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FORTY YEARS IN THE ALTIPLANO

A CROSS-CUTTING EVALUATION OF AID-FINANCED ASSISTANCE IN GUATEMALA'S ALTIPLANO (FROM THE 1940'S TO THE PRESENT)

VOLUME II

GUATEMALA CITY, GUATEMALA MARCH 1989

USAID Guatemala Cross Cutting Evaluation

V O L U M E 2

Contractor Reports

(12 Annexes)

'a'

Volume 2

Table of Contents

Acknowledgements i

Field Team Leader's Executive Summary (David Lazar). . . . ii

ANNEX I: Overview and Institutional Development (David Lazar, Danilo Palma, Gregorio Tum) . . 1

ANNEX II: Agricultural Research, Extension, Forestry, and Infrastructure (Earl Jones, Rubén Poinciano) 35

ANNEX III: Rural Finance (Robert Laport) 119

ANNEX IV: Small Scale Irrigation (Edwin French). 149

ANNEX V: Marketing (William Rhett) 193

ANNEX VI: Health (Laurence Day, Sheldon Annis, José Baudillio López, Gregorio Tum). 239

ANNEX VII: Rural Education (Edgar Nesman). 273

ANNEX VIII: Agricultural Marketing (Fernando Garcia Salas) 305

ANNEX IX: Institutional Development (Danilo Palma). 333

ANNEX X: Information/Evaluation Systems (José Alvarez). 427

ANNEX XI: Cross Cutting Evaluation of the Altiplano (Gregorio Tum 446

ANNEX XII: The Guatemalan Economy: A Historical Review (Roberto Castro). 468

'b'

Volume 2

Topical Table of Contents

- Agricultural Programs
  - Agricultural Research, Extension, Forestry, and Infrastructure: ANNEX II - 35

I. Introduction - 39

A. The Setting - 39

1. Rural Conditions - 40
2. Agricultural Developmene Overview - 43
3. Forestry and the Environment - 44
4. Rural Infrastructure - 45

B. The Institutions - 48

1. Ministry of Agriculture - 48
2. Research - 52
3. Extension - 54
4. INDECA - 58
5. USPADA - 59
6. INACOOP - 59
7. BNADESA - 59
8. PVOs and Other Private Sector Efforts
9. Bilateral and other International Programs - 61
10. Peace Corps - 62
11. ROCAP - 62
12. United States Department of Agriculture - 63
13. AID/Washington - 63
14. The Infrastructure Institutions - 63

C. Study Methodology - 64

1. General Approach - 64
2. Document Review - 65
3. Field Studies - 65
4. Limitations - 66

II. US Projects - 67

A. Prior to 1950 - 67
B. AID Projects in the 1950s - 68
C. The Decade of the 1960s - 70
D. The 1970s - 72
E. The Present Decade - 72

1. Strengthening the Institutions - 74
2. Acquisition of Land - 79
3. Other Socioeconomic Effects - 80
4. Technical Assistance - 83

III. Lessons Learned - 84

A. Sequential Effects - 84

1. Training - 84

2. Institutional Strengthening - 85
3. Production - 86
4. Research and Extension - 86

B. Special Circumstance Effects - 87
C. Results Beyond those Anticipated - 87

IV. Conclusions and Recommendations - 90

A. Training - 90
B. Institutional Strengthening - 90
C. Production - 91
D. Marketing - 94
E. Research - 94
F. Extension - 96
G. Farm Credit - 97
H. Land Purchase - 97
I. Forestry and the Environment - 98
J. Infrastructure - 99
K. Women in Development - 100
L. Strategies for the Future

APPENDICES - 102

II.1: Contacts - 103
II.2: Bibliography - 108
II.3: Acronyms - 113
II.4: Study Guides - 116
II.5: Ministry of Agriculture Budget - 118

Agricultural Finance:
ANNEX III - 119

I. Introduction - 120

II. Methodology - 120

III. Findings - 121

A. Background - 121
B. The Formal Credit Delivery System - 121

1. BANDESA - 121
2. The Cooperatives - 124
3. The Private Sector - 126

B. The Informal Sector - 127

IV. Conclusions and Recommendations - 127

A. The Role of the Formal Credit System - 127
B. General Comments on BANDESA - 128
C. Specific Recommendations on BANDESA - 128
D. The Cooperatives - 130
E. The Private Sector - 131

APPENDICES - 132

III.1: Rural Credit Delivery and Financial Services - 132
III.2: BANDESA: Loan Activity from Fidecomisos - 142
III.3: Quetzaltenango: Lending Activity in 1988 - 143
III.4: Quetzaltanengo: Loan Portfolio, 12/31/88 - 144

III.5 Highlands Loans from Trust Funds - 145
III.6 Bibliography - 146
III.7 Contact List - 148

• Small Scale Irrigation - 149

Introduction - 150

Small Scale Irrigation - 151

Previous Project Contributions - 151
Impact Studies - 151
Basic Lesson - 152
Working Model (PROGETTAPS) - 153

Irrigation Project Implementation - 154

Organization Procedure - 154
Technical Assistance Constraints - 154
Marketing Strategy - 156
Reflections/Analysis - 156
The Bottom Line - 157

Technical Considerations - 158

Well Equipment Service/Replacement - 158
Aquifer Reserves - 159
Aquifer Monitoring - 160
Water Use - 160
Research/Extension - 161
Professional Training - 162
Training - Farmer - 163

Complementary Projects - 164

Dual Use Well Water - 164
Integrated Pest Management - 164
Animals - 166
Biodigestors - 166

Aquaculture - 167

Soil Conservation - 168

USAID Contribution - 168
DIGESA Program - 168
Technical Assistance - 169
DIGEBOS Program - 170
Tree Establishment - 171
Other Programs Detected - 171
Farmer Perception - 172
Soil Analysis - 172
Training - 173
Other Supporting Institutions - 173

Summary of Conclusions and Recommendations - 176

APPENDICES - 179

IV.1 USPADA Data re PROGETTAPS - 179
IV.2 PROGETTAPS Technology Transfer Model - 183
IV.3 PROGETTAPS Technology Diffusion Model - 184

IV.4 PROGETTAPS Organization Chart - 185
IV.5 Proposed Organization Chart for USAID Project 520-0274 -- HAD II - 186
IV.6 Legislative Changes Proposed for DIGESA in Diario de Centro América - 187
IV.7 Contact List - 190

- Agricultural Marketing (ANNEX V) - 193

EXECUTIVE SUMMARY - 194

I. Evaluization Capsulization - 195

A. Major Findings/Conclusions - 195

1. Internal-AID - 195
2. External - 196

B. Marketing-Related Specific Recommendations - 196

C. Lessons Apparent to the Evaluator - 198

1. General - 198
2. AID-Related - 198

D. Major Constraints Presently Affecting Marketing - 199

II. Introduction - 199

A. Thrust of Joint AID/GOG Agricultural Projects - 200

B. Execution of AID/GOG Marketing-Related Strategies - 200

1. Marketing Strategies to Strengthen the Small Highlands Farms Sector - 200
2. Marketing Strategies to Strengthen Public Sector Institutions - 203
3. Marketing Strategies to Strengthen Private Sector - 210
4. Decentralization of GOG and Commercial Activity Applicable to Marketing and Effects, if any - 216

III. The USAID Portfolio - 216

A. Influences Affecting Projects - 217

B. Changes in AID Approaches - 217

IV. Synthesis: Focus and Sustainability

A. Coordination Across Sectors - 218

1. AID Relevancy of Conceptualization, Goals, and Management - 220
2. GOG Relevancy of Conceptualization, Goals, and Management - 221

B. Target Population Selection - 222

C. Project Impact on Small Farmer - 222

1. Project Responsiveness to Needs - 223
2. Beneficiary Access to Marketing-Related Delivery Systems - 223
3. Domestic vs. Export Markets - 223

4. Traditional vs. Non-Traditional Crops - 224
5. Support Systems Physical Infrastructure - 224
6. Role of Middlemen - 225
7. Role of Marketing-Related Information Systems - 224

D. Bottlenecks - 226

1. In Physical Infrastructure - 226
2. In Agencies - 226
3. In the Private Sector - 226

E. Continuity and Sustainability - 226

V. Marketing Commonalities and Needs of AID/GOG Policies - 227

VI. Project Methodology and Limitations - 228

NOTES - 230

Table 1: Summary of Seminar Training Results - 231

Table 2: Marketing Information Field Survey - 232

Contact List - 234

Bibliography - 236

• Agricultural Marketing (ANNEX VIII) - 305

I. Introduction - 307

II. Present Situation - 308

1. Facilitating Functions (Macro Level) - 308

1.1 Market Intelligence (Information) - 308
1.2 Standardization and Regulations - 310
1.3 Financing - 313

2. Physical Functions - 314

3. Exchange Functions - 315

III. Conclusions and Recommendations - 316

1. Conclusions - 316

1.1 Market Intelligence - 316
1.2 Standardization and Regulations - 317
1.3 Financing - 317
1.4 Physical Functions - 318
1.5 Exchange Functions - 318

2. Recommendations - 318

2.1 Market Intelligence - 318
2.2 Standardization and Regulations - 319
2.3 Financing - 319
2.4 Physical Functions - 319
2.5 Exchange Functions - 320

APPENDICES - 321

Appendix 1: Graphs Relating to Market Flows - 322
Appendix 2: Contact List - 328
Appendix 3: Bibliography - 331

• Education Programs (ANNEX VII) - 273

I. Executive Summary - 275

II. Education for Development in the Rural Highlands of Guatemala - 278

III. Study Methodology - 280

IV. The Setting for Rural Education in the Guatemalan Highlands - 281

A. The General Situation in Guatemala - 281
B. General Education Situation - 282
C. The Situation of Primary Education - 282
D. The Situation with Teachers and Teacher Training - 283
E. Characteristics of Rural Education in Highlands - 283
F. Guatemalan Government Educational Policy in the 1980s - 284

V. Summary of USAID Education Projects - 286

School Construction - 286
Rural Primary School Education - 286
Nonformal Education - 286
Bilingual Education - 287
Educational Administration - 287
Threads and Strands Running through AID Programs -287

VI. Impressions - 289

Continued Need for Educational Assistance - 289
Education for Development - 289
Education and the Private Sector - 289
Importance of Community 'Promotors' - 290
Professional Envy and AID Related Projects - 290
Radio Feedback System - 290
Radio Credibility - 291
The Reality of Regionalization - 291
Charges in Ministry Personnel - 291
Bilingual Program and Cultural Pride - 292
Education and Migration to the Coast - 292
Education, Violence, and Sustainability - 292
Importance of Consultants - 293
Post-Literacy Programs - 293
Local Participation - 293
Women in Development - 293
The Importance of Scholarships - 293
Vehicle for Social Change - 294

VII. Recommendations - 295

APPENDICES - 298

VII.1 List of Documents - 298
VII.2 List of Contacts - 301
VII.3 Guidelines for Interviewing and Document Review - 303

- Health Programs (ANNEX VI) - 239

1. Introduction - 240
2. How Has the Health of the Population Changed over the Past 30 Years? - 240
3. How have Health Services Changed through the Years of AID Support? - 243

Development of an Urban, Curative Health System - 243
Development of a Rural, Prevention Oriented Health System - 245
Development of Rural Health Manpower - 246
Establishment of Health Services in the Highlands - 247
Provision of Safe Water Supplies
Contributions Through Other Health Delivery Systems - 250
Current Institutional Situation - 251

4. What Effect has AID had on the Availability and Use of Family Planning Services? - 253
5. What Differences have AID's Interventions Made at the Community Level? - 258
6. Intersectoral Considerations - 259
7. In Conclusion: What can be Inferred from the Past as We Look to the Future? - 260

TABLE 1: Summary of AID Support for Health and Population 1950-1989 - 263

TABLE 2: Ministry of Health's Expenditure for Curative and Preventive Medicine, 1985-88 - 264

Notes - 265

APPENDICES - 270

VI.1 Contact List - 270
VI.2 Bibliography - 271

- Institutional Development

ANNEX I - 1

Introduction - 3

What is an Institution? - 5

The Inward-Oriented Institutions - 6

The Communities - 6
Community-Based Approaches - 8

The Outward-Oriented Institutions - 11

Administration: Procurement, Contracting - 11
Budgeting and Disbursement - 13
The International Overload - 16
A Strategy for the Future - 17

The 8% Solution - 20

Three Further Issues - 22

Environment - 22
Marketing - 22
Women in Development - 23

APPENDICES - 24

I.1 Table: Population Growth and Employment Indicators 1950-1989 - 24
I.2 Dr. José Baudilio López notes on malnutrition - 25

Protein-Energy Malnutrition - 25
Underweight at Birth - 26
Morbidity Caused by Malnutrition - 26
Riboflavin Deficiency - 26
Anemia - 27
Food Availability - 27

I.3 Table: Intensity of Crop Cultivation and Yields of Corn and Beans 1950 and 1979 - 28

I.4 Documents - 32

I.5 Contact List - 34

ANNEX IX - 333

Executive Summary - 334

Introduction - 340

I. Evaluation Background and Methodology - 341

II. Evaluation Results - 343

A. The Project's Process - 343
B. Information Systems Situation - 344
C. Project Inception and Designing - 348
D. Project Implementation - 354
E. Project Monitoring and Evaluations - 359
F. Project Termination - 361
G. Institutional Development: The Lessons-Learning Process - 363

a. Education Sector - 364
b. Agricultural Sector - 366
c. Infrastructure - 368
d. Health - 368

H. AID/Guatemala - 369

III. Conclusions and Recommendations - 371

A. Conclusions - 371
B. Recommendations - 373

BIBLIOGRAPHY - 376

APPENDICES - 377

IX.1 Introductory Meetings - 377
IX.2 Documents Reviewed - 378
IX.3 Persons Interviewed and Institutions Visited - 381
IX.4 Fieldwork Notes: Danilo Palma - 385

• Information Systems (ANNEX X) - 427

I. Introduction - 427

II. Information and Coordination in the Public Sector - 427

A. Data Sources and Availability - 427

INDECA - 427
DIGESA - 428
DIGESEPE - 428
INE - 429
BANDESA - 429
Banco de Guatemala - 429
USPADA - 430
DITEPESCA - 430
SEGEPLAN - 430
INSIVUMEH - 430

B. USPADA: Role, Structure, Need, and Effectiveness - 433

C. Flow of Information - 434

III. The Private Sector - 438

IV. Agency for International Development (AID) - 439

A. Information Flows of Projects - 440
B. Monitoring and Implementation - 441

V. Project Impact Evaluation - 441

NOTES - 442

List of Persons Interviewed - 443

Bibliography - 444

• Macroeconomic Overview (ANNEX XII) - 468

A. Trends in Economic Aggregates since World War II - 468
B. Structural Characteristics and Changes - 469
C. Summary - 474
D. 1980-85: Stagnation, Instability, and Structural Shocks - 465
E. 1986-88: Stabilization and Economic Renewal - 477
F. The GOG's Stabilization and Growth Programs: Status as of the End of 1988 - 481
G. Guatemalan Economic Policy in 1989-1990 - 483

1. The 1989 Stabilization Program - 483

• Sociocultural Overview (ANNEX XI) - 446

Introduction - 447

A Brief Historical Background - 448

USAID Participation in the Educational Process of the Highland Communities - 449

Programa Nacional de Educación Bilingue (PRONEBI) - 450

Santa Lucia Normal High School - 452

Programa de Desarrollo Integral de la Población Maya (PRODIPMA) (Altiplano Higher Education Program) - 453

The Central American Peace Scholarship Program (CAPS) - 454

Changes in the Role of Women - 454

Some Key Factors that Foster Development - 456

- Committees - 456
- Women's Participation in Development - 457
- Young Mayan Professionals' Participation - 458
- Educational Support for the Mayan Population - 459

Some Constraints to Development in the Highlands - 460

- The Minifundio System - 460
- Lack of Concensus on the Official Alphabet for Writing the Mayan Languages - 461

Conclusions - 462

Recommendations - 463

Field Methodology - 464

People Interviewed - 465

Notes - 466

ANNEX I

OVERVIEW AND INSTITUTIONAL DEVELOPMENT

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The authors of this report gratefully acknowledge the assistance given on the document reviews, interviews with private and government officials and program beneficiaries, and discussions with officers of USAID/Guatemala. Without their wholehearted assistance, these reports would not have been possible. Nevertheless, the information contained, the conclusions drawn, and the recommendations made are the responsibility of the authors. No endorsement by the officials nor their institutions should necessarily be inferred.

EXECUTIVE SUMMARY

For six weeks, eight of us looked at the history and results to date of forty years of U.S. assistance programs on the Guatemalan altiplano. Our assignment, in brief, was to draw out the lessons of that experience and project it forward in terms of AID strategies for the future.

The assignment would not have been possible had it not been for the fact that most of us have had considerable prior experience in Guatemala, much of it involved with the very institutions and programs whose history and performance we were tracing. And it was that same experience factor that caused most of us to undertake our study with something other than intellectual or professional detachment; we were involved.

Our summary is that there is good news and there is bad news. U.S. assistance programs have clearly "worked" on the altiplano, perhaps not as well or as rapidly as all of us might have hoped but, nevertheless, they have worked. People are living longer, more people are receiving more education, fewer people are dying of preventable diseases and recent unanticipated (in degree) successes in programs of irrigation, terracing and crop diversification show promise of rapid increases in rural incomes and employment.

Furthermore, present programs are reaping the benefits of earlier efforts, a process we would expect to see accelerate and expand in the future. An outstanding example of this is the fact that native speakers from the altiplano are now starting to be seen in paraprofessional and even professional jobs, one or two even at supervisory levels. And there are cadres behind them with the training to expand that representation.

The bad news is that levels of malnutrition do not seem to have abated at all, the size of the average farm holding is getting smaller - by anywhere from 30 to 40% in the past 15 years - and serious environmental damage, the result in most cases of crowding, is starting to appear.

Putting the pace at which positive change is taking place and promises to in the future against the pace at which a burgeoning population pushes on land/food supplies, cuts trees for firewood and for planting (and the rate at which that factor is lessening supplies of water for irrigation) and the other, well-known panoply of the effects of over-population, we are not optimistic that Guatemalan development goals can be met before the costs go out of control.

To summarize the main specific findings and

recommendations:

In examining institutional development we found:

- - AID has developed a highly successful model for dealing with the altiplano communities in agriculture, health and education. That model should be continued and refined/adapted to changing needs.

- - The communities are strong and most of them seem to have recovered - in terms of community organization and self-confidence - from the trauma of the beginning of this decade. They should be the principal target of AID's activities which should be seen by them as enabling and should stress production as rapidly and as broadly as possible.

- - The principal line ministries with which AID works are being overloaded, in terms of the demands for counterpart personnel and funds, by international assistance agencies. They do not have enough of either left to fully carry out their regular programs. International donors need to address that problem.

- - Guatemala's antiquated system of administrative controls on such activities as contracting and purchasing, and a budgeting system that results in unpredictable, arbitrary and indefinite freezes or cuts in operating funds are seriously hampering project execution across the board. While temporary expedients to get around those obstacles - such as setting up projects as self-contained units outside the Government structure - may be justified by the need to keep projects moving, AID's goal of institution building demands that the problem be confronted. There may be some GOG-initiated movement in that direction that would make launching such an effort easier and there may even be a home-grown model.

In agriculture:

- - Present irrigation projects have had a greater impact on the economic and social wellbeing of small farmers than any other efforts in recent years. Benefits are very high. Soil conservation also produces a quick return (although less than irrigation) and has the additional potential of aiding the farmers for many years to come. Animal husbandry projects, especially those involving dairy cattle, also produce rapid income gains. The highest income results appear to come from combinations of irrigation, soil conservation, crop diversification and dairy cattle. The Mission should expand the funding for these activities.

- - Farmers, technicians and private businessmen were

iv

unanimous in expressing the view that marketing is the weak link in the agricultural chain. Pieces of a full marketing system are all around, but they need to be pulled together and the gaps filled in. AID, in collaboration with appropriate Guatemalan public and private sector institutions, should start immediately on an effort to design an overall marketing strategy for Guatemala.

- - The need for rural credit is not as great as had been believed. However, the Mission should assure there is sufficient credit available to support the efforts in mini-irrigation, soil conservation, crop diversification and animal husbandry. BANDESA is viewed by most interviewees as doing a reasonably good job under difficult circumstances. Its balance sheet should be cleaned up, however, so that time-wasting collection efforts can be avoided and so that it can be a more attractive candidate for international financing. The bad loans that were passed to BANDESA's portfolio when it was created and most of the bad earthquake housing loans it was forced to make should be written off or transferred to another agency.

- - Environmental problems, some already serious and some potentially so, are starting to appear. Deforestation is causing lower stream flows in some irrigation areas and soil erosion is becoming evident on many slopes cut over for farming or firewood. Pollution is appearing in some streams used for irrigation, threatening the health of consumers and the marketability of the vegetables being produced. The community forestry project should be expanded. Provision should be made for more personnel. That project should be tied in more closely to the work in mini-irrigation. There also is, at least, an incipient problem in misuse of pesticides and other agricultural chemicals. The Mission should take a closer look at these problems, perhaps in conjunction with the large-scale effort being cranked up in ROCAP.

- - The AID and IDB-PROGETTAPS projects are working in the same agencies with the same farmers. Given the great demand for agricultural assistance and the paucity of resources to respond, the two sets of activities should be separated geographically so as to spread the available resources as widely as possible.

In Health:

- - The budget of the Ministry of Health is still weighted heavily towards urban and curative medicine. The portion of the budget for rural and preventative health care have stayed at 13-14% of the total budget for the past four years. AID is responsible for what shift there has been to

v

rural, preventative health care. It should continue these efforts.

- - Progress in health is patchy, both by area (San Marcos is making good progress) and by program. The potable water activities are doing well but that effort may be slowing down because of increasing difficulty of access. The rate of vaccination of children under one year of age is very low.

- - The acceptance of family planning services is very low. The most promising effort here is aimed at the next generation. A conceptual break-through is needed.

In Education:

- - The bilingual education program is working well and participants see it, and the scholarship program, as opening new channels for needed social change. These important programs should be continued. The Mission should do what it can to encourage movement of bilingual GOG employees into policy-making positions.

- - Radio education projects have been successful although not all of the elements necessary to continued success have been maintained. A number of team members have suggested that something like the Basic Village Education program would be useful in their individual areas. In education it would be useful to develop a radio education program to support the primary education program. The Mission should consider the feasibility of providing support to a renewal of the original format of the Basic Village Education program.

- - Local participation is particularly important in education programs. The Mission should take what steps it can to assure the creation of more local school committees.

- - An independant program of educational research should be started.

ANNEX I: OVERVIEW AND INSTITUTIONAL DEVELOPMENT

Development Associates, Inc. has been tasked to help "asses the impact of AID development strategy to date on the well being of the indigenous rural poor population living in the highlands [of Guatemala], determine lessons learned, and recommend approaches that will lead to more sustainable development in this area in the future." This work was undertaken as part of an AID/Guatemala effort to analyze "the major constraints to and opportunities for increased development in the highlands, analyzing the major changes that AID interventions have had over the past 30 years in addressing the constraints and opportunities of development in the highlands, and making recommendations on appropriate interventions needed for sustainable economic development in the future." The analyses undertaken in specific substantive areas by Development Associates, Inc. were conceived of - and will finally appear as - annexes to that overall Mission product (and, hence, are frequently referred to in the DA-produced materials as "Annexes").

Nevertheless, in carrying out its tasks under the Cross-Cutting Evaluation project, Development Associates, Inc. has tried to do more than simply produce a series of annexes, in the substantive fields assigned, to the overall Evaluation. Throughout our work we have constantly compared notes and "seminared" our tentative findings to see whether some common themes might emerge, themes which might form the basis for a set of unified conclusions and recommendations beyond those identified in each substantive area. We didn't have to force the issue: we did indeed find such common themes and most of them fall under the rubric of Institutional Development. Thus, the present section serves not only as the substantive evaluation required in the area of institutional development but also, in a most real sense, as the Overview of the work of our team.

There is, however, one set of issues on which we all agree, and which does not fall under this general umbrella. We also feel these issues are of sufficient importance to require us to state them up-front. They may be summarized as follows:

We believe that AID's focus over the years on the rural Altiplano has been correct and is fully justified by what we have seen. We have retravelled many of the roads that AID has helped to build and have seen again how they have served to knit together many previously isolated areas, including some major population centers, and how they have opened many previously isolated communities to opportunities to

participate in expanding programs of education, health and agricultural development. We have seen electricity expanding into these same areas, though not as quickly as some of us might wish. We also believe that very real progress has been made in bringing the rural, mostly Indian poor into the development process in Guatemala, as can be seen in statistics on improvements in health indicators such as infant mortality and life expectancy, increased school attendance, particularly among girls, and participation in programs such as mini-riego, crop diversification and others. We also count as a highly significant indicator of the increasing success of these joint GOG-AID efforts the growing presence, in Guatemalan programs, of native speakers, both men and women, some of them now moving into positions having programming and supervisory responsibilities. Behind them is a growing cadre of Indian speakers with a sufficient educational background to maintain and increase that flow. In short, not only is positive change taking place, it is accelerating. This has redounded to the ultimate benefit not only of the target group but of the development of Guatemala as a whole.

However, these changes have taken time, forty years and more in many cases. This will not come as a surprise, nor will it appear as overlong to anyone with an understanding of development processes. For these changes are not <u>just</u> economic but also involve a panoply of interactive political, cultural and social factors, as this annex and those that follow set out in some detail.

<u>Therefore, when we compare the figures on population growth of that target group (and, indeed, of the country as a whole) with the rates at which positive changes are taking place, we cannot be optimistic that, even under optimal assumptions, overall GOG development goals can be met before forward progress is overwhelmed by the consequences of that growth in terms of dwindling land/man ratios, increasing malnutrition, massive rural and urban unemployment, severe environmental degradation and additional, similar factors. In a word: we're not sure you can get there from here.</u> (See Appendices I.1, I.2, and I.3)

Despite our attempt, in doing this study, to limn out recommendations for what we see as emerging problems or opportunities, we have no recommendation here. But we do have an observation: in all of our interviews we have nowhere sensed the feeling of urgency that the situation we see would seem to demand. We might speculate that, having lived through the political and economic turmoil of most of the decade of the 80s, Guatemala is not ready to face its present crisis. Whatever the reason, however, it is our

feeling that the level of effort being put forward is nowhere commensurate with the problems confronting this country now. One possible exception is the very upper levels of the Government of Guatemala where the very little evidence available to us does seem to indicate a real desire to move ahead rapidly. If that is so, it constitutes an opportunity for more rapid progress that cannot be overlooked.

METHODOLOGY

As each section of this report points out, the evaluation called for was done on the basis of reading extensively in the voluminous selection of historical documents provided by the Mission plus an intensive, but necessarily limited series of interviews and field visits. The same is true of this present section on institutional development which, however, also draws heavily on the work of the other substantive teams. Thus, our report is what one team member describes as "impressionistic." That having been said, however, it also should be pointed out that most of the members of the team have followed the Guatemalan development picture for years and that includes, in most cases, close contact with the programs each of them reviewed for this study. Thus, to the extent that this evaluation is "impressionistic", the impressions involved are those of a group with a long and continuing background in the materials examined and not those of an "outside" squad "parachuted in" for the study.

Which leads to one last word on format. Precisely because it was our desire to allow each member of the Development Associates team to bring his own experience and perceptions to bear on the job at hand to the greatest extent possible, no attempt was made to fit findings and recommendations into the procrustean bed of a common format. Each of the sections of this report thus represents the views of the technical specialist involved as he felt they could be most effectively put forward.

INSTITUTIONAL DEVELOPMENT

INTRODUCTION:

AID has been concerned with institution building in Guatemala for at least forty years. The annexes that follow lay out some of the history of this effort. Starting no later than the early '70's, institutional strengthening or institutional development was a key factor in every major AID project. In addition there were a series of general projects in "public administration" which included work aimed at

4

strengthening organs of the government not immediately involved in the core AID-GOG activities in agriculture, education and health.

Even earlier, in the '60's (and continuing into the '70's) AID undertook a number of training programs designed to help bring out leadership at the community level as a way of helping the communities mobilize themselves to participate in their own development by deciding on their own priorities and establishing their own communications with available sources of project funding and technical assistance.

Finally, and most importantly, AID has increasingly built on and augmented this group of community level contacts, through training and supporting Guias Agricolas, Promotores de Salud and Educacion and volunteers in those functional areas and designing its programs to use them to link more and more closely to the rural communities in the highlands.

How have these efforts paid off? The picture is mixed, but the results have been most positive where the potential for building on them is the greatest, i.e., at the community level. The government organizations with which AID has had more or less constant contact over the years show varying strengths and weaknesses, mostly depending on factors beyond AID's control, such as degree of politicization and the extent to which GOG priorities and, very importantly, administrative procedures have permitted or impeded the kinds of positive operations that are needed to maintain morale and dedicated personnel. A common strong, positive factor is the number of well trained and motivated personnel in the systems and still on the job. We also found, and the individual annexes that follow document this to some extent, that AID-introduced work methods, procedures and approaches have been adopted and internalized by the entities with which AID has worked over the years. Those are successes.

The biggest problem we found in this area - and we will have quite a bit to say about it - is in the area of general administration, i.e., disbursement of funds, procurement, budgeting, and contracting. As it turns out, this problem resides principally in agencies of the government, such as the Ministry of Finance and the Controlaria General, with which AID has not worked directly on specific operational joint projects which those institutions were in charge of carrying out. Contacts with these organizations were either on macro-level policy matters or on details of programs being carried out by the Ministries of Health, Education, Agriculture and the other "technical" organizations. But the series of problems being created in this area has hampered,

and on occasion even paralyzed, substantive project operations. Failure to address them (not necessarily in the form of an AID program), even though they have been evident for years, must be counted at the very least as a serious oversight.

There is one other generalizable problem that has come up frequently enough even in our limited number of interviews to merit mentioning here. That is the problem of personnel turnover at the supervisory and high technical levels. This is cited as a problem in terms of both the GOG and AID. On the side of the GOG the reason most usually given is politics. Our GOG contacts cited no reasons for the progress-hampering turnover of AID project managers, but we assume this is a result of the operation of AIDs standard personnel rotation policies.

It is at the level of the communities, however, where AID's work in leadership training, community development and subsequent linkage of substantive programs in agriculture, health and education to the communities have paid off most handsomely. The pattern of community involvement through promotores, volunteers, and other, similar personnel trained for this purpose, when used well - and with only one outstanding exception it has been used well - has proven to be a significant source of strength, forward movement and sustainability. Work in education in the highlands including, more recently, bilingual education also has helped. We have seen increasing numbers sted of bilingual Guatemalans attaining sufficient levels of education to move into positions in government programs where their presence should make those programs ever-more effective in offering increasingly relevant options to the communities. Many more are needed, but the cadre of bilingual Indians with enough education to move into entry-level government jobs is growing. The communities are increasingly, and should be seen as the primary development institutions on the Altiplano and the institutions to which AID's future strategies should be (even more) closely keyed. This will be spelled out in some detail below.

WHAT IS AN INSTITUTION?

Before going any further, we should make explicit the definition of "institution" used in carrying out our tasks under this evaluation. We define an institution here simply as a group of people organized to accomplish a given purpose. (This does not suggest that individuals and groups within the institution may not be seeking to accomplish purposes other than - or even incongruent with - the institutional purpose and, indeed, few institutions can be understood without

understanding that set of intra-institutional vectors. Certainly this is true of the institutions dealt with here.)

We do not propose here to attempt to develop a taxonomy of institutions. However, for the purposes of this report we have found it useful to divide the institutions with which AID has been concerned over the past thirty or more years into two categories: outward-oriented and inward-oriented. Outward-oriented institutions are those whose stated purpose lies outside the organization itself - in this case those ministries and agencies of the Government of Guatemala with which AID has had contact or which have impacted AID programs in other ways. Inward-oriented institutions are those whose purposes relate to the members of the group themselves: communities, families, cooperatives (de base, not the federations). While this evaluation will not refer constantly to that distinction, we set it out here because it is implicit in most of what follows.

There is, however, one distinction between the two types of institutions that we think it important to set out here because it often is lost sight of in day-to-day and year-to-year development work. Outward-oriented institutions, for all that institution building efforts focussed on them may seem to take them as "objectives" or "targets" of assistance efforts are not that at all. They are development <u>instruments</u> even though their general sustainability, and the sustainability of improvements built in to them, are matters of legitimate concern. But the <u>objectives</u> of assistance are the inward-oriented institutions or, rather, the individuals who compose them.

In the discussion that follows we will not repeat the comments found in the later sections of this report as already generalized above. Rather, we will focus on specific suggestions for forward strategies based on that material, supplemented by specific observations of the team that looked at institutional development as a discrete substantive area. These suggestions and recommendations seem to us to group themselves most logically under problem/opportunity headings. We will present them in that fashion.

THE INWARD-ORIENTED INSTITUTIONS

The Communities

Where ever we went, we were impressed by the strength and resiliancy of the highland communities. We were particularly impressed by the fact that their habit of working in groups, particularly in committees formed to

7

handle specific problems or projects, seems to have come back in full force after a period in which such groups were likely to be considered subversive, with drastic consequences, meetings were banned and a number of trained promotores and other community leaders were killed. The ability of these groups to spring back up and into action following that kind of experience testifies to their deep roots in the culture.

We were also impressed, again, by the extent to which the group, the community, forms the context not only for individual action but also individual opinion. (An intriguing sidelight on this matter was brought out in an evaluation of the Basic Village Education (BVE) Program. In attempting to check correlations between acceptance of agricultural advice by listeners and literacy, it was found that there was no correlation with the literacy of the individual listener but a high correlation with the literacy level of the community.) This strongly suggests to us that the Mission is on the right track in addressing its programs to communities. This approach should be sustained and sharpened.

Finally, the history of "development", that is change, on the altiplano (or anywhere else) will be written in terms of how rapidly new ideas and new technologies are absorbed and the interactive changes caused by that process in the impacted society. For the reasons set out above, that again means focus on the community. And that focus will need to include sensitivity to the process of social change taking place in the communities under the impact of technological change. The communities are a great source of strength not only, as we have already suggested, to the individuals who compose them, they also are a potentially great source of strength to the country as a whole. On the other hand, if the increasingly rapid introduction of technological change should bring about the dissolution, rather than the evolution, of the highland communities, the resulting social and political costs will be very high.

We are not suggesting - heaven forbid! - that AID or the GOG attempt to assume responsibility for the way in which social change takes place in the highland communities. They must and will do that for themselves. But AID should be alert to situations in which approaches to the communities cause conflict and should be willing and able to alter those approaches to avoid or attenuate such conflicts. Specific examples of what we're talking about here are hard to foresee but we can provide one specific case we found. It was brought to our attention that, in some communities, conflicts had arisen between the younger, more progressive community leaders and some of the community elders, with the latter

8

(who traditionally are accorded great respect) feeling that they had been pushed aside. We informally passed a suggestion to AGES (the Guatemalan Association for Sexual Education, whose programs, we hasten to add, were not, to our knowledge, a cause of this problem) that their classes might devote an hour or two a week to presentations by community elders to the children of the old traditions, songs, mythology (or cosmology) and anything else they felt should be passed on. This, we feel, will not only reduce the possibility of the elders being excluded, it likely will gain their increased support for AGES. It also should help provide cohesion to the communities. AGES, we are told, accepted this idea enthusiastically. It might be tried in other
settings such as the bilingual education program.

Community-Based Approaches

Whether by pure serendipity or conscious program design, AID, from a very early period, started to use the promotores it had previously trained as points of entry into the community for substantive programs. Whatever the origin, this method of operation very soon became conscious and standard. And it worked. It worked because it allowed potential participants in substantive programs in the communities to discuss proposed projects and make their decisions as groups, which is their natural mode of operation, and to participate in groups if they decided to participate. It worked because community standards and sensitivities were, through the promotores, taken into account in the initial approaches and, we would hypothesize, worked with and not violated. And it worked, we would argue, because the approaches on new projects were seen by the communities as enabling, as offering them something they were free to accept or reject, rather than as attempts by the Ladino society to make them do things (with which they have had a good deal of experience and which they reject out of hand). Indeed, the increasing use of community-selected voluntarios, guias and promotores to introduce specific "items of change" undoubtedly went a long way towards avoiding the "Ladino curse". The Ladino technicos came in later, with technical assistance, after an initial decision had been made to consider whatever project was being proposed.

In any event, the Mission has developed a very successful model for introducing change to highland communities. This model should continue to be used in the future. Because this model is so successful and is so generally applied there is a danger that it might be taken

9

for granted. Rather it should be kept constantly in mind and refined as needed to take account of new needs or possible new applications.

One of the most compelling illustrations we encountered of how that model should be applied is a negative one. We heard accounts of the early experience with the family planning program carried out by APROFAM. Although specially trained promotores were used to spread that program, due perhaps to their very enthusiasm, and/or perhaps the fact that they had quotas to fill (so many acceptors in a given time period) they were perceived as pushing their programs, seeking to impose them. As is well known, those attempts failed. (What may not be as well known is something else we were told: those attempts were linked in the minds of some people not only to APROFAM but, through them, to the Ministry of Health and to AID producing what might be called a "pollution effect". In one highland community that has been successful not only in absorbing some modern agricultural practices but in finding external sources of financing to help carry them out, we asked where they got their financing. They mentioned, among others, the Embassies of Canada and Germany. When asked whether they had ever approached AID, their answer was: "No. They're tied in with APROFRAM and the Ministry of Health.")

The lesson to be learned is obvious and we know this isn't the first time it's been said. But it bears repeating: <u>Approaches to highland communities on new projects should be made at the level of the community (rather than being seen as directed at individuals). Those approaches should be designed so as to be seen by the community as offering an option rather than attempting to impose a change.</u>

Fortunately, both parts of this recommendation have proven to be fairly easy to carry out with respect to projects in agriculture and education. Schools and projects that increase production or income are easily understood and desired (although agricultural credit, at least where it involves mortgaging land, is not so readily accepted. No arcane "cultural differences" need be sought here, however. The risk involved is considerable and alternative, traditional sources of credit do not require mortgages.) In health projects there is a split: the construction of health posts or potable water systems also fit in easily with this approach; people want them and accept them. Mass vaccination campaigns are harder; the relative success of the campaign carried out recently was due largely to an intelligently conducted program of education before the actual innoculations started (and there's a lesson to be learned there, too); it also may have been helped by the fact that

the highland people, for some reason, like and trust injections. Note should also be taken of the fact that the project design was modified to accomodate the strongly-expressed reluctance of the people of the highlands to vaccinate children under one year old. However regrettable this may have been seen to be from a technical point of view, it is likely that an insistance on vaccinating infants would have vitiated or even destroyed the project.

On the other hand, the sanitation part of the water and sanitation project did not gain wide acceptance, partly because the communities saw no need for the privies and partly, probably, because there was an early attempt to link the availability of potable water to acceptance of the privies which the communities undoubtedly found coercive. We consider it likely that wide-spread acceptance and use of privies in the highlands will not come without a wide-spread and sustained educational effort as to the reasons for their use. Health courses in the public schools wouldn't be too early a place to start if that isn't being done already. Environmental programs that attempt to control hillside tree clearing or the cutting of firewood will be difficult; these involve immediate pressing needs, almost whatever the longer-term consequences might be. In these cases not only will a sustained educational effort be need, but it is probable that some alternatives will have to be offered.

The difficulties encountered by the family planning program are well known. Although the conceptual difficulties involved are admittedly enormous, an effort should be made to design a community-based approach to family planning. Again, this would almost certainly have to involve a very sensitive, wide-spread educational campaign. In this respect the AGES program, which appears to be on the right track, should be carefully watched and evaluated. Although that program, in and of itself, will be "too little and too late" to have the impact needed on the population problem within the necessary time frame, it might provide some clues as to how to approach communities on sensitive or difficult problems in an acceptable manner.

In general, at a number of points, <u>we sensed the need for some wide-spread, culturally sensitive communications system.</u> Acceptance of programs such as family planning, some environmental programs and programs of community sanitation depend on people having an information background that does not presently exist. Attempting to provide that background through promotores <u>of those programs</u> is liable to be seen as "pushing" and hence be counterproductive. However, that same information - what causes diarrea and how is it spread? Why are children healthier if born further apart? Why

deforestation reduces stream flow - provided by a trusted, "neutral" medium, might create the informational background against which promotores would then be listened to. The old BVE program model is very much the sort of thing we find lacking.

This is the good news.

THE OUTWARD-ORIENTED INSTITUTIONS

Whenever field operations are discussed, whether in MAGA, MSPS or Education, the problem arises of "trabas burocraticas". Shortages of funds for viaticos and gasoline for field trips, medicines for health posts, blackboards, chalk and even desks for schools - these and similar stories of continuing frustration come up in almost every conversation. Long delays in procurement and endless procedures for approval of contracts and other routine operations slow down program implementation and frustrate field operators. Sudden, seemingly arbitrary delays in making available funding called for in approved budgets result in technicians sitting at their desks, unable to do their jobs.

These same trabas, if they persist, (and they will if a concerted effort is not made to overcome them) will frustrate the government's present thrust towards decentralization of operations. Regional offices, rather than providing the necessary flexibility and streamlining to move out smartly on implementation, will simply add another level of bureaucratic delay. These same factors will make attempts at inter-agency coordination (such as those contemplated in HADS II) mere exercizes in conversation with scarce possibilities of joint planning let alone joint execution by the GOG agencies involved. (Incidently, it seemed to the writer that "coordination", as used by the Guatemalan technicians with whom he spoke, has a meaning much closer to the former-conversation - than to the latter. In working out programs with Guatemalan counterparts, AID personnel should take pains to assure that a common definition of that word is reached.)

Because these bureaucratic delays are not only severly hampering present operations but will continue to do so in the future, thus slowing down and even distorting the desired impact of planned and contemplated AID programs, we thought they were worth looking into. We do not pretend to have isolated all of them, but we did isolate a few.

Administration: Procurement, Contracting.

12

There probably are a number of reasons for the delays and anomolies encountered in what should be these routine aspects of government operations. However one reason is surely that in Guatemala, as still in much of Latin America, the procedures involved reflect the last vestige of the dead hand of Spanish Colonial administration. They were established principally to avoid theft by the simple expedient of requiring a hierarchy of personal attestations all the way up the chain of command. They were not established with any notions in mind of program execution, much less rapidity or flexibility of execution. From the point of view of action programs, they face in the wrong direction.

What is needed is a system that is based on delegable authority to execute agreed programs in all their aspects, including procurement and contracting, against approved budgets and control procedures, without further prior approval and subject only to post-audit.

Fortunately, there is reason to hope that that the GOG, on its own, may be moving in this direction. Additionally, we have reason to believe that this will not require a vast, lengthy effort in "public administration reform". We are told that the kind of system sketched out above is the system currently in use in semi-autonomous agencies such as ICTA. It seems to work quite well. If so, a model exists which will simplify enormously the change-over required.

We also have been told that changing over to this ICTA-type model of administration is what is contemplated under the GOG's current regionalization program. If so, fine (although, as discussed below, there are other problems that will have to be solved before regionalization, much less coordinated operations, can work.)

The Mission should explore with the GOG the extent to which full delegation of authority to the line ministries, and through them to the proposed regional bodies is contemplated. If what is contemplated is less than full delegation of authority to purchase, contract, hire and disburse funds pursuant to approved budgets and in accordance with prescribed proceedures, AID should discuss with the Government of Guatemala the possibility of extending to its Ministries the administrative flexibility, under the same controls, that currently govern the operations of semi-autonomous institutions.

(Before making the recommendation in that form, should it be necessary, the Mission should check further on the actual situation in ICTA. Our information is based on only

one source, although he should be a reliable one since he was the head of ICTA for a number of years.)

If the GOG is not contemplating full delegations of authority as described above, the Mission should urge it to do so. If outside assistance is felt to be necessary to help design such a change-over, (we would guess that the bulk of the work required could be done in-house by the GOG itself) we would consider that to be a very high-priority investment.

In any discussion of administration with the GOG, AID should - based on our conversations - be prepared to field a number of "counter-charges" regarding AID's own administrative procedures. There seem to be a number of stories out there about long delays in AID procurement (one group of project vehicles took two years to arrive, we were told) and also undue delays in disbursements against vouchers sent to Mexico.

Budgeting and Disbursement

There is another set of problems that operate in parallel with those described above but independantly of them. They also serve to hamper and, not infrequently, paralyze project operations. These have to do with disbursement procedures and, according to our information, seem to be rooted in deficient budgeting procedures.

At least part of the problem, the part that we have been able to identify through conversations with knowledgable officials in various ministries, lies in the Dirección Tecnica del Presupuesto in the Ministry of Finance. That office disburses funds to the Ministries periodically against their budgets. Not infrequently, however, for various reasons as, for example, if government receipts for a given period are below projections, the DTP does not disburse the full amount of funds budgeted for the period. The Dirección also seems to be empowered to distribute cuts unevenly as among ministries/agencies or even, perhaps, among programs and projects although our information on this last point is not certain. We have been told, however, that some highly skilled (and highly prized!) GOG bureaucrats are able to get funding for their projects or programs out of DTP even under conditions of a partial or general funding freeze. The personnel of the DTP also seem to be adept at causing delays in disbursements which cannot be traced to a decision that might subsequently be reversed - even by experts in getting their disbursements when the rest of the government is sufferring. We were told of a case, for example, where an approved budget item was put under the wrong "rubro" - in effect, as we understand it, the wrong "allotment number".

14

That took some six months to straighten out before the funds involved eventually were disbursed.

We do not assume that the Dirección Tecnica del Presupuesto is acting on its own ipse dixit. On the contrary, we assume it is acting under orders, at least broad orders issued from time to time to restrict disbursements for whatever reason. The result at the project level, of course, is chaos. As the process works, there is no point at which an administrator can say: "OK, our budget is cut so much for the rest of the year. That means we will have to concentrate remaining funds on priorities 1 through 5 and stop operations for this year on 6, 7 and 8." With no notion of how long the funding restriction or freeze is likely to continue or at what level funding might eventually be restored, and with available funding only sufficient to pay salaries, substantive work stops.

Whether the reasons for this capricious method of controlling outlays lies in unpredictability of receipts, or, as others have suggested, in the desire to build or maintain a reserve against unbudgetted contingencies or even, somehow, to stay in compliance with IMF targets (as some other of the people we spoke to suspected), the root cause is the same: inappropriate budgeting techniques. Particularly in countries seeking to maximize budget flows into productive development activities, a budget must be more than a political and fiscal document; it also must be an operating plan. The Guatemalan budget and its modes of implementation appear to be seriously deficient in this respect.

We recommend that AID enter into a policy dialogue with the Government of Guatemala, which also must include the IMF, to deepen the understanding on all sides of where the problems are and the impact, on current operations, of present budgeting methods and administrative procedures. If the impressions of the team outlined here are correct, AID should urge the IMF to provide technical assistance to the GOG to revamp its budgeting and budget administration procedures.

The recommendations above, although calling for immediate action by AID, also suggest a strategic dimension more in line with the time-frame of the principal mandate of this team. Until the situations described above with respect to program administration and budgeting/disbursement are straightened out, whether by following up on the recommendations of this team or otherwise, AID should avoid program designs that call for close operating coordination- as opposed to collaboration - between GOG agencies.

15

The reasoning behind this recommendation is obvious enough, we believe. Given the numerous pre-approvals presently required in many aspects of project administration, with resultant delays unpredictable from the operating level, and the vagaries of the present disbursement system which can impact differently on different agencies (even agencies in the same ministry, we are advised), it is impossible for two or more agencies to maintain agreements on time-bound operating plans.

We recognize that there may be situations where the urgency of the need to proceed with a particular program plus the nature of the program itself may force the Mission to proceed on a tightly integrated type of operation despite the advice above. The HAD II program (a pun?) is very much in our minds as we write this. In that program, AID and the GOG took deliberate steps to insulate the program from at least some of the problems set out above by setting up an elaborate structure outside the GOG apparatus to handle program implementation and control. (We are not sure they will avoid the disbursement problem.) In any event, it is not our purpose here to evaluate that recently approved project which is just on the point of getting underway. In conformity with our mandate, we will only observe that, while we understand the frustration and the felt need to get on with the job that produced that particular design (and, we assume, the similar extra-GOG control unit - the PAU - set up under health loan 339) there is a price to be paid for such designs in terms of institution building/sustainability. As it is when the projects are over the contractors go home. There is no added capacity - which there otherwise could have been - within the concerned agencies of the GOG to carry on similar operations on their own in the future. And they need that capacity, even if it is the capacity to handle procurement through the private sector rather than through a government procurement office.

In the short run there may be a middle ground. We recommend that, should the Mission find it necessary to continue the use of outside control/administration/procurement units such as that contemplated under HAD II, consideration be given to including arrangements in the original project design that would, at the end of the project, move trained people and developed procedures back into the operating ministry in a manner designed to install that additional capability in that ministry.

For the long run, however, AID and the GOG should realize that these measures are palliatives. The real problems lie in the areas set out at the beginning of this section. A frontal attack on that series of problems - and

others that will come to light in a full study of the matter - is, in our opinion, seriously overdue.

The International Overload

In the course of our examination of factors hampering present and future project implementation, we came across another one that clearly merits AID'S attention. Based on conversations with several GOG officials, we have a pretty strong notion that externally financed projects are overloading the capacity of the Government of Guatemala, with respect to both budget funds (used as counterpart) and personnel and hence derrogating from its ability to carry out its own operating programs. Externally financed projects, we are told, are accorded priority in the ministries in both respects, funding and personnel. We are advised further that the result often is starvation of the GOG's own, on-going operations. Hence, for example (this is a hypothetical explanation of a real case) when the DIGESA extensionistas move on to a new area in the externally-financed crop diversification program, no one is left behind, under an on-going GOG-funded program, to follow up with technical assistance to the last group that came into the program. This may also be one explanation for the chronic shortage of operating materials under the regular programs of the Ministries of Health and Education. Many of those programs, of course, are programs started with external assistance and which have now, as designed, been internalized within the GOG. To this extent the external donors are working against the sustainability of their own programs.

This situation has another impact that bears particular mention. It is stifling the initiative of trained professionals in the ministries who are anxious to design and carry out their own projects. They point out that this could be done using existing equipment not dedicated to externally-financed projects. But the funding isn't there to permit this. This is a serious waste of both human and material resources.

Here, again, the basic problem is budgeting. But the solution does not have to await the overhaul of the GOG budgeting system recommended above. AID should take the lead with the other principal external financing institutions, bi-lateral and multi-lateral (including, importantly, the IMF) and the concerned ministries and agencies of the GOG, in calling for an examination of the overload problem. Existing ministry and agency budgets should be analyzed to determine whether, and if so to what extent, this problem exists. If this is the problem we think it is, future AID project papers - and those of other external financing institutions, if AID

can swing that - should contain an annex addressing this problem as it relates to the budget(s) of the GOG agencies concerned. As necessary and appropriate, AID and other externally-sponsored financing agreements should contain specific covenants designed to avoid this problem (by guarantying an adequate level of budget resources and personnel hiring authority) for the life of the proposed program.

If the indications we have received are correct, the remedy will be a painful one for the GOG. While some GOG budget funds undoubtedly can be saved by more careful programming, the bulk of the solution will have to come from either (1) a lower level of current GOG operations, (2) a higher budget, (3) a lower level of external lending or some combination of all of those.

A Strategy for the Future

"Evaluation" implies the question: "Does what we are doing need to be changed?" (Which, in turn, is redolent of the old story of the comedian Sam Levinson, who told of his mother saying to his father: "Jake, go downstairs and see what the children are doing and tell them to stop.") Our answer, at least in this context, may appear a bit unusual. It is: (At least for the short term) don't change what you are doing in the highlands; but do change somewhat the way you are looking at it. We would suggest that, in pondering the task at hand on the Altiplano, the Mission consider that, in the first instance, that task is the introduction of change itself rather than any specific change. That is, at least until much larger numbers of highland communities have had at least one or two successfull experiences in accepting offered services and working with government agencies and programs, focus should be heightened on the processes by which communities accept and assimilate or reject change. We must emphasize that we mean more attention to this factor and not less attention to the quality of the changes to be introduced in agriculture, education and health. (In this connection, we note the recent addition to the Mission staff of a young native Mayan-speaker, from the highlands, with U.S. training in sociology. He has functioned as an invaluable member of the team that prepared this report and we have no doubt that he will be equally invaluable in helping the Mission carry out the recommendations in this section of our report.)

We have noted, as many others have in other cultural settings, that the successful assimilation of one "item of

change" by a traditional community facilitates the acceptance and assimilation of the next and the next in an upward and outward spiral. That has strategic implications, we believe, for USAID/Guatemala and the GOG. The question has been raised as to whether it isn't better to geographically group projects in health, education, agriculture and community infrastructure so as to get a synergistic effect at the local level. We looked for evidence that this had happened but didn't find any. What we did find, as stated above, was that each successful project seemed to make the community more receptive to further ideas. What this suggests to us is a sort of "open market" approach to development on the altiplano. The notion would be to offer as many communities as possible as many choices as possible and let them choose those for which - for whatever reason - they are willing to take responsibility (through investment of their own labor or credit, or through irrigation, local school, health, potable water, etc. committees).

This strategy is more congruent with the "offering" approach to communities suggested above than is the more planned approach inherent in deliberate project grouping. The latter type of strategy, implying (as is usual) numerical goals within a limited geographic area is more likely to lend itself to "pushing". We make this recommendation fully realizing that, for logistical reasons and because objective criteria exist for project prioritization such a strategy is unlikely to be fully adopted. But we suggest the Mission, in discussing strategy with the GOG, seek to move in this direction.

This strategy will require increased emphasis on access roads; the programs of the line ministries are very dependant on them. It also will require careful monitoring of training programs for promotores, guias agricolas and volunteers to be sure that the "pipeline" is kept full. (In this connection, we note that a number of promotores and others are moving out of their programs and into jobs with PVO's or programs of other ministries. We think this process is hopeful and should be encouraged. To the extent that a "career path" is established for these people [a]recruitment of replacements will be facilitated and [b] trained, bilingual people will be moved into positions of greater responsibility and influence. Both results are "consummations devoutly to be wished.")

In this same connection, we are impressed with the widespread presence in Guatemala of PVOs. To the extent that such a move would further their own objectives, they could play a vital role in the strategy recommended by moving increasingly into the more isolated communities, preparing the way for the eventual entry of government-provided

19

opportunities.

AID's strategy in the highlands, at present, is designed to: "Achieve greater participation of all Guatemalans--primarily the historically disadvantaged -- in the generation and benefits of that growth." (CDSS Update - December 1988.) We have no quarrel with that. But we sense that, in the minds of many both in AID and the GOG, the stress is put more on participation in benefits (with an additional margin for "catching up") then on generation - production. And yet (and admitting we have not made a comparative study of yields:investment in the urban private sector - something the Mission might want to undertake for its own reasons), there seems to us to be little room to doubt that the direct, economic benefits - including, importantly, employment generation - of the programs in mini-riego, terracing and crop diversification are much greater than potentially available returns in the urban private sector. If the population problem can be solved, and assuming necessary and appropriate marketing structures can be put into place (not easy, but a much simpler proposition), the altiplano is the place most likely to generate the significant increases in national wealth that will be needed into the foreseeable future.

Furthermore, production gains on the altiplano translate immediately and directly into improved standards of living. This is not nearly so true of production gains in the urban private sector. For these reasons the Mission should continue to stress - and perhaps even increase the accent on - those projects that promise rapid pay-off in production increases. This would include not only terracing, mini-riego and crop diversification, which should be extended geographically as rapidly as possible, but also work in storage (on farm drying and simple cold storage), home canning, marketing and new product development.

We would not want the reader to infer that we are arguing for investment in the rural private sector instead of the urban private sector (and it should be kept in mind that we are talking about the private sector in both cases). We are aware that the Mission is planning to look more closely at the urban, modern private sector and, while our scope of work did not get into that area, we have no reason to question that judgement. The only point we mean to make here is that programs on the altiplano should be viewed as investments in production more than anything else.

(With respect to the Mission's proposed study of the urban informal sector, we offer the gratuitous suggestion that it include a study of reciprocal flows of people and

money between that sector and the rural highlands.)

THE 8% SOLUTION

We visited a number of municipios and aldeas to get an idea of how the program was going for passing eight percent of central government revenues directly to local levels of government and to learn what we could about the present state of community-government relationships at that level.

In general the program seems to be working; we did see a number of projects at the local level (in addition to those being carried out in the cabaceras) with that funding. However, we got the impression - which was confirmed by the recent Price Waterhouse audit - that it was difficult to tell exactly how much had been spent for what and where. Certainly the aldeas had little or no idea of what projects had been carried out beyond those in their own communities.

One way of handling this problem, which would have the additional virtue of bringing the aldeas and cantones more into the process (and hence enhancing the "democratization" potential implicit in the program) would be to require each municipio to post in a prominant place in the municipal building and in each aldea and canton the total amount of funds received by the municipio under the 8% program for the previous and present year and a list of projects, by community, funded or being funded with those funds. They also should be required to submit that list to the Contraloria. We feel sure that listing will be read with interest by people at the local level; certainly any errors, such as a mistaken listing of projects not actually undertaken, would be noticed immediately and, we are confident, called to the attention of municipal authorities. Such a requirement might also give rise to other interesting forms of debate, such as who is getting funding and who isn't. For the moment, however this is a "top down" program, with ultimate decisions on which community projects to fund being made by (mostly Ladino) municipal councils or, we sometimes got the feeling, by the Alcaldes. One municipal secretary, a very conscientious man, expressed concern over the lack of a sense of priorities he felt was exhibited by the project selections of some communities.

As a way of getting some funding to the local level for projects selected at that level, the 8% program undoubtedly is better than nothing. In the long run, however, we would prefer to see a local level program based on enhanced capacity of local levels of government to levy their own taxes and fees and make their own decisions on uses of the funds collected.

21

We should add here that we make this suggestion, and the others in this section, knowing that the 8% program is not an AID program. We take into consideration, however, the fact that AID is in constant communication with the GOG on a whole range of topics and that its professional suggestions and opinions are respected by GOG officials.

One aspect of municipio level government on the altiplano that surprised us is the extent to which it seems to consider itself as operating on a different track from the central government ministries of agriculture, health, education, etc. While the municipios do, occasionally, recur to INFOM for technical assistance or funding, it does not seem to have occurred to any of them to approach any of the line ministries. They are generally aware of what those ministries are doing in their areas but seem to regard them as almost existing in another world. (It may be worth noting that the most common reason given for not recurring more often to INFOM is the long lag time and uncertainty of INFOM's eventual response. In general, INFOM, to whom we spoke, seemed understaffed in those offices providing technical assistance in project selection, design and supervision. On the other hand its technical assistance programs in public administration do seem to be getting out and are appreciated.)

This was particularly striking since the most popular projects under the 8% program seem to be school rooms and schools. (Additional teachers may or may not be assigned by the Ministry of Education. We found one case [San Juan Sacatepequéz] where additional school rooms had been staffed on a volunteer basis by certified teachers who had not been able to get puestas for that year. San Juan also had built its own health center which was staffed by last-year medical students from the Universidad Francisco Marroquin. San Juan Sacatepequéz, of course, is a suburb of Guatemala City and so has some possibilities not open to more remote municipios.)

Yet this lack of contact with and use of the line ministries does not have to be the case, as was brought home to us sharply in Guastatoya (El Progresso) where a hustling municipal administration had been able to draw resources for local projects from the line ministries. It strikes us that this sort of interaction between local levels of government and the line ministries could not only significantly further the process of democratization at all levels but also help stretch the strained budgets of the line ministries (since communities have demonstrated their willingness to put up their own funds, and labor, for schools, water supply projects and other, similar projects).

It occurs to us that what is needed here, at least in the first instance, is information, letting people know what services might be available and, importantly, where to go to find out about them and how to get them. We suggest that AID discuss with the GOG the publication of a government directory listing those agencies of the government that provide services directly to the public. The directory would contain a very brief description of each such agency and the services it provides; it would be cross-indexed by type of service; and it would contain a listing, by department and municipio, of all offices of each agency. It would be useful if they could be translated at least into the major Mayan langauges. These directories should be made available to all municipios, aldeas and cantones and to the "Principales" in charge of community affairs at the village level and should be kept available for consultation by any interested individual. At least some PVO's might also want to be included in such a directory. Provision would have to be made to up-date/replace these directories from time to time, of course. Even so, this should be a very inexpensive experiment in democratization.

THREE FURTHER ISSUES

Since this section does serve as an overview of the work of Development Associates, Inc., there are three additional issues, touched on or elaborated in the annexes that follow, that we feel are sufficiently important to warrant highlighting here.

Environment

Serious environmental damage is starting to show up in a number of the areas we visited and more is predictable. The Mission and the GOG are starting to address these problems but a very significant effort will be needed to prevent further deterioration, let alone to repair the damage already done. Some of the problems likely to be encountered in carrying out this effort have been referred to above.

The team was pleased to learn of the largescale environmental effort about to be launched by ROCAP. The Mission should move quickly and decisively to work with and take advantage of that effort.

Marketing

We also want to underline here, because of what we agree to be its critical importance to the productive work being

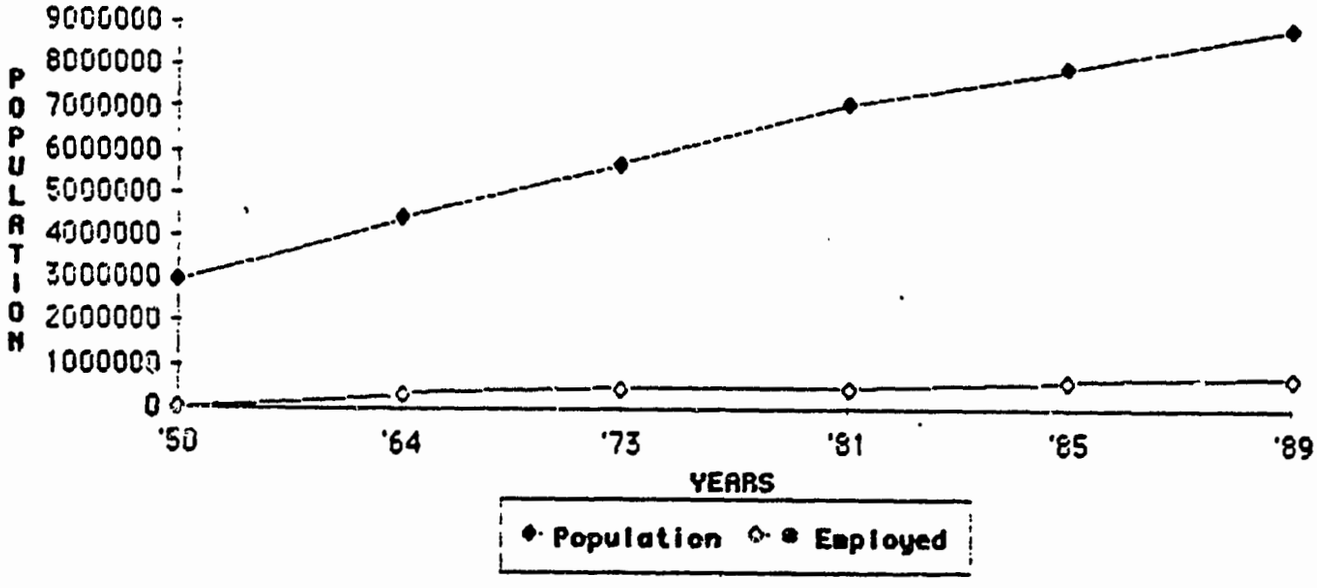
undertaken in agriculture (and the very success of that work) the main conclusion of the annex on this topic. The Mission should undertake a global study of marketing in Guatemala, looking at all aspects of the problem and identifying existing gaps, bottlenecks and possibilities as a basis for further specific project work in this field.

Women in Development

We have looked at the Mission's proposed strategy for incorporating WID analysis in all aspects of AIDs future work and for being certain that issues uncovered in that analysis are dealt with in project design. We applaud that development. Evaluations carried out by a large number of assistance donors all over the world have demonstrated clearly that that's the way to go.

APPENDIX I.1

POPULATION GROWTH AND EMPLOYMENT INDICATORS
(1950-1989)
Sources: (Pop.) Ctro. Latinoamericano Demografía
(Emp.) Instituto Guat. de Seg. Social (IGSS)



APPENDIX I.2

TO: David Lazar

FROM: José Baudilio López

DATE: February 11, 1989

Protein-Energy Malnutrition

Based on information collected in the period December 1985 through March 1986, INCAP performed an analysis of the nutritional status of children under three years of age.

Analysis of the results indicate that underweight in Guatemalan children is detected very early, usually during the child's first quarter of life. This underweight increases after the fifth month and reaches its maximum prevalence between the 12th and 14th months of age.

According to analyses carried out by INCAP, the highlands area is where this problem is felt most, especially in the Departments of Quetzaltenango, San Marcos, Totonicapán, el Quiché y Sololá.

In 1986, a height census of children in the second grade (Guatemalan equivalent to the first grade), between 6 and 9 years of age, was performed to determine the degree to which their physical growth had been retarded; again, the highlands was the most affected area. Over 50% of the children showed some degree of moderate or severe malnutrition.

Guatemala's economic development from the 1950s to the 1970s did not have a significant impact on the nutritional status of the population. Concerning the appropriate height in terms of age, INCAP analyzed data from 1965 through 1975, finding that approximately 50% of children under five years of age suffered from a deficit of 10% or more in height in terms of age. Rural areas were the most affected. Data analyzed by INCAP showed that during the period from 1967 to 1977, the nutritional status of the country deteriorated.

In the "Analysis of the Nutritional Problem of the Guatemalan Population," a study performed by INCAP in 1977, it was found that 29 to 38% of the children between the ages of 6 - 59 months, suffered from malnutrition of degree I or II on the Gomez scale; 48% were placed at degree I.

Underweight at birth

A study performed by the Child, Maternity and Family Division (División Materna Infantil y Familiar, DIMIF) revealed that 15.9% of newborns in 1975 weighed 2,500 grams or less, which demonstrates not only the nutrition of the mother, but also the child's high risk of mortality during his first year of life. Other studies indicate that the ratio of children that are born underweight reaches alarming levels in rural areas; during the period from 1964 through 1972, INCAP carried out a longitudinal study, finding that 41.7% of newborns weighed 2,500 or less.

Morbidity Caused by Malnutrition

For over 40 years, the existence of severe malnutrition in Guatemala has been acknowledged. It is evident that protein-caloric malnutrition is one of the most important problems faced by Guatemalan children, but paradoxically, no standardized means is available that allows the magnitude of this problem to be detected. The only reliable data is that provided by studies carried out by INCAP.

In addition to the marked protein-caloric deficiency in Guatemalan children, there are other nutritional deficiencies affecting this group of high risks, as was expressed by Dr. Delgado in the document: "Nutritional Nourishment Situation of Guatemala" (Situación Alimentaria Nutricional de Guatemala) (INCAP), 1987:

"In 1965, only 19% of the families had an adequate consumption of Vitamin A. The evaluation of the sugar fortification program carried out in 1979 showed that this avitaminosis was no longer a Public Health problem. The program was discontinued in 1980. A new evaluation on ocular damage, conducted in 1984, revealed that 0.7% of the children examined had corneal xerosis and 1.4% had scars. The latter figure is 25 times higher than the limit of 0.05 set up by PAHO, a level above which Vitamin A deficiency becomes a Public Health problem."

Riboflavin Deficiency

Studies performed in 1965 revealed that more than 60% of the families living in rural areas consumed less than 75% of the daily dietary recommendation of riboflavin.

Anemia

The main cause for anemia in Guatemala is iron deficiency. In 1965, 31% of the population showed signs of anemia. Recent studies suggest that between 52 and 76% of women at fertile age suffer from low levels of iron.

Food Availability

Production of vegetables and basic grains (sugar, corn, wheat) has been very irregular. Even corn production increased at a lower rate than population growth. Sugar and cooking oil production increased considerably, as a direct result of external market expansion for sugar and cotton fiber.

Information gathered as late as 1984 shows that during the early 1980's there has not been an increase in per capita food production. This is extremely serious, taking into account the great inequality existing in its distribution, the rapid increase of population, and the increase in prices of food and services (inflation). All of these factors negatively affect food availability in poor rural communities.

APPENDIX I.3

Intensidad de cultiv. y rendimientos

Departamento	Nombre de municipio	% tierra cultivada, 1979	% tierra cultivada, 1950	Rendimientos maiz 1950, prim cosecha	Qq.maiz x mz., primera cosecha, 1979	Qq. frijoles x mz. 1950	Qq. frijol x mz. 1979
Baja Ver	San Jerónimo	.22	.15	8.23	13.55	6.08	7.42
	Salamá	.26	.13	3.94	8.97	1.68	3.71
	Granados	.28	.19	8.48	13.24	6.14	11.38
	El Chol	.35	.16	6.53	7.79	3.49	4.10
	Cubulco	.39	.28	6.72	8.07	4.62	6.58
	Purulhá	.49	.11	15.58	18.11	19.31	10.94
	Rabinal	.54	.36	4.89	10.39	4.04	2.34
	San Miguel Chicaj	.60	.17	5.78	9.32	6.35	8.99
Mean		.39	.19	7.52	11.18	6.46	6.93
Chimalte	Patzún	.35	.48	7.00	22.83	.71	10.76
	San Martín Jilotepeque	.37	.21	8.28	22.60	5.32	12.87
	San Pedro Yepocapa	.41	.37	10.79	15.64	5.37	.
	Tecpán Guatemala	.44	.42	8.22	24.79	1.91	6.32
	Santa Apolonia	.55	.	7.86	22.46	1.03	1.00
	Acatenango	.57	.36	8.05	11.93	3.34	5.52
	San José Poaquil	.57	.54	7.36	25.49	4.91	4.71
	Chimaltenango	.60	.49	6.77	25.78	4.23	9.19
	Zaragoza	.62	.56	7.03	35.00	2.58	10.22
	Pochuta	.68	.41	17.81	20.56	7.00	.
	Comalapa	.79	.46	9.84	30.62	.83	8.45
	Patzicía	.81	.65	7.19	32.12	.94	8.74
	El Tejar	.94	.42	8.70	17.50	4.71	5.00
	San Andrés Itzapa	.95	.69	6.20	15.63	3.77	4.68
	Santa Cruz Balanyá	1.06	.75	10.38	40.00	1.62	10.50
	Parramos	1.11	.88	6.27	13.65	3.70	10.00
Mean		.68	.51	8.61	23.54	3.25	7.71
El Quich	San Pedro Jocopilas	.26	.31	5.50	13.02	1.13	12.54
	Chiché	.27	.	6.99	17.08	.88	1.00
	San Miguel Uspantán	.30	.12	12.41	13.41	7.35	9.47
	Chajul	.36	.23	[illegible]	12.45	9.67	13.61
	Chinique	.39	.35	[illegible]	10.74	1.14	3.00
	Joyabaj	.44	.28	[illegible]	12.29	5.46	9.22
	Santo Tomás Chichicastenango	.44	.56	[illegible]	15.65	1.85	9.55
	Sacapulas	.49	.19	7.36	12.67	1.97	13.00
	Cunén	.50	.27	[illegible]	13.42	2.82	11.80
	Nebaj	.52	.32	19.74	[illegible]	2.98	3.59
	Zacualpa	.56	.35	[illegible]	17.50	3.67	7.09
	Santa Cruz del Quiché	.60	.59	[illegible]	[illegible]	1.77	9.08
	Patzité	.61	.	[illegible]	13.33	.88	.
	San Juan Cotzal	.66	.28	[illegible]	12.59	[illegible]	3.10
	San Andrés Sajcabajá	.67	.53	[illegible]	11.57	[illegible]	9.00
	San Antonio Ilotenango	.67	.	11.49	16.23	2.75	.67
Mean		.48	.34	9.70	13.59	3.41	7.71
Guatemal	Chinautla	.15	.14	7.92	18.60	2.96	.

Intensidad de cultiv. y rendimientos

Departamento	Nombre de municipio	% tierra cultivada, 1979	% tierra cultivada, 1950	Rendimientos maiz 1950, prim cosecha	Qq.maiz x mz., primera cosecha, 1979	Qq. frijoles x mz. 1950	Qq. frijol x mz. 1979
Guatemal	San José Pinula	.18	.19	8.94	15.57	3.36	19.67
	Santa Catarina Pinula	.23	.35	8.53	7.55	2.75	8.50
	San Raymundo	.23	.14	7.38	14.45	3.10	10.61
	San José del Golfo	.26	.30	5.06	5.85	2.69	3.77
	Mixco	.28	.22	6.79	10.01	5.42	6.75
	San Juan Sacatepéquez	.29	.21	7.41	13.10	3.73	11.88
	Chuarrancho	.38	.33	4.55	7.83	2.03	8.86
	San Pedro Ayampuc	.39	.25	4.00	48.07	3.03	8.50
	Villa Canales	.39	.36	11.99	16.90	6.00	10.88
	Palencia	.39	.29	6.62	17.30	3.65	12.36
	Fraijanes	.41	.24	10.30	16.58	2.57	12.00
	Villa Nueva	.49	.34	9.60	14.26	1.54	29.00
	San Pedro Sacatepéquez	.54	.32	7.49	14.00	3.76	.
	San Miguel Petapa	.61	.49	10.12	18.46	3.04	6.00
	Amatitlán	.70	.49	9.13	19.40	5.43	11.63
Mean		.37	.29	7.86	16.12	3.44	11.46
Huehuete	Malacatancito	.16	.09	8.72	20.95	3.89	10.27
	Huehuetenango	.33	.17	9.19	19.13	6.49	5.68
	Aguacatán	.33	.41	10.63	21.83	3.55	7.61
	Nentón	.34	.07	13.11	10.64	2.26	4.90
	Santa Cruz Barillas	.37	.18	13.60	14.28	2.88	9.62
	Santa Bárbara	.41	.33	7.21	16.44	9.13	1.89
	Santa Ana Huista	.42	.81	13.06	10.76	11.80	9.78
	San Juan Ixcoy	.44	.52	8.99	12.96	4.05	8.00
	San Pedro Necta	.50	.27	10.15	11.75	6.27	10.79
	San Rafael Petzal	.52	.62	10.79	13.85	6.67	1.00
	San Pedro Soloma	.52	.49	11.55	11.82	4.81	5.95
	La Libertad	.54	.28	9.10	11.59	10.28	9.15
	San Gaspar Ixchil	.54	.22	8.68	12.70	7.05	10.46
	La Democracia	.56	.4	14.43	12.42	11.34	8.42
	San Mateo Ixtatán	.58	.21	14.53	9.49	12.43	4.94
	Colotenango	.69	.61	14.40	10.61	4.95	9.17
	San Sebastián Coatán	.69	.56	7.74	19.66	4.99	2.37
	Chiantla	.71	.38	9.95	17.34	2.07	16.65
	Santa Eulalia	.73	.63	11.61	.97	10.17	6.74
	Santiago Chimaltenango	.74	.44	9.54	14.60	3.83	.
	San Sebastián Huehuetenango	.75	.51	11.16	15.09	7.34	11.83
	San Rafael La Independencia	.77	.62	9.18	15.43	1.99	8.70
	Cuilco	.80	.18	12.25	14.79	3.22	3.54
	Todos Santos Cuchumatán	.82	.64	8.18	14.71	7.38	7.05
	San Ildefonso Ixtahuacán	.86	.82	13.27	14.50	11.65	12.72
	San Antonio Huista	.89	.32	10.00	10.25	10.42	8.00
	San Miguel Acatán	.90	.82	8.43	13.81	5.17	2.60
	San Juan Atitán	.93	.61	13.36	12.73	2.04	7.14
	Jacaltenango	.93	.49	11.08	11.17	.17	7.36
	Tectitán	.97	.	10.53	13.47	3.55	1.63
	Concepción	1.04	.62	9.26	11.95	1.13	6.70

Intensidad de cultiv. y rendimientos

Departamento	Nombre de municipio	% tierra cultivada, 1979	% tierra cultivada, 1950	Rendimientos maíz 1950, prim cosecha	Qq.maiz x mz., primera cosecha, 1979	Qq. frijoles x mz. 1950	Qq. frijol x mz. 1979
Mean		.64	.43	10.76	13.60	5.90	7.36
Quezalte	Concepción Chiquirichapa	.	.51	18.64	25.20	1.22	.
	San Martín Sacatepéquez	.36	.38	12.48	20.44	2.57	9.50
	Cabricán	.45	.25	9.70	21.67	.84	5.00
	Coatepeque	.49	.58	29.79	35.91	9.22	7.71
	San Carlos Sija	.51	.34	14.05	21.33	5.19	1.00
	Flores Costa Cuca	.52	.42	20.41	26.31	7.80	1.00
	Génova	.57	.42	25.80	31.62	4.53	6.00
	San Miguel Sigüilá	.60	.	15.67	.	1.00	1.00
	La Esperanza	.64	.69	11.34	30.00	6.75	.
	San Juan Ostuncalco	.67	.59	15.63	21.00	3.59	1.00
	El Palmar	.72	.47	14.28	14.94	5.87	7.00
	Colomba	.74	.59	17.49	17.48	24.13	5.00
	Palestina	.74	.	10.39	21.00	3.67	.
	Cajolá	.82	.83	22.69	19.00	1.95	5.00
	Zunil	.83	.43	10.10	17.67	5.57	15.00
	Almolonga	.84	.54	8.69	58.04	1.75	.
	Huitán	.85	.39	10.55	.	2.00	.
	Quezaltenango	.87	.74	12.61	24.50	3.12	22.00
	Cantel	.92	.78	12.56	21.67	3.30	3.00
	Sibilia	.92	.26	13.56	42.50	2.00	.
	San Francisco La Unión	.94	.	11.61	21.71	.	.
	Olintepeque	.94	.95	13.00	36.00	1.43	.
	Salcajá	.95	.68	12.01	15.00	1.64	.
	San Mateo	1.11	.	9.60	12.50	5.20	.
Mean		.74	.54	14.69	25.25	4.54	6.37
San Marc	Pajapita	.25	.71	25.64	32.96	10.36	2.00
	Sipacapa	.29	.26	7.35	16.24	1.22	19.67
	Concepción Tutuapa	.35	.29	9.55	9.34	3.48	17.25
	Esquípulas Palo Gordo	.44	.21	12.15	18.00	1.94	3.00
	San Miguel Ixtahuacán	.48	.26	7.75	14.31	2.02	5.23
	Tejutla	.50	.29	11.49	24.17	1.46	.
	San Marcos	.52	.33	10.31	20.60	3.07	2.00
	San José Ojetenán	.59	.	10.20	11.61	1.01	1.00
	San Pablo	.61	.35	13.56	14.76	5.86	30.17
	Ixchiguán	.62	.	11.05	15.75	5.00	7.62
	San Pedro Sacatepéquez	.64	.53	10.54	16.26	2.40	6.89
	Comitancillo	.64	.	12.63	22.97	1.55	22.50
	Tacaná	.66	.44	10.01	14.34	1.24	11.00
	Sibinal	.69	.38	9.38	12.93	1.30	9.10
	San Antonio Sacatepéquez	.69	.	7.90	14.50	1.79	3.25
	Catarina	.70	.42	16.93	21.85	8.81	9.36
	Tajumulco	.70	.29	7.68	11.38	3.98	10.04
	Malacatán	.70	.38	15.45	17.42	13.17	11.04
	San Cristóbal Cucho	.72	.64	7.08	31.00	1.33	8.00
	Ayutla	.79	.28	24.42	31.04	11.29	25.00
	San José El Rodeo	.83	.60	14.03	26.87	4.21	7.00

Intensidad de cultiv. y rendimientos

Departamento	Nombre de municipio	% tierra cultivada, 1979	% tierra cultivada, 1950	Rendimientos maiz 1950, prim cosecha	Qq.maiz x mz., primera cosecha, 1979	Qq. frijoles x mz. 1950	Qq. frijol x mz. 1979
San Marc	Ocós	.84	.18	10.33	31.43	2.80	2.00
	El Quetzal	.84	.58	13.27	19.00	5.30	1.00
	La Reforma	.86	.60	12.45	18.07	5.57	12.67
	El Tumbador	.90	.62	15.13	14.91	5.63	7.16
	San Rafael Pie de la Cuesta	.90	.64	12.81	15.52	7.07	11.00
	Nuevo Progreso	.92	.57	15.50	20.58	11.46	6.60
Mean		.65	.43	12.39	19.18	4.60	9.67
Solola	Concepción	.	.	5.53	.	3.88	24.00
	Santa Clara La Laguna	.17	.	4.64	9.82	.	.
	Santa María Visitación	.18	.	5.82	4.00	1.00	.
	Panajachel	.38	.36	9.78	20.00	5.35	18.50
	San Lucas Tolimán	.49	.41	8.50	16.05	5.15	7.00
	San José Chacayá	.51	.18	8.19	27.00	1.27	.
	Santa Catarina Palopó	.65	.62	6.41	.	4.45	5.00
	Sololá	.66	.53	6.24	15.72	.86	10.00
	San Andrés Semetabaj	.67	.51	6.52	18.45	4.83	7.34
	Santiago Atitlán	.73	.56	7.28	16.01	5.36	9.67
	Santa Lucía Utatlán	.82	.59	6.93	23.40	1.05	1.50
	San Antonio Palopó	.84	.76	5.19	11.89	4.09	10.48
	Santa Catarina Ixtahuacán	.86	.75	11.60	14.46	6.76	10.50
	San Pedro La Laguna	.89	.60	6.30	12.00	5.35	9.00
	San Pablo La Laguna	.93	.85	7.20	10.05	4.43	15.00
	Nahualá	.96	.94	12.15	14.97	4.29	9.50
	Santa Cruz La Laguna	1.00	1.00	8.61	.	.	13.00
	San Marcos La Laguna	1.02	.99	8.86	12.06	7.00	2.00
	San Juan La Laguna	1.02	.59	5.68	11.73	6.25	7.14
Mean		.71	.64	7.44	14.85	4.20	9.98
Totonica	Totonicapán	.06	.82	11.48	17.98	8.76	18.00
	Santa Lucía La Reforma	.36	.	4.45	18.17	.85	12.28
	Momostenango	.36	.67	9.07	26.33	3.56	17.30
	Santa María Chiquimula	.61	.	11.68	16.68	8.34	9.00
	San Cristóbal Totonicapán	.84	.	10.22	21.65	1.54	26.00
	San Francisco El Alto	.84	.72	8.90	26.49	1.10	.
	San Andrés Xecul	.91	.	9.08	40.22	1.76	.
Mean		.57	.74	9.27	23.93	3.70	16.52
Mean		.61	.45	10.40	17.87	4.49	8.75

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APPENDIX I.5

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Alberto Hernández - Municipal Secretary of Villanueva

Humberto García - Municipal Secretary of Patzún

Deputy Mayor and Community Committee of Chipiacul, Patzún

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ANNEX II

AGRICULTURAL RESEARCH, EXTENSION, FORESTRY, AND INFRASTRUCTURE

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Table of Contents

List of Tables. ii
Ministry of Agriculture Organization Chart. 11

I. INTRODUCTION 1

A. The Setting 1

1. Rural Conditions. 2
2. Agricultural Development Overview 5
3. Forestry and the Environment. 6
4. Rural Infrastructure. 7
   a. Rural Roads. 7
   b. Rural Electrification. 9
   c. Rural Market Facilities. 9

B. The Institutions 10

1. Ministry of Agriculture, Animal Husbandry, and Food . . 10
2. Research. 14
   a. ICTA 14
   b. DIGEBOS. 15
   c. The Universities 15
   d. Private Sector Research. 15
   e. International, Bilateral, and Private Organizations 15
3. Extension 16
   a. DIGESA 16
   b. DIGESEPE 18
   c. DIGEBOS. 19
   d. Ministry of Development. 20
   e. Other Extension Efforts. 20
4. INDECA. 20
5. USPADA. 21
6. INACOOP 21
7. BANDESA 21
8. PVOs and Others 22
   a. CARE 22
   b. Penny Foundation (Fundación del Centavo) 22
9. Bilateral and International Programs 23
   a. IDB-PROGETTAPS 23
   b. COCADI 23
   c. COGAAT 24
10. Peace Corps 24
11. ROCAP 24
12. United States Department of Agriculture 25
13. AID/Washington. 25
14. Infrastructure Institutions 25

C. Study Methodology. 26

1. General Approach. 26
2. Document Review 27
3. Field Methodology 27
4. Limitations 28

II. UNITED STATES PROJECTS 29

A. Prior to 1950. 29
B. AID Projects in the 1950s. 30
C. The Decade of the 1960s. 32
D. The 1970s. 34
E. The Present Decade 34

1. Strengthening the Institutions 36
   a. Ministry of Agriculture, Animal Husbandry and Food. 36
   b. Agricultural Guides and Representatives 37
   c. Cooperatives and Associations 38
   d. Credit. 39
   e. Marketing 40
   f. Forestry and the Environment. 40
   g. Rural Infrastructure. 40
2. Acquisition of Land. 41
3. Other Socioeconomic Effects. 42
   a. Housing 42
   b. Nutrition 42
   c. Income Generation Purchases 42
   d. Participation of Minorities 43
   e. Women in Development. 44
   f. Community Organization. 44
   g. Small Farmer Attitudes. 45
4. Technical Assistance 45

III. LESSONS LEARNED. 47

A. Sequential Effects 47

1. Training 47
2. Institutional Strengthening. 48
3. Production 49
4. Research and Extension 49

B. Special Circumstance Effects 50

C. Results beyond those Anticipated 50

IV. CONCLUSIONS AND RECOMMENDATIONS. 53

A. Training 53

B. Institutional Strengthening. 53

C. Production 54

D. Marketing. 57

E. Research 57

F. Extension. 59

G. Farm Credit. 60

H. Land Purchase. 60

I. Forestry and the Environment 61

J. Infrastructure 62

K. Women in Development 63

L. Strategies for the Future. 63

APPENDICES. 65

II.1 Contacts. 66
II.2 Bibliography. 71
II.3 Acronyms. 76
II.4 Interview Guides. 79
II.5 Budget for 1975, 1978, 1983, and 1988 of the Agriculture Institutions by Operations, Investment, Other, and Totals. 81

List of Tables

1. Rural, Urban, and Total Population in the Highlands Departments, 1981 Census. 2

2. Number of Farms by Size: 1950, 1964, 1979, and 1988. . 3

3. Personnel in the Public Agriculture Sector Institutions by Salary and Wage Categories, 1983 to 1988. . . 13

I. INTRODUCTION

Guatemala has made considerable strides in its efforts to improve its industrial base. The principal economic sector is still agriculture and it will remain so for a long time to come. The US Agency for International Development (USAID) and the Regional Office for Central American Programs (ROCAP), together with other bilateral, international, and private organizations, have invested heavily in the improvement of Guatemalan agriculture. Those efforts, in conjunction with those of the Government of Guatemala (GOG), have resulted in some important changes over the last thirty years. Much more can be accomplished.

As explained in the main body of this report, USAID/Guatemala, as a part of its forward planning process, designed an evaluation that would examine the sequence of activities over the past 40 years, the content of specific programs and projects, and the results of those actions. The Mission expects to make use of the lessons learned from this study of the past and present.

The team that produced this annex was charged primarily with an inquiry into the projects in agricultural research and extension, which in conjunction with the other studies on specific components (credit, marketing, and agronomy) would provide the information base for program recommendations. The study team also found that the examination had to include some corollary topics: cooperatives, the work of other donors, and production capabilities per se; these are treated only as needed to explain the past and present.

Necessarily, the team had to look at the conditions of natural resources, particularly forestry, since a great deal of effort has been expended on irrigation, which depends on the watersheds. Movement of products into and out of an area is hindered or facilitated by rural access and farm to market roads. Similarly, some processing of agricultural products requires electricity. The latter components, forestry and infrastructure, were studied much more briefly than research and extension but the findings on them give an indication of trends and needs.

Finally, it was not always possible to separate the several components within agricultural improvement. Combinations of services from two or more agencies, gaps in services, and overlapping functions caused some sections of this report to deal with aggregates. Those circumstances are explained when that occurred.

A. The Setting

The focus of the evaluation was the Guatemalan highlands, not the

entire country. This was further delimited by two departments (roughly equivalent to US states but with much less autonomy) of Chimaltenango and Sacatepéquez in the reorganized Region V of the Ministry of Agriculture, Animal Husbandry, and Food (MAGA); and those of Quetzaltenango, San Marcos, Totonicapán, and Sololá in the new Region VI (formerly a part of Region I).

1. Rural Conditions

The Guatemalan highlands are heavily populated, calculated at 2,298,648 inhabitants in 1981, about 40% of the nation's people at that time. (See Table 1.) The population is expected to double by the year 2010 at the present growth rate. The residents of the highlands are rural, poor, and many speak indigenous languages, some with limited proficiency in Spanish.

Table 1: Rural, Urban, and Total Population in the Highlands Departments, 1981 Census

Department	Rural	Urban	Total
Sacatepéquez	33,752	87,375	121,127
Chimaltenango	144,182	85,877	230,059
Totonicapán	178,882	25,537	204,419
Sololá	99,584	54,665	154,249
Quetzaltenango	228,566	138,383	366,949
San Marcos	415,571	56,755	472,326
Huehuetenango	371,972	59,371	431,343
El Quiché	290,927	37,248	328,175
Totals	1,763,436	545,211	2,308,647

Source: Dirección General de Estadística, Guatemala, 1984

The inhabitants of the departments in the old Regions I and V were primarily rural: 68.9% in 1981; that proportion has changed little since then. The least rural was Sacatepéquez with 27.9%; the most rural was San Marcos with 89.9%. Both the numbers and the percentages of rural residents give evidence of the importance of providing agricultural services.

Many population groups are isolated because of ethnic, tribal, and language differences, as noted earlier. Others are isolated because of few access roads in many areas where the topography is

mountainous in the extreme. AID, GOG, and other donors have built many roads in the last decades but many more are needed.

The problems of nutrition and health generally have been of serious consequence in the Guatemalan highlands. Despite the many projects to increase production and introduce more nutritious foods, plus direct food assistance under Mother and Child Health and school feeding programs, in 1987, INCAP's study of the highlands found about the same proportion of children suffering from malnutrition as a decade and even two ago: 85%. In large part this is because the population has increased more rapidly than the impact of the several programs. As would be expected with severe poverty conditions, there are many health problems that have persisted through time and have, in part, prompted many programs of technical assistance. (See the specialized annexes for details on health and nutrition.)

The distribution of land is a serious problem throughout the country. The vast majority of the farms, 78%, is smaller than 3.5 hectares. (Table 2) Those same small farmers own only 10.5% of the farmed land.

Table 2: Number of Farms by Size: 1950, 1964, 1979, and 1988*, in Guatemala

Size in Hectares	1950 Number	1964 Number	1979 Number	1988 Number
Less than 0.7	74269	85003	166732	201000
0.7 to 1.3	91581	98658	121351	128000
1.4 to 3.4	99779	129115	128587	125000
3.5 to 6.9	42444	52023	51798	50000
7 to 22.4	26916	37025	40356	39000
Above 22.4	13698	15440	22790	21000
Total	348687	417344	521636	564000

* The 1988 numbers are rough estimates based on small samples.

NOTE: The "less than 0.7" group for 1950 and 1964 excluded parcels of less than one cuerda (1600 sq. varas/yards,); they were included in 1979 but the analyses were incomplete.

Despite the variations in the statistical procedures used across the years, it is clear from Table 2 that the number of very small

farms is growing rapidly. The division of farms for the children reduces the land available each generation. Even if all the farmed land in Guatemala were divided among the existing farmers, each would have only 7.4 hectares. And much of the land in some areas is of low fertility and could not support a family on 7.4 hectares.

The highlands is no exception to the country wide figures. The per capita hectares of land available for agriculture, by department, was as follows in 1982, according to the General Directorate for Statistics:

Sacatepéquez	0.96	Chimaltenango	0.59
Sololá	0.48	Totonicapán	0.22
Quetzaltenango	0.56	San Marcos	0.38

That is to say, <u>there is very little land for farming in Guatemala nor in its highlands</u>; special programs to increase productivity are the only immediate solution - and even that solution will not last for long. Obviously, a still more important solution is that of reducing the population growth and perhaps some additional industrialization where Guatemala has an economic advantage.

Two other factors must be noted that have had substantial impact on the rural population. One of these was the earthquake of 1976 that destroyed many roads, homes, and some farm land. While that quake is the most recent and better known, there have been others that caused damage to the rural sector.

The political violence, too, has concentrated in the rural areas. Violent changes in government often brought about other changes in programs and distracted resources from rural development. The guerilla violence of this decade has had, and still has, debilitating effects on rural people and agriculture. At times, whole areas were in conflict, resulting in many deaths people fleeing for their lives, and abandonment of farms for from short periods to up to three years. As an example, in one village interviewed in this study, 87 were killed and all the others fled. All of the homes were burned and the land went to weeds and brush. Although the violence is less now, it still adversely affects some areas.

Despite these mostly negative descriptions, there have been many positive interventions toward alleviating the conditions. The US has had assistance programs in Guatemala since the early days of World War II. The early efforts were mostly small but beginning with the decade of the 50s, have increased a great deal. Other bilateral programs have also helped. International assistance such as that of the Central American Development Bank, the World Bank, and the InterAmerican Development Bank have been active in recent years. Progress has been made. It is still not enough

but the present strong interest in Central America and Guatemala in particular, bodes well for further progress in the future.

2. Agricultural Development Overview

During the early part of this century, Guatemala had two, quite separate systems of production. The first, involving most of the inhabitants, was that of subsistence, with the farmers feeding themselves plus small amounts remaining in good years that could be sold and invested in other necessities. The second was the large farms and ranches: cattle, sugar cane, coffee, and a few other agricultural enterprises. This production was sold domestically and exported. Bananas were grown in the coastal areas, largely by large companies and for export. There were some medium sized farms, as well, and these produced a wider variety of goods for sale abroad (coffee) and locally.

Following World War II, more emphasis was placed on agriculture, with the formation of public research and extension services. Many of these early efforts were geared to the medium and large farms, mostly increasing the production of those goods already being produced. New elements were stimulated, however, including cotton, rubber, and rice. More attention was paid to small and medium farmers, and many enterprises such as corn, beans, poultry, swine, goats, and sheep were studied and improved. The growing urban segment of the population required foodstuffs and some farmers responded to these needs. Subsistence farming, however, continued as the regimen for a high proportion of the rural agriculturalists.

The urban and some nearby international markets became an even greater stimulus to production in the decade of the 50s, and it was then that the Ministry of Agriculture, and in conjunction with the US in the cooperative agricultural research and dissemination agency vastly broadened the scope of efforts to increase and improve agricultural production. Although that program was limited in its geographic coverage, some substantial successes were registered and Guatemala was able to mostly keep up with its food demands and still sell some quantities in foreign markets.

Population pressures continued to be felt. When the Ministry of Agriculture took over the duties of the former joint agency, research programs were increased; many advancements were made in better varieties, particularly of corn and beans, and in farming practices. Despite these gains, population continued to outstrip supply, becoming a serious social and economic problem. Guatemala, with assistance from the United States, other governments, and international agencies, placed more and more emphasis on agricultural production generally and on improving the conditions of the small farmers specifically. Rural roads, some electrification, schools, and health programs accompanied

the work in agriculture, in part to help increase production and sales, and in part to alleviate the conditions of the rural poor.

Because of its large area of temperate climate, Guatemala has been able to address some important farm markets with its fruit and vegetable products. Violence and unstable political conditions in neighboring countries have spurred this development. Recent attention to the production of non-traditional crops for export gave further impetus to these enterprises.

The nation has many pressing needs; those related to education and health are described in other annexes. Those in agriculture can be briefed in this section as involving two major questions:

How to feed the growing population adequately?
How to produce sufficient export goods to allow the nation sufficient hard currency to enable it to purchase the goods and services needed.

Agricultural development is complicated, as noted previously, by the scarcity of land, low level of farming practices among the many small farmers, and the lack of an adequate government budget to appropriately address the needs.

3. Forestry and the Environment

Only a few generations ago, Guatemala had large extensions of forests, conifers in the highlands and many hardwood species in the coastal areas and lower elevations. The nation exported substantial quantities of wood and wood products. The demand for these products has not decreased.

Guatemalans have depended, and still do, on firewood for cooking and for heat in the highlands. Little charcoal is manufactured. As the population grew, this demand became enormous, causing widespread depredations on the forests. And there is no end in sight for this stripping of the resource.
Simultaneously, the scarcity of farm land has caused farmers to push deeper into the forests, using slash and burn methods to carve out small parcels for their corn and beans. That pressure, too, continues largely unabated.

These demands on the forest reserves have brought about widespread deforestation. Some efforts at control have been put into place but to date they have had limited success. Indeed, the present laws discourage some wise use management practices (pruning and selective cutting) that would increase the usable supplies for firewood and lumber. Reforestation programs have been implemented sporadically but these efforts have been, and continue to be, too little and in some cases, too late. An

agroforestry program has been underway since 1964 but its achievements have been too few under the continuing threat to the mountains generally and to the watersheds in particular.

In many sections of the country, soil erosion from the steep slopes and in the watersheds is rampant. Mountains that a few years ago supported trees and other vegetation are now denuded or in process of so becoming. Of particular importance to this review of agriculture, is the damage being done to the water resources. Springs are drying up; creeks and rivers are diminishing in flow. Supplies of this precious resource for drinking water and for irrigation are rapidly disappearing in some areas and are in danger in others. The overall effects of such problems as environmental damage will be enormous in the near future and they already exist in some sites.

Further, the very successful mini-irrigation program of AID-DIGESA is seriously endangered. Those projects mostly use springs, creeks, and rivers as sources of water. A few problems have already arisen and more will follow. There simply will not be enough water to irrigate the land. Drilled wells to take advantage of subterranean sources are producing large quantities of water in most sites. These, too, will eventually be in jeopardy if the watersheds remain unprotected and their vegetative cover not replenished.

There are many other pressures on the environment, including sources of irrigation water. Continued population growth with the increasing release of sewage into the streams is imperiling health in several areas. Two mini-irrigation systems at Santa María Cauqué are being changed to drilled well irrigation because of the sewage problem. Intensive use of agricultural chemicals, some of which are banned elsewhere, and their seepage into the streams and subterranean reserves, have already caused concerns. Some Almolonga farmers have had to abandon use of a stream formerly used for irrigation. Other systems are thought to be contaminated. Improved sewage disposal and better control of chemicals demand immediate attention.

4. Rural Infrastructure

For the purposes of this report, rural infrastructure was defined narrowly to primarily include roads and electricity. Potable water systems, health clinics, schools, and municipal structures are covered within the other annexes. Brief mention will be made of agricultural buildings and area markets constructed in earlier projects.

a. Rural Roads

Except for the PanAmerican Highway and a few other major roads, Guatemala began the post World War II period with a severely

restricted network for vehicular transportation. There were some graveled roads but these, too, were few and connected only major population centers. Travel to small towns and villages was risky at best and sometimes impossible in a motor vehicle, especially during the rainy season.

As the demands for vehicle traffic increased, the government recognized the necessity of improving the system of roads and highways. It built some but the very high cost of such construction reduced what could be achieved. International agencies such as the Central American Bank for Economic Integration, the InterAmerican Development Bank, and the World Bank made many loans to the government for transportation. It must be pointed out, however, that these institutions were primarily involved in the construction of highways. Some rural roads were built but not many.

Because of its consistent interest in agricultural development, AID pushed the construction of farm to market and then farm access roads within several projects across the years. That thrust has greatly changed the communications in the rural areas. Many of the most productive sections have already been linked with the marketing centers. The most recent projects have spent large sums on access roads and those, too, are now facilitating the entrance of farm supplies and the movement of produce out to the markets. It is also important to emphasize another benefit from the rural access roads, that of the movement of technical assistants and other services into an area. Where there is no road, few extension agents, health workers, and other development assistance arrive. And even when they did enter prior to the road, the trip was long and arduous, diminishing the territory they could serve.

USAID/Guatemala has had many years of road building with the Rural Roads Directorate of the Ministry of Communications, Transportation, and Public Works. Over the decades, the two bodies have worked out careful assessment procedures for the selection of roads, for their designs, and for the construction. Many of the projects have utilized community participation to achieve the road building and the subsequent maintenance. The design and procedures are models in effective collaboration between governments. In every project on which there are data, the joint projects built more roads than stated in the objectives.

There is also, of course, quite another set of benefits from rural roads. Previously, transporting a sick person out on a hammock carried by men, or on horseback, was slow and dangerous. Small children could not readily attend schools not even a short distant from their homes. General personal and agricultural communications between villages, and between villages and cities, were infrequent. Roads that allowed the entrance of buses or the

many other vehicles that carry passengers, have generally expanded the radius of action of rural people. Too, there is a direct, although difficult to measure, benefit to agriculture from this expanded communications - that of the opportunity to find out about prices and markets, about better farm practices, and the opportunity to view what other farmers are doing and the results they have obtained. The possibilities of horizontal diffusion are considerably enhanced.

b. Rural Electrification

Guatemala developed some current generation capabilities early and has continued to explore these possibilities. Almost all of the electricity went to the towns and cities where the demand was highest and where residents could afford to pay the monthly rates. The efforts to extend this service into the rural areas has mostly occurred during the last two decades, and particularly since 1980. The service has not yet reached the majority of the villages in some areas but more are connected each year.

In early years, there were a number of private companies in the field of electrification, including some municipalities. These have been reduced in number so that now most of the services are provided under the National Electrification Institute (INDE), with a few municipalities carrying out distribution. While INDE has suffered many problems because of increased demand for current and few additions to its generation capacity, the AID-INDE projects have progressed reasonably well.

There are the obvious benefits of electricity to the lives of the rural residents - lights for reading and work, for radios, and for sewing machines and corn grinders. There is also the potential benefit of providing power for irrigation and potable water pumps, for the processing of agricultural products, and for small industries. The present generating capacity will not allow extension of electricity to the entire rural area but plans and construction will increase the capacity in the future. That eventuality will enhance the potential for local area added value processing of produce, increasing profits for the farmer and/or providing local employment.

c. Rural Market Facilities

The concerns for the marketing of farm produce has persisted since the days of the cooperative services in Guatemala. Some early markets were built, such as "La Feria" near the present DIGESA offices, the beginnings of "La Terminal," and several across the countryside. Subsequently, AID and the government built a number of others under the rubric of secondary market centers and those have become very important to the farmers. It was thought that the increase of road transportation would

reduce the importance of those secondary markets but they continue to be of great value.

B. The Institutions

The Government of Guatemala institutions, particularly the Ministry of Agriculture, Animal Husbandry, and Food, have been the primary vehicles for the US rural development projects. In addition, however, others have been utilized in these efforts. The Ministry of Development was one that was involved for some years during the decade of the 70s. Too, private voluntary agencies and other private sector entities have played a part, particularly during the past decade.
[Organization Chart for MAGA]

1. Ministry of Agriculture, Animal Husbandry, and Food

As noted in an earlier section, the Ministry of Agriculture began primarily as a entity devoted to promoting large scale production and marketing of the principal export products from Guatemala: cattle, sugar cane, coffee, and to a much lesser extent, bananas. With the formation of the cooperative service between the United States and Guatemala, the attention was shifted toward a more modern structure with research and extension capabilities. In 1957, the process to transfer the cooperative service to the Ministry of Agriculture was begun; it was completed by 1963.

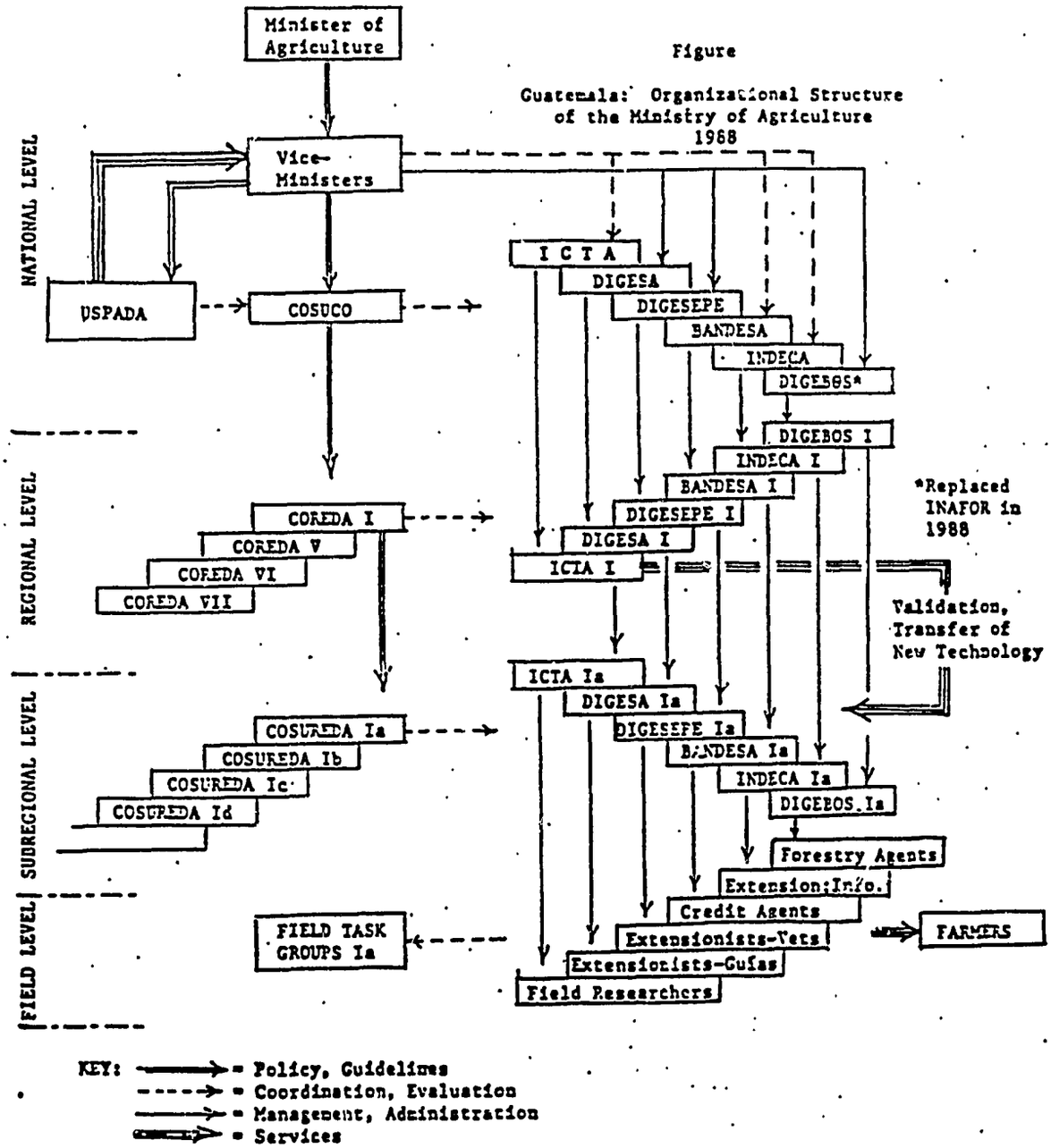
The Ministry of Agriculture has undergone various transformations during its history and has had periods with a great deal of GOG budget support, as well as periods with little. Its general organization, until recently, has been from the top, the minister, down to the field level; it is currently aiming at more input from the field and greater participatory decision making.

The present organization of the Ministry of Agriculture, Animal Husbandry, and Food is displayed in the organizational chart. The minister heads the administration and he is assisted by vice ministers, each with a particular part of the organization under his direct supervision. The principal entities associated with the ministry include:

USPADA is charged with sectoral planning,
BANDESA, the government agricultural credit bank;
INDECA, an institute that deals in some phases of marketing,
ICTA, the research institute,
DIGESA, the directorte for crop extension,
DIGESEPE serves to conduct livestock extension,
DIGEBOS is the forestry directorate.

Figure

Guatemala: Organizational Structure of the Ministry of Agriculture 1988



The ministry has varying degrees of control over these units; as a generality, the institutes have less direct supervision than do the general directorates.

Two other organizations must be mentioned: INACOOP aids in the formation and development of cooperatives, including those in agriculture; INTA conducts some functions in the acquisition of land for distribution to landless peasants. Neither is within the Ministry of Agriculture but are instead attached to the Office of the Presidency. A division, DIRHIA, in the Ministry of Communications, Transportation, and Public Works, works with the larger irrigation projects constructed some years ago; although it helped with some of the early plans and training for the mini and drilled well irrigation projects, it has no direct connection with them.

The organization chart for the Ministry of Agriculture also displays the several levels of coordination groups: COSUCO (national), COREDA (regional), and COSUREDA (subregional). Field task groups perform a similar function at the community or area level.

The National Coffee Association (ANACAFE), an independent federation, does nearly all of the research, extension, and marketing of that product. It receives a percentage of the returns from all coffee exported and with it, finances its operations.

Unfortunately, the personnel data obtained on the ministry cannot be divided into technical, administrative, and clerical categories. Generally, salaried persons are technical and administrative but some upper clerical positions are also included. The wage category includes field workers, guides, representatives, and a few others.

The Table 3 column entitled ministry includes the several offices in Guatemala City, in the regional offices, and in the DIGESA and DIGESEPE agencies. in DIRHIA (Hydrolic Resources Division; manages large scale irrigation projects),

Renewable resources, human resources, agricultural training, transportation, plant and animal protection laboratories and inspectors, and a few other small support offices are included. Field estimates suggest that about half the ministry personnel is in DIGESA but that at least 75% is in the wage category. A DIGESEPE estimate was set at about 10% of the ministry personnel.

Despite the problems of desegregating the numbers, it is obvious that the main Ministry of Agriculture personnel was at about the same level in 1983, 1984, and 1986; it suffered a substantial drop in 1985. In 1987 and 1988, the number more than doubled. It must be emphasized that much of this rise (quantity unknown)

was in guides and representatives but their addition expanded the work in extension.

Table 3: Personnel in the Agriculture Public Sector Institutions by Salary and Wage Categories, 1983 to 1988

	MINISTRY	ICTA	INAFOR*	INDECA	BANDESA
1983					
Salary	2505	390	620	613	1166
Wage	2875	548	3483	105	----
TOTAL	5380	938	4103	718	1166
1984					
Salary	2606	388	615	593	1150
Wage	3705	627	1457	50	----
TOTAL	6311	1015	2072	643	1150
1985					
Salary	2647	391	618	595	1161
Wage	1454	485	1074	47	----
TOTAL	4101	876	1692	642	1161
1986					
Salary	2683	416	618	595	1161
Wage	3731	611	1087	163	----
TOTAL	6414	1027	1705	758	1161
1987					
Salary	6667	395	590	572	1150
Wage	7253	603	1361	208	----
TOTAL	13920	998	1951	780	1150
1988					
Salary	8099	441	----	608	1162
Wage	5378	627	----	227	----
TOTAL	13377	1068	----	608	1162

Source: Statistical Register, National Civil Service Office

* INAFOR became DIGEBOS in 1988 and staff was in transition; the fiscal agents no longer are part of the service but the exact effect on DIGEBOS has not yet been determined.

Appendix II.5 displays the budgets for the several agencies in 1975, 1978, 1983, and 1988. While direct comparisons are difficult because of differing exchange rates and inflation,

there is still ample evidence that the budgets for the Ministry of Agriculture have increased; even considering inflation, the 1988 budget, Q 165,463,563 ($ 61,282,800) is about six times the 1975 level. However, inflation took its toll between 1983 and 1984; the latter figure, in real terms, represents a small decrease.

2. Research

The primary responsibility for farm research rests with the Agricultural Science and Technology Institute (ICTA). DIGEBOS performs that service for forestry. The universities of San Carlos, Landivar, and del Valle also conduct some research; often that is done in conjunction with ICTA, DIGESA, or DIGESEPE. Private businesses, both input suppliers and large producers, carry out some trials and adaptation studies. There are also some private consulting firms that conduct research for other entities.

a. ICTA

The Agricultural Science and Technology Institute is listed as semi-autonomous but it is within the Ministry of Agriculture. It is governed by a board of directors with the ministers of agriculture and finance included. The board plans the overall strategies and, once the budget is set, allocates monies to the several programs.

The ICTA personnel varied from 876 to 1068 during the period. The present number represents only a small increase since 1983.

ICTA has experienced a moderate budget increase across the years. The high in 1988 includes some small sums that were provided by IDB and AID, both in general operations and investment (vehicles, buildings, equipment). AID/Washington projects in beans and cowpeas, and on model farming systems, have aided the institute.

The institute is headed by a manager with directors for its several commodity study groups and for each region; the latter have subregional directors. The organization has research stations all across the country except in El Petén; the regional directors are also the research station managers. The production centers are headed by an administrative delegate who answers directly to the regional or subregional director for the area.

The principal commodity groups work in corn, beans, rice, sorghum, wheat, oil crops, vegetables, fruit, and livestock. Two support groups add their functions: socioeconomic studies and seed production. The institute is charged with both long term,

development research, and for shorter term applications studies on varieties, soils, fertilizers, and farm practices.

b. DIGEBOS

The organization and its general functions will be discussed more fully under extension. The Forestry General Directorate does conduct its own research. The main activities are those of adaptability, planting techniques, and management practices. It has close ties to the forestry program in the Center for Agricultural Technology, Research, and Education (CATIE), in Turrialba, Costa Rica, and through it to the AID Regional Office for Central American Programs (ROCAP) fuel wood and reforestation projects.

The old forestry institute, INAFOR, was seriously reduced in personnel, declining from a high of 4103 to 1951 in 1987. Some of this decrease is due to the removal of the fiscal functions from their responsibilities.

c. The Universities

The three universities with agricultural studies - San Carlos, Rafael Landivar, and del Valle - all have some land for research and do produce some studies. Their resources are limited but the professors and thesis students do mostly adaptive investigations. As noted earlier, they often collaborate with the public and some private institutions. They have sufficient expertise to do more.

d. Private Sector Research

As a generality, the research work done by the several commercial houses, large farmers, and consulting firms can be described almost entirely as applications. The fertilizer companies try different levels of fertilizers on different crops and soils. Chemical houses do somewhat the same trials on insects and diseases. Feed sales houses, with livestock farmers, do similar work on their products.

Large growers, especially those of the specialty crops such as flowers, fruit, and vegetables, also do applications studies. Some also do more indepth work such as the development of varieties. In recent years, many of these growers have contracted their research work, or at least its routine supervision, to consulting firms, as have some of the supply houses. The consulting trend appears to be expanding rapidly.

e. International, Bilateral, and Private Organizations

As a generality, these do no long term development studies. They do, usually in cooperation with farmers, conduct adaptability and practices trials. These entities are more likely to work out an

arrangement with the government organizations for complicated research.

There are some exceptions to this general rule. The Swiss project did almost all of its adaptability and practice trials with its own specialists, even bringing in consultants when needed. The French and West Germans also do some. This work tends to generate the specific knowledge and skills needed to serve their target project populations. Pacific Sun Co. is now doing some work on raspberries, varieties of blackberries, asparagus, and some other vegetables.

CARE, with assistance from ICTA, did studies on cardamon. An Evangelical group has done some minor trials work. Save the Children and Foster Parents have both helped farmers do some varietal and fertilizer level trials.

3. Extension

Education of farmers and the diffusion of appropriate varieties and farm practices are, for the most part, in the hands of DIGESA and DIGESEPE but many other organizations also work in this field. DIGEBOS carries out extension activities on general forestry and on agroforestry.

a. DIGESA

The General Directorate for Agricultural Services is a direct dependency of the Ministry of Agriculture and is the largest, both in personnel and coverage, of the MAGA bodies. It is headed by a General Director, who is assisted by an Assistant Director. Each region has a regional director; in addition, most of the subregions have directors for their areas. Extension agencies are strategically located throughout those areas.

This service has, in addition to administrators and their support personnel, the following types of technicians:

Irrigation: In each region with substantial irrigation activities, there is a supervisor and some professionals who do the feasibility studies, loan applications, installation with the farmers, and supervision of the first irrigation practices.

Soil Conservation: A regional supervisor is aided by field technicians who prepare the beginning studies, guide farmers in the construction, and assist with the first plantings.

Both of these groups are regionally managed since there are too few of them to be able to be distributed among the field agencies. A socioeconomic studies unit will soon be added, in that same manner, to assist those groups and the extensionists with needed research in those fields and in evaluations.

Extensionists: The ideal is to have one or more extension agents located in strategic centers where they can serve all of the communities around them; that ideal is seldom achieved because of lack of personnel. The agent serves as the head of the agency, as liaison with ICTA and DIGESEPE, and gives direct assistance to farmers and groups of farmers (groups are preferred for efficiency).

Home Economists: These women work directly with the farm and other wives and girls to help them with organizing themselves to achieve development goals, give instruction on gardens, cooking, and nutrition, and on home crafts.

The ideal would be to have at least one in each agency but that, too, is beyond the financial resources of DIGESA.

4S Club Promoters: These men and women strive to organize clubs of young people in order to teach them about agriculture, livestock, and home living. The actual instruction will be shared with the extensionist and the home economist. Many agencies have no club agent.

Agricultural Guides: Many agencies are assigned a number of positions for the guides that is supposed to be enough so that all of the important production communities are covered. Each guide has an assignment of five or more communities in which he works intensively, usually one community each day. The guides are farmers, often from the same area where they work, and he speaks the local language. They are full time employees and have received some training for their jobs. Before 1986, most, but not all guides were volunteers and received no pay. Not all agencies have guides; in some where PROGETTAPS operates, they are replaced by agricultural representatives.

Agricultural Representatives: These persons are elected by their communities as liaisons with all of the other services with the expectation that they will be able to help their farmers obtain the assistance needed. They are paid as half time employees. Some of these, too, have received training; that, plus their own

experience, allows many of them to perform direct farm assistance.

The work of the irrigation and soil conservation technicians is almost entirely with the recipients of the USAID-DIGESA projects. They also assist nearby farmers who, on their own, do conservation and sometimes irrigation.

The extension agents, with the help of the guides and representatives, have done the bulk of the work with the AID projects, both in the past and in the present. They are the primary linkages between those projects and the beneficiary farmers. The home economists and club agents give instruction on project components that fit within their assigned audiences.

A typical full agency has one each of the personnel. With the representatives, annual plans are drawn up for general extension, home economics, and youth. Those plans are submitted to the subregional office and from there to the region.

Except for the DIGESA-PROGETTAPS agencies, there is little transportation, fuel, per diem, or supplies. The agents often travel on foot or bus, pay their own expenses, and some of those related to the conduct of the operation. They try, in so far as possible, to ride with personnel from other agencies and to talk businesses into helping with the other expenses. (The AID irrigation and soil conservation technicians have more transportation and supplies. Those with PROGETTAPS have vehicles and allotments for fuel, per diem, and supplies such as seed, fertilizer, and chemicals; the farmers also return twice the amount of seed they received, which is sold, and this helps support the agency.)

b. DIGESEPE

The General Directorate for Animal Husbandry is a relatively small organization that, in addition to extension, performs tasks in animal health, feeding, product sanitation, and direct veterinary services. Its organization is similar to that of DIGESA but with special support branches for health, sanitation control, and artificial insemination. The staff is made up of veterinarians, specialists in diseases and feeds, livestock extension workers, and some assistants that expand the extensionists' sphere of action.

DIGESEPE's work in the several regions varies with the types of farm animals prevailing there. Its clientele includes farmers with dairy and dual purpose cattle, sheep, goats, swine, poultry, rabbits, pond fish, and bees. The Peace Corps assists them, especially with the bee and small animal projects.

DIGESEPE participates actively in the AID projects in the highlands, assisting farmers to determine the feasibility, design, and production practices of animals financed under the present and some earlier projects. In the highlands, nearly 85% of the project farmers have chosen dairy cows; by stabling them, producing feeds from borders,other cut grass sources, and vegetable residues, they have been able to progress quite rapidly. DIGESEPE technicians collect data on breeding, feeding, and milk production. In the Huehuetenango area, sheep for wool have been important components. Some projects with all of the other farm animals are conducted with a few farmers and their wives and children.

c. DIGEBOS

The General Directorate for Forestry has many functions relating to the promotion of, education about, and assistance to the rural population on forestry. Since 1964, the organization was a semi-autonomous institute, INAFOR, but last year it was brought more directly under the Ministry of Agriculture. In the last year of INAFOR, there were only 40 professionals and middle level technicians; that has risen to 90 now and as others complete training, will go up to 120. There are several categories of field workers but the major vehicle for extension is the promoters, who have functions similar to those of the guides in DIGESA.

At the national level, the general director is assisted by chiefs who head the specialist and support offices. Regional offices deal with the problems in their areas, assisted by technicians and promoters. As noted earlier, in addition to extension, DIGEBOS has an applications research function; those studies are conducted in the regional stations and in forests. Seed and plant multiplication is a major function of these stations.

Two AID projects operate with DIGEBOS. One of these is of long standing, since 1974, agroforestry. This is the most wide spread of the programs of the directorate, covering some 13,00 farmers. The project works with communities, organizing them to carry out planting and care of trees. Fuel wood and lumber species are included. The principal idea of the project is to reforest the watersheds that bring potable and irrigation water to the farms.

The second AID-DIGEBOS project is entitled community forestry; its primary goal is to protect the watersheds. While relatively new, and hampered by many bureaucratic tangles on purchases, the project is already working on natural and seeded reforestation, and on the management of existing forests. A legal problem hampers some of the intended progress in wise use management (allowing thinning and harvesting of trees when best for preserving the overall health of the forest).

d. Ministry of Development

This ministry has had a widely varying set of tasks across the years, ranging from promoting village organization and contact with other development institutions, to outright agricultural extension services; It even disappeared fo a time. The latter function, during the early 1970s, was an AID attempt to increase technical assistance to farmers. The experiment did not produce the anticipated results.

The present ministry has experienced several problems with the implementation of its programs, partly derived from its late start into the field and partly from unequal salaries for some promoters, resulting in unionization and a work stoppage.

In addition, the "development promoters" moved into the same villages as the extension service, causing a great deal of confusion. Presumably there will later be some separation of duties, facilitating the work of each.

e. Other Extension Efforts

Although their work will be discussed in more detail in later sections, it is helpful to note here that there are other entities that perform educational work with farmers. INACOOP, the National Cooperative Institute, helps farmers organize themselves into precooperatives, cooperatives, and federations. It has had a cooperative strengthening project with AID. CARE helps conduct agroforestry extension in conjunction with the Peace Corps and DIGEBOS. It earlier conducted a cardamon production and marketing project. Visión Mundial, Save the Children, and Foster Parents do farm practices work with farmers and their families. The Swiss, West Germans, and The Netherlands all have extension projects currently underway.

The commercial supply houses also do extension work on the use of their products. Buyers and brokerage firms give some advice. CLUSA now, and ACDI earlier, do or have done extension work with the members of the cooperatives they serve. Also, some cooperative federations have extensionists on their staffs. The IDB project in the western highlands finances extension work but has no staff of its own.

The three universities do some extension, primarily to train their students during the field practice. Landivar has a program called the Training Center for Social Promoters (CAPS).

4. INDECA

The National Commercialization Institute has in the past received a great deal of help from USAID/Guatemala; indeed, that

organization helped form it. Except for help provided via the PL 480 Title I Food for Peace program, no project has been funded directly by the Mission with INDECA in many years. Most of the early efforts were in the organizational strengthening projects. (The special annex on marketing deals in depth with this institute.)

In 1978 and 1983, the INDECA budget was at its high point (the present number was not provided but was said to be "lower"). A part of that institutions's budget is for the purchase of grains so it is difficult to judge personnel or operations changes. The personnel in INDECA, while experiencing changes, is still at approximately its 1983 level.

5. USPADA

The Sectoral Unit for Planning and Food in MAGA is a direct arm of the minister. Its primary focus, planning, is directed toward all phases of agriculture. It has benefitted from all of the institutional strengthening projects, and especially from 233, to improve its operations.

6. INACOOP

The National Cooperative Institute, attached to the Presidency, assists any kind of cooperative but agriculture occupies much of its time. It helps farmers organize themselves, obtain its legal status, and gives technical assistance to the boards of directors, managers, and accountants. Education programs on cooperatives are regularly conducted. Most functions of INACOOP are conducted from its main offices in Guatemala City but it also has offices in some of the regions. It has in the past and in the present, benefitted from AID projects on farmer cooperatives.

7. BANDESA

The BANDESA budget has increased substantially but most of the rise is in loan funds. Taking inflation into account, the operations budget has changed little across the period. The BANDESA personnel has remained almost static since 1975.

The credit arm of the agricultural development operations is the National Agricultural Development Bank. That institution is thoroughly reviewed in another annex, thus only a brief discussion is included in this one. In general, BANDESA and its predecessors have been the most important formal source of credit for the small farmer in Guatemala. Its only serious rival is the intermediaries who often make production loans, with an informal but strong lien on the harvest. Commercial supply houses sell

goods on credit, and this, too, increases the supply of operations money to the farmers.

The earliest attempt at an agricultural development bank was via a private institution. That did not function well, particularly for small farmers. The first government bank was then instituted; a name change occurred some 20 years ago. The banks have always experienced a high delinquency rate and this has severely hampered their operations. As shown in Table 3, the bank has relatively few employees serving a very large number of farmers; this causes great difficulty in monitoring the harvests and effecting collections. BANDESA has a much stricter loan and repayment policy now than in the past and its current record is much improved.

8. PVOs and other Private Sector Efforts

In 1986, a ROCAP consultant counted almost 100 private voluntary organizations working in rural Guatemala. The number was reduced greatly during the violence. The number is still quite high in 1989. Many of these have quite specific objectives - health, social organization, education. Others carry out combined assistance. The study team found it impossible to

investigate all of these and therefore restricted their inclusion herein to the two major ones that work closely with AID projects.

a. CARE

This organization has worked for many years in Guatemala. Earlier, it distributed PL 480 Food for Peace commodities to mother and child health and school lunch programs; it no longer works in this field. It has also built schools and conducted other community improvement programs. Since 1974, it has worked with the forestry institute, INAFOR, now DIGEBOS, and the Peace Corps in a wide spread agroforestry project in the highlands. It also worked with ICTA, DIGESA, and INTA on a three year cardamon production, processing, and marketing endeavor. The latter programs are described in more detail in later sections.

b. Penny Foundation (Fundación del Centavo)

This is a small foundation begun 27 years ago from funds provided by the founders and collected by them, and invested so that the earnings could socially and economically benefit the rural poor. The board of directors plans the work and hires administrative and technical staff to carry it out. Its headquarters is located in Guatemala City and it has offices in many parts of the nation.

The foundation mostly makes small loans to farmers and others so that they can operate a farm or business, or carry out some improvement that will better the lives of themselves and their families. In addition to agriculture, its main activity, it also has helped with land purchases, small businesses, housing, and with other small projects.

Of major interest to this report is its work with USAID/Guatemala on first a pilot farm land purchase project and on a followup with greater activity. The Foundation and the Mission report many successful transactions and a very low delinquency rate. More detail will be given in the next chapter.

9. Bilateral and International Programs

The principal focus of this study is the assistance from the United States. Nevertheless, it is important to state that there are many other countries and international organizations working in rural development in Guatemala. No single institution can address all of the needs thus it is vital that as many as possible collaborate toward development. This report will deal only with three of those involved. In addition, it is useful to record that many others are or have been helpful in the past: Switzerland, Japan, Taiwan, France, the European Economic Community, and the World Bank, to name only those that were named in the highlands regions.

a. IDB-PROGETTAPS

The InterAmerican Development Bank has financed many projects here over the years: roads, potable water, agricultural credit, and two small irrigation projects. Its largest current program in agriculture is that of the Program for the Generation and Transfer of Agricultural, Livestock, and Seed Technologies in the highlands. That project will be discussed in more detail in a later section so suffice to note here that it involves both applied research and extension, with a special methodology. Its primary focus is on basic grains.

b. COCADI

The Netherlands Government presently operates a program entitled Cakchiquel Integrated Development Coordination in several sites in the area of that indigenous language group, mostly in Chimaltenango. It has several organizing and technical assistance activities but that of most importance to this report is its technical assistance to agriculture. It has its own extension workers who help farmers develop their production plans and their applications for credit. COCADI works closely with the DIGESA extension, soil conservation, and small irrigation agents. Since the program's extension agents have far fewer farmers to

assist, their work is seen by the farmers as in greater depth and frequency.

The COCADI project has a total personnel of 20, including office and support staff, as well as those working in extension. It has some funds for small loans to farmers.

c. COGAAT

This West German program also conducts a wide range of development activities. It has extension and family consultants who provide organizational and technical assistance to its group members. COGAAT works in production and soil conservation. Both these and the family assistance make use of European Economic Community, and sometimes World Food Program, commodities to help the rural families improve their economic and social wellbeing.

10. Peace Corps

The volunteers of the Peace Corps work in many kinds of projects - agriculture, beekeeping, small animal production, irrigation, soil conservation, and agroforestry, in addition to projects in housing, health, and education. Most of the Peace Corps projects are done in conjunction with the public sector agencies; bees and small animals with DIGESEPE, crops with DIGESA, agroforestry with DIGEBOS. Further details of these will be given in later sections.

11. ROCAP

The AID Regional Office for Central American Programs works only on regional problems and through regional institutions. Its nutrition program, through INCAP, has had substantial success through the years. It is of major help to institutions such as the InterAmerican Institute for Cooperation in Agriculture (IICA) and to the Center for Agricultural Research and Education (CATIE), which provide research, training (graduate and short courses), and technical assistance in many phases of agriculture and forestry. It has also furnished help to the PanAmerican Agriculture School in Honduras, to the technical level animal husbandry school in Costa Rica, and to the technical level forestry school in Honduras. It is also helping with the establishment of a tropical lowlands agricultural university in Costa Rica. Through a project with the Central American Business Institute (INCAE), first in Nicaragua and now in Costa Rica, it has helped promote and train for exports of non-traditional crops.

Further, ROCAP has some important regional projects in integrated pest management, fuel wood plantings, general forestry, and the

environment. It is currently establishing a fund for environmental studies and for protection and remediation of all types of environmental problems.

Guatemalan agriculture and forestry have benefitted in many ways from the ROCAP projects: masters degree training, short course technical training, research, and direct action programs. Several of its projects continue to help Guatemala.

12. United States Department of Agriculture

The USDA has had many projects in Guatemala across the years. Its main focus at the present time is the control of the Mediterranean fruit fly and a management program for the Africanized honey bee. These activities are carried out in conjunction with Mexico, Guatemala, Honduras, Costa Rica, and to some degree with El Salvador. The purpose is to control the fruit fly in Central America and Mexico so that affected products can be shipped to the US and elsewhere, and to prevent their spread into the United States. The department also collaborated in the work conducted under small farmer diversification.

The Africanized bee project began with similar aims but at this time concentrates on the management of the mixed blood bees so as to maximize their production and reduce the danger to animal and human life occasioned when pure strains of the African bee migrate into an area.

13. AID/Washington

As noted in the ICTA discussion, the Washington office of AID has some direct projects in Guatemala. Two that are known projects include one in bean and cowpea research and another on model farming systems study. The latter program has just received authority for the building of a model farm.

14. The Infrastructure Institutions

The Rural Roads section of the Ministry of Communications, Transportation, and Public Works has been, for some time, the only vehicle for the AID rural farm to market, access, and tertiary road construction projects. It has established a good reputation for feasibility studies, selection criteria, and implementation. In the beginning years of US projects, two separate methods were used: directly with the Ministry of Public Works and via private contractors. Contracting can still be done on major construction and the selection process has resulted in well performed work.

The Central American Bank for Economic Integration earlier built some rural and farm to market roads. It still builds some that are deemed important for certain marketing outlets.

The rural electrification projects have all been carried out with the National Electrification Institute (INDE). The institute has semi-autonomous status and a suitable administrative and implementation structure and personnel. It is hampered by the difficulty of obtaining sufficient hard currency to order the equipment it needs for the work. It is also beginning to experience some problems of insufficient current generation and will have to resolve that problem before large scale rural electrification can take place.

There are other rural infrastructure projects that have been built in the past and are in process now. Some of those in former decades were constructed by contractors through funds channeled through the Ministry of Agriculture: ministry buildings and secondary market places. For a shorter time, two other forms have been in use: CARE with the municipalities, and the municipalities themselves from the 8% project. (See the Overview of the Institutional Development for further details on the 8% program.)

C. Study Methodology

The present study is a purposive interview/inspection evaluation by specialists in the several fields who have had extensive experience in Guatemala. The study team utilized many documents for relevant information. Additionally, they conducted indepth interviews with many AID, GOG, and private sector informants. They also conducted interviews with farmers and other rural people, and inspected the implementation of many projects in the field. These methods, plus their knowledge and experience, formed the primary basis for the study.

1. General Approach

The overall strategy was to study, in so far as possible, the AID projects from about 1950 through 1988, examine their processes and results, and discover longitudinal sequences that had produced lasting and cumulative effects. The second phase was to determine, if possible, the component or components that had enabled the lasting success. At the same time, the study team was charged with an examination of the projects or components that either did not produce the desired results or that had negative effects.

2. Document Review

The Mission provided voluminous documentation on the present and some past projects related to agriculture, forestry, and infrastructure. Many others were obtained from the Mission, GOG, and private organization officials during interviews with them. Both groups contained project papers, amendments, reports, evaluations, material produced during the implementation of projects, and other information useful to the study. In addition, statistics on the nation and the regions were used.

The most recent and pertinent documents were read entirely; the summaries, conclusions and recommendations, and special portions of the others were studied. Notes were taken, organized by major subject, and filed for use during the preparation of this report. When necessary, as was often the case, the information was discussed with the officials during the interviews to clarify or expand the knowledge about them. (See Appendix II.2 for those of major importance to the materials in this annex.)

3. Field Studies

The length of time provided for the study, six weeks, severely limited the amount of time that could be dedicated to interviews with regional and local officials and farmers, and to the inspection of projects completed and underway. The ten days in the field provided a substantial volume of interviews. (See Appendix II.1 for those in the capital and the regions.) The interviews and inspections concentrated on projects involving irrigation, soil conservation, diversification, livestock projects, and some traditional cropping enterprises. A few were held on marketing, both traditional and non-traditional products, credit, and on general services. Direct interviews and inspections were conducted in Quetzaltenango, San Marcos, Totonicapán, Chimaltenango, Antigua, and Sacatepéquez.

The field work also included a large number of interviews with the government personnel serving the farmers: DIGESA, DIGESEPE, ICTA, DIGEBOS, and INACOOP. Private sector entities were also included: Penny Foundation, CARE, Western Affiliate of the Non-Traditional Products Exporters Union, and farmer groups, cooperatives, and an association. Mayors, representatives, and others from municipal governments were seen when possible. (Appendix II.1 contains the list of those directly interviewed.)

Two interview guides were prepared to assure reasonable uniformity of recording of the basic information. (The guides are presented in Appendix II.4.) All of the interviews were conducted personally by the consultants except when the respondents spoke little or no Spanish, in which case

the accompanying technician translated the questions and the replies.

An important characteristic of these many interviews is the willingness to be interviewed, the frank answers, and the many valuable suggestions offered. This openness was true of farmers, officials, and private sector personnel. No one was reluctant; each supplied a great deal of information. That information was validated via the inspections and despite the relatively small sample, the authors view the information with high confidence in its validity.

4. Limitations

The most serious limitation was the small amount of information available on many of the older projects, especially those before about 1974. There was very little documentation. Too, very few informants could be located who had worked in those decades. Some directions could be ascertained but in only a few cases could results be determined.

In some ways, it would have been useful to have encountered more quantitative data on the effects of the projects. They would have given greater possibilities of generalization. Some of the evaluations conducted contained numbers but some of the later ones were of limited utility. Some numbers were based on no or very limited baseline data. Others related to such broad geographic areas, such as "the highlands," that they had no meaning when related to the projects. Still others failed to take such disastrous events such as rapid changes in government, earthquakes, and the guerilla violence into account; those, of course, have only limited use in describing the effects of projects.

The limitations are serious when viewed from a statistical point of view. However, when these limitations are seen in light of the task for this study - what were the events or sequences that contributed to or distracted from rural development, their influence is much less than would the case for other types of evaluations.

The authors, nevertheless, present this report with few reservations. Only a few generalizations are stated and those are related primarily to process factors. The others are those, which through interview information, inspection, and expertise in the field can be substantiated in at least the cases observed.

II. US PROJECTS

In the previous chapter, many general and specific projects of the United States were mentioned. Most of those will be reviewed in this chapter, together with many others throughout the history of cooperation between Guatemala and the United States of America. Inevitably, the documentation on the older projects was unavailable. In some cases, interviewees could relate some useful information about them. That is included when of utility to the overall discussion and to the sequencing of events through time.

A. Prior to 1950

As noted in earlier context, the first known assistance to Guatemalan agriculture was during World War II. The War Emergency Commodities Program was essentially an attempt to assure supply of several important products to the United States although at the same time, it helped Guatemala make some improvements in production. The main commodities addressed by the technical assistance program were coffee, sugar, spices, and bananas. Some experiments in rubber production were done but little resulted from these. Late in the war, attention was paid to cotton.

Although mostly associated with the european countries, the Marshall Plan devoted some development money and technical assistance to Latin America. It, and a short lived successor, helped with a few construction projects in transportation, especially ports and railroads that had been neglected during the war because of shortages of materials and equipment. Some studies on institutional capacity were conducted, including that of the very small Ministry of Agriculture. A few of the agricultural production programs continued during this time.

During the latter part of this period and during the Alliance for Progress, the Government of Guatemala requested assistance in the formation of a more modern Ministry of Agriculture. The eventual agreement and project resulted in the installation of the Cooperative Service for Agricultural Research and Dissemination (SCIDA) (similar services were created in health and education). Most of the activities of this cooperative service took place after 1950 and will be discussed in that section.

A vital part of the Alliance for Progress program, that of training technicians, began in the first part of the SCIDA effort; many Guatemalans were sent to various universities in the United States, to the PanAmerican Agricultural School in Zamorano, Honduras (a three year technical school that last year

began to offer a university degree), and for graduate and technical studies at the InterAmerican Institute for Agricultural Sciences (IICA, now CATIE) in Turrialba, Costa Rica. The latter regional institutions were founded in 1947 as a part of the Marshall Plan assistance to agriculture in Latin America.

B. AID Projects in the 1950s

From the earliest part of this decade, USAID/Guatemala (and its predecessor Alliance for Progress) was very active in the field of agriculture in the country, as is evident from the following list:

520-0003	Establish the Cooperative Research and Extension Service (SCIDA)
005	Establish the Cooperative Agricultural Credit Service (SCICAS)
012	Training program in tropical forestry
013	Training program in poultry
019	Training program in coffee culture
021	Coffee technology
022	Training program in cacao
025	Training in food and nutrition
026	Training in audio visual techniques
027	Training in wheat development
031	Soils research
046	Tropical forestry: fertilizing, liming
048	Agriculture and home economics
055	Strengthen SCIDA: administration
064	Strengthen agricultural extension
069	Agriculture and home economics
072	Land clearing, home economics
073	Transfer SCIDA to Ministry of Agriculture
074	Irrigation
083	Rural access roads
086	Home life education
092	Agricultural development, marketing
102	SCIDA agricultural research
105	Agricultural research
112	Kenaf production for fiber
119	Strengthen SCIDA
120	Agricultural administration
122	Agricultural research and extension
123	Research experiment stations
124	Agricultural engineering training
125	Establish the forestry school
127	Transfer agricultural research to Instituto Nacional Agropecuario
128	Agricultural research, rubber
140	Research: rubber, fruit, livestock, diversification

148 Agricultural policy and institutions
167 Rubber production (1959-1973)
190 Agricultural education

While unfortunately the exact years covered by each of these projects are no longer available, the repetitions suggest the effective periods. There were several important themes during this decade:

(1) Establishment of the cooperative service for agriculture; and

(2) Training of the personnel for the institutions.

The Governments of Guatemala and the United States agreed that services were necessary, that the old style Ministry of Agriculture did not perform them adequately, and that to build an appropriate institution for the future, the two would work together in the strengthening effort. There were few university degree trained specialists in agriculture or forestry. SCIDA agreed to train a corps of technicians.

The newly created school in Honduras, the University of Costa Rica, the University of Puerto Rico, and New Mexico State University were the first to be utilized in this effort. The InterAmerican Institute of Agricultural Sciences was used in a substantial program of non-degree technical training, especially in tropical forestry, coffee, cacao, and rubber. As students returned from the courses abroad, and after acquiring some experience, some were sent to many institutions for graduate degrees.

During this period when the specialists were being trained, US personnel, with the Guatemalans that were available, drew up plans for the work in agriculture and forestry, and then began to implement the work. As the specialists returned, the extension agencies were set up and manned, the research stations organized, and the first tasks in forestry were undertaken. As more Guatemalans returned from their studies, the systems were expanded and strengthened.

(3) Strategies and techniques to increase agricultural production.

Notice that throughout the period, a great deal of work was done on production with research begun, extension activities carried out, and additional people trained in the several crop and livestock fields. Direct work with farmers was being conducted. Rubber production, one of the World War II concentrations, continued through this and subsequent periods. Kenaf (a maguey species) was pushed early and has continued in production. Much work was done on corn and beans, and later sorghum

diversification began late in this decade and has been consistent since then.

(4) Establishment and/or improvement of agricultural education.

When these were well underway, three agricultural education projects were begun: assist San Carlos to begin its faculty of agriculture, set up the technician school (for peritos agrónomos), and set up the forestry school (also at the technician level). Equipment, libraries, and teaching materials were included.

(5) Transfer of the created entities to Guatemalan operation and administration.

In 1957, SCIDA began its transfer to the Ministry of Agriculture. This was not done all at once but in a sequence that lasted into the 1960s. An additional agricultural support institution was also begun during this period, that of agricultural credit, begun first as a cooperative service and then later turned over to the national government. The first rural access roads projects were also begun during this decade.

C. The Decade of the 1960s

Although a considerable amount of support for agriculture, per se, continued, two new fields occupied much of the United States effort in Guatemala: health and education. These were seen as of very high priority and as complementary to the work in farm production.

The primary characteristic of the projects related to agriculture and forestry was that of strengthening the institutions that had been developed and others that related closely to their operations:

120 Agricultural administration
122 Agricultural research and extension
123 Agricultural research stations
125 Forestry
127 Continue the transfer of SCIDA functions to MAG

Notice that all of these have the same content as those in the 50s; they entailed further strengthening of the institutions. The rural credit bank project was not repeated but its tenure, too, spanned the latter part of the 1960s and during most of the 1960s. Rural credit assistance continued inside other projects.

A new project was begun in 1963, that addressed many policy issues in agriculture; those policies were also related to the

further reenforcement of the institutions. Customs was modernized, loan funds were provided for the agricultural development bank, and some early marketing operations were begun. Planning development received strong assistance in the latter part of the decade.

In mid-1960, the National Agricultural Institute (IAN) was created to carry out the research needed for both crops and livestock. The entity was to become ICTA, first separate from and later as a part of the Ministry of Agriculture, although still listed as semi-autonomous.

Agricultural engineering was introduced into Guatemala late in this period but it developed slowly and sporadically. The Ministry of Agriculture has retained some small functions in the field. The faculty of engineering at San Carlos absorbed the early efforts there and still provides some course work in it.

In 1965, recognizing the dearth of information about the land, a ten year set of surveys and special studies were begun. The present topographic and the earliest soils maps were produced from this valuable effort. The studies were not exclusively for the rural services; they also benefitted the departments, municipalities, road construction, and forestry.

One of the chief activities of the decade was the further development of the faculty of agriculture at San Carlos University. It has always been expected that at some time, the institution would become the third link in the traditional US program for agriculture: extension, research, and the university. That link was never fully brought into the system although there was a period when collaboration was quite high. San Carlos, as the leader of the other two was, not accepted (nor in any other Latin American country, except Brazil, for any length of time).

Many Americans, during the late 1960s, thought they had made a mistake in the creation of the semi-autonomous research institute, setting it apart for extension and to some degree from the rest of the Ministry of Agriculture. That separation continued until ICTA was brought into the Ministry of Agriculture under the recent reorganization; the "idea" remains to this day.

A long term program was begun in 1966 and continued through 1974: rural community leadership and modernization. While this was not confined to agriculture by any means, that field was an integral part. During that period, the health field benefitted more than did education or agriculture, although it could be said to have laid the ground work for the present system of agricultural representatives.

D. The 1970s

This decade saw some different approaches to those undertaken previously and some continuations of the major inputs to rural development.

197 Agricultural development (a heavy credit component)
200 Cooperative development
204 Rural development
216 Industrial/agricultural service centers
226 Rural credit and cooperative development
232 Food production and nutrition improvement
233 Small farmer development
238 Small farmer marketing
245 Rural enterprise development
249 Integrated areas development

Two principal thrusts can be ascertained from this list: efforts to strengthen rural credit availability and management, and a strong element of private sector development. First, every one of these projects had some credit involved. Economic security was sought as a primary aim. Guatemala, as much of Latin America, was experiencing hard times - prices had dropped for most of the principal exports. Governments were mostly unstable. Unrest and violence began during the last few years of the decade. USAID attempted to strengthen the private sector, whether an individual farmer, a cooperative, or a business, hoping that the result would have a longer lasting effect on the nation, including greater social and political stability.

The 1976 earthquake in Guatemala called for some special assistance. This program lasted into the 1980s. Agriculture was not a special target of the relief but since most of the damage was rural, it benefitted as well.

E. The Present Decade

It is important to note, first, that three major projects from the 1970s continued into the 80s and strongly influenced the present projects:

232 Food production and nutrition improvement
233 Small farmer development
238 Small farmer marketing

The 232 and 233 programs, although receiving some less than positive evaluations, accomplished, in addition to rises in production, two other important guidelines for the future:

(1) Strategies, training, and facilitation for planning.

(2) Strategies for closer coordination at the national, regional, and subregional levels.

(3) Strong Emphasis on Soil Conservation and Irrigation.

Progress was made on all three although none was achieved to its full intended goals. In the case of planning, it appears that the major remaining deficiency is the gap between planning and the articulation of the plans into field resources. On the second, coordination, the appropriate committees have been set up and function to some degree.

There are still weaknesses, some of which involve "territorial conflicts," but at least the beginnings are in place. In one region, some of the former project officials that whatever the current weaknesses, the progress in coordination is a substantial achievement of the previously named projects and 255, entirely conducted in the 80s.

All of the officials and farmers interviewed agreed that marketing remains the single, most serious weakness in the overall agricultural development programs. Some achievements were obtained: additional marketing centers were constructed or modernized, some marketing cooperatives created (and some strengthened). The frustrations gave rise to another strategy, that of concentrating marketing work in the private sector. Problems developed with project 0238, resulting in an abortive marketing approach.
In addition to the three projects listed at the beginning of this section, there have several others that have affected general agricultural development, all conducted or begun in the 1980s:

255 Small farm diversification systems
274 Highlands agricultural development (HAD I)
Highlands agricultural development (HAD II)
276 Agribusiness development
286 Cooperative strengthening
290 Small fish pond development
317 Ixcán cardamon cultivation and commercialization
330 Pilot commercial land markets
343 Small commercial land markets
351 Aquaculture extension
355 Guatemala dairy development
363 Agricultural production and marketing services
381 Technification of traditional export crops

Guatemala dairy development, 355, has had many problems and may not be implemented. The technification of traditional export crops, 381, is not scheduled to begin until later in 1989. Except for these two, the listed projects will be discussed as they apply to the remaining sections in this chapter.

The work on rural roads, rural electrification, and other related activities continued through this decade. Those, too, will be explained in their appropriate sections of this chapter.

1. Strengthening the Institutions

The projects in the present decade have all had components that helped the several institutions improve their performance. As a generality, these continued to provide training for the staffs, introduction of computerization of data, technical assistance in methodologies and for production, support for decentralization, and further participation of the private sector in the conduct of agricultural development.

a. Ministry of Agriculture, Animal Husbandry, and Food

A major thrust of the most recent projects is that of effecting more effective coordination among the directorates and institutes of the ministry. Strong support was tendered toward the formation and functioning of the coordination committees at the national (COSUCO), regional (COREDA), and subregional (COSUREDA) levels. The most successful activity was effected in the regions.

In the view of the past and present officials responsible for coordination, the closest ties have evolved between DIGESA and DIGESEPE, especially in Region VI, although the relationships have improved between these and ICTA. The two extension directorates also work well with BANDESA on the local level but there seem to be fewer possibilities at the regional level, leaving those relationships at a more general agreement state of collaboration. Few incidence of coordination between any of the MAGA institutions and DIGEBOS were found, although the present status of transition in the latter may account for the absence of concrete actions. INDECA appears to be active at the national level but of little consequence in the other committees.

It must also be pointed out that there were some hindrances to the development of coordination and other strengthening efforts during this period. Frequent changes of ministers, vice ministers, national and regional directors, project officers, counterparts, and project managers during the implementation of 255 alone, were so numerous that continuity was difficult. The modifications in target groups and strategies, personality conflicts, and bureaucratic delays in procurement also reduced the potential achievements of that project. Nevertheless, or perhaps in spite of these problems, a considerable amount of coordination was accomplished and the production activities were more successful than might have been expected from the history.

Much of the successful strengthening took place within the separate directorates and institutes; those will be discussed in their appropriate sections. It is important to point out, however, that some excellent beginnings were made in the improvement of the facilities, of computerization capabilities, in technical assistance provision.

b. Agricultural Guides and Representatives

The guides work in two of the services: DIGESA and DIGESEPE. A similar category of field worker is employed in DIGEBOS, where they are called promoters. Too, in some of the IDB-PROGETTAPS projects, representatives replace guides. These persons are farmers from the areas where they work and are selected because they have some recognized leadership qualities, tend to be somewhat more progressive in outlook, have had some education, and give promise of being able to learn what is required to be able to assist the farmers in the villages they attend. Most of them speak the languages of their areas.

The ministry institutions, in conjunction with the technical assistance consultants of the projects, provide basic training in organization of farmers, dissemination methodologies, and technical agriculture. The guides in DIGESA are assigned to work in five or more villages under an extension agent but they also help with the activities of the home economist and the club agent. The DIGESEPE guides sometimes work in a specific area but because they are fewer, often are assigned to a project activity. The agriculture study team interviewed a number of them, and farmers with whom they work, and found their acceptance very high.

Many of the DIGEBOS promoters in the agroforestry project have had a considerable amount of training in organizing the communities (basically, the Freire method). They are not necessarily farmers although they come from the rural communities in which they work. They have had some training in tree nurseries, planting techniques, and somewhat less education on farming. The interviews suggest that they are held in high regard as "helpful persons" in the communities but not necessarily as "agroforestry technicians."

The agricultural representatives are half time employees that are elected by their communities to:

- Represent their communities in planning committees.
- Assist the community members in gaining access to technical and financial resources in the ministry.

They need not necessarily be leaders in agriculture but all of those interviewed are. Indeed, one representative interviewed is

obviously a very successful farmer in basic grains and vegetables, and also has a good grasp of the techniques of irrigation. He is called upon mostly for his agricultural expertise - so much so that he finds it difficult to do his own farming, a highly developed combination of vegetables on soil conservation terraces with irrigation.

The Ministry of Development also has promoters in the villages and it was reported that there will soon be many more. Although it was said that they are expected to assist with organizing groups and communities toward progress in agriculture, the interviews produced no evidence that this was the case. "They are here" was the summary judgment by most informants.

The Mission has strongly supported the work of the guides, promoters, and representatives in their respective agriculture related services. It has assisted with their training, some teaching materials for their use, and the idea that this is an viable vehicle for:

- Development of them as more skillful farmers.
- Promotion of diffusion of techniques to others.
- Incorporation of more local people into the process of development.

It is equally important to emphasize that these employees are local, frequently Indians, and come from among the rural poor. While the guides are all men, many promoters and representatives are women. This part of the program, then, helps toward the AID goals of spreading the benefits of development to the poor, to minorities, and to women.

c. Cooperatives and Associations

The cooperatives in Guatemala have had, and continue to have, mixed success. The long term ANACAFE group is the most solid of any product group but during their long history, they have survived their problems, weeding out those that did not function properly, and moving on toward the present successful operation. At the present time, there are some small and large cooperatives and federations that appear to be on their way, or continuing, to profitable production and marketing.

The major USAID/Guatemala project cooperative during the 80s is 286, cooperative strengthening, partially with INACOOP and some with the CLUSA supervised groups. The INACOOP operations, while not reaching the number of viable cooperatives expected, has had good management and operations influences on those that remain after some initial group losses. The Institute's insistence on fiscal responsibility and loan repayment has paid off, giving

many small farmers the opportunity to expand and market their production. Unfortunately, some of these were affiliated with a federation, FECOMERQ, that has not been supervised closely enough (not under the aegis of INACOOP) and their is considerable danger that the member cooperatives, and thus the farmers, will lose some of their investment.

The CLUSA work with the Rincón Grande strawberry cooperative is exemplary. In association with Pacific Sun Co., the production is excellent, the quality high, and the marketing functioning well from the cooperative's end. The problems with the lack of cold storage at the La Aurora Airport, and the monopoly air transport have caused produce losses. CLUSA and the agricultural study team strongly recommend AID actions to remedy these. CLUSA also works with 4 Pinos, both a producer cooperative and a marketing organization; 4 Pinos has a good reputation with the farmers, suggesting that this effort is paying off. The previously attended FECOMERQ indicates some needed modifications in the technical assistance given to such organizations.

The study team obtained information from farmers participating in the irrigation projects that suggests that some of these may be arriving at a stage of development in which precooperative or cooperative status may be feasible. The very small groups cannot be considered, by themselves, as of operable cooperative size. Some of the larger, however, should receive assistance from INACOOP so they can discover if an associative organization could be of help in forwarding their production and marketing plans. The team recommends that at least some of the money remaining in the AID-INACOOP funds be extended to them.

d. Credit

The annex dedicated to credit gives ample details on this subject. The study team merely emphasizes, that from the developmental aspects, credit must continue to be available. Two major facets deserve continuation:

(1) Loans to farmers, through groups, for the installation of irrigation systems; and

(2) Short term production credit for the relatively heavy investment in production inputs for vegetables and animal husbandry, especially for small dairy cattle projects.

The high success rate evidenced in both types of projects, and especially in their combinations, shows these to be among the best economic and subsequent social endeavors of the Mission during the past and present decades.

e. Marketing

The farmers and technicians interviewed in this part of the study were in agreement that the highest priority for future development is in marketing. This includes information about markets and prices, marketing mechanisms, local area processing, and transportation. The study team lauds the successful efforts at cooperative and federation marketing but hastens to add that the individual private sector mechanisms are working reasonably well.

Some doubt about the spreading of effects from the Non-Traditional Products Exporters Union were expressed by officials and farmers, suggesting that their information is reaching few small farmers. A broader dissemination of the information is very desirable. A direct connection between La Gremial and DIGESA would appear to be the least expensive and most feasible approach. Radio broadcasts, including those in local languages, could be helpful.

Further details on marketing are included in a separate annex. This annex does not pretend the depth necessary to comprehend the entire problem and potential solutions.

f. Forestry and the Environment

Previous sections have laid the ground work for most of the efforts during this decade. First, the strong interest and concerns of the Mission, and of ROCAP, are lauded. They give promise of substantial protection and remedial actions in the future. Second, the two AID projects now in operation offer a beginning set of solutions. The agroforestry project, while slow, has an important community education aspect that, in the long run, will be very important. The community forestry project offers more immediate actions and should be greatly strengthened. Assistance is also needed with the Guatemalan forestry law, which does not provide sufficiently for wise use management of forests.

In an earlier discussion, the study team emphasized the necessity of collaborative work between the DIGESA irrigation and the DIGEBOS community forestry project, both in the determination of feasibility and in the protection and/or reforestation of the watersheds that feed the projects. The team recommends the addition of a specialist in water rights to the community forestry-irrigation projects--to assure equitable treatment among the groups with interests in the sources of water.

g. Rural Infrastructure

As reported previously, the rural access, farm to market, and tertiary roads projects were found to be unusually well designed and administered. The results, utilizing local participation, are not only successful in getting roads constructed but also in

their maintenance. The team strongly recommends that the roads projects be continued, and expanded in some areas where irrigation and diversification are progressing rapidly.

Rural electrification has also proceeded well, although at a slower pace than roads. The supply of current is a deterrent to very rapid growth. As this problem is resolved, the projects should not only continue but also accelerate. The electricity not only greatly enhances the living conditions of the rural areas but is also economically necessary for irrigation, some processing, and for the development of businesses that provide value added to the rural production.

The study team does want to point out that in the members' opinion, too little attention is being paid to the marketing of productions to areas other than the United States. The very large Salvadoran market, at least ten times that of the US, and the substantial markets in Mexico and Honduras, suggest that more attention is merited. Too, the long time success of Kerns Co. in canning many products for domestic and export markets suggests that there may be other possibilities for value added processing within Guatemala.

2. Acquisition of Land

The descriptions of the work of the Penny Foundation detailed the operation of the two projects in this field. The team found their operations sound. The staff has been careful in the selection of beneficiaries, carried out the purchases properly, and extended technical and credit assistance to help the new land owners begin economic operations. The extension of the project is commended.

There is also another kind of land acquisition that is occurring as an unanticipated result of the irrigation projects. Farmers are succeeding economically, and are purchasing small amounts of additional land to add to their holdings. The consolidation of irrigated and unirrigated plots makes the irrigation projects more efficient, and of course, increases farm income for the purchasers. While this also, in a way, adds to the landless poor, their unwillingness to enter into the hard work entailed in irrigated vegetable crops kept them at such a low income level that their families were in the less than subsistence category. Many of these have chosen to become employees of the farmers with irrigation and have actually raised their incomes by so doing.

One other type of land acquisition is occurring from the irrigation projects. Farmers, as they can, are purchasing the land on which the springs that provide the water are located to ensure their rights to that water. There are some potential long term effects on other potential users of the water but for the

irrigation project farmers, this acquisition is an insurance for the future.

It must be pointed out in connection with the irrigation project farmers' land purchases, that these have caused some temporary delinquencies on their loans with BANDESA. The interviews brought out, however, that the acquisitions also increase the guarantees of the farmers with the bank, thus there is probably no real loss entailed.

3. Other Socioeconomic Effects

The agricultural study team observed and collected information on many effects growing out of the several projects within the field work. While it emphasizes that few concrete data were obtained, the evidence for most of those described herein are so obvious that there is no doubt about their existence.

a. Housing

New and improved housing was seen throughout the project areas visited. Few farmers who had projects in operation for three or more years had made no improvements. The contrast between the houses, all new, of the project farmers and their non-participating neighbors was overwhelming. The project beneficiaries had torn down their stick and mud (bahareque) houses and had built with concrete blocks, put in cement floors, and often added water and latrines. The team saw this as an unusually high effect from the projects.

b. Nutrition

The study team urges that a foods and nutrition education program be instituted with greater strength than those in progress. There are nutritious foods available in many communities and a campaign, together with cooking methods, could materially improve the nutritional benefits from the projects.

c. Income Generation Purchases

The case of land and spring purchases has already been described. There are others, however, that although not necessarily general across projects, merit mention. One project farmer had bought an old pickup to transport his and his neighbors' produce to market. A group of farmers with AID-DIGESEPE dairy cattle were paying for a milk receiver and inspector; that investment had already paid a dividend - the dairy plant had raised the price 5 centavos per liter.

Much more frequent was the decision of groups with irrigation to improve their systems. One group, having paid its debt, was installing a permanent distribution system for the water so the

amount of land covered could be greater. Another group was adding drip irrigation in order to expand the use of the same amount of water to still more land. Three groups had paid for mini-irrigation systems and are going in debt again for drilled wells. They have full confidence that these investments will pay for the investment and give additional income.

Another farmer, with only soil conservation terraces and vegetative barriers, has succeeded well enough that he now feels he can invest in an irrigation system. He has already obtained a loan from Penny Foundation to buy a small plot of land and build a house.

d. Participation of Minorities

The incorporation of Indians into the guide, promoter, and representative components have already been described. There are other kinds of evidence as well. The irrigation projects in the highlands are about evenly distributed between Indian communities and those made up mostly of mestizos. Irrigation technicians stated that there was no difference between these groups on the acceptance or proper operation of irrigation or soil conservation projects. They noted that in the earlies projects, some ten years ago, the indigenous groups were reluctant to incur the debt necessary for irrigation. That is no longer the case.

The number of professionals and middle level technicians from the Indian groups is still not as high as it should be, even though it is increasing. The opportunities for these people to progress through the educational system before was very limited; it is now enhanced although still limited in rural areas. As the Indians advance their general education, more will go into technical and university education, and thus become available for better positions. Residents noted that bilingual education had increased the participation of Indian children in primary school and that more were now at the secondary level. With less resistance to elementary education, better Spanish is learned, facilitating their participation in higher education and in the positions available for those with less than high school education.

Another set of "advances" for minorities is also worth note. With indigenous language facility, and greater proficiency in Spanish, more elected officials now come from the local groups. Too, more municipal auxiliaries are now selected from among them. More are seen working in public offices and in businesses. The interviewees believe that bilingual education was a major factor for many of these advances; some communities complained that they did not have a bilingual teacher, sometimes not even a promoter, and they want them. USAID/Guatemala would do well to not only continue but also strengthen the bilingual education project.

e. Women in Development

There are only a few women at the professional and technical levels in DIGESA (except for home economists), DIGESEPE, ICTA, and BANDESA - too few. It was stated that women graduates in agriculture often go into private supply houses and other private businesses. That could not be confirmed within the short time for this study. Their enrollment in the faculties of agriculture in the universities is still small.

Women do participate in the irrigation and soil conservation projects. Several project groups included female beneficiaries. DIGESEPE reported that women benefit particularly from the small animal projects. Officials from both extension services thought that the more intensive and extensive work of the home economists was raising the participation of women.

There was one important unanticipated benefit for women in families in the irrigation-diversification projects: the women generally sell the produce in the local market stalls. While many women have traditionally done this, they were often town residents or artisans. On the farms, the men are so occupied with the intensive cultivation that the women have become the designated salespersons for many families. They also do some initial processing of the produce.

Overall, however, few women have received direct employment benefits from the projects. Greater attention, probably with some special promotion and training opportunities, are in order.

f. Community Organization

There is considerable evidence that project activities have an effect even among non participant residents of the communities. Many have asked to be included in the irrigation and soil conservation groups. Some of the early producer cooperatives reported that they lost members in the early stages but are again enrolling them. This is probably a natural self selection that is important for the successful operation of these business oriented groups.

The DIGESA home economists and club agents work with a wider audience in the communities. Their efforts tend toward community organization although they do not demand that, nor should they. The deforestation problems may force DIGESA to expend more effort on community organization since irrigation water users, alone, do not make up the entire set of users.

Two projects do seek community wide support for their activities: the AID-DIGEBOS agroforestry and community forestry projects. Both have had some successes and some weaker responses.

Generally, conservationists have expected community wide participation. It is at least a goal that should be attempted.

g. Small Farmer Attitudes

The AID projects planned and hoped for changes in the attitudes of small farmers about farming. The design of the AID and IDB projects - the demonstration of proved, profitable practices via research and extension - were specifically aimed at that factor.

Some of the interviews, however, suggest that at least for many farmers in the soil conservation, irrigation, and diversification projects, the change has been beyond the anticipations of the designers. Farmers not only adopted the new practices, they also learned that they can make appropriate decisions about their farms and the enterprises. A Guatemalan official feels strongly that in the end, this may be the greatest single achievement of the last few projects.

4. Technical Assistance

No interviewee in this study doubted the wisdom of proving adequate technical assistance. That does not appear to be in question. But there were also some important provision listed about technical assistance.

- The technicians must be truly experts in the desired fields, not just partially knowledgeable.
- The technicians must be provided at the appropriate stage of the project, and the proper time of the year, and in the quantity necessary to help resolve the problems.
- Experience in working with very small farmers is absolutely essential.
- Abilities in collaborative work with local technicians are mandatory.
- As a generality, the technicians should be housed with their counterparts, not physically separated from them.

Some of the recommendations varied with the assigned task but even then, there was close agreement that the above aspects were vital to achieving major successes.

III. LESSONS LEARNED

The study of the projects of the United States over some 50 years, albeit with scarce information in the first two decades of the period, has shown some patterns and some inconsistencies. The agricultural sector team approached the examination of the history from the point of view that consistencies and inconsistencies, per se, did not necessarily suggest success nor lack of it. The previous discussions on projects have detailed many important achievements of individual projects and combinations of them. This chapter will not repeat the details but will emphasize the broader lessons learned. The study team repeats its warnings that there may have been many lessons learned in the earliest days that because of the paucity of information on them, could not now be ascertained.

A. Sequential Effects

This first examination of the history of projects, that of the sequential effects, must be seen as potentially positive or negative. This does not mean that the existence of any sequence caused failure; quite the opposite - no negative sequence was identified. This section will, however, point out some lack of sequence that, because of inconsistency, produced fewer or less profound benefits from what might have been anticipated.

1. Training

The most obvious sequence content from the many projects included in the earlier lists of project titles and discussions of them is that of training. As nearly as can be determined at this point, every project, beginning with the commodity programs during World War II, contained some elements of education. That component has had and continues to have profound effects on agriculture in Guatemala.

> The advances in planning, research, extension, production, and marketing could not have occurred when and to the degree they did without this component.
>
> In one way or another, almost every agricultural professional and technician owes some debt to the AID concerns for education: training abroad, the Guatemalan universities and the technical schools, and the regional institutions have all benefitted, thus helping thousands of persons, and through them, many more.
>
> These trained people have made it possible, along with other factors, for the agricultural and related institu-

tions to become the service organizations they are today.

A primary beneficiary of this training is the modern private sector. Many public employees eventually will go to work for businesses.

There are many who lament the loss of the trained professionals and technicians from the public sector; for a time the loss may be real but as they continue to help enable the growth of the private sector, they again contribute to the long term wellbeing of the country. Further the availability of a "career path" should enhance recruitment.

It must also be pointed out that the trained people have contributed generally to the development of agriculture in the world: professors in US and other nations' universities, teachers and researchers in the regional institutions, and in the other regional and international agricultural, banking, and general development institutions.

The team also points out that some of these trainees have come from among the poorest of the poor, among indigenous groups, from among women in the population. Emergence of trained technicians form the first, the poor, has been a major success story of USAID. The other two groups, Indians and women, still lag far behind although they are starting to be seen in government positions. They are being trained and are not only contributing to better agriculture but, in the long run, to the improvement of these groups generally.

2. Institutional Strengthening

The agricultural study team has noted in many contexts, that there is a great deal of need for further strengthening of the existing institutions. That does not detract, however, from the vast investment USAID/Guatemala and its predecessors made toward viable institutions. As with training, the effort has been almost continuous, albeit through differing mechanisms, across the years. Some quite obvious labors should be mentioned:

- The creation of SCIDA to build a Ministry of Agriculture.
- The transfer of that agency's functions to the Ministry.
- A long list of projects to improve the research and extension organizations.
- Assistance in the creation of agricultural credit banks, savings and loans, and special funds to the benefit of agriculture.

- Help in creating and improving INDECA, USPADA, INAFOR/DIGEBOS, and agricultural/forestry studies in universities and schools.

- Many years of preoccupation with the agricultural cooperative efforts.

- Credit and technical assistance to private sector businesses in and related to agriculture.

None of these efforts, when seen as a whole, has had complete success. Nor have they been complete failures. The institutions are there carrying out programs. they are not as efficient as they might be, but they are on the job. What AID has done for institutions is make it possible for the institutions to begin, develop, and make some contributions to Guatemalan agriculture.

3. Production

The first US work in Guatemala was that of fomenting and improving the production of certain commodities. US interests were of paramount importance in the beginning but the result was more production. A simple listing of the products addressed by the production programs is sufficient to highlight the concerns with this process: rubber, sugar, cotton, bananas, corn, beans, rice, cattle, poultry, swine, sheep, vegetables, and fruit. Some of the projects were devoted primarily to the production of goods that could be sold; many others, however, were addressed to directly affect the nutrition of the population.

4. Research and Extension

The sequences of these, whether separate or in combination, have not been totally consistent; they were, however, persistent. The predecessors of the present institutions were deliberately created by the Governments of Guatemala and the United States in joint actions. The concept of research and extension as a team effort necessary to the wellbeing of the nation and its people was introduced, fostered, and enhanced by numerous projects of the US Government. Their implementation was almost always jointly financed by the two governments.

From the beginning it has been difficult to achieve proper realization of these two functions. Much of the discussion in the previous chapters has described the deficiencies. The problems do not negate the essential utility of the two nor the inherent wisdom of their creation.

In retrospect, the vagaries of the changes in Guatemalan governments, their goals, and the enabling budgets have at times limited the implementation of research and extension. They remain, however, and are a testament to the many US efforts over the years.

B. Special Circumstance Effects

Situations across the years in Guatemala have, of course, had many effects on programs and their implementation. The earthquake and the violence are two important ones and the US has responded to the government's needs. There are a few others, however, that resulted in special US actions outside its usual programming support across the decades. Since they were discussed previously, they only need brief mention here:

(1) Although research was created within the research and extension complex, AID subsequently supported its separation to a semi-autonomous institute. There were reasons for it but the separation has sometimes caused difficulties with coordination.

(2) In frustration over extension's inability to perform its proper services, AID at one point funded a competing service. That did not function as expected and was later abandoned.

(3) Although generally AID has placed its technical assistance consultants within the Government of Guatemala agencies, it has a few times grouped them in a special unit. The Government of Guatemala officials saw this as a weakness and recommended against it.

In all of these cases, the expediencies of program implementation brought about the departures from AID's normal procedures. These, and others of this type should be considered very carefully before abandoning a long term of institutional strengthening efforts.

C. Results beyond those Anticipated

All of the benefits noted herein were a part of the goals or objectives of the projects, whether stated or not. The degree to which they occurred, however, was surprising. They may give some indications for planning that will help in the future.

Since very early times, health projects have intentionally helped create local committees to forward their work. Education later

took up the same approach. The relatively new Ministry of Agriculture community organization efforts, coupled with the present use of agricultural representatives, is a further consolidation of this approach. In addition to their immediate utility, they appear to be incorporating a wider spectrum of Indians and the other rural poor into the decision making and project selection.

In a similar vein, AID's pressure and its implementation of several projects in bilingual education, while geared specifically toward achieving greater functional literacy among the indigenous groups, have also had an impact on the participation of these peoples in development activities. As more of the bilingual students pass through the educational system, their influence on programs will be enhanced.

During the field work, many farmers recounted their work toward obtaining assistance: demands made at local, regional, and national levels of government. Some now know that they do not have to wait for "help to come to them," by organizing groups and/or the communities, they can obtain what they need. The separate efforts show a strong result of AID's community development work but as they mature into a trend, this force could become important in affecting the provision of government services.

USAID/Guatemala knew full well that the installation of the mini-irrigation systems would make it possible for small farmers to enter into crop diversification. It expected, though, that a great deal of effort would be necessary to convince them and educate them about growing non-traditional and other vegetable crops. Many farmers did not wait for further instruction; they sought the information from many sources, tried the enterprises, and have often become very proficient at the cultivation of these crops. The degree of their efforts on their own behalf is surprising. When problems arise, they will require assistance but the introduction of diversified crops was not a major problem.

There is also mounting evidence, as discussed in the farmer attitude section of the previous chapter, that small farmer successes with the last few projects have also convinced them that they are capable of choosing among alternatives and then proceeding with those. Some extension workers feel sure that this is a major achievement of those projects.

The USAID/Guatemala production projects, especially those on diversification, fully expected that employment would be generated from the intensive cultivation of vegetable crops. The amount of that employment, however, is greater than that anticipated. On the irrigated vegetable farms, one full time employee per cuerda is common. Additionally, others are employed

during planting and harvests. The employment benefits are very high.

Some successful farmers of diversified crops are increasing their land holdings, buying land from neighbors. While as an overall effect, this will cause problems for some, the direct influence for the purchaser is an increase in economic opportunities. Also, some groups of farmers with irrigation systems have purchased the land containing the springs feeding the system. That, too, can have an eventually positive effect since it ensures proper control and management of the water source.

The study team found the degree of these results to be salutary. They are likely to have long term benefits for the rural poor of the highlands. USAID/Guatemala should continue to support project components that further strengthen these trends.

IV. CONCLUSIONS AND RECOMMENDATIONS

The agriculture study team, because of the necessity of examining the work of many institutions in a number of fields, has grouped its conclusions and the subsequent recommendations into subject areas. In some cases, however, the time frame set in the scope of work made generalizations tenuous; those are separated, then, for clarity and definition.

A. Training

USAID's long term commitment to training agriculture and related personnel has produced, directly and indirectly, a resource of professionals and technicians in the public and private sectors that have made and are making significant contributions to rural development.

Recommendation:

Continue training as both an immediate benefit to the resolution of problems and to long term economic and social growth.

Continue the training of farmers, and agricultural guides and representatives, and give more emphasis on irrigation and vegetable crops.

Conduct specific training for extensionists on irrigation and vegetable crops, as a priority activity.

Expand and intensify the training of the promoters in the DIGEBOS community forestry project.

Additional graduate and short course trained personnel is needed in advanced irrigation, forestry and watershed management, vegetable production, and marketing; those educational opportunities are urgently recommended.

B. Institutional Strengthening

Despite the many years of USAID efforts to build viable public sector institutions and then strengthen them through the years as conditions change, it is obvious that all of those dealing with agriculture have many deficiencies.

Recommendation:

The team recognizes the utility of reducing the influence of these institutions in HAD II but at the same time is

recommends that HAD II be accompanied by a strong project in institutional strengthening so that in the future, such shortcuts may become less necessary.

The beginnings of decentralization are in place in varying degrees; fuller implementation of this concept and its reality are urged.

There are several indepth and long range efforts to bring concentrated attention and assistance to the overall and specific problems of the environment in Guatemala; at the present time, the institutional structures in Guatemala appear inadequate for such a massive undertaking.

The team strongly recommends close cooperation with ROCAP and others planning to work with the Guatemalan Government so that the urgent measures may be implemented swiftly and effectively. They will require institutional building.

The agricultural study team lauds the past and present work at strengthening the institutions. Aa great deal has been accomplished. There is much left to be achieved.

C. Production

Production is the most persistent and consistent effort of the United States agencies in Guatemala. The projects have had a profound effect. Unfortunately, the counterbalance of population growth has reduced the general economic influences of this augmented production.

Raising the productivity of small farmers has taken a long time but there is ample evidence that this is now occurring-not with all of them but with a significant number. While many efforts through the years have led up to this point, the startling changes brought about by irrigation and soil conservation, followed by the cultivation of vegetables, fruit, and some livestock give cause for heightened efforts with the small farmers.

Recommendations:

Irrigation, soil conservation, and diversification should continue, as planned in HAD II, but with more financing if possible.

Reducing the intensify of these efforts by spreading the same funds equally across six regions instead of three gives more coverage but would not allow consolidation of the successes in the previous ones; more funds are needed

so that the project can have a greater impact in the first three while introducing the program into the new regions.

USAID should continue the utilization and success of the agricultural guides and representatives by providing the training and other support necessary.

The amount of employment generated is unusually high and can be sustained so long as the products can be sold at a reasonable price. The project recipients have, in a very short time, made substantial payments on their loans (some groups have paid them off); are expanding the irrigation systems and their land coverage; have built new homes or improved them; have purchased land, vehicles, and springs; and show much evidence of improvement in their living standards generally.

Despite the unusually high economic and social benefits from the irrigation systems, there are serious problems on the horizon and some are already present.

Recommendations:

The continual deforestation of the major and minor watersheds is causing reductions in water flows in springs and streams; without attention, these problems will worsen and in some areas, negate the benefits of the irrigation systems:

- Controls on the continued stripping of the watersheds is urgent; the team has no easy answer for this control but asks that a method be explored.

- Reforestation must become a prime priority in the irrigation projects; some assistance may be obtained from the AID-DIGEBOS-CARE-Peace Corps agroforestry project but swift, effective helps is more likely to come from the AID-DIGEBOS community forestry project.

- The agriculture team strongly urges that the community forestry project personnel be reinforced by the addition of at least one well trained and two middle level staff members to assess the potentials in each area where the irrigation projects are in progress or contemplated, and detail needed efforts to maintain or improve watersheds.

- It is strongly recommended that a direct linkage be formed between the community forestry and

irrigation projects so that problems are circumvented or remediated before or during the installation of irrigation.

- It must also be emphasized that reforestation is not the only measure needed; in many cases, erosion control structures and temporary vegetative barriers will be required as interim methods.

- Additionally, when possible, rapid growth firewood species must be planted to reduce the depredation of the protective forests.

Some systems have already suffered from contaminants, causing or about to cause serious health hazards.

Recommendations:

Dialogues with the appropriate government and private sector entities to cause manufacturers of soaps to change to biodegradable formulas.

Intensive campaigns and assistance must be instituted for the construction of appropriate latrines and in some cases small sewage disposal systems to reverse the contamination of streams by feces.

Some harmful agricultural chemicals are in use in Guatemala; these should be banned and, when possible, should be replaced by biological controls.

The recently completed environmental assessment contains data and other information on the contamination problems. The recommendations should become a prime USAID directive in its dialogues with the Government of Guatemala.

In addition to these substantive issues, the agricultural study team discovered in its field work that there are problems on water rights, multiple responsibilities on them among private and government entities, and the probability of many and complex problems for the irrigation systems.

Recommendations:

As a first step, the team recommends that a practical Guatemalan riparian rights specialist, who can work in the field and with the villages and municipalities, be assigned full time to the AID-DIGEBOS community forestry project team to assist the farmers and others in assuring continual rights to the water.

That specialist should also be assigned the task of assisting with the irrigation and drinking water rights.

USAID may also need to work with the Government of Guatemala to study the present water rights laws and possibly assist in their revision if needed.

The benefits from the irrigation projects are so high and obvious that it is vital that USAID and the Government of Guatemala seek ways to continue them and to assure their continued success.

D. Marketing

The almost unanimous opinion of extension and farmers is that the number one problem facing agriculture at this moment is marketing the products.

Recommendations:

The team urges that a way be found to disseminate the information being collected by the Union with USAID assistance. Two suggestions have been put forth:

- The Union prepare a weekly information sheet and submit it in a timely fashion to DIGESA so that it can be distributed to its agencies.

- The Mission explore the possibility of radio broadcast of prices and market information in local languages.

There is no refrigerated storage capacity at La Aurora airport; a facility, probably under the private sector but with equal access to all shippers, should be constructed.

At the present time, only authorized passenger lines can ship produce freight; USAID should seek a change in the law so that the cargo lines operating in Central America can be contracted.

Assistance should be given for the construction of small airports in strategic production areas, such as Quetzaltenango to hasten shipment of perishable goods.

E. Research

ICTA and its predecessors have contributed extensively to the

improvement in agriculture. In recent years, its work on grain (or grass) in community with legumes has substantially raised the protein of forage. The trials with fruit have produced helpful information. The potential to help farming exists; the problem is how to realize that potential.

The team recognizes that ICTA has caused some of its own problems. The usual conflict of interest between "science" and "technologies", common to many research institutions, is a major factor. The staff finds it difficult to divert energies to short term, applications research from longer term studies. Both are necessary and provision for them should be made.

Recommendations:

USAID should use its dialogue resources with the Government of Guatemala to achieve improvement in ICTA allocations to applications research.

While some integration among ICTA, DIGESA, and DIGESEPE, one further step is recommended, that of physically locating an ICTA researcher in strategic subregional or agency offices to provide even better integration and more constant attention to the trial and demonstration plots.

In its HAD II project, USAID/Guatemala makes some provision for ICTA within the scope of work. It also provides some alternative vehicles for achieving its research ends should ICTA be unable to provide the services. The study team finds this "acceptable" as a short term expedient but cautions that in the long run, the overall good for the agricultural sector may not be properly served unless considerable care is taken. These alternatives are not a substitute for bringing ICTA to its full potential within the framework of research and extension as strong cooperating units.

The research capabilities of the three universities that offer agricultural studies (San Carlos, Rafael Landivar, and del Valle) should be strengthened; their inclusion can serve both the immediate and the long term public good.

Some businesses and consultant groups already perform research; it may be cost effective to contract further work with them. The resulting information, however, must be made available to the public, free of charge. Those companies must not be allowed to profit unduly from the findings.

F. Extension

This is crucial juncture for the expansion of the successes of the AID projects to other .farmers in the areas in which the irrigation, soil conservation, and crop diversification work has been conducted. As with most government institutions, DIGESA is poorly funded: insufficient personnel, transportation, and supplies. It is generally, however, performing meritorious service, often with great sacrifices; it will continue to do so but some adjustments should be made to facilitate the work.

Recommendations:

The extension agents in the USAID project areas should have sufficient access to vehicles, gasoline, and computers to assure that they can work properly.

As noted in a previous context, the Mission should fund the necessary training programs for extension agents, guides, and some representatives on irrigation and vegetable crops.

There is considerable evidence that the implementation of projects burden on DIGESA has reached or is approaching its capacity, despite all of its goodwill. The agriculture study team offers the following suggestions for strengthening that capacity until government revenues reach a point where full extension efforts can be funded.

Suggestions:

The Mission should consider hiring certain crucial AID extension specialists to help with project implementation during the life of the project; those should be the fewest possible but sufficient to ensure appropriate project implementation.

USAID/Guatemala should reexamine it intention to spread approximately the same amount of resources across a territory double that of the previous project; consolidation of efforts in areas not covered in the previous regions may be more desirable.

In this same vein of DIGESA implementation capacity, greater effectiveness might be achieved if all of the donor agencies, private or public, were to carefully coordinate their efforts.

Even in combination, however, there is not enough help for farmers. While the team has no immediate suggestions for

coordinating the efforts of the agricultural supply, product purchasing, and other businesses with DIGESA, that possibility should be explored.

Finally, DIGESEPE has instituted a thorough set of controls on the conditions of the farmers before entering into livestock projects; that is laudable and will provide valuable information for future programming and for project evaluation. DIGESA will soon have an socioeconomic study unit in place that will furnish some of the same types of data. It is recommended, however, that an additional, simpler data collection be instituted in every site for irrigation and soil conservation so that at least basic comparisons can be made later.

G. Farm Credit

The interviewed farmers, for the most part, were owners of some land. If they were not delinquent with BANDESA and had the assistance of DIGESA in preparing the loan applications, they reported credit availability. They did note that sometimes the process is lengthy and the final approval sometimes late - but credit was available. All of the interviewees recognize the necessity of being credit worthy; some were delinquent for a short period of time but all of them expected to pay soon.

Recommendation:

USAID/Guatemala should discover why, when in the overall fund for irrigation there are unexpended funds, and yet farmers in other regions have no access to them.

There is a full report on rural credit within the overall report. The details on credit and its processes can be found there.

H. Land Purchase

The Guatemalan Mission has engaged in two programs of land purchase, one for colonization in the coastal area, and a broader project funded through the Penny Foundation. The former was difficult but produced some salutary results. The latter, still in progress, allows landless farmers to purchase small tracts of land and begin their farming operations with the technical help of the foundation's extensionists.

Recommendations:

The team recommends that this combined land purchase and technical assistance for production continue.

Should more land become available in some sections, it could prove helpful to expand the land purchase program.

I. Forestry and the Environment

The agricultural study team reviewed the documents pertaining to the two principal forestry projects of AID, discussed these with the project personnel and with DIGEBOS, and inspected some project work in operation. It found the plans and beginning work of the community forestry project to be well conceived and executed. It also discovered, however, that much of the work is seriously delayed because the purchase orders and some other monies are extraordinarily slow in being approved.

Recommendations:

The team recommends that this project serve as the major vehicle for the urgent reforestation efforts.

USAID/Guatemala should seek a mechanism for making the utilization of the project funds more timely and less clogged with bureaucratic difficulties.

The team also strongly recommends that a linkage be formed between the community forestry program and the DIGESA irrigation development.

The team, in its discussions on irrigation, recommends that additional watershed study personnel plus a water rights specialist, be added to the community forestry project to assist DIGESA in its irrigation program.

The team applauds the Mission environmental impact study and agrees with the recommendations.

The ROCAP development of a strong Central American program for the betterment of the environment is a strong move toward long term solutions to the problems; the Mission should join with that effort to implement the program in Guatemala.

J. Infrastructure

The AID rural access roads project with the Ministry of Communications, Transportation, and Public Works has achieved more kilometers of roads than set within its goals. That is highly commendable. The team inspected some of the roads and found them well built and maintained.

Recommendation:

Since there are still many roads needed in some sections of the country, the team recommends that the worthy efforts continue and receive additional funding when the present allotments are gone.

Rural electrification has progressed at a reasonable pace. No evidence was found that suggested that the installations had any defects. The projects have not, of course, reached a very high proportion of the rural population.

Recommendations:

The team recommends that some study into the electricity needs for the irrigation projects be made so that the rural electrification project can, when possible, bring that power source to the farmers.

The area market place construction project of some years back was successful and the facilities are still in use. Ways to add to them should be studied. Area processing facilities could also add materially to the commercialization program.

The agricultural study team also reminds the Mission of the untenable conditions for the shipment of perishable produce from the airport. There is no cooling facility there and when any delays occur, which happens too frequently, great losses are experienced by the shippers and thus by the farmers.

Recommendation:

The Mission should explore ways to install a cooling/cold facility at or near the Guatemala airport; the team feels strongly that a private sector investment is the best solution but that certain controls would be needed to assure equitable usage.

Although not pursued in any depth, a suggestion by the Highlands Affiliate of the Union of Non-Traditional Product Exporters, for a cooling facility in Quetzaltenango merits research. Similarly, the work of that organization and the

Chamber of Commerce to locate a small airport there for the shipment of perishable produce also deserves consideration.

K. Women in Development

The several agricultural programs across the years have all included the possibilities of the participation of women. Some have been included in training and many others have benefitted from the production activities financed by USAID. The overall judgment, however, is that women have had less direct benefit than men.

> Recommendation:
>
> Additional attention to specific posts or training slots for women should be included in all future projects.

it must be emphasized that no direct prejudice against women was discovered but neither had there been much intentional action toward their inclusion.

L. Strategies for the Future

The Mission projects across the 40 and more years have had a decidedly positive impact on agriculture and rural development. The review of them suggested that the strategies that produced stronger and more sustainable impacts, or have the potential to do so.

(1) Emphasis on increased production should continue as the prime vehicle for AID projects.

(2) The development of irrigation for small farmers should continue as a strong component of future activities.

(3) On farm soil conservation merits continued support as a measure to increase and sustain productivity.

(4) Protection and reforestation of the watersheds are vital components in sustaining the growth facilitated under the USAID/Guatemala projects.

(5) The Mission should consistently train technicians and farmers; it should also maintain its efforts to strengthen the agricultural institutions as a long term measure for improvement of the sector.

(6) The AID methodology of organizing project oriented groups of farmers functions well for economic impact; it also makes it possible for farmers to learn that they can affect other strategies for improving their lives. The methodology merits continued support.

APPENDICES

APPENDIX II.1

CONTACTS

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APPENDIX II.2

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APPENDIX II.3

ACRONYMS

ACDI	American Cooperative Development International. Desarrollo Cooperativo Internacional Americano
AES	Applied Environmental Science. Ciencia Ambiental Aplicada
AID	Agency for International Development. Agency Internacional para el Desarrollo. (Also USAID)
ANACAFE	Asociación Nacional de Café. National Coffee Association
BANDESA	Banco Nacional de Desarrollo Agrícola. National Agricultural Development Bank
CARE	Cooperation of America for Remittances Everywhere. Cooperación Americana para Remitencias.
CLUSA	Cooperative League of the USA. Liga Cooperativa de los EEUUA
COCADI	Coordinadora Cakchiquel de Desarrollo Integrado, Cakchiquel Integrated Development Coordinator (Panatzán, headquarters, Chimaltenango)
COGAAT	Cooperación Guatemalteca-Alemana de Asistencia Técnica. Guatemalan-German Technical Assistance Cooperation
CORECO	Comité Regional de Coordinación. Regional Coordination Committee. (Highlands Development Project)
COREDA	Comité Regional de Desarrollo Agropecuario. Regional Committee for Agricultural Development
COSECO	Comité Sectorial de Coordinación. Sectoral Coordination Committee
COSUCO	Comité Superior de Coordinación. Superior Coordination Committee
COSUREDA	Comité Subregional de Desarrollo Agropecuario. Subregional Agricultural Development Committee

DIGEBOS	Dirección General de Bosques (MAGA). General Directorate for Forestry
DIGESA	Dirección General de Servicios Agrícolas (MAGA). General Directorate for Agricultural Services (Agricultural Extension)
DIGESEPE	Dirección General de Servicios Pecuarios (MAGA). General Directorate for Animal Husbandry Services (Livestock Extension)
FECOAR	Federación de Cooperativas Regionales Agrícolas. Federation of Regional Agricultural Cooperatives
FECOMERQ	Federación Cooperativa de Mercadeo El Quetzal. El Quetzal Cooperative Marketing Federation
FENACOAC	Federación Nacional de Cooperativas de Ahorro y Crédito. National Federal of Savings and Loan Cooperatives
FUNDAP	Fundación para el Desarrollo Agrícola y Pecuario. Agricultural and Livestock Development Foundation
IICA	Instituto InterAmericano de Cooperación Agrícola. InterAmerican Institute for Agricultural Cooperation
INACOOP	Instituto Nacional de Cooperatives. National Cooperative Institute
INAFOR	Instituto Nacional Forestal. National Forestry Institute (replaced by DIGEBOS)
INCAP	Institute of Nutrition for Central American Programs. Instituto de Nutrición para Centro América (antes incluía Panamá)
INDE	Instituto Nacional de Electricidad. National Electricity Institute
INDECA	Instituto Nacional de Comercialización. National Commercialization Institute
INTA	Instituto Nacional de Transformación Agraria. National Agrarian Transformation Institute

MCTOP	Ministerio de Comunicaciones, Transporte y Obras Públicas. Ministry for Communications, Transportation, and Public Works
MAGA	Ministerio de Agricultura, Ganadería y Alimentación. Ministry of Agriculture, Animal Husbandry, and Food
NUFED	French funded school near La Nueva Esperanza. Escuela financiada por Francia en Nueva Esperanza, Chimaltenango
PROGETTAPS	Programa de Generación y Transferencia de Tecnologías Agrícolas y Pecuarias. Program for the Generation and Transfer of Agricultural and Animal Husbandry Technologies (IDB)
SCIDA	Servicio Cooperativo InterAmericano de Desarrollo Agrícola. InterAmerican Cooperative Service for Agricultural Development.
USAID	United States Agency for International Development (See AID)
USPADA	Unidad Sectorial de Planificación y de Alimentación. Sectoral Unit for Planning and Foods

APPENDIX II.4

STUDY GUIDES

Agente de Diseminación

(Space reduced for report presentation.)

Sitio_____ _____Institución_____

Puesto/Función_____Nombre_____

1. Favor describir brevemente el trabajo que está realizando con estos agricultores.

2. Con cuántos agricultores en cuántos sitios está Trabajando?

3. En su opinión, qué grado(s) de éxito(s) ha tenido?

4. Cuáles son los problemas que ha encontrado y si se resolvieron, cómo?

5. Qué planes tiene para los próximos años?

6. Qué recomendaciones tiene para proyectos futuros?

Agricultores/Usuarios

1. Qué tiempo tiene de participar en el proyuecto?

2. Cómo se enteró del proyecto?

3. Porqué participa?

4. Beneficios que le trae el participar? (Ingreso económico, entrenamiento, mejoramiento de la comunidad, etc.)

5. Desvantajas, o qué es lo que sacrifica para poder participar? (Desatiendo las actividades?)

6. Qué es lo que más le gusta o satisface del proyecto en la que participa? Porqué?

7. Qué es lo que menos le gusta y porqué?

8. Obstáculos en el desarrollo del proyecto?

9. Cree que cuando el proyecto termine, seguirá realizando las actividades introducidas?

10. Qué otras actividades cree que se podrán apoyar y si tiene sugeriencias como hacerlo? (Créditos, asistencia técnica, participantes, infraestructura)

11. Qué relación tiene con el agente de diseminación?

12. Otros.

118

APPENDIX II.5

Budgets for 1975, 1978, 1983, and 1988 of the Agriculture Institutions, by Operations, Investment, Other, and Totals (in Quetzales)

(See abbreviation notes below)

		MINISTRY DIGESA	DIGESEPE	ICTA	INAFOR	INDECA	BANDESA
1975	fun	11733064	2045623	1119217	2059000	3902376
	inv	16076379	298175	66915	3040911	240250
	otr					
	TOT	27809443	2343798	1266132	5099911	6564713
1978	fun	21495190		3476733	1612428	7440679
	inv	24911379		1115769	333017	250000
	otr				30462404	1908156
	TOT	46406769	3830680	4592502	32407849	9598835
1983	fun	31738820	4801757	3980213	4631803	12752663
	inv	45566547	159300	1930029		90000
	otr				38769177	58061352
	TOT	77305367	4973914	5910242	44400980	70904015
1988	fun	68755911	10813098	5500000		
	inv	96707652	1477610	749952		
	otr					
	TOT	165463563	12400708	6249953		

Source: Technical Budget Directorate, Annual Reports, Ministry of Public Finance

Notes: fun=operations and includes personnel and routine costs; inv= investment (plant, vehicles, equipment); otr=other (usually the addition of direct funds such as loan monies in BANDESA)

Exchange rates: In 1975 and 1978, the exchange was Q1=$1; in 1983, the official rate was Q1=$1 but in the unofficial market, the rate was approximately Q1.5=$1; in 1988 the rate is

ANNEX III

R U R A L F I N A N C E

Dr. Robert Laport
Development Associates

Mr. Roberto Castro
USAID/Guatemala

ANNEX III: RURAL FINANCE

I. Introduction

The rural credit component has been included within the overall Cross Cutting Evaluation for the obvious reason that borrowed money, or credit, is often utilized, in the absence of capital, to facilitate the increase in production and productivity which is an objective of development. The report will convey the findings and conclusions of the consultant obtained over 24 man-days; this was sufficient time to form a number of definite impressions, but was not sufficient to perform an in-depth, quantitative study of the delivery systems, their operations, and the qualitative impact on the end users.

II. Methodology

The consultant was provided access to a large volume of written material including project papers and evaluations of previous projects, sectoral evaluations, special studies regarding important aspects of Highland rural life and experiences during the past fifteen to twenty years (including studies on the impacts of the violence during the 1980-83 period), and recent evaluations of the Banco Nacional de Desarrollo Agricola (BANDESA) and the two cooperative federations, FENECOAC and FECOAR, with whom USAID has been most heavily involved. These institutions are the major factors in the system of credit delivery to the small farmers. . The consultant studied the material provided carefully, and used the knowledge learned as a base for developing further pertinent information from interviews conducted subsequently in the Capital and in the Highlands region.

In the Capital, interviews were conducted with USAID officials from various Departments, and with Government officials from the Ministry of Finance, BANDESA, and DIGESA; the prime sources of information on both the credit and agricultural cooperatives were officials of an association which has been active in promoting the cooperative movement in Guatemala for many years. The consultant interviewed both the private sector group within AID and the President and two Directors of one of the more active private banks to ascertain the level of interest of the private sector in financing the Highlands farmer.

The consultant spent four business days accompanied by Drs. Castro and Smith, and Mr. A. Nakatsuma of USAID in an extensive tour of Highlands Region I. Visits on BANDESA's Regional Headquarters and four other agencies and Cajas Rurales were made. The four cooperative offices visited in various towns

were closed. Regional offices of ICTA, DIGESA, and the mayors of three small towns were visited, and the group spoke with about fifteen small farmers during the course of the trip.

Reports of the interviews and visits are contained in the Appendices which follow.

III. Findings

A. Background

The Highlands region, which includes all of the old Political Region I, and the parts of at least two others; is the home of an estimated 1.5 million people of Mayan descent who live in small communities and small, individual farms throughout the area. The land can be characterized as a series of narrow, fertile valleys at an altitude of 7 to 8 thousand feet (where the major cities, towns, and the more prosperous farms are located), divided by fingers of the Sierra Madre range which rise in ridges to between 11 and 12 thousand feet, separating and isolating the valleys. A large percentage of the entire land area, including the ridge peaks and the steep slopes which lead to them, are populated and farmed.

Others will dedicate themselves to describing the farming techniques which have evolved, and to the more sociological aspects of Highlands life. This consultant feels it important to set the environmental stage, so that the problems which will be described with respect to granting loans to, and collecting loans from, the farmers in the region can be more readily understood. The terrain and the paucity of easily passable access roads places an unusually heavy requirement on logistical resources. The unfortunate combination of high-risk credit (agricultural lending is high-risk), a business which involves numerous loans of small amounts (good for portfolio diversification, but expensive to administer), and a market whose geography makes communication between lender and borrower extremely difficult and expensive, places the lender in a losing situation from the start. To produce a profit, a lender would have to charge usurious rates of interest, and operate without portfolio loss.

B. The Formal Credit Delivery System

1. BANDESA

BANDESA was formed in 1970 during the re-organization of the Ministry of Agriculture, and succeeds three predecessor credit institutions. Both the current loan portfolios, and the loan losses accumulated by those institutions, were transferred to BANDESA at that time. In other words, BANDESA has never been without what many consider to be a too high percentage of past-

due loans ("prestamos morosos") in its books.

BANDESA's main asset is its network of Agencies (which both make loans and take deposits) and "Cajas Rurales" (which only make and collect loans, but otherwise do not handle cash). Region I, for example, with its Regional headquarters in Quetzaltenengo, has an agency there and in Totonicapan, Solola, San Marcos, El Quiche, Huehuetenango, and La Democracia. In addition, it has "Cajas Rurales" in Tejutla, Joyabaj, San Miguel Uspantan, San Antonio Huista, Aguacatan, and Soloma.

Loan volume in Region I is high given that its units extend each year about 28% of the total number of BANDESA's loans (as one among eight regions). That loan amounts are smaller on average is borne out by the fact that these loans usually only represent about 17% of the bank's annual total. In 1987, Region I made 7,954 fideicomiso loans for Q11,918M, and 730 loans for Q2,094M from the bank's own funds. Recovery of loans on an annual basis runs from 80% to 85% on a unit by unit basis. The worst encountered on our trip was the Aguacatan C.R. where, due to very low prices received at harvest-time, garlic farmers sold below cost. As a result, the C.R's. portfolio was about 50% past due (but is considered recoverable).

Quantitative data from the 1988 examination of BANDESA suggests that, notwithstanding past history, earthquake, and violence, Region I is the most efficient region among the eight into which BANDESA is divided. However, when asked his opinion of his market penetration, the Regional Director felt that his agencies and "cajas rurales" were serving only 2% to 3% of the population. This is extremely difficult to quantify, since many loans are are to multiple borrowers. It would appear, however, that many, many farm families in the region do not receive bank services and, to the extent to which they use credit, are getting it from some other source.

A typical Agency, headed by a "jefe", will possibly have a "sub-jefe", three to five credit agents, and secretarial assistance for the preparation of loan documentation (voluminous) and the maintenance of loan cards on each borrower. This is the lending side of the agency. The "banking side", which does not report to the "jefe", but to the "sub-gerente bancaria" at the Head Office, will have a paying/receiving teller or two, a bookkeeper, and possibly a person to operate the radio for verification of checks (sometimes this is done by the bookkeeper). It will also have a guard and clean-up person(or service).

The "caja rural" will have an "encargado" and one or two agentes de credito. It may have a secretary to prepare loan documentation, or a credit agent may do the typing himself. The CR does not take deposits or disburse cash. The "encargado" has

authority to approve loans, but the borrower must go to the parent agency to receive loan proceeds (which are never disbursed in full at one time-this means at least two trips to the agency to draw down a loan). The CR will receive repayments which the "encargado" will take to the agency from time to time. The Aguacatan CR which we visited was without telephone communication, so the "encargado" would travel to Huehuetenengo each Friday to take cash collected, and loan documentation prepared during the week.

Credit agent workload at each of the units which we visited was high in this consultant's opinion. The average of current loans per credit agent varied between 250 to 350. In addition, a credit agent is responsible for collecting loans in the past due category, so some credit agents are handling as many as 400 borrowers.

Credit agents and their superiors felt that all borrowers, even Class A borrowers who have a perfect record of repayment for two years, should be visited at least once each year. This is difficult with workloads at previously stated levels, and the task is further complicated by a a shortage of vehicles in working condition. Maintenance is lacking, and the inadequate access road system takes its toll. Except for the rainy season, dirt bikes are probably the most sensible means of transportation, and the units visited had motorcycles in their inventory.

The quality of BANDESA officers whom we met in Region I was high in all respects; they knew their business, their customers, the bank's problems, and had good ideas for solving them. The number one problem mentioned in each of the units was communications. The antiquated radio system, installed essentially to serve the deposit- taking side of the agency, functions on the most basic level. This makes it particularly difficult for BANDESA to compete for deposits with private banks in the same plaza who have computerized on- line systems. It may take BANDESA an hour or two to verify a checking account balance with the head office; the operator must first get through, then the receiver at the head office must obtain the account balance from another location within the building. Head office must then re-contact the agency with the information.

Availability of transport was the second most mentioned constraint along with a desire for improved office equipment. This was followed by a desire for improved and more attractive furniture and furnishings to attract customers and make their visits to the bank more comfortable. We were impressed that all of the complaints voiced, indeed elicited, were positive and constructive, directed at improving their ability to do a good

job and at improving the image of their institution. This attitude was universal at the units visited, and reflects the high degree of morale and pride in institution which we encountered in the field.

If this consultant has any problems arising from these field visits, it is with the attitude generally encountered that a level of past-due loans in the range of 10% to 20% is acceptable. Since the level in BANDESA overall is 35%, agency personnel in Region I were quite satisfied with their portfolio performance. As these individuals are doing as good a job as can be expected with the resources at their disposal, this is an attitude that can only be changed coincidentally with other changes and improvements in their working environment.

Pursuant to a study of BANDESA in which this consultant participated last year, and subsequent negotiations by the mission, the GOG has accepted the implementation of a decentralization plan as part of the conditionality for the Highlands Agricultural Development Phase II project. Funding for improved communications, new systems, and vehicles has been included within the project. The preparation of detailed implementation plans to include four regions is scheduled to begin shortly.

2. The Cooperatives

It should be mentioned at inception that this consultant was not able to organize field visits with cooperative federations nor member cooperatives. Four coop offices, whether federation members or not is not known, were closed when the interview team visited. The information contained herein is derived from interviews with Drs. David Richardson and David Fledderjohn of the American Cooperative Development Institute (ACDI), and from a review of recently completed evaluations of FECOAR and FENECOAC, and member institutions.

According to opinions expressed, of the about 700 cooperatives in Guatemala, probably no more than 100 are viable over the long run. The two principal reasons for this high mortality rate are a lack of business management and low capitalization. Poor management can run through inadequate capitalization in short order.

There are two distinct coop types, examples of which are credit coops (FENECOAC), and agricultural coops (FECOAR). In practice, however, to the inexperienced viewer they appear to operate in much the same way and to offer about the same services to their members. The credit coop, for instance, is established to operate much like a savings and loan association in the US.

However, they buy bulk fertilizer (and other inputs), and sell to members, providing the credit necessary to enable the sale. The agricultural coops do essentially the same thing, and also take deposits. Both types of coops have ventured into the marketing of farm outputs; none have succeeded in this activity, and there have been several outright distasters.

Coop capitalization stems from two sources, a) membership quotas which, in the material reviewed, have ranged from Q10 to Q100 with the majority at the low end of the scale, and b) retained earnings from profitable operations, where they exist. Beyond the capital account, the coop may leverage itself by taking deposits from its membership, or by borrowing from banks, primarily BANDESA, or from its parent federation. Since membership is entitled to borrow a multiple of from 2 1/2 to 4 times the amount of its capital "aporte" plus amounts on deposits, most coops have had to make use of borrowing.

The cooperative idea has been readily accepted in the Highlands since it so closely parallels the close, supportive, communal system intrinsic to the Indian culture in Guatemala. However, according to our informants, the "cooperative spirit" so dear to the hearts of the membership is often counter-productive to the acceptance of the need for sound, business-like management within the cooperative. Management must be rigid about collecting loans from the membership, but this is, of course, an unpleasant and unpopular task. Managers have been removed for being too diligent in attempting to collect loans from its delinquent members. Poor loan portfolio performance is the main cause for cooperative failure. Another is lethargy on the part of management, combined with a failure to provide needed services to members to meet increasing competition from other sources. Membership declines over time, and those who continue take their business elsewhere. Finally, the coop's income dwindles to the point where it will not support expenses. Lastly, there have been cases of management fraud, or gross mis-management which have simply wiped out existing institutions.

The few cases of true commercial success among the cooperatives, 12 de Octubre and San Andres Semetabaj (FECOAR), and Union Popular and Santiago de Coatepeque (FENECOAC) as examples, have one main characteristic in common. They have dedicated, capable, and well compensated management which is permitted, and supported by the coop Board, to run the cooperative as a business enterprise. These examples are so dramatic in their positive results, by comparison with the majority, that the personal element stands out. It leads one to conclude that the cooperative system might be worth the effort to strengthen and expand. It will involve the difficult process of finding the right man for the right job, and educating Boards and membership to provide the necessary support. However, what we are dealing

with is the need to improve the system; the system itself is not intrinsically flawed.

This consultant was unable to obtain statistical data regarding coop operations in the Highlands region sufficient to do more than draw a few general conclusions. Combined, the credit and agricultural cooperatives include a membership far greater than the number of borrowers reached by BANDESA. We were unable to determine, however, the number of coop borrowers, or the number who may be receiving assistance from both its coop and BANDESA. In analyzing the amounts of credit extended by a number of Highlands coops, it was possible to deduce that the amount of the average loan is considerably smaller than the average BANDESA loan of Q1,600 in the region. The full extent of coop membership is not indicitive, however, since the vast majority of the cooperatives are not in a sufficiently liquid financial condition to be of much assistance to their memberships.

3. The Private Sector

The generally held view that the private banking system is not interested in working actively with the small farmer was borne out in one interview with the President and two Directors of one of Guatemala's newer and more aggressive banks, Banco del Cafe. They cannot afford the cost, nor accept the risk, of dealing with many small borrowers. They deal exclusively with medium and large farms, and the preferred transaction size is a minimum of Q10,000. Below this amount, they feel that they lose money in that the transaction cost of analysis and documentation is almost identical between a small and a large transaction. Efforts to interview the manager of another bank in the field were unsuccessful. There is, however, a definite interest in talking with AID to explore ways to work together. Banco del Cafe has done a number of transactions in which they lend to intermediaries who, in turn, are dealing with small farmers in amounts under Q10,000.

Although not significant in gross money terms, the private voluntary organizations (PVO's) are the remaining undescribed factor in the formal credit sector active in the Highlands. These include, in some localities, evangelistic church groups which assist their membership with small loans, especially in micro-artisania, and organizations such as the Penny Foundation which has been extending credit in small amounts for many years. Recently, Penny Foundation, with assistance from USAID, has begun a program of land purchase (as land becomes available and funds permit) which is then sub-divided and sold to the landless on extended terms. CARE has been active in small agricultural credit, but the depth of impact is not known.

B. The Informal Sector

During the interview team's visit to the Highlands, the team stopped and talked at random with about 15 farmers along the road. During each conversation at some point, the farmer was asked if he used credit. The answers were all negative. However, we were told that many borrow small amounts for inputs from members of the extended family, and the "prestamistas", small independent money lenders who charge interest rates of from 5% to 10% per month, was often mentioned.

According to the officials at BANDESA, the "prestamista" performs a valuable service for many small farmers who need credit but cannot fulfill the BANDESA's land tenure requirements. They also, we were told, will lend to clients who are in default with BANDESA and are unable to borrow again until they are up to date with the bank. The "prestamista" will also lend to a BANDESA borrower to supplement the established limit permissable (per cuerda) for a given crop which often will only cover a fraction of the farmer's cost.

As the apparent "lender of last resort", the farmer is careful to pay his "prestamista" loans. This is acknowledged by BANDESA officers without rancor. It also indicates that the "prestamista" is doing a better job of collecting loans than the bank and, probably, is more accessable. Certainly, no private individual could sustain BANDESA's past due rate and survive.

The scope and extent of the "prestamista" business is not known and would be interesting to try to determine. However, given our conservative estimate that probably as many as 75% of the Highlands farm families are not served by BANDESA or the cooperatives, they must therefore survive without credit or satisfy their needs from the services offered by the informal sector.

IV. Conclusions and Recommendations

A. The Role of the Formal Credit System

Given the finding that credit through the formal sector (we have been unable to measure the impact of the informal sector) reaches, at a maximum, 20% to 25% of the farm families, it is clear that rapid expansion of the credit system is not the crucial element it was once believed to be. However, credit <u>is</u> a primary factor in the soil conservation (social payments), mini-irrigation, and crop diversification projects which have dramatically improved the welfare of thousands of Highland farm families during the past 14 years. <u>AID should be sure that there</u>

is enough credit in the system to support these programs.

B. General Comments on BANDESA

This consultant, contrary to the views of many, can see no way in which the business of making many small loans to widely dispersed farm borrowers in the Highlands can be consistantly made on a profitable basis by an institution without charging rates equivalent to the rates charged by the "prestamistas". On the other hand, this consultant does not believe that, in BANDESA's case, it is absolutely essential that the bank operate on a consistantly profitable basis. If BANDESA's annual "morosidad" can be held to under 5%, and other necessary operating efficiencies are achieved, the annual subsidy which GOG would have to provide would be within reasonable limits, as explained below. BANDESA's operations contribute to the creation of capital in the Highlands, to the creation of incremental wealth in the country, and through soil conservation and re-forestation, to the protection of the Highlands environment (an important aspect of national capital formation/preservation). BANDESA, with proper reforms and with a "privatization" of management outlook and internal structure, can be brought to the point where it can compete successfully with the private banks for larger business transactions to offset the losses on small agricultural loans, thereby moving toward eventual profitability.

The ultimate test of sustainability will be BANDESA's ability to fund itself through its deposit gathering ability. Improved systems should permit BANDESA to expand its agency network through the up-grading of Cajas Rurales to take advantage of many locations in which it is the only bank in town. This program should be studied and pursued.

C. Specific Recommendations on BANDESA

BANDESA evolved as a successor to three defunct, predecessor institutions in 1970. It was saddled with the past due loan portfolios of these institutions, and since, has suffered through two subsequent periods of very high loan loss, the Emergency Housing loans pushed through the bank in 1976 and after (most borrowers felt that this was grant assistance), and the effect of the violence of the 1980-83 period during which numerous borrowers were killed or moved to escape the troubles. A considerable portion of the 35% "morosidad" position of the portfolio reflects loans made during these periods which continue to be carried on the books. The inability of BANDESA to capitalize itself in an ammount sufficient to write-off these loans and clean up its balance sheet creates a bad impression with lenders and donors alike. It also generates unnecessary expense, as the loans have to be accounted for, and futile efforts to collect are still being made. Capitalization should

be provided, after the portfolio has been examined, and those old, uncollectable loans should be written off, or set aside in another entity, so that BANDESA can get a new start with a relatively clean balance sheet.

Public sector financial institutions are vulnerable to political misuse, both as a source of employment and as a source of credit. BANDESA has served its purpose in both aspects over the years. The effect on the loan portfolio is difficult to determine, but the use of the bank as a source of employment, to the detriment of the bank's operations, is obvious in the fact that over 50% of the bank's employees are in staff functions in the Head Office. The high level of motivation perceived in the field is contrasted to an extremely low level of morale in the Head Office. There are too many highly paid "Licenciados" for too few productive jobs. As over 98% of transactions may now be approved in the field, following the adoption of AID recommendations to increase field lending authority in 1986, many in the Head Office are under- employed. Redeployment of human resources is difficult, however, because the political appointees can maintain their positions in the Capital, and the strong bank union can also legitimately block moves to the field since the majority of head office jobs are more highly rated on the salary scale than most field jobs. Efforts must be made to strengthen the branch network where the workload takes place and where loans must be collected and, over time, reduce Head Office staff to necessary proportions.

Decentralization of the key back-room operations functions and loan administration functions such as collections will help the efficiency of the bank. It will force an improved communications system, and it will force the modernization and installation of new accounting systems throughout those decentralized regions, and at the Head Office. With money available, the major constraint will be on the personnel side, especially in identifying and training regional managers with management and decision making capability. The decentralization of accounting will require that a substantial number of bookkeepers be trained in computer use. .The use of P/Cs to prepare loan documentation will also require considerable training and re-design forms; however, the long term benefits to the bank in adopting these measures will be considerable. Lastly, the implementation of decentralization should permit a balancing of the productive workload of the bank; increased staffing with credit agents should permit the agencias and "cajas rurales" to improve the loan coverage of their geographic areas, and at the same time, improve the loan collection record, assisted by collection specialists housed at regional level and at some of the more problematic, or remote, agencies. Immediate efforts to improve communications and to modernize systems in support of a decentralization program should be begun.

The Minister of Agriculture should appoint a career, professional banker to run BANDESA. Secondly, the time-consuming process of changing the by-laws to make the Chief Executive a full Board member with voice and vote should be begun. At the present time, there is no full time employed official of the bank who is a full Board member. The by-laws, as structured, essentially give full decision making authority to the Board, and there is no distinct differentiation between between policy making, usually a Board function, and management of the bank's day-to-day operations, which is management's perogative. The by-laws should also be changed to provide management full authority for the day-to-day operations of the bank, within limits to be established, and the internal budgeting process should be independent of the National System.

D. The Cooperatives

USAID and ACDI are presently in the process of preparing diagnostic reviews of all of the key cooperatives within the FECOAR and FENECOAC federations; the recommended adjustments to portfolio, particularly the write-down of assets due to bad loans and inventory losses, and the attendant reduction of capital accounts are being made. This consultant is not aware of future plans for AID assistance to the sector, other than the continued technical assistance being provided.

The quality of management is the key to the success and long term viability of the coop entity, as is management's ability to impose sound business management disciplines upon the coop Board and the membership. This is a delicate process, and should be pursued accordingly. If it hasn't been tried, on site visits by Board members of marginal coops to the several first class coops, long enough to see how management functions and to talk to their counterparts and some of the membership, could be helpful in causing a change of mind- set and behavior. However, if the coop entity will not accept sound management practices after repeated attempts, one sees no reason to continue beating a dead horse; support should be withdrawn and the natural selection process be permitted to take its course.

If AID plans to intensify its assistance to the sector, a degree of conditionality might be imposed. It might then be possible to, a) establish a year-long training program in cooperative management to include retailing, credit, collections, planning, and relations with the Board for interested individuals from the Region, educated at least through the Colegio level, but preferably university trained, who are finally selected by the consultants, and b) to obtain a committment from the Boards to re-write their procedures to leave day-to-day management in the

hands of the manager. Appropriate levels of compensation and incentives for the manager should be included in the agreement. The level of Board and membership confidence could be improved if new managers were bonded against mis-appropriation of funds.

E. The Private Sector

The primary possibility for new initiatives appears to be the extension of discussions with the private banks to study means to improve their indirect intervention with the small farmer. For instance, the major constraint found in the system is the marketing of farm product, particularly vegetables, due to the increased production stemming from soil conservation and irrigation efforts. Banco del Cafe is experienced in coffee handling, according to their statement, about 45% of the national crop--buying and selling. Study and formulate the promotion of a program between the private banks, the new marketing associations being formed in some farm regions, and the Almolonguenos, along with the Gremial on the export side, to improve the marketing function with emphasis on improving farm income and reducing crop losses, and the sale of surplus products.

Continued support of the PVO's is warranted, but the writer is unable to offer any more specific comment as he is generally unfamiliar with the extent of their impact on the sector.

APPENDIX III.1

Rural Credit Delivery and Financial Services

Report of Visits and Interviews during period 1/9-1/27 1989

1. Mr. Barry Lennon, Lic. Gustavo Leal, ORD, USAID/G 1/10/89

REL scheduled this first visit to update himself on the situation with BANDESA which, as Team Leader, he had reviewed in depth during April 1988 and recommended, in some detail, a re-organization to improve the delivery and recovery of rural credit and achieve cost reduction through the transfer of Head Office personnel to productive positions in the field.

Although little concrete has been achieved to date, there has been progress at the political level of BANDESA, its Board, which includes Ministers of pertinent GOG Departments and the Banco de Guatemala. USAID has included a partial decentralization of BANDESA as a pre-condition to a new grant/loan project for the Highlands rural sector; this conditionality has been accepted, and the BANDESA Board has voted that a detailed decentralization plan be developed and implemented upon its approval. The conditionality of Highlands Agricultural Development Phase II (520-0247) is satisfied upon the "initiation" of such a program.

As Mr. Lennon is Project Manager and liaison officer with the credit and agricultural cooperatives, he indicated the people with whom REL should meet to inform himself on the scope, modus-operandi, and financial condition of two major coop federations and their underlying member cooperatives. He also provided the most recent investigative reports, "diagnosticos", detailing the operational and financial condition of the member coops of the FECOAR system developed by AID in the mid-nineteen seventies.

When questioned about the operating details of the various AID funded Trust Fund accounts, REL was referred to Mr. Michael Allan, Controllers Office USAID, and Lic. Carolina Roca, Director, Direccion de Financiamiento Externo y Fideicomiso, Ministerio de Finanzas Publicas, GOG.

2. Mr. Michael Allan, Controllers Office, USAID/G 1/10/89

Mr. Allan is responsible for the timely disbursement and control of programmed trust fund monies from USAID to GOG, and then to the implementing agency of the GOG. This was not a particularly productive visit as Allan's responsibilities turned out to be un-related to the purpose of REL's visit; however, it did provide insight into the complexity of moving

AID grant funds from the GOG to the implementing agency level (in this case BANDESA) when certain sums had not been included within BANDESA's annual budget as a line item. Unless specifically included as a line item, the related fideicomiso funds remain on deposit in the GOG's account at Bco. de Guatemala, and cannot be transferred. In the specific problem which Allan described, $2.8MM of counterpart funds from the 1983 ESF earmarked for project 520-0309 still remain to be disbursed to BANDESA after repeated attempts to have the funds included in its budget.

3. Lic. Carolina Roca, Director, Direccion de Deuda Externa y Fideicomiso, Ministry of Finance. 1/18/89

The new procedure for establishing priority for the use of foreign assistance, as well as GOG funds for development, is a coordinated effort between the Planning Ministry, Finance Ministry, and the Budget Office who, after working over the plans of all of the operating Ministries, Health, Education, Agriculture, etc., prepare a list of core projects of high priority, and projects of secondary priority. As USAID counterpart funds from ESF and PL480 grants and loans are by far the largest source of GOG funding for these projects, AID is consulted regularly during this process and must approve the core project list, along with the President and Congress of the GOG as part of the budget. Upon final approval, Counterpart funds are deposited with Bco de Guatemala in GOG accounts for each project approved within the core component. Deuda Externa is then responsible for the disbursement of funds to the appropriate agency for each project as needed.

As regards BANDESA, Lic. Roca has recommended that negotiations with AID take place which would discuss the possibility of consolidating the 22 trust funds under the bank's control and unify their conditions to the degree possible. When REL brought up the case described by M. Allan concerning 520-0309, Lic. Roca stated that this was a case in point; BANDESA lending for the required purpose was no longer considered appropriate as numerous bad loans had been experienced, so the budget item had not been approved. GOG negotiated a broadening of conditions with AID, ie., BANDESA could now lend the Q2.8MM (actually don't know whether this is now Q's or still US$) in any region for any purpose, so she felt that the line item relating to these funds would be included in the next BANDESA budget.

Lic. Roca also felt and has recommended that the consolidation of BANDESA trust funds would also facilitate lending operations within BANDESA by simplifying the disbursement process, reduce the cost of accounting for trust

fund loans throughout the BANDESA system, and facilitate the identification of past due loans of long standing which could and should be written-off provided that the capital to offset the write-off be forthcoming.

REL was referred to Lic. Beatrice Villeda, Sector Agricola; Lic. Melida Chow, Sector AID; Lic. Julieta Morales, Sector Transporte; and Lic. Ana de Molina, Sector Educacion y Salud in the Direccion de Deuda Externa if further details were required.

4. Mr. Barry Lennon, USAID/G, Proj. Mgr. Cooperatives 1/12/89

Mr. Lennon described for REL the rather complex array of cooperative organizations in existence to assist the farmer in one way or another. He stated that 10 federations of coops exist, each of which serves a number of member cooperatives which, in turn, provide services to the member farmers.

Two cooperatives of the ten have received the bulk of AID attention and assistance; FENACOAC is a federation of 68 credit cooperatives (of whom 24 are being reviewed by AID) whose purpose is to provide credit to its members for the purchase of inputs to the agricultural process, primarily fertilizer, seed, and insecticides; FECOAR is an AID sponsored agricultural cooperative federation with 6 member cooperatives which was established about 1975 whose purpose is also to provide credit to its member farmers for the purchase of farm inputs which they provide. The funding of both federations is a combination of bottom-up, top-down capitalization. Individual farmers desirous of membership pay a membership quota to the coop (an "aporte") which differs from coop to coop. The coop agrees to lend a multiple, from 2 1/2 to 4 times the amount of the aporte to the farmer, however a portion of each loan is withheld and added to the farmer's aporte account. A portion of the combined membership aporte account is channeled upward by the coop to the federation which becomes a part of its capital account. Similarly, the member coop can leverage its lendable funds by requesting loans from the federation, which, in turn borrows from AID or other sources to leverage its capital. The member coop will hopefully develop its own capital over time from interest earned on member loans, and from profits realized on the sale of products to its members. Increasing membership is also a source of additional capital. By the same token, the federation will increase its capital from interest earned on loans from the member coops.

Mr. Lennon directed REL to Mr. David Fledderjohn who had

been instrumental in the formation of FECOAR in the 70's, and to Mr. David Richardson, both of ACDI, a US firm specializing in agricultural cooperative development.

5. Lic. Isaias Figueroa, Sub-Mgr Credit, BANDESA 1/16/89

Gustavo Leal, USAID, requested REL attendance with the above, to discuss the BANDESA terms of reference for the decentralization effort. The presentation on this date was not considered adequate by Lic. Leal, and Lic. Figueroa was asked to resubmit the document after numerous suggestions were made by the participants. Following this meeting, REL asked to be brought up to date on BANDESA operations and changes in personnel which had occurred since REL's study of the institution last year.

Due to continued operating losses, little, if any, improvement in its ratio of loans collected to loans made, and a lack of progress in organizational reform, the international donor agencies have been reluctant to increase the amount of assistance to the agricultural sector through BANDESA which is the only institution with a breadth of coverage in the countryside and a willingness to make small loans to small farmers. As a result, the percentage of loans to farmers from BANDESA's own deposits increased considerably between 1987 and 1988.

REL was informed that two key individuals (in REL's opinion) have taken extended accrued vacation, usually a sign that they are searching or have taken jobs elsewhere. Edin Barrientos was Administrator to whom all Regional Directors, and through them the Agency Chiefs, reported; in other words, he was head of the country-wide banking network. Julio Roberto Mexicano was Chief of the Reforma Agency; as one of the best agency heads in the bank, he had been brought into this position to straighten out a loan portfolio which included a high percentage of bad loans. In REL's mind, these were officials who would have played important roles in any decentralization scheme which will require much more of the region head, especially, than present duties call for.

REL was directed to the new Director of Planning to obtain up to date statistical information, and to the Director of the Fideicomiso Department for information on the utilization of the 22 AID trust accounts.

6. Dr. David Fledderjohn, ACRI representative, 1/18/89

DF explained to REL, David Lazar, and Bill Rhett that early AID intervention in the rural cooperative sector was heavily influenced by Dan Chai during the 1960's. As the

cooperative form of organization would be a natural progression of the indigenous community organization, it was felt that this kind of vehicle would be the most effective way to reach remote rural communities. Initial organization efforts and the subsequent disbursement of funds was assisted by visiting health teams who were the only ones who had knowledge of, and were known by, many of these communities. Small credit unions evolved over time; many still exist, but AID emphasis subsequently switched to the support of several major coop federations, primarily two, which do not compete with the more remote original coops. These now receive assistance, if they are still credit-worthy, from BANDESA.

Marketing of products, explained DF, is not, and has not been, a major coop function. Individual farmers have a better chance to get better prices than the coop. This is primarily because the vast majority of highland farmers still produce staples for home consumption (70% corn and 25% wheat, with 5% in vegetables). The small surplus over and above subsistence is sold locally.

In those areas where major exportable (from the area) surpluses are produced, coops are not playing a marketing role. DL feels that there are a number of reasons for this among which are, 1) a lack of expertise, 2) the generally poor financial condition of the coops, ie., the consequent lack of working capital with which to purchase a crop, and 3) limited management skills in an overall sense.

The marketing of inputs, fertilizer, seed, and insecticides, accompanied by the extension of credit, has been the major role of the cooperatives, according to DF. The effectiveness of this effort, and especially the recovery of credit extended so that the farmer can finance his requirements for the next crop, and the coop remain healthy, is directly related to the quality of management. Generally, DF states that mediocre to moribund management is the rule rather than the exception, and only a handful of member coops with whom he deals are in anything approaching a sound financial condition.

About the two federations most closely followed, DF explained that in FENECOAC, 16 member coops have 85% of portfolio; these have bad loans totalling Q6MM (%of portfolio not mentioned), and a number are in danger of insolvency. FECOAR members are in somewhat better shape, but several were in areas heavily affected by the 1980-83 violence and have not recovered (in addition to the killing and displacement of people, the right of free assembly was drastically curtailed). The coops in general are living from hand to mouth, management is complacent, and the entities are kept alive by piecemeal donations from a variety of international

agencies.

DF made a number of general observations derived from his many years experience working with coops in Guatemala; 1) the importance of credit to development in the agricultural sector has been greatly overstressed, and on the other hand, credit mishandled, ie., the mis-handling of loan funds by unskilled lenders and unskilled borrowers has vastly weakened the cooperative movement institutionally. DF does not feel that rural credit systems are sustainable on other than a subsidized basis;

2) The fervor for cooperativism makes it difficult for members to realize the need for business-like management; they often resent and obstruct, or discharge managers who are trying to put the coop on a sound basis business-wise; 3) early AID programs over-estimated the acceptability and strength of the coop movement; and 4) the need to develop skilled human resources at the management level, with the exception of bookkeepers which was thought sufficient early on, has been vastly underestimated; of approximately 700 coops in Guatemala, DF feels that probably only 100 are viable over the long run; the need to be able to provide a breadth of services to members, including marketing of products and technical assistance has been overlooked, especially in soil conservation, irrigation, and diversification techniques which work very well.

REL made a date to return to study the recent FECOAR and FENECOAC studies.

7. Guillermo Matta, Roberto Perdomo, PRE/USAID/G 1/19/89

REL visited the above to discuss efforts by the private sector in lending rural credit and other assistance to the Highlands indigenous farm population.

Both agreed that, to the extent to which the private banking system might be involved in crop or infrastructure financing in the Region, their interest would be limited to financing the medium-sized and large-sized farmer, not the small campesino. The Private Voluntary Organizations (PVO's) are more involved, although some only with technical assistance, not credit. The PVO's mentioned were:

FUNDAP Momostenango--improve wool production and weaving.
Movimento Guatemalteco de la Reconstruccion Rural
FUNDESPE
CARE (has started an S&L type operation)

FACT (Private Agencies Cooperating Together)
Assoc. de Entidades de Desarrollo (ASINDES)
The Penny Foundation

REL was provided with names and addresses of a number of these participants; representative visits will be made, time permitting. Probably Penny Foundation is most pertinent to our evaluation as they have received AID assistance, and are the principal entity involved in carrying out the project for the purchase, subdivision, and resale of land to small farmers.

8. Lic. Isaias Figueroa, Pedro Bardarona, BANDESA 1/23/89

Lic. Gustavo Leal and Dr. Roberto Castro, USAID/G, invited REL to a further meeting to discuss the revised terms of reference presented by BANDESA relative to an RFP for a decentralization plan. Although not directly related to the evaluation, this proved to be very helpful to REL and RC in their trip to the Highlands beginning the next day. It was also a direct outcome of the institutional evaluation performed for AID by the Development Associates team in 1988.

9. Luis Phillipe Xitumul, Director Region I, BANDESA, Quetz. 1/24 and 1/25/89

REL, RC, GS, and AN visited on two occasions with LPX who prepared information overnight which the interviewers had requested.

Region I (old designation) includes Agencies (both lenders and deposit takers) in Totonicapan, Solola, San Marcos, El Quiche, Huehuetenango, Quetzaltenango, and La Democracia. Cajas Rurales (lenders only) report to their departmental agency, and are located in Tejutla, Nebaj, Joyabaj, San Miguel Uspantan, San Antonio Huista, Aguacatan, San Carlos Sija, Santiago Atitlan, Momostenango, and Soloma.

As a measure of the importance of the Region I, it has approximately 20,000 loans in portfolio, or 27% of BANDESA's total, but for an amount equivalent to 17% of the bank's total indicating the smaller average size of a loan. The activity curve of the Region's trust fund loans has increased from 5054 in 1975, to 5781 in 1980, 7286 in 1987, and 8717 in 1988. Aggregate amounts loaned have increased from Q3,242M in 1975 to Q15,767M in 1988, an increase of 80% calculated on a post devaluation basis of 2.7:1.

Notwithstanding the above, LPX estimates that his market coverage, 8700 loans made in 1988 within his region, represents a penetration of only 3% which is essentially

correct if the estimated number of farm families were about 300,000. If the number of families were half that, market penetration would only be 6%.

10. Carlos Francisco Garcia, Sub-Jefe; Rene Orozco, Credit Agent; Urbano Lopez, Credit Agent; BANDESA, San Marcos 1/25/89

Agency has a sound portfolio in relative terms with collections running over 90%. Overall, Agency and its cajas rurales is running uncollectible loans of 5% to 8%, beginning with DIGESA suggested loans in 1974, the earthquake relief in'76, and the effects of the violence in the 1981-83 period (which is still a factor in some parts. San Marcos region has a good amount of coffee, a crop which we didn't encounter higher up. The agency is very active in this crop, primarily with the bank's own funds. Roberto Castro probed in depth for information on savings mobilization, and was told that the agency desperately needs a second paying/receiving teller and improved communications. We were told that, pursuant to their calculations, the savings accounts on which they pay 8% for any amount, adjusted for the cost of the 13% reserve requirement and for the cost of servicing the accounts, cost BANDESA 14% per annum which is the interest rate that they charge on loans using bank funds. The competition pays scaled rates depending upon amounts up to a maximum of 12%.

11. Elmer Hernandez, Director; Cooperativa Azumachey, Quetz. 1/25/89

Mr. Hernandez visited us when introduced while doing his banking business at BANDESA. This is a new, less than one year old independent credit coop in Quetzaltenengo whose membership of 101 are urban residents. The coop requires an aporte of Q100 for membership, and on loans charge 1.5%/month (18%/yr.). On deposits they pay 4% to 6%, depending upon the amount. Credit control thus far is good as the only have 1% of portfolio past due--but they are still new and small. Elmer mentioned that an older moribund coop is being resurrected since they are seeing what can be done, and another credit coop run by one of the evangelical groups with 102 members is providing competition (Cooperativa San Francisco).

12. Juan Cardona, Jefe: Miguel Angel Galindo, Sub-Jefe: BANDESA, Huehuetenango 1/26/89

The Huehue Agency has a Jefe, Sub-jefe, and 3 credit agents. It is also responsible for three cajas rurales, one with an encargado and 2 credit agents, another with an

encargado and 1 credit agent, and one with just an encargado. None of the CR's are connected with Huehue by phone. In 1987, Huehue and its CR's did 3,814 loans, the highest number in Region I. With 11 lending personnel, this represents a workload of 346 loans per officer.

They estimate that the "morosidad" on current portfolio is between 10% and 15%. It is 35% on their overall portfolio, the same amount as for the bank as a whole.

Management represents that relations with DIGESA and DIGESEPE are good, but that the local sub-regional coordinating group does not function. The relationships are personal and function well on a business basis.

The agency has an important portfolio of artisania loans for furniture, wool weaving, and copper work with a morosity rate of under 10%. The important loans for mini-riego are not so good with morosidad running about 20%; when asked, we were told that DIGESA is of no help at all in collection.

The Huehue agency is actively aware of the border trade with Mexico; naturally, Guatemala exports vegetables and imports sugar and bottled gas, considerably cheaper across the border.

Their wish list is for improved communications, another paying/receiving teller, and additional vehicles. The team appeared knowledgeable and highly dedicated about their work and their institution.

13. Haroldo Lopez and Luis Nery Velasquez, Credit Agents: Caja Rural Aguacatan, BANDESA 1/27/89

The CR made 750 loans last year, and in addition is responsible for about 1200 loans which are moroso. Amount wise, 50% of portfolio is past due.

According to our informants, both agronomists and fairly new to BANDESA, this very rich garlic and onion producing region suffers from a marketing problem--which is the cause of the credit problem. At harvest time, garlic which costs about Q50/quintal to produce sells for from Q30 to Q40 per quintal. If farmers could be convinced to hold part of their crop for later sale (there is weight loss in storage, but this is more than compensated by higher price), and had the storage facilities to do so, the would realize prices of from Q60 to Q75 per quintal.

A new variety of garlic has been introduced which is suitable for export into the US and would bring prices of Q80 to Q90; this is supposed to begin this year, and if

successful (we were told that over half the crop would be eligible), the community problems, and the bank's, would be solved. Whether or not it is to be involved this year is unknown, but the bankers mentioned that 600 of the local growers were forming a marketing association in order to better protect themselves.

The CR felt that they served 60% to 70% of their market, a reasonable assumption given the compact nature of the area. The town has no telephone. The only contact with Huehue is physical; the "encargado" hand carries cash collected on loan repayments and loan documentation to the Agency weekly on Friday. If our informants are correct, the bank pays an insurance premium of Q5,000 for each trip to insure the approximately Q30,000 which the encargado carries. Is a 17% premium for each trip reasonable?

APPENDIX III.2
BANDESA
HIGHLANDS REGION
LOAN ACTIVITY FROM FIDEICOMISO SOURCES

# Loans	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Totonicapan	609	657	778	686	944	845	605	421	559	634	393	619	668	670
Solola	343	354	371	406	450	619	354	275	400	808	632	863	976	796
San Marcos	960	835	976	529	765	921	528	472	655	1488	788	1151	1285	1191
El Quiche	806	703	622	713	907	900	1969	792	482	927	635	548	818	952
Huehuetenango	998	779	807	637	931	1349	960	1549	2898	3997	3464	3974	3349	3814
Quetzaltenango	1338	1315	1386	1032	1514	1147	1235	1022	993	1679	1027	1513	858	1294
TOTAL	5054	4643	4940	4003	5511	5781	5651	4531	5987	9533	6939	8668	7954	8717
(000 Quetzales) Amount of Loans														
Totonicapan	300M	286M	381M	436M	700M	615M	461M	283M	445M	644M	387M	569M	787M	699M
Solola	271M	230M	195M	437M	389M	611M	309M	287M	396M	935M	708M	1037M	1423M	1253M
San Marcos	628M	571M	627M	410M	656M	839M	598M	588M	1078M	3088M	1007M	1718M	1868M	1874M
El Quiche	548M	399M	378M	662M	1123M	900M	2061M	838M	665M	1349M	896M	793M	1281M	1561M
Huehuetenango	643M	709M	504M	528M	1099M	1696M	1317M	2207M	3894M	4812M	3694M	3138M	4317M	6753M
Quetzaltenango	852M	797M	859M	889M	1676M	1240M	959M	5602M	1064M	2633M	1068M	3088M	2244M	3627M
TOTAL	3242M	2992M	2940M	3361M	5643M	5901M	5705M	9805M	7542M	13461M	7760M	10343M	11920M	15767M

APPENDIX III.3

LENDING OFFICERS AND LOAN ACTIVITY IN 1988

FOR REGIONAL DISTRICT I, QUETZALTENANGO

Unit No.	Name	Lending Officers	1988 Loan Activity No.	Amount
21	Totonicapán Agency	4	518	Q 523,976
79	Rural Cashier Momostenango	1	152	174,586
22	Sololá Agency	5	641	1,036,490
77	Rural Cashier San Juan Laguna	1	155	216,327
23	San Marcos Agency	6	892	1,329,381
51	Rural Cashier Tejutla	2	299	544,395
34	Quetzaltenango Agency	6	824	2,887,760
75	Rural Cashier San Carlos Sija	3	470	738,857
31	El Quiché Agency	4	332	664,433
52	Rural Cashier Nebaj	2	272	365,716
53	Rural Cashier Joyabaj	2	232	266,060
54	Rural Cashier Uspantán	1	116	264,600
32	Huehuetenango Agency	5	1015	1,461,491
73	Rural Cashier Aguacatán	3	698	866,935
55	Rural Cashier San Pedro Soloma	1	94	117,600
57	Rural Cashier Santa Cruz Barillas	3	167	585,954
41	La Democracia Agency	4	1061	2,111,849
56	Rural Cashier San Antonio Huista	3	779	1,609,275

APPENDIX III.4

Banco Nacional de Desarrollo Agricola
(BANDESA)
Credit Department

REGIONAL DISTRICT I

LOAN PORTFOLIO AS OF DECEMBER 31, 1988

Unit No.	Name	No. of Loans	Amount
21	Totonicapán Agency	889	Q 523,976
79	Rural Cashier Momostenango	461	174,586
22	Sololá Agency	1670	1,036,490
77	Rural Cashier San Juan Laguna	262	216,327
23	San Marcos Agency	1990	1,329,381
51	Rural Cashier Tejutla	1204	544,395
34	Quetzaltenango Agency	2505	2,887,760
75	Rural Cashier San Carlos Sija	1211	738,857
31	El Quiché Agency	1026	664,433
52	Rural Cashier Nebaj	439	365,716
53	Rural Cashier Joyabaj	624	266,060
54	Rural Cashier Uspantán	442	264,600
32	Huehuetenango Agency	2340	1,461,491
73	Rural Cashier Aguacatán	1078	866,935
55	Rural Cashier San Pedro Soloma	349	117,600
57	Rural Cashier Santa Cruz Barillas	565	585,954
41	La Democracia Agency	1731	2,111,849
56	Rural Cashier San Antonio Huista	1303	1,609,275

APPENDIX III.5

BANDESA
HIGHLANDS LOAN ACTIVITY FROM FIDEICOMISO SOURCES
AGENCIAS + CAJAS RURALES

	No. Loans	Amount (Q000's)	Average
1975	5054	Q 3,242M	641
1976	4643	Q 2,992M	644
1977	4940	Q 2,940M	595
1978	4003	Q 3,361M	840
1979	5511	Q 5,643M	1024
1980	5781	Q 5,901M	1021
1981	5651	Q 5,705M	1010
1982	4531	Q 9,805M	2164
1983	5987	Q 7,542M	1260
1984	9533	Q13,461M	1412
1985	6939	Q 7,760M	1118
1986	8668	Q10,343M	1193
1987	7954	Q11,920M	1499
1988	8717	Q15,767M	1809

Includes Agencies in Totonicapán, San Marcos, El Quiché, Huehuetenango, Quetzaltenango y Sololá, along with their respective Cajas Rurales.

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Cooperativa La Unión Argueta
Cooperativa Movimiento Campesino
Cooperativa Unión Popular
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APPENDIX III.7

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ANNEX IV

SMALL SCALE IRRIGATION

Dr. Edwin French
Development Associates

SMALL SCALE IRRIGATION AND SOIL CONSERVATION

PROJECTED USAID FOCUS FOR THE FUTURE

INTRODUCTION

The purpose of this rapid analysis is to examine were AID has been, where it is now and where should it be heading in regard to irrigation and soil conservation. It is not meant to focus on the successes or failures but to synthesize from these experiences what may be some logical sound paths to follow in the future. It is incorrect and nearly impossible to single out the two factors, irrigation and soil conservation, in a discussion that really by the nature of this exercise must be placed in a wholistic context.

Over the last 13 or so years, AID has invested quite heavily in the future agribusiness of Guatemala. There exists a certain dichotomy between irrigation and soil conservation. Irrigation has a very significant short term impact that will be felt for a long time to come while soil conservation whose impact is longer term will also be realized by generations to come, in a very negative way if we fail or in a very positive way if we succeed.

The positive impact of irrigation which has been introduced over a wide area is already being felt by many. The ability of many to irrigate crops during the dry season where before they could expect at best one complete harvest per year, has turned their lives around.

With irrigation a new set of problems, before not comtimplated may surface. A technified deep-well irrigation system puts the farm families committed to this system, in a much less secure/tenuous position when considering their dependancy of this pump system.

Through our agressive efforts to provide water to many, we open a whole array of new problems or at least intensify some old ones. Competion/marketing problems will intensify as production increases. The environment is placed, potentially, at greater risk with increased use of pesticides and expansion of cultivation into previously uncultivated areas.

Considering the pluses and the minuses, we take a positive attitude for the future, reflecting on the past while looking forward to our planning needs for the future of agricultural development in Guatemala.

SMALL SCALE IRRIGATION

Previous Project Contributions

Promotion of small-scale irrigation technology has bridged at least three AID-financed projects (Small Farmer Development-0233; Small Farmer Diversification - 0255 and HADS - 0274.

As a preface statement to any observations, suggestions or criticisms found in this section dealing with small scale irrigation, it must be stated that the positive impact felt by the participating farmers has been significant.

Impact Studies

Critical to the process of projecting strategy for the future is having an in depth understanding of what impact small scale irrigation and soil conservation efforts have had up to now. With little base line data available, empirical data even if only occasional or sporadic become quite important. Information now being generated by USPADA for PROGETTAPS provides an example of the type of data needed in most other projects carried out under AID financing (Appendix A).

Information generated by Gary Smith in an informal survey in Regions I and V reported net income increases per cuerda, per year, as a direct result of having gravity-fed irrigation and crop diversification, of between 400 and 900% over the traditional system. This figure is derived from information obtained from farmers using simple irrigation systems that depend on natural spring or retained water.

It has been estimated that out of 259 surface water exploitation projects established during the period 1977-88, approximately 2,226 hectares have been put under irrigation, affecting 5,917 persons (information obtained by word of mouth from DIGESA).

Information obtained from some older/establish projects where deep-well water has been extracted from underground sources indicates that these more sophisticated systems have also yielded higher returns to the farmer group families but with greater over head costs.

The principal advantage in having irrigation in the Altiplano area is that it makes it possible to obtain three to four harvests per year compared to one under dry-land conditions. Additionally, it allows a farmer to produce not only his traditional crops which feed him, but also high income horticultural crops which raises his earning level. The tremendous increases reported by Smith are based on high value export, as well as, domestic markets that have opened to producers as a result of the recently acquired production

capability.
It should be stated that this is the impact as seen today. Whether each farmer group can maintain its present market advantage as many more producer groups enter the market as potential competitors remains a question. A positive answer to this question will only be obtained through an integrated planning and implementation process with focus on specific goals that fit within the public and private sector constraints.

A rapid impact survey of the Small Farmer Development Project (520-0233) in March of 1984 by Gary Elbow and Peter Heller, concluded that western highland producers were lead into diversified crop production through irrigation and this provided a better living.

A more recent impact study, carried out in 1987 during the Small Farmer Diversification System Project (520-0255), looked at participants in irrigation, soil conservation and crop production components and non-participants in Region I. Results of this study showed that the income from the participants farms was 11.6 times that of the non-participants.

Personal observation during this analysis plus farmer comments add strong testimony as to the positive impact that has occurred due to irrigation. I had the opportunity to observe farm families receive irrigation water for the first time in their lives. The enthusiasm was obvious, because it was something they had never dreamed of. It was quite emotional for them as for me. It is this same emotion that has driven the irrigation projects so far and so fast. They (the farmers) were given water for the first time. They were introduced to change, a change which gave them a different view of the world and the possibility for change. <u>What has happened in each irrigation project has been positive</u>. <u>It has begun to change peoples thinking</u>. The challenge now is to maintain the enthusiasm by providing greater means to exploit their new found resource, water.

<u>Basic Lesson</u>

<u>The basic lesson to be learned from the success of the Small Scale irrigation projects is that they are directed toward what the farmers perceive as their number one constraint to production/increased income</u>. Now that this constraint has been overcome in several areas, the task ahead is for extensionist and researchers to maintain a line of communication with the farm community that will lead to the continued development of appropriate technology as perceived by the farmer. This means on-farm oriented research and

extension which shorten the communication link between the farmer and the technology generation process.

Working Model

PROGETTAPS (a FIDA - BID funded project), is a working model of a farm oriented program that effectively employs a bottom-up approach to technology generation and dissimination of appropriate technology. The success of the program is in part due to the exploitation of DIGESA's extended network (Appendix B) of farmer cooperators, rural leaders, promoters and field technicians who work together in an orchestrated fashion to dissiminate technology and relay back to research, farmer's perceptions and needs (Appendix C). Generation of appropriate technology is key to any technology dissimination process. Through organizational design (Appendix D) which includes an administrative/coordinating unit responsible for budget coordination and dispersal and a technical Advisory committee responsible for final interorganizational coordination of objectives and goals, embodied in an annual work plan, DIGESA-PROGETTAPS and ICTA primarily are brought together in a symbiotic relationship. PROGETTAPS gets appropriate technology from ICTA and ICTA has at it disposal DIGESA's extended network into the farm community's. The farm communities provide the testing ground for new innovations, as well as, a large representative sample of the small farm sector which supplies the necessary feedback for technology modification and/or validation.

The PROGETTAPS model has achieved to organize, program and disperse resources to met specific goals established by DIGESA - PROGETTAPS and ICTA.

DIGESA is presently moving toward the adoption of a modified PROGETTAP's model for the operational strategy of all DIGESA (Appendix E) which would tend to consolidate DIGESA's dispersed programs under a coordinated set of objectives and goals. This change is presently under consideration in the National Congress to become law. Without a doubt, the proposed modifications will provide a vehicle for more efficient use of resources within and between institutions.

I recommend that AID examine carefully the proposed modified PROGETTAP's model in which future projects can be administered and executed.

IRRIGATION PROJECT IMPLEMENTATION

Organization Procedure

Implementation of deep well irrigation systems is carried-out within the irrigation program by three designated groups: 1) A technical assistance group (one group per region) has the job of making contact with the interested farmer groups to inform them of the potential rewards, risks and pitfalls from putting in an irrigation system of which there are three distinct types: a) from springs, b) from retained water source and c) from a deep well. 2) The technical assistance group is followed by a design group that analyses the particular site for water availability, topography, carries out the design process, gets price quotations for material and equipment needed to complete the project, gets bank credit approval with farmer group from BANDESA and oversees the pipe and sprinkler installation carried out by the farmer group. 3) Well drilling and pump installation are carried out by privately hired companies as is the electrical hook-up. INDE is needed in many cases to run an electrical service to the site.

The three groups seem to function quite well together, each doing his job as best he can. As originally planned, the technical assistance group would follow-up with training in the use of the irrigation systems and production. This, in theory, was a good idea and, in fact, there have been successes. However, the present rate at which irrigation systems are being installed, does not allow for much individual attention or contact time between the technical group and all the farmers in each irrigation project.

Surface water exploitation projects are initiated essentially in the same fashion as the deep well projects with the exception that well-drilling is not required. However, the need for technical follow-up remains a critical constraint.

Specialized task force groups as seen in HAD I was a relatively new inovation which provided the concentraction of resource to get the expanded irrigation project moving. Today the expansion of the project requires a new strategy which provides for integration and consolidation of resources.

Technical Assistance Constraints

Considering the rate of project expansion, the limited resources at the disposal of the technical assistance group and the static number of personnel within this group, despite continuing added responsibility, it's clear that there is presently and will continue to be a serious shortfall in

technical backstopping at the farm level. This applies particularly to the immediate need of assistance in crop production and water management.

The intensity of technical assistance contact time needed by each group varies, based on their past experience in production of vegetables or fruits. For example, one group visited at the project Alameda III near Chimaltenango, were within a 10 hectare irrigation project that has capacity for 80 families. They were in the process of putting in the irrigation pipe and very near completion. A few months prior to their new experience with irrigation, they were producing corn, potatoes, aba and beans. They have visions of diversifying into horticultural crops, selling to exporters and, in general, upgrading their standard of living, all of which is very possible. However, the training and other technical assistance time required to bring this one particular group of producers from basically zero vegetable production to the point of being diversified competitive producers is almost a full time task, not to mention the other projects in this immediate area, Alameda I and II and the others established and projected. The technical back stopping need being suggested for the Alameda group repeats itself over and over again as more groups attain irrigation capability.

Constraints to project implementation are exemplified in Region V where the irrigation design group, previously described, is composed of nine persons with only 2 vehicles to cover the needs over all of the region. As was described by design group members they lack many of the basic tools required to do their job. This includes adequate logistical support to move them from their home base in the capital city out into the region. If this weren't enough of a bottle neck to project implementation, the technical assistance groups in theory have a much greater frequency of contact with farmers than the design group, both prior to and following each irrigation system installation. Despite this, resources available for operation of the technical assistance group are more limiting than the design group.

The Region V technical assistance group, for example, has one vehicle that must be shared by six technicians. Essentially, most of this group is grounded for a large percentage of the time. This important group should have all the necessary audiovisual equipment with generators for field presentations and technical material, both slides-tapes, written and illustrated. In actual practice there is a continuing deficiency of the basic tools required by the technical assistance groups to effectively and efficiently do their job.

Marketing Strategy

Equally as pressing is the need that overlays all production oriented projects or groups of projects, i.e. a marketing strategy entailing every detail from quality control in the field, farm to market roads, to possible processing facilities or export channels with a continuing search for new commodities which match market demands both domestically and internationally.

The biggest and best cooperatives, such as Cuatro Pinos and Rincón Grande, have hired, trained personnel in production and marketing and they still have serious problems. For example, a serious road block encounter by Rincón Grande and other groups attempting to export perishable product by air is the lack of sufficient cargo space which results in products being left behind in wait of another flight. Without refrigeration facilities at the airport, perishable products run a high risk of being lost.

As the number of vegetable/fruit producers increase with every new irrigation project, the supply of market-ready products will increase, resulting in more intensive competition between farmers/farmer groups not to mention the other many pitfalls and traps to be encountered.

If we consider the entire sequence over time of AID supported, irrigation focused projects. To this point we can say that success has resulted. In AID's quest to bring a higher standard of living to a greater portion of the rural and urban population, we must factor into the equation the level of production and what the market will bear. As we move toward the coverage of large areas with access to irrigation, i.e. intensive production, with each group essentially competing with the next, there must be put in place a detailed overlay marketing strategy. If such a plan, containing both long and short term goals, is not put forth and implemented in the relatively short term, the present cumulative positive effect of AID supported irrigation/crop diversification programs could result in a negative impact.

Reflections/Analysis

AID projects prior to 0274 involving irrigation system implementation did not involve well drilling. Each project involved fewer farm families and the pace of the total program in general seemed to be considerably scaled-down in many respects. Of the successful irrigation projects we see today, many extend back several years. The time, money and individual attention required to make many of these projects successful has been considerable. The pace at which well drilling is moving, e.g. 30 wells in the next 2 years in the

Chimaltenango area alone, has pushed this program to the point of overload, i.e. open to serious problems.

A detailed examination of implementation strategy is required immediately given the rapid establishment of deep-well projects, lack of technical backstopping capability and shortfall in development of a marketing strategy. Such an examination should consider not only the irrigation project within DIGESA but the entire support base within DIGESA. Consideration should be given to the integration of the irrigation project in all of DIGESA with all of DIGESA's programs working toward common goals, which involves a forward thinking and integrated planning effort. When setting goals, strong consideration should be given to the physical economic and time constraints of the institution or institutions involved. The entire priority and goal setting exercise should be an outgrowth of identified problems/constraints at the farm, community and institutional level.

Integration should occur between ICTA, DIGESA, DIGESEPE and DIGEBOS resulting in the creation of commonly agreed upon objectives and goals. Such planning should maintain a clear vision of their capability to carry out such a plan based on their present or projected resource base. Short falls in equipment and personnel as seen in the irrigation program can be overcome if the programs are not operated as separate units, but integrated into an overall plan that can take better advantage of all available resources. Official policy is needed to make such collaboration possible.

The Bottom Line

The bottom line of this discussion on irrigation is that the program has certainly had significant impact on the lives of many and this is precisely what AID should be about. When embarking on such an effort, however, it must be recognized as a long term effort that should contain the flexibility for coarse correction when deemed necessary. As the program pushes forward, i.e. influencing more and more peoples lives, such as is occurring with the multi-regional irrigation project, certain risks are also being imposed, which puts the farm families out on a limb to varying degrees. AID must have the planning foresight to undergird this type of effort with whatever supportive programs/projects that are necessary. In this case, it may be improved lines of credit to the small producer, it may be an improved farm to market road system or improved rural electrification, it may be the development of an appropriate marking/processing system, it may be strengthing research extension efforts.

TECHNICAL CONSIDERATIONS

Well Equipment Service/Replacement

Well equipment purchased for the majority of the deepwell irrigation projects is the submersible type of variable horsepower (a function of well depth and flow rate) with a four inch outlet. The only turbine driven pump I saw was installed at the Cuatro Pinos cooperative and it was a six inch outlet. Due to limited equipment all well casings are 8 inch.

Generally speaking, turbine pumps have greater longevity than submersibles. However, due to cost and availability, submersibles were chosen over turbine type.

Given that the program has gone with submersibles and given that they only have a 1 year service guarantee, a maintenance plan must be rapidly put into place to include repair/replacement. Since the pumps are submersible the entire well (less the casing) must be pulled to remove the pump/motor for repair, all of which requires special equipment and know-how. Perhaps AID should place stricter specifications and service guarantee on well pumps and replacement parts to protect the consumer farmer groups.

Through discussions with DIGESA personnel concerned with the irrigation program, I was informed that a rotating-fund plan is being considered that would be generated and maintained from a surcharge added to the electric bill. This is not a bad plan assuming the money in the fund is managed and administered well. Additionally, repair and maintenance would be contracted to the private sector and paid from the rotating fund. In theory, the plan sounds good, but will it work? Will the surcharge provide a sufficient sum of money to take care of the needed servicing?

The submersible pumps have a life span of approximately five years assuming some other problem such as an electrical current surge, for example, does not occur, reducing the life span of the motor.

Given the critical long term nature of the irrigation program, there must be put in place immediately a security plan that ensures rapid action when a pump failure occurs. There are irrigation systems designed for projects serving one-hundred or more families. These families are completely dependant on the proper functioning of the well for their

production, i.e. livelihood. Perhaps AID should consider establishing/or contributing, to the proposed rotating fund. Such an up-front quantity of money would be considered seed money to ensure that a sufficient level of start-up funds during the critical program establishment period. As can be seen in Table 1, the number of wells to be drilled during 1989 is ambitious. With each well more and more families become dependant on this man imposed, technified, susceptible-to-failure system.

TABLE I

Irrigation Well Drilling Activities for 1989

Region	Departments	No. of Wells	Hectares Irrigated	Families Benefited
II	Baja Verapaz	5	125	188
III	Progreso, Zacapa, Chiquimula	12	300	400
IV	Jalapa, Jutiapa, Santa Rosa	14	350	524
V	Sacatepéquez, Chimaltenango	10	250	375
VI	Quetzaltenango, Totonicapán, San Marcos, Sololá	14	350	525
VII	Huehuetenango, Quiché	5	125	188
		60	1500	2200

Without a doubt failures are going to occur. If a guarantee or fund is not in place, that can remedy the problem in a matter of a few days, the families stuck with no irrigation water could loose their entire crop. This would be disastrous for them and a tremendous set back for the program. AID specifically could come under fire at the farmer level for having failed them.

Aquifer Reserves

Base line studies in aquifer and surface water resource and use feasibility studies should receive or continue to receive support. These studies will provide data essential for planning in an overall water use development strategy. Many of these studies to date have received funding from AID, (through PL-480), BID and other donor countries. Greater

coordination between donor groups could provide the resources necessary to fill the information voids in a programed and efficient fashion.

A program to strengthen the capability of the National Institute for Seismology, Vulcanology, Meteorology and Hydrology could provide more detailed information for future planning needs. Such a strengthening effort may envolve computerization of all old and new hydrological information which would allow for fast retrieval and computer mapping, greater support of field study activity as well as, a training component.

Aquifer Monitoring

As water use increases for both agricultural as well as domestic use, a programed monitoring system must be put in place. Determination of dynamic level and flow rate are two critical parameters established for each well dug at the time it was dug. Aquifer capacity, if unknown can be determined and level monitored overtime at each well site if a program is designed and a team put in place with the responsibility to physically carry-out field work, record, file and publish this data. This group could be in charge of or collaborate in the collection of weather data for each site. This implies a need to establish weather recording equipment where not presently available. Such information for most sites is scant or lacking. The information can be used to correlate precipitation, water use and aquifer level changes in order to make sound predictions for future water availability and obtain long term impact data in response to changes, for good or for bad.

Additional collaborative efforts can be establish to analyze water samples and maintain records relating to water quality, which can change overtime due to aquifer draw down, encroachment or surface contaminant percolation.

The task of water sampling/data collection could be carried out by the aquifer monitoring team. Water potability analysis and record keeping could be carried out by the Ministry of Health.

Water Use

Problems

Superficial water flow irrigation systems are very simple of design and maintenance; however, in many instances they are not very efficient in water usage. As communal use of surface water intensifies or annual changes in precipitation result in long dry periods, or stripping of watersheds for

firewood increases, water availability will decrease. This can result in communal infighting or fighting between groups for a particular water source. Fueding over water use is an old problem, but will be agggreviated as water use intensifies.

Focused studies should be initiated to determine 1) present and long term water use demands, 2) community structure and use patterns and 3) projected water use plans for short and long term.

Improved Efficiency

HAD II has given consideration to the improvement of water use efficiency. Improved water use efficiency must be emphasized to minimize water deficit problems over the long term. Many times infrastructure improvement implies increased cost which must be payed for by the producers. Such improvements may involve improved water entrapment systems, improved distribution system or improved delivery systems or combinations of several or all. Improved programing and timing of water delivery, should also be considered as a means to improve water efficiency use in any irrigation system.

Deep well irrigation systems must also be targeted for water use efficiency improvement for 2 reasons:

1. User demand may outstrip the supply of water and
2. Overhead cost are relatively high.

Drip systems do improve water use efficiency several fold over sprinklers, but require higher cost more sophisticated equipment and more management. Drip systems have been tried on some sites with varying degrees of success. Most successful have been where drip was used in combination with deep well systems. Sedimentation from either surface or deep well systems is a problem and causes plugging of the drip emitters. Some emitter types have fewer problems than others in this regard. However filtration units must be coupled with any system. Appropriate water-saving technology must be determined for a particular recommendation domain based on the constraints encountered. Given the increased cost and sophistication of the system drip irrigation may not be for everyone.

Research/Extension

Many systems with irrigation and diversified crops have terraced land and dairy cows. To stabilize the verticle down-hill side of a terrace, grass is established by

DIGESEPE. They have, in fact, introduced improved grasses to be planted on these slopes. To obtain good forage production during the dry season, over-spray of the sprinklers across terraces provides the needed irrigation. Under a trickle or drip system the forages would not receive this direct source of water, the rate of forage grass would diminish, the cow would receive less forage and milk production would go down.

ICTA has done very little research in irrigation methods or system development. However, they are beginning to place more of their resources in irrigated diversified crop research. Longer term research goals should be st to address present and future technology needs for integrated irrigated crop and animal systems. Future plans could project dairy processing facilities in tandom with crop-animal systems, as an example.-

Material was only recently purchased for installing a system at the Chimaltenango Research Station. Irrigation equipment is available to fit almost any technology level. What is needed is an adaptive research methodology in order to establish technology appropriate for each recommendation domain. This implies the need for an on-farm research program which is closely orchestrated with extension/the farmer.

ICTA must be provided more resources to carry out the kind and extent of work needed. The present deficient condition of ICTA must be overcome before much can be expected of that group.

Indications are that DIGESA has begun to realize its short-fall in field technical assistance capability and has begun to consolidate its efforts, both in human and physical resources to better address the expansion of irrigation and diversified agriculture. These consolidation efforts must be designed in close coordination with ICTA, DIGESEPE and DIGEBOS.

<u>AID project design and implementation should design its programs in such a way as to encourage and compliment a closely coordinated research-extension approach to technology generation and diffusion</u>.

Professional Training

<u>Turn over or attrition of professional personnel in ICTA, DIGESA and DIGEBOS within the institutions is relatively high and should be researched</u>. As a result of this training of technical personnel for both research and extension must be

an ongoing long term priority. This training should continue at all levels, including post graduate, undergraduate short courses in and out of the country.

The progress seen in Guatemala, particularly in the agricultural sector, is the result of many years of accumulated education which has been supported from many sources, both public and private. Within the governmental institutions the result of in and out of country training is highly visible. Well trained professionals are what makes progress occur and we see it happening. Strong support of educational programs that support the agricultural sector should continue.

Assistantships can be an extremely useful tool, achieving both training and research needs in specific areas. The assistantships are provided to the national and/or private universities. The assistantship thesis research can be very focused on issues vital to a particular project such as in HAD II. Direction of focus could be dictated by needs within ICTA, DIGESEPE or DIGEBOS, for example. I strongly encourage this form of support to the education of Guatemalan professionals vigorously exploited.

Training - Farmer

Farmer training is critically important and should be closely aligned with on-farm activities carried out by both ICTA, DIGESA, DIGESEPE and DIGEBOS when called for. Farmer training assumes that the information to be passed on, is appropriate for the farmer. When both extension and research align themselves with the farmer, knowledge can be transmitted in all direction. In this way, researchers and extensionist alike are picking-up the kind of questions needed to design and disseminate technology which meets the farmers' desires and constraints.

In order to carry out this kind of closely integrated (farmer-extension-researcher) program, all the inputs must be in place, which may include per diem budget, materials/equipment budget and vehicles. The biggest complaint heard is that the vehicles and equipment arrived toward the end of the project and we couldn't do our job. Strong efforts to overcome this type of bureaucratic bottle-neck must be a priority for AID if we expect to execute well coordinated programs that will have an impact.

COMPLIMENTARY PROJECTS

Dual Use Well-Water

With the establishment of a deep well-water pump system, comes the possibility of dual-use, in the home, as well as, in agricultural production. In most instances the water extracted would meet most health standards and is deep enough to reduce the risk of contamination. I have picked-up in various discussions that dual-use has been considered. However, I have seen no evidence that the idea has reached a project stage. In part, the thought was not pursued in the context of any implemented-irrigation projects, simply because it complicated the project task beyond what was originally projected and raised the cost significantly. In spite of the fact that the well and associated system is not designed for connection directly to homes, there still exists the potential to utilize the existing pump system for home domestic needs.

One idea expressed which has possible merit, was [illegible] to install a holding tank for each house or for a given number of houses and connect it to the pump distribution outlet. The pump would be used at a certain time or times of the day to fill the tank/tanks. From the tank, tubing would extend to the house. The idea is simple but the implications in improved health could be great for most rural families over the long term.

Integrated Pest Management (IPM)

It is clear that as irrigation is adopted and farmers diversify away from their traditional crops toward horticultural species, the use of pesticides takes a vertical climb upward from what was practically zero usage. Misuse of pesticide in timing of application, type of pesticide and dosage are the rule rather than the exception.

I stopped to talk to one man and his family planting potatoes. A young boy was placing seed potatoes in a prepared furrow while a man followed behind him gingerly spreading Aldrin, in powder form, over the seed potatoes, using his bare hands to do so. Young children were playing just a few feet away down wind from this operation. I could see the white dust drifting over them. I didn't stay to watch, but, I'm sure that upon finishing, the man washed his hands and the bowl he was using to carry the Aldrin in a stream that was immediately adjacent to the small potato planting.

I asked the man were he got the Aldrin and he said he bought

it from the cooperative he is a member of.
I asked what company name was on the bag. His response was that he purchased a small bag that did not have a label. Of course that means someone else handled the poison and more than likely, without any breathing or skin protection.

Another teenage boy I spoke to had just applied a highly toxic organic phosphate insecticide to some broccoli plants that were nearly ready for harvest.

These two examples may be atypical but they illustrate a potential -or perhaps existing- problem of some seriousness. In every vegetable producing area we traveled to, it was quite usual to see at least one person with a backpack sprayer per small producer group area.

The half-life of Aldrin is measured in decades. It's toxicity is such that its use is banned in the United States. In addition to the potential damage to humans, contaminants in plant material grown on contaminated soil could preclude the possibility of producing crops for export. Aldrin is just an example of the breath of the problem which exists due to lack of control on pesticide use.

Leveling the land through the construction of terraces is good for erosion prevention but applied pesticides also tend to remain and can build-up over-time depending on the type of pesticide used.

The use of plant residues resulting from intensely managed diversified cropping systems for animal feed is certainly efficient. But, such plant residue may contain high levels of any number of pesticides, particularly if these pesticides were not applied correctly. The outcome of this practice will result in contaminated animal products which are consumed directly by the farm family or are sold.

Priority consideration should be given to an integrated pest management program as part of, or parallel with, HAD II. This may be one of the most urgent and important tasks ahead. In any event an extremely aggressive IPM program should go hand in hand with any crop diversification thrust. AID should investige the possibility of a joint IPM project with the ROCAP Environment Project.

In the very near future, short term technical assistance with Guatemala counterparts should be undertaken to carry out a base line study. Pesticide use parameters should be established and samples collected for analysis. This step is critically important to understanding what potential remedies should be pursued in a longer-term effort.

The project should include a careful examination of laws controlling import and sale of toxic substances and their enforcement should be carried out.

Future AID projects of HAD II nature should without question have an IPM element.

Animals

A direct result of an irrigated, terraced, diversified crop system is the adoption of dairy animals. As was described previously, grass produced on the down-hill side of the terraces can be used as food for the cows in addition to the excess amount of plant residue produced under irrigation. DIGESEPE's interventions with improved grasses and improved milk producing cows, has made the animal venture quite rewarding for the farm family. Additionally, improved calf offspring can be sold at a handsome profit. This is not to mention the manure produced which can be composted or used in a bio-digester.

For small limited resource farmers, BANDESA requires that the farmer seeking a loan for purchase of an animal have irrigation and diversified crops as a means of providing greater insurance of payback.

DIGESEPE presently has very minimal support as measured by the normal indicators, e.g. few vehicles that are all old, little support for field staff and a low operating budget. A long range forecast of animal production and DIGESEPE role in this activity should be undertaken. In any event, the irrigation, forage, animal production nexus is one that AID should continue to consider for its income-enhancement potential.

Bio-Digestors

The construction and use of bio-digestors is expanding. Some relatively current estimates are as follows:
San Marcos - 114, Quetzaltenango - 80, Totonicapán - 16, Huehuetenango - 42, Sololá - 4, Quiché - 3. The plan for 1989 is to install another 200 in various locations. Bio-digestor construction is not an AID supported program. However, it is interesting to note that the units are being installed on sites which are being irrigated. The synergistic effect of irrigation, diversified cropping and animal production has been quite astounding with irrigation being the key element, followed by diversified crops, which help pay for a cow and eventually a digestor.

These three component form an almost complete or sustainable system with crop residue going to the cow, the cow producing manure, the manure going into the digestor which produces gas for lighting and cooking, as well as liquid and solid fertilizer needed for crop production which in turn produces more plant residue and the cycle continues. As an added benefit the perception of both farmers and extension agents is that pesticide usage decreases with increased use of bio-organic manure.

Given the adoption rate among irrigated farms and given that the end results of the bio-digestors approach an agricultural system of greater sustainability, AID may want to encourage the use of bio-digestors. Bio-digestors may be more appropriate for some farmers or areas than others, but where appropriate could have a significant impact. In any future project considerations involving bio-digestor, study should perhaps be directed toward improving the technology.

AQUACULTURE

The aquaculture project covered under projects 520 - 351, funded by CARE and coordinated by DIGESEPE with field implementation carried out by Peace Corp, is still alive and well and is projected to be continued. This project is not focused on the Altiplano area, however, demonstrated success raises the possibility of success in the highlands. An Auborn University short term group in 1986, provided a very positive analysis of aquaculture potential in the country, including the highlands. A San Carlos University run station, Zunil, near Quetzaltenango, has developed an information base for aquaculture in that area and, in fact, have extend some of that information to interested farmers in the area.

Considering irrigation systems that use surface water, the possibility exists of incorporating aquaculture as an added benefit, producing fish for communal consumtion or sale. Other benefits from fish pounds could include the availability of water for animal use/crop production and water entrapment for improved ground water recharge.

A project feasibility design team, which should include San Carlos University personnel, should be contracted to carry out a site by site analysis for potential aquaculture establishment.

SOIL CONSERVATION

USAID Contribution

USAID's support of soil conservation efforts over time include projects such as Small Farmer Development (0233), Small Farm Diversification Systems (0255) and the Highlands Agricultural Development I (0274). Presently these two distinct USAID supported programs directed at soil conservation.

Thousands of hectares of sloped land have been protected. Results of years of promotion are clearly seen in varying forms of soil conservation throughout the central and western Guatemala. A relatively small amount of converted land can be credited to any one project because it has been a priority with many non-AID funded programs. HAD I and the CARE-DIGESEPE Programs have made progress, but the effort has been slow. More recent data from DIGESA (Table 2) indicates that during the 1985-1988 period 9,685 ha. It must be stated that progress is being made. The spin off effect has swayed a relatively high percentage of farmers to incorporate soil conservation methods without social payment were put under-varying forms of soil conservation in the Altiplano under the social payment system.

TABLE 2

DIGESA Soil Conservation Program Achievements Across the Highlands, 1985 - 1988.

Year	Area under Conser. Prog. (ha)	Families Benefited	Social Payments(Q)
1985	94.78	436	37,119.78
1986	1,047.43	3,702	307,387.52
1987	1,907.06	5,439	617,630.75
1988	6,636.31	2,706	1,774,924.25
TOTAL	9,685.58	12,283	2,824,062.30

DIGESA Program

Incentive System

The DIGESA based soil conservation project is presently operational under HAD I. The principal participatory incentive is based on social payment. The monetary amount paid is not promoted as a payment for work done rather it is a partial reimbursement for work time lost.

The amount paid per unit of land varies because the land size unit, cuerda, changes from one area to another. I have heard social payment figures quoted that vary anywhere from Q50 to Q85 per cuerda. Reimbursement (social payment) is based on the land area placed under one of several types of soil conservation systems.

The type of system used will vary depending primarily on the slope of the land and the soil type. Specifications as to what type system will be employed are provided by one of the regional soil conservation technicians, if one is present in the region, or a regional extension agent.

Region VI and V have used primarily terraces, where as, Region IV, III and II have utilized primarily filtration ditches and vegetative barrier systems.

Technical Assistance

At present, Region VI has a coordinator and 9 technicians that focus only on soil conservation. They work with the guias agricolas at the community level. The Region V group is similar to VI and was formed this year. Coordinators serve a multipurpose extension role in the region. Region V has attempted to incorporate a limited amount of applied research into its work agenda. Work has really only begun in Regions IV, III and II under HAD. Any efforts being carried out in these regions is assumed by the regional extension personnel, guias agricolas, and representantes from the communities.

In theory, the steps followed in an effort to get soil conservation methods incorporate on a farmers land are as follows:

1. Locating the area is done by the extentionists, guias agricolas, representantes and sometimes the soil conservationist.
2. Motivate the farmers
3. Training of farmers
4. Conservation plan
5. Construction
6. Evaluation
7. Payment
8. Technical backstopping

I heard, however, that this procedure, in many instances, was being drastically short-circuited to the point that the farmers didn't always fully understand the advantages. In other cases, the farmers didn't understand sufficiently how to manage the new system.

Technically speaking the terracing and contouring work appears for the most part to be well done. In execution of the field work, problems would arise, such as, grass material to be planted on the down-hill side of the terrace not arriving on time, resulting in erosion of the terrace. Generally, the field technical assistance group or extension agent is short on vehicles. Particularlly for the technical group this is a problem because of the travel distance. A shortfall in available vehicles resulted in a sharp decline in technical backstopping.

DIGEBOS Program

The program carried out by DIGEBOS is supported in part by CARE under a PL-480 Food for Work Program. This program, as the DIGESA program, works through community level committee structure, however DIGEBOS has a much closer tie to the rural community because of its promotores who work on a permanent basis with representatives from the community. A principal job of the representatives is to establish and maintain tree nurseries and distribute the seedling trees. Within the context of this activity carried out by the representatives, soil conservaton is promoted and carried out.

The permanency of a tree nursery, in addition to the daily task of caring for the tree results in a much tighter knit group than the conservation groups with whom DIGESA works. The DIGESA conservation group is in and out of an area quickly. This reinforces the concept of community centered projects.

Reimbursement in part for lost time is provided by CARE as food for work. Reimbursement per day is two pounds each of beans, corn and flour, one pound of rice and 1/2 liter of cooking oil. This is calculated to be sufficient for a family of 8 for one day.

Success in forming and maintaining a group varied from one location to another. It appeared in several cases that the principal motive for working was to receive food and the representatives complained that it was not enough or it did not arrive on time.

I was unable to attain hard data from all the areas covered under the program. However, as an example, the municipalities of San Juan Comalapa and Santa Apolonia, constructed 10.8 hectares of soil conservation structure in 23 aldeas in 1988.

Tree Establishment

A principal objective of DIGEBOS's present activity is to protect the watershed areas, particularlly those which relate to irrigated areas.

Vital watershed areas are being cleared at a rapid pace for wood and cropping. DIGEBOS has begun to direct its thinking toward a more integrated approach to watershed protection. The focus is presently on agroforestry systems that would allow short-and long-term use of the forested watershed area. The systems could be based on several different types of enterprises. This change in strategy, in part, is a result of less than adequate impact achieved from past efforts. At this point, within the institutions concerned, the urgent need to stop the destruction of plant cover in the watershed areas is understood. As an example, DIGEBOS' goal for the upcoming year in the Chimaltenango and Sacatepéquez, Region V is to begin the reforestation and/or agroforestry system approach in 20 different watersheds that relate to small scale irrigation projects.

The technicians within DIGEBOS are well trained and acutely aware of the problems. Their work in the tree nurseris has been successful in varying degrees, depending on the location. They do an adequate job of training the promotores, given the limited availability to the basic extension tools such as slide projectors, a generator, camera, or access to a budget for film and developing costs not to mention the other supplies needed to do a good job. Even the representantes commented that their job of getting the word across could be made easier if they could show slides. They are always short of vehicles which is essential for them to be effective. For example, Chimaltenango (Region V) has 4 technicians and 2 1980 model pick-ups and no money to take care of repair and maintainance. There are five promotors and one motorcycle which means their mobility is quite limited.

Other Problems Detected

In an interview with one group of representatives, their concern was expressed regarding DIGESA'S soil conservation efforts. Because of the pressure to move from one area to another, in order to meet the expectations of the annual work plan, there was limited pre-and post-planning and/or discussion with the farmer groups. This left the farmers with an unclear understanding of the value reaped from the construction of soil conserving structures. They felt that

because of this limited contact time, farmers go ahead and carry out terrace construction or other soil conservation form, to receive their social payment and would then fail to maintain the structure, allowing the slope to return to its previous state. They stated that the work would at times be destroyed. The representantes attending the meeting know the value of soil conservation. However, it was clear that even this dedicated group had relatively short range vision and wanted to see some technology introduced that would provide them with a greater monetary return in a shorter period of time. This type of thinking was heard when the discussion related to tree planting or soil conservation.

The group of representantes I met with, approximately 16 present, owned land of sizes ranging from 0 - 5 cuerdas. It was also revealed that farmers with no or little land rented whatever they could. Apparently this is quite common. It maybe very difficult to get a farmer on rented land to invest in any type of labor intensive soil conservation activity. If they construct some type of soil conservation barrier or terrace simply for the money, they will very likely not maintain the terraces.

Farmer Perception

Analysis of farmer perception is critical to acceptance of an ideas, technology, etc. My conversations with farmers led me to believe that they understand the value of soil conservation and watershed management but they have pressing day-to-day needs for their families and themselves. These immediate needs must be taken into consideration when designing a project with long range goals such as soil conservation, tree production, or protection of a watershed that will someday benefit the farmer directly. He is much more likely to accept the task of tackling long range problems if his related short term needs can be met.

Soil Analysis

At present soil maps are available on macro-scale. Support of a long term soil mapping program is needed to bring more precision to this basic data source. ICTA nor Natural Resource have an adequate budget to carry out this mapping task. This is another example of fiscal starvation.

Soil physical characteristics was programed to be determined at each irrigation site to give greater precision in determining plant water need. This element was dropped due to lack of adequate laboratory facility needed to process the samples.

Adequate soil lab facilities are essential for any technified analysis of soil conservation results or production studies. Strong capability in soil analysis will be a requirement if ICTA is to participate in the S&T/AGR IBSNAT project (International Benchmark Sites Network for Agrotechnology Transfer).

Training

The supply of trained professionals in irrigation and soil conservation at all levels is critical for carying out future and/or present projects in these related areas. Enough trained individuals must be maintained. This is a continuous and long term effort that cannot be overlooked.

Other Supporting Institutions

ICTA

Given that ICTA is the principal generator of technology/technical backstopping it is pertinent to review method of operation and constraints of this institution. ICTA in the past has done very little research where irrigation was included as a variable. In this respect, it has a considerable void to fill. It is presently gearing up to generate appropriate technology in vegetable production under irrigation and does have on-farm work under way in this area.

In considering what ICTA has done since its days with Rockfeller, one must consider strongly its of resources. In order to have a strong on-farm research program. There must exist an adequate budget for vehicles, per diem and other materials. I have heard the complaint that ICTA has put plots on-farm, but they are few and only on the main highways. Trials established in less accessible locations requires a larger vehicle/travel budget and more personnel to follow-up with the required monitoring and data taking.

As we see ICTA today, it is extremely stretched by the demands placed upon it. In order to cover the research needs of production, processing and marketing for all crops including basic grains, oil crops, fruits and vegetables, along with animal production and soil conservation, it requires a greater infrastructure and budget. ICTA for the past 8-10 years, has been extremely weakened by low budgets, compounded by a mandate to diversify its efforts from what

was initially a mandate to increase basic grain production.

There are many examples which exemplify the weakened state of ICTA today. One case that stands out very clearly is the deteriorated state of ICTA's soil analysis capacity. If the programs being carried out in ICTA and DIGESA were being managed effectively, soil analysis and recommendation formation would be an extremely important, integrated element.

The actual laboratory work area is located in what was a structurally condemned building. The laboratory equipment, some purchased, some fabricated on site is worn to the point that it is hardly usable. The equipment required for nitrogen analysis is so worn that it is unusable, which in effect means they can not perform nitrogen analysis. In almost all instances, the procedural steps used in taking soil samples through a analytical series is done with such rudimentary equipment, that consistency and correctness of the data produced is variable and the time required is painstaking.

At present, the system has no built in means of getting results to the farmer, i.e. it is hit or miss. The soils department had franking privileges which allowed them to send results by mail to the farmer. Approximately four years ago, this privilege was taken away and since that time, no analysis results have been mailed to producers or technicians who bring their samples in. If the farmer or technician doesn't come to the lab and pick-up the results, they remain at the lab. As a result of this, there are thousands of unclaimed analysis results.

ICTA - PROGETTAPS

The relationship ICTA has had with PROGETTAPS has muchly improved it economic wellbeing in the last year. There still exists deep and serious deficiencies but these are being addressed to the extent possible. Only recently, for example, has ICTA begun to receive now vehicles through the PROGETTAPS arrangement.

ICTA - Food Science, Human Nutrition

ICTA is presently entering into a wide diversification of its research responsibilities. In addition to that, research thrust in various aspects of vegetable production, but it has also begun look at food processing and dehydration technology. In collaboration with CIP, ICTA has establish a food processing center at the Chimaltenango Research Station.

Much attention has been placed on processed potatoes, however, this same equipment has been exploited to process several vegetables grown in the area.

ICTA, having demonstrated an eagerness to punch ahead with this area of adoptive research in food processing should be applauded and, in fact, encouraged to expand its efforts not only in processing, but the also in area of human nutrition. This would require some investment, but if established and supported the tremendous void in nutritional research and extension in Guatemala could begin to be addressed. A thrust in the human nutrition area would compliment nicely the ongoing vegetable research extension thrust and would provide appropriate information to the critical nutritional wanting in the Altiplano.

Support and development a Food Science-Human Nutrition section in ICTA should be carried out with a collaborative arrangement with INCA, CIP, CIMMYT and others concerned with this area.

SUMMARY OF CONCLUSIONS OF RECOMMENDATIONS

1. AID should examine carefully the proposed modified PROGETTAPS model in which future projects can be administered and executed.

2. Examine in-depth AID-sponsored soil conservation programs with consideration of operational strategy, incentive systems, overlap/duplication of efforts institutional/integration, impact, define deficiencies and propose strategies for improvement.

3. Detail project for improvement of soil analysis facilities at ICTA and the Dirección de Riego y Avenamiento.

4. A detailed examination of the small scale irrigation implementation strategy (0274) is required immediately given the rapid establishment of deep well irrigation projects, the lack of technical backstopping capacity in irrigated sites and shortfall in development of a marketing strategy.

5. The cumulative effect of the irrigation projects (0233, 0255, 0274) have had a very positive impact on the lives of many farm families.

6. The success of the small scale irrigation projects is due to the fact that these projects have been directed at what the farmers perceive as their most important constraint to production/increased income.

7. Design marketing strategy while continuing search for new markets/commodities.

8. Irrigation/production, soil conservation work should be recognized as a long-term effort that should contain the flexibility for course correction.

9. AID should place more strict specifications and service guarantees on well pumps and replacement parts to protect the consumer farmer groups.

10. AID should consider establishing/contributing, to the proposed rotating fund to be used for deep-well repair.

11. Base line studies in aquifer and surface water resources, watersheds per irrigation project and use feasibility studies should receive or continue to receive support. A program to strengthen the capability of the National Institute for Seismology, Volcanology,

Meteorology, and Hydrology could provide more detailed information for future planning needs.

12. As water use increases for both agricultural and domestic use, a programmed monitoring system must be put in place.

13. Focused studies should be initiated to determine 1) present and long-term use demands, 2) community structure and use patters, and 3) projected water use plans for short and long term.

14. Appropriate water saving technology must be determined for the various recommendation domains.

15. Longer term research goals should be set to address present and future technology needs for integrated irrigation crop and animal systems.

16. ICTA's economic and physical state need immediate analysis to determine what needs exist and what priority.

17. A needs assessment of ICTA's soil analysis facility is critical given this facility's importance to the HAD II Project.

18. Turnover or attrition of personnel within ICTA, DIGESA, DIGESEPE and DIGEBOS is relatively high. The problems should be pinpointed and solutions identified.

19. Training/extension support equipment is lacking in all institutions at the region level.

20. Long range study on urban domestic water needs and strategy identification should be carried out.

21. AID may want to encourage the use or integration of biodigestors with the future projects.

22. Priority consideration should be given to integrated pest management as part of or in parallel with HAD II.

23. AID should investigate the feasibility of a joint IPM project with the ROCAP Environment Project.

24. In the very near future, a short-term technical assistance team with Guatemala counterparts should undertake to carry out a baseline study that profiles all aspects of pesticide usage.

25. Future AID projects of HAD II nature should without

question have IPM element built in. The projects should include a careful examination of laws controlling import and sale of toxic substances and their enforcement.

26. Examine aquaculture potential for Highlands--initiate project design with feasibility/design team to carry out site-by-site analysis.

27. Individuals trained at various levels internally and externally must be an ongoing and long-term effort that cannot be overlooked.

28. Assistantships which target the theses problem at a specific research need in any one of the institutions is a benefit to the student, the universities and the institutions.

29. Lack of logistical support and extension field equipment is a <u>serious</u> problem which should be analyzed carefully by institution and a plan to remedy the problem be designed.

APPENDIX IV.1

Example of Data Being Collected by USPADA for PROGETTAPS Impact Evaluation

SUBPROYECTO DE TRANSFERENCIA DE TECNOLOGIA AGRICOLA
AGRICULTORES BENEFICIADOS Y METAS 1,989
CON PARCELAS DE TRANSFERENCIA
DIGESA

Cuadro 8
Region 5: Central
MODULO: CHIMALTENANGO-SACATEPEQUEZ

CULTIVOS	PROGRAMADO PROYECTO				Características de la ejecución: Número de grupos organizados			Agricultores por grupo	Agricultores atendidos				% EJECUCION	PROGRAMADO 1989
	1,986	1,987	1,988	ACUMULADO	1986	1987	1988		1,986	1,987	1,988	ACUMULADO		
MAIZ	580	828	1104	2512	0	302	175	10	0	3020	1730	2	0	180
MAIZ A	393	307	590	1290	0	0	0	10	0	0	0	0	0	0
FRIJOL	32	8	46	86	89	50	91	10	712	500	910	2122	2467	91
FRIJOL A	376	340	537	1253	0	0	0	10	0	0	0	0	0	0
TRIGO	175	188	272	635	104	109	79	10	832	1090	790	2712	427	72
TRIGO A	2	10	14	26	0	0	0	10	0	0	0	0	0	0
PAPA	15	16	25	56	0	89	50	10	0	890	500	1390	2482	24
PAPA A	6	8	8	22	0	0	0	10	0	0	0	0	0	0
HORTA	14	14	22	50	146	117	94	10	1168	1170	940	3278	6556	50
OTROS 1/	0	0	0	40	0	0	38	10	0	0	380	380	950	0
TOTAL	1593	1719	2618	5970	339	667	525		2712	6670	5250	9882	166	417

METPO889

##: Se considera como un avance de proyecto
1/ Grupo de cultivos no contemplados en el proyecto
La ejecución reportada al 30 de noviembre de 1988.No se recabo inf. sobre cultivos asociados
FUENTE: Módulo de S&E

APPENDIX IV.1 (Continued)

SUBPROYECTO DE TRANSFERENCIA DE TECNOLOGIA AGRICOLA
HECTAREAS ATENDIDAS Y METAS 1,989
CON PARCELAS DE TRANSFERENCIA
DIGESA

Cuadro 7
Region 6: Sur Occidente
MODULO: QUETZALTENANGO-TOTONICAPAN

CULTIVOS	PROGRAMADO PROYECTO				Tamaño de finca sugerido	Características de la ejecución 3/ área utilizada para tranferir tecnología					TOTAL FINCAS ATENDIDAS EN EL PROCESO	área potencial de adopción tecnología	% EJECUCION	PROGRAMADO 1,989
	1,986	1,987	1,988	ACUMULADO		1986	1987	1988	ACUMULADO	Tamaño de finca utilizado				
MAIZ	475	492	620	1587	1.04	3	8	6	17	0.45	4796	2158.2	136	20
FRIJOL	6	7	10	23	1.05	0	0	2	2	0.45	530	238.5	1037	1
MAIZ A	403	427	516	1346	1.33	0	0	0	0	0	0			0
FRIJOL A	284	301	401	986	1.20	0	0	0	0	0	0			0
TRIGO	287	304	367	958	1.21	2	7	7	16	0.45	4398	1979.1	207	16
TRIGO A	527	558	675	1760	1.18	0	0	0	0	0	0			0
PAPA	20	21	24	65	1.23	2	9	6	17	0.45	4610	2074.5	3192	9
PAPA A	13	13	16	42	1.27	0	0	0	0	0	0			0
HORTALIZA	10	11	13	34	1.21	5	5	10	19	0.45	2740	1233		0
MANZANA	0	0	0	0	0.00	5	5	10	19	0.45	120	54	**	0
HABA	0	0	0	0	0.00	0	1	0	1	0.45	80	36	**	0
						0	0	0	0					11
TOTAL	2025	2134	2642	6801	1.18	17	34	41	92		18224	7773	114	60

**: Se considera como un avance de proyecto.
1/ No existe programacion
3/ Los tamaños de finca utilizados son promedios de cada área
La ejecución reportada al 30 de noviembre de 1988.No se recabo inf. sobre cultivos asociados
FUENTE: Módulo de SAE

APPENDIX IV.1 (Continued)

SUBPROYECTO DE TRANSFERENCIA DE TECNOLOGIA
AGRICULTORES BENEFICIADOS Y METAS 1,989
DIGESA

Cuadro 6
Region 6: Sur Occidente
MODULO: QUETZALTENANGO-TOTONICAPAN

CULTIVOS	PROGRAMADO PROYECTO				Características de la ejecución									
					Número de grupos			Agricultores por grupo	Agricultores atendidos				%	PROGRAMADO
	1,986	1,987	1,988	ACUMULADO	1986	1987	1988		1,986	1,987	1,988	ACUMULADO	EJECUCION	1989
MAIZ	450	500	580	1530	212	179	131	10	1696	1790	1310	4796	313	450
FRIJOL	4	8	10	22	0	0	53	10	0	0	530	530	2409	78
MAIZ A.	335	260	416	1011	0	0	0	10	0	0	0	0	0	0
FRIJOL A	236	212	372	820	0	0	0	10	0	0	0	0	0	0
TRIGO	240	254	300	794	146	160	160	8	1168	1600	1630	4398	554	360
TRIGO A	447	469	570	1486	0	0	0	10	0	0	950	950	64	0
PAPA	16	17	20	53	300	131	90	8	2400	1310	900	4610	8698	186
PAPA A	9	10	14	33	0	0	0	10	0	0	0	0	0	0
HORTA	8	10	10	28	600	70	144	10	600	700	1440	2740	9786	0
MANZANA	0	0	0	0	0	12	0		0	120	0	120	**	0
HABA	0	0	0	0	0	0	8	10	0	0	80	80	0	248
TOTAL	1745	1740	2292	5777	1258	552	586		5864	5520	6840	18224	315	1322

**: Se considera como un avance de proyecto
La ejecución reportada al 30 de noviembre de 1988.No se recabo inf. sobre cultivos asociados
FUENTE: Módulo de SAE

APPENDIX IV.1 (CONT.)

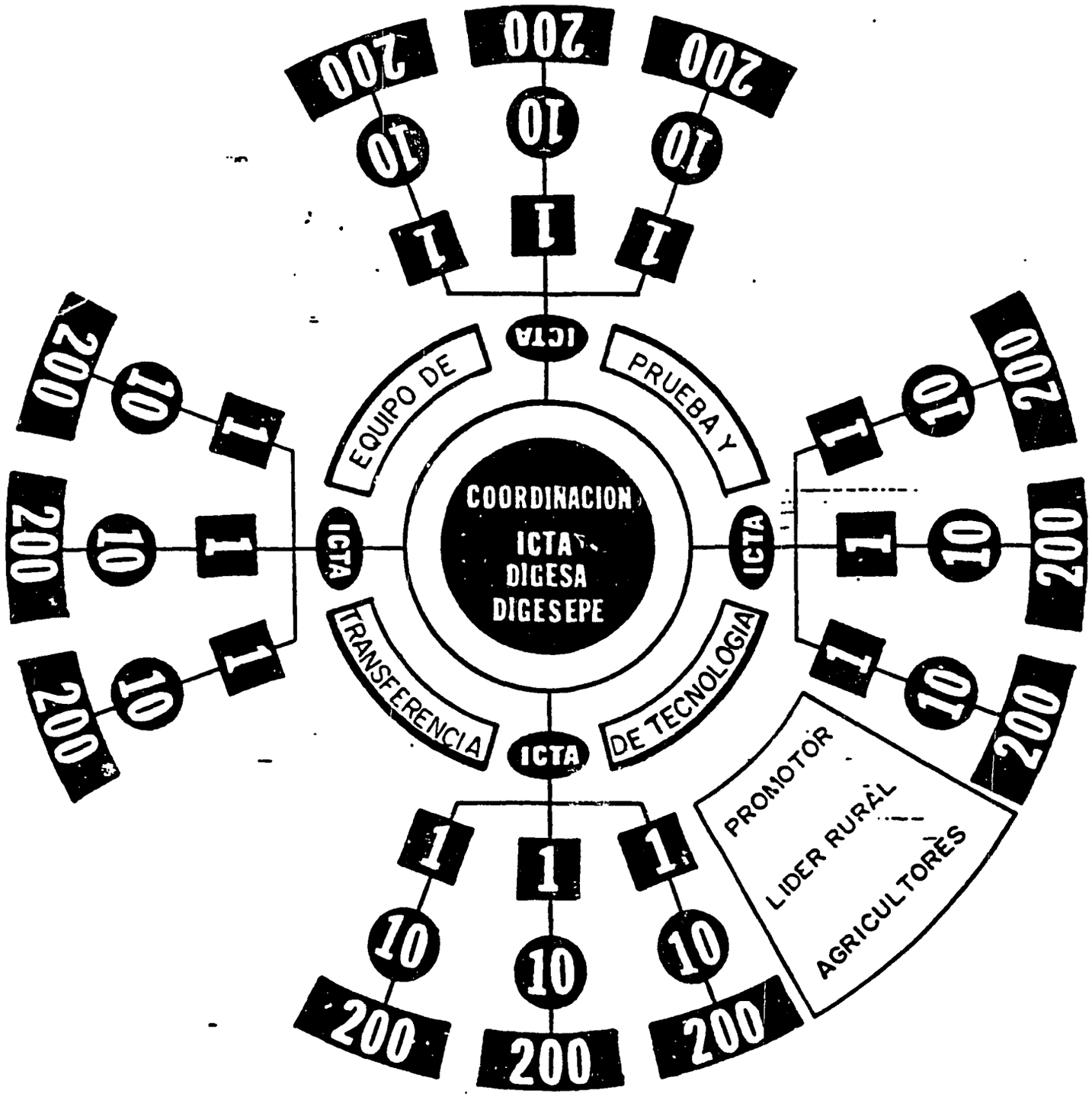
SUBPROYECTO DE TRANSFERENCIA DE TECNOLOGIA AGRICOLA
HECTAREAS ATENDIDAS Y METAS 1,989
CON PARCELAS DE TRANSFERENCIA
DIGESA

Cuadro 9
Region 5: Central
MODULO: CHIMALTENANGO-SACATEPEQUEZ

CULTIVOS	PROGRAMADO PROYECTO				Tamaño de finca sugerido	Características de la ejecución 3/					TOTAL FINCAS ATENDIDAS EN EL PROCESO	área potencial de adopción tecnología	% EJECUCION	PROGRAMADO 1,989
	1,986	1,987	1,988	ACUMULADO		área utilizada para tranferir tecnología 1986	1987	1988	ACUMULADO	Tamaño de finca utilizado				
MAIZ	621	665	962	2248	0.89	0	31	15	46	0.5	4750	2375.00	106	25
MAIZ A	383	410	593	1386	1.07	0	0	0	0	0	0	0.00	0	0
FRIJOL	56	9	49	114	1.33	2	5	8	15	0.5	2122	1061.00	931	13
FRIJOL A	368	393	568	1329	1.06	0	0	0	0	0	0	0.00	0	0
TRIGO	170	181	263	614	0.97	2	4	9	15	0.5	2712	1356.00	221	10
TRIGO A	1	5	7	13	0.50	0	0	0	0	0	0	0.00	0	0
PAPA	14	15	23	52	0.93	0	4	5	9	0.5	1390	695.00	1337	3
PAPA A	6	7	7	20	0.91	0	0	0	0	0	0	0.00	0	0
HORTA	15	14	22.	51	1.02	1	4	5	10	0.5	3278	1639.00	3214	7
OTROS					0.00	0	0	2	2	0.5	380	190.00	NN	
TOTAL	1634	1699	2494	5627	0.98	5	48	44	98.		14632	7316.00	126	58

NN: Se considera como un avance de proyecto.
1/ No existe programacion
3/ Los tamaños de finca utilizados son promedios de cada área
La ejecución reportada al 30 de noviembre de 1988.No se recabo inf. sobre cultivos asociados
FUENTE: Módulo de S&E

SISTEMA MODULAR DE TRANSFERENCIA DE TECNOLOGIA.



Network Exploited by PROGETTAPS for Technology

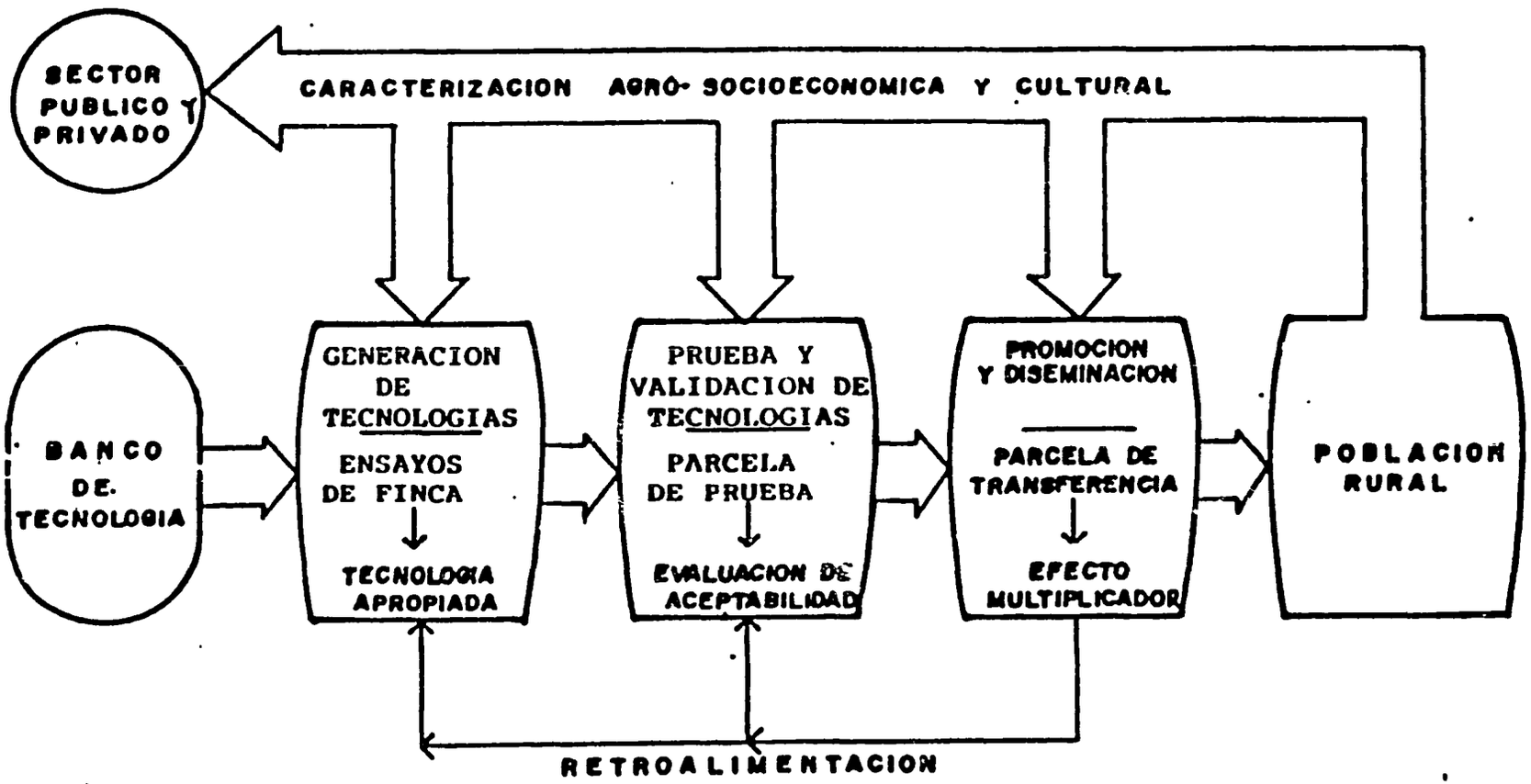
Transfer and Information Feedback

APPENDIX IV.3

PROGETTAPS Model of Bottom-Up Technology/Diffusion Approach

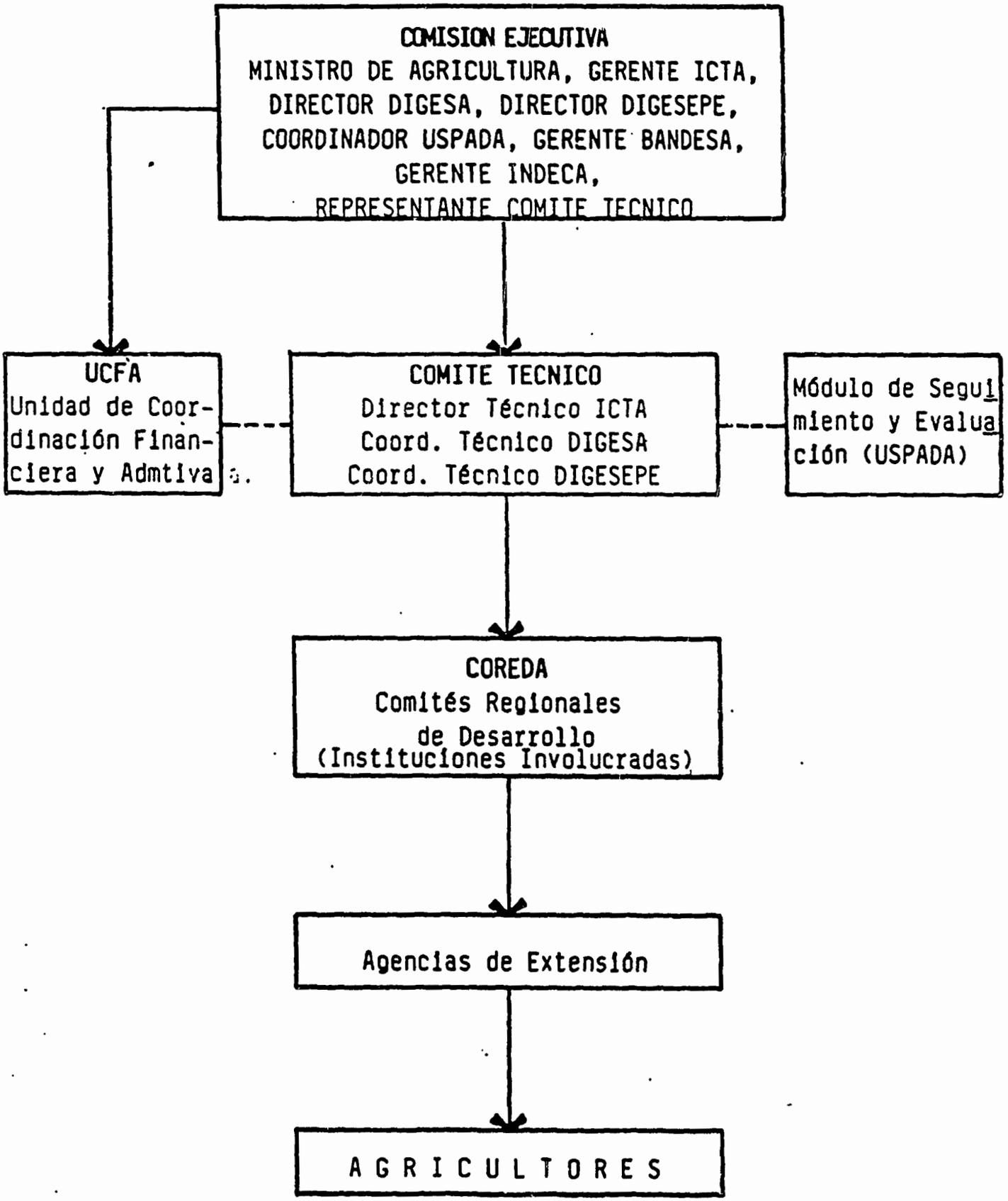
FIGURA No. 2

DIAGRAMA DE FLUJO DEL MODELO TECNOLOGICO DE PROGETTAPS



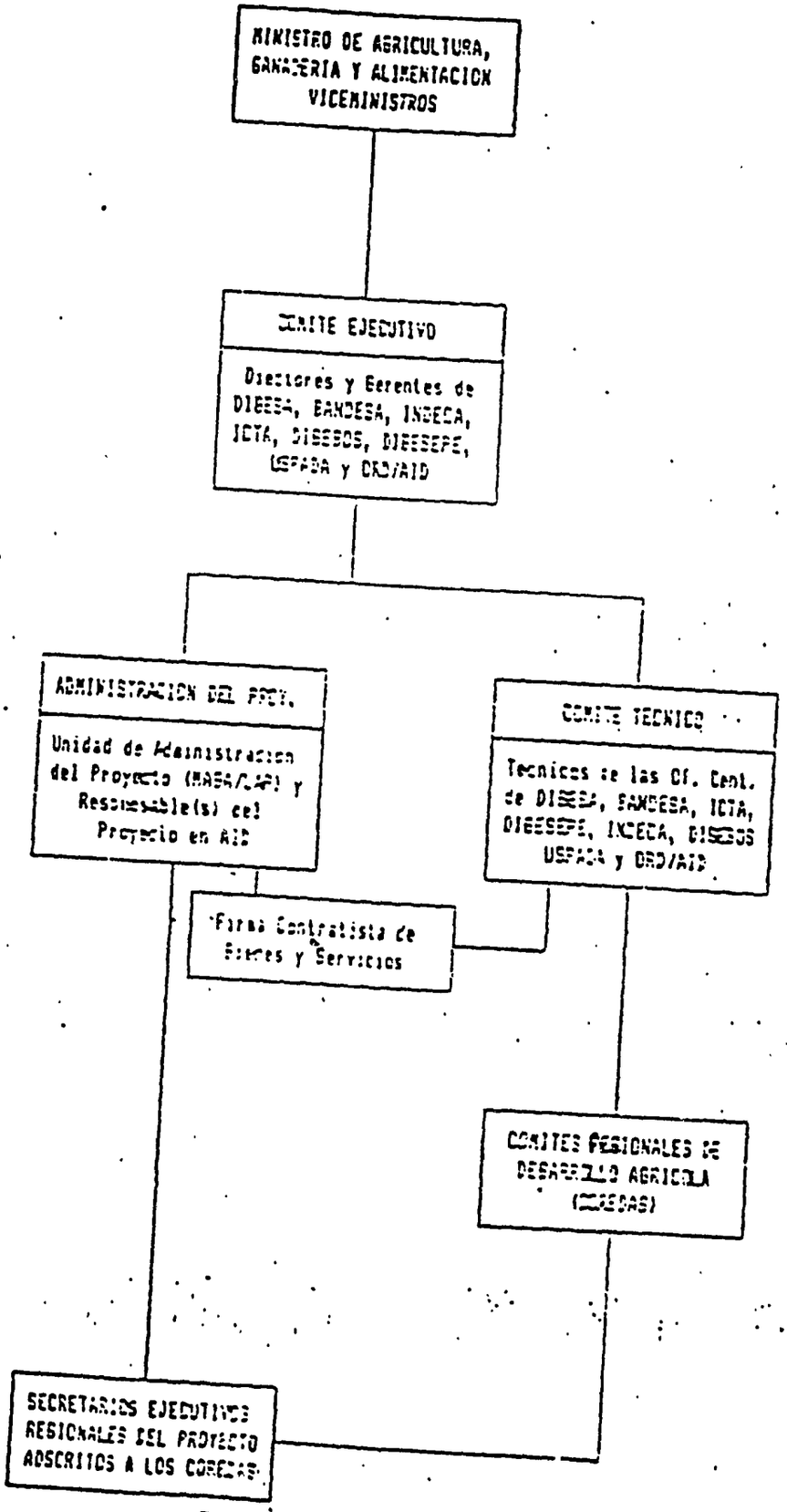
APPENDIX IV.4

ORGANIGRAMA DE PROGETTAPS



Organization Chart for PROGETTAPS Operations

ORGANIGRAMA DEL PROYECTO
DESARROLLO AGRICOLA DEL ALTIPLANO
FASE II



Proposed Organizational Diagram for the Altiplano Development Project Phase II

APPENDIX IV.6

Official publish notes on DIGESA Organizational changes being considered for legislation

147

Diario de Centro América

Organo oficial de la República de Guatemala

Guatemala, lunes 5 de diciembre de 1988 — Número 15

SUMARIO

ORGANISMO EJECUTIVO

MINISTERIO DE AGRICULTURA, GANADERIA Y ALIMENTACION

Crean la Unidad de Administración del Proyecto "Cd»G/AID 520-0274 Desarrollo Agrícola del Altiplano" y le dan jurisdicción en toda la República.

MINISTERIO DE FINANZAS PUBLICAS

Aprueban el contrato administrativo número 20-88 del 28 de octubre de 1988, por medio del cual la empresa "Productos Avícolas e Industriales, Sociedad Anónima" (PAISA), se compromete al suministro e instalación de los cubos y accesorios, en la forma que se detalla, con destino a las Aduanas que se mencionan.

MINISTERIO DE GOBERNACION

Aprueban los Estatutos de la "Asociación de Criadores Porcinos de Guatemala"; y reconocen su personalidad jurídica.

MINISTERIO DE ECONOMIA

Conceden al señor Ronald Noel Rodríguez Maldonado, la patente de invención que se indica.

ANUNCIOS VARIOS

Matrimonios. — Solicitud de nacionalidad. — Líneas de transporte. — Constituciones de sociedad. — Modificaciones de sociedad. — Disolución de sociedad. — Aviso de marcas. — Títulos supletorios. — Edictos. — Remates.

Cía. de Tejidos Granter, S. A.—Balance General al 31 de diciembre de 1988.

ORGANISMO EJECUTIVO

MINISTERIO DE AGRICULTURA, GANADERIA Y ALIMENTACION

Crean la Unidad de Administración del Proyecto "Cd»G/AID 520-0274 Desarrollo Agrícola del Altiplano" y le dan jurisdicción en toda la República.

ACUERDO Nº 365-88

Palacio Nacional: Guatemala, 24 de septiembre de 1988.

El Ministro de Agricultura, Ganadería y Alimentación,

CONSIDERANDO:

Que para dar cumplimiento a los términos y condiciones de la Enmienda Nº 3 al Convenio de Donación Nº 520-0274 para el Proyecto de Desarrollo Agrícola del Altiplano, celebrado entre el Gobierno de la República de Guatemala y Gobierno de los Estados Unidos de América, es necesario establecer una estructura de coordinación y administración eficaz para utilizar apropiadamente los recursos del mencionado Proyecto y principalmente, apoyar el logro de los objetivos del mismo de conformidad con los términos y condiciones convenidas por las Partes;

CONSIDERANDO:

Que la magnitud, complejidad y alcances del Proyecto de Desarrollo Agrícola del Altiplano requiere mejoras sustanciales en los procedimientos de coordinación y administración respectivos, así como del establecimiento de una estructura ágil y flexible para responder a las necesidades que surjan durante su ejecución;

CONSIDERANDO:

Que este Ministerio, en representación del Gobierno de la República de Guatemala, es responsable directo de la ejecución del Proyecto de Desarrollo Agrícola del Altiplano, por lo cual debe garantizar la apropiada coordinación, administración, ejecución, seguimiento, evaluación e impacto del mismo,

POR TANTO,

En el ejercicio de las facultades que le confieren los artículos 1º y 4º del Decreto Nº 102-78 reformado por Decreto Nº 51-81, ambos del Congreso de la República, y artículo 12º del Acuerdo Gubernativo del 10 de marzo de 1982, Reglamento del Ministerio de Agricultura, Ganadería y Alimentación,

ACUERDA:

Artículo 1º—Crear la Unidad de Administración del Proyecto "Cd»G/AID 520-0274 Desarrollo Agrícola del Altiplano", la que tendrá jurisdicción en toda la República, su sede central será la ciudad de Guatemala y sus oficinas estarán en las regiones que abarca el Proyecto. En el contexto de este Acuerdo a dicha unidad y al Proyecto "Cd»G/AID 520-0274 Desarrollo Agrícola del Altiplano" se les identificará como "la Unidad" y "el Proyecto" respectivamente.

Artículo 2º—La Unidad será la encargada de ejecutar las funciones que en materia de coordinación, administración, seguimiento y evaluación del Proyecto, corresponden al Ministerio de Agricultura, Ganadería y Alimentación.

Artículo 3º—La Unidad dependerá jerárquicamente del Comité Ejecutivo del Proyecto, el cual será integrado por:

— El Ministro de Agricultura, Ganadería y Alimentación, quien lo presidirá;
— El Viceministro de Agricultura y Alimentación;
— El Viceministro de Ganadería y Alimentación;
— Los Directores Generales de la Dirección General de Servicios Agrícolas (DIGESA), Dirección General de Bosques y Vida Silvestre (DIGEBOS) y Dirección General de Servicios Pecuarios (DIGESEPE);
— Los Gerentes Generales del Banco Nacional de Desarrollo Agrícola (BANDESA), Instituto de Ciencia y Tecnología Agrícolas (ICTA) e Instituto Nacional de Comercialización Agrícola (INDECA);
— El Coordinador de la Unidad Sectorial de Planificación Agropecuaria y de Alimentación (USPADA); y
— El Jefe de la Oficina de Desarrollo Rural de la Agencia para el Desarrollo Internacional (ORD/AID).

Artículo 4º—La Unidad será una entidad especializada en funciones y recursos con el objeto de coordinar, administrar, supervisar y evaluar la ejecución del Proyecto, de acuerdo con las políticas y lineamientos establecidos por el Comité Ejecutivo del Proyecto y otros órganos competentes relacionados con dicho propósito.

Artículo 5º—La Unidad desempeñará sus funciones en estrecha coordinación con el Comité Técnico del Proyecto y con los Comités Regionales de Desarrollo Agrícola (COREDA) de las regiones que abarca el Proyecto. El Comité Técnico estará integrado por los Subdirectores Generales y Subgerentes Generales de DIGESA, DIGESEPE, DIGEBOS, BANDESA, ICTA, INDECA, una representante de ORD/AID y el Coordinador de USPADA, quien lo presidirá.

Artículo 6º—Son funciones de la Unidad:

a) Formular las políticas, estrategias y acciones del Proyecto, y presentarlas a consideración del Comité Ejecutivo para su consideración y aprobación;

b) Desarrollar y poner en práctica un sistema técnico, administrativo y financiero de coordinación, apoyo y seguimiento del Proyecto, con énfasis en la participación de las unidades ejecutoras del Proyecto en los niveles central y regional para alcanzar los objetivos del mismo;

c) Organizar, establecer y operar un sistema de información eficiente de las actividades del Proyecto para coordinar, priorizar, apoyar, agilizar y evaluar la ejecución del mismo. Este sistema de información deberá compatibilizarse con los de otros sectores y/o proyectos que tengan relación con "el Proyecto".

d) Participar en la elaboración, seguimiento y evaluación de los planes operativos anuales y globales del Proyecto, que formulen cada una de las unidades ejecutoras involucradas, para lograr la integración, coherencia y complementariedad de las actividades del Proyecto. Asimismo, para garantizar que se logren adecuadamente las metas "la Unidad" deberá agilizar las gestiones presupuestarias, financieras y administrativas que las unidades ejecutoras involucradas realicen ante el Ministerio de Finanzas Públicas a fin de obtener oportuna y suficientemente los recursos de préstamo y contrapartida correspondientes;

e) Analizar y sustentar planteamientos técnicos de solución a los problemas y restricciones relacionados con la ejecución del Proyecto, particularmente en aquellas áreas en las que es necesario definir, tomar y ajustar acciones de política y decisiones en los diferentes niveles de autoridad central y regional involucrados;

f) En consulta y coordinación con los Comités Ejecutivo y Técnico del Proyecto y los COREDAS de las regiones donde se ejecute el mismo, formular y aprobar los términos de referencia y especificaciones de los servicios de personas individuales y jurídicas así como de bienes que se adquirirán para "el Proyecto", participar en la evaluación y selección de ofertas de servicios y bienes que se adquieran para "el Proyecto", así como revisar y aprobar los contratos a suscribirse con personas individuales o jurídicas que provean servicios de asistencia técnica y de cualquier otra naturaleza para "el Proyecto". Estas funciones están relacionadas con la adquisición de servicios y bienes para "el Proyecto" que se lleven a cabo a través del Ministerio de Agricultura, Ganadería y Alimentación, de la Agencia para el Desarrollo Internacional y de la Firma Contratista del Proyecto:

198

c) Apoyar, coordinar y supervisar, conjuntamente con la CAD/AID, las actividades de la Firma Consultora del Proyecto para garantizar su eficacia y eficiencia en la adquisición de bienes y servicios para "el Proyecto".

d) Supervisar y evaluar, conjuntamente con los integrantes de los Comités Ejecutivo y Técnico del Proyecto, los COREDAS de las regiones que abarca "el Proyecto", la Secretaría General del Consejo Nacional de Planificación Económica y la Agencia para el Desarrollo Internacional, el desempeño y resultados de toda la asistencia técnica contratada para "el Proyecto", así como de las actividades de adquisición de servicios y bienes de la Firma Contratista del mismo;

f) Ejecutar y cumplir con las disposiciones y decisiones del Comité Ejecutivo del Proyecto y aquellas que emanen de otros órganos competentes, relacionadas con la ejecución del Proyecto;

f) Asesorar al Comité Ejecutivo en las diferentes actividades técnicas, administrativas y financieras relacionadas con la ejecución del Proyecto;

h) Actuar como Secretaría Ejecutiva de los Comités Ejecutivo y Técnico del Proyecto, así como de los COREDAS en las regiones que abarca "el Proyecto", para todo lo relacionado con la ejecución del mismo; y

i) Otras funciones que sean compatibles con la naturaleza y finalidad de "la Unidad".

Artículo 7º—"La Unidad" se integra con un Coordinador a nivel nacional y seis (6) Secretarías Ejecutivas Regionales. Además, esta unidad contará con el personal técnico, operativo y equipo de apoyo para el desarrollo apropiado de sus responsabilidades.

Artículo 8º—El funcionamiento de "la Unidad" será dirigido por un Coordinador Nacional, quien elaborará, someterá a aprobación y dirigirá la ejecución de los programas técnicos y el presupuesto de "la Unidad". El Coordinador Nacional del Proyecto será nombrado por el Ministerio de Agricultura, Ganadería y Alimentación y la Agencia para el Desarrollo Internacional.

Artículo 9º—Son atribuciones del Coordinador Nacional del Proyecto:

a) Dirigir el funcionamiento de "la Unidad" de acuerdo con los lineamientos del Ministerio de Agricultura, Ganadería y Alimentación y las que emanen de otros órganos competentes relacionados con "el Proyecto";

b) Dirigir el sistema técnico, administrativo y financiero de coordinación, apoyo y seguimiento del Proyecto;

c) Dirigir y coordinar la organización, establecimiento y operación del sistema de información del Proyecto, el cual se localizará en las sedes central y regionales de "la Unidad".

d) Coordinar, apoyar y evaluar la elaboración y ejecución de los planes operativos anuales y globales del Proyecto de las unidades ejecutoras involucradas, aprobados por el Comité Ejecutivo del Proyecto;

e) Preparar, someter a aprobación y ejecutar la estructura administrativa, los programas técnicos y el presupuesto de "la Unidad";

f) Participar en la selección del personal técnico y administrativo de "la Unidad", así como en la selección, contratación, supervisión y evaluación de los servicios de asistencia técnica y bienes contratados para "el Proyecto";

g) Participar en la selección de candidatos apropiados para capacitación de corto y largo plazo dentro y fuera del país, contemplados en "el Proyecto";

h) Asesorar al Comité Ejecutivo en las diferentes actividades técnicas, administrativas y financieras relacionadas con la ejecución del Proyecto;

i) Actuar, por delegación del Ministerio de Agricultura, Ganadería y Alimentación, como representante oficial en los actos relativos "al Proyecto"; y

j) Otras atribuciones que sean compatibles con la naturaleza y finalidad del cargo de Coordinador Nacional del Proyecto.

Artículo 10.—Las atribuciones específicas de "la Unidad" se desarrollarán en el Reglamento respectivo que se emitirá en un plazo no mayor de noventa (90) días, contados a partir de la fecha en que entre en vigor el presente convenio.

Artículo 11.—Para el adecuado desempeño de sus funciones, "la Unidad" podrá requerir la colaboración de otras entidades relacionadas con "el Proyecto".

Artículo 12.—Del financiamiento.

Constituyen recursos de "la Unidad":

a) Los provenientes de la Donación de la Agencia para el Desarrollo Internacional contemplados en el Convenio de Donación CdeG/AID 520-0274 para "el Proyecto" de Desarrollo Agrícola del Altiplano, así como cualquier otra contribución, aporte o donación canalizadas conforme a las disposiciones legales del país; y

b) Las asignaciones anuales del Presupuesto General del Ingreso y Egreso del Estado, que para el funcionamiento, "la Unidad" y operación del Proyecto le sean asignadas.

Artículo 13.—Las funciones, personal, equipo y presupuesto asignados a la Unidad de Coordinación del Proyecto "Sistemas de Diversificación para el Pequeño Agricultor del Altiplano" (UCPRODA), así como los bienes y servicios del Equipo de Asistencia Técnica (EAT) para dicho proyecto con sede en la ciudad de Quetzaltenango, que a la fecha de emisión de este acuerdo se encuentren vigentes y disponibles, pasan a formar parte de la Unidad de Administración del Proyecto "CdeG/AID 520-0274 Desarrollo Agrícola del Altiplano".

Artículo 14.—El presente acuerdo entrará en vigencia ocho días después de su publicación en el Diario Oficial y deja sin efecto todas las disposiciones Ministeriales o Institucionales que se opongan al mismo.

Comuníquese.

RODOLFO ESTRADA HURTARTE

ALFONSO LOARCA PINEDA,
Viceministro de Ganadería y Alimentación.

—☆—

Establécese una estructura de administración para ejecutar el Proyecto "CdeG/AID 520-0274 Desarrollo Agrícola del Altiplano", la cual quedará integrada por los niveles jerárquicos que se detallan.

ACUERDO MINISTERIAL NUMERO 200-88

Palacio Nacional: Guatemala, 24 de noviembre de 1988.

El Ministro de Agricultura, Ganadería y Alimentación,

CONSIDERANDO:

Que de acuerdo a evaluaciones de los Proyectos "CdeG/AID 520-0253 Sistemas de Diversificación para el Pequeño Agricultor" y "CdeG/AID 520-0274 Desarrollo Agrícola del Altiplano", se recomendó la conveniencia de combinar ambos proyectos en uno solo, y a la vez consolidar varios elementos que han probado tener éxito dentro de una serie de actividades financiadas en forma conjunta por el Gobierno de Guatemala y la Misión AID durante los últimos 15 años, las cuales se han orientado a resolver los problemas agrícolas de los pequeños productores del Altiplano;

CONSIDERANDO:

Que la fase II del Proyecto de "Desarrollo Agrícola del Altiplano" constituye la consolidación de esos elementos y a través del mismo se desarrollarán los componentes siguientes: 1. Uso de Aguas y Tierras; 2. Investigación y Extensión Agrícolas; 3. Servicios de Crédito, 4. Comercialización; y 5. Servicios de Apoyo al Proyecto;

CONSIDERANDO:

Que la ejecución del Proyecto de "Desarrollo Agrícola del Altiplano" vendrá a fortalecer y a mejorar la capacidad administrativa y técnica de las entidades públicas y privadas involucradas en el Proyecto, para desempeñar sus actividades en forma más eficiente y efectiva a los niveles nacional, regional y local;

CONSIDERANDO:

Que el Ministerio de Agricultura, Ganadería y Alimentación, como representante del Gobierno de la República de Guatemala, será el responsable directo de la ejecución del mismo, para lo cual deberá crear el marco institucional adecuado a fin de garantizar el logro de los objetivos acordados en términos de beneficiar a los pequeños y medianos agricultores del país;

POR TANTO,

En el ejercicio de las facultades que le confieren los Artículos 1º y 4º del Decreto Nº 188-70 reformado por Decreto Nº 11-82, ambos del Congreso de la República, y Artículo 12º del Acuerdo Gubernativo del 10 de marzo de 1982, Reglamento del Ministerio de Agricultura, Ganadería y Alimentación;

ACUERDA:

Artículo 1º—Establecer una estructura de administración eficiente para ejecutar el Proyecto "CdeG/AID 520-0274 Desarrollo Agrícola del Altiplano", la cual quedará integrada por los niveles jerárquicos siguientes: a) Nivel Político/Ejecutivo; b) Nivel de Coordinación Técnico/Administrativo Nacional; c) Nivel Técnico Ejecutivo; d) Nivel de Coordinación/Ejecución Regional; y e) Nivel de Coordinación Técnico/Administrativo Regional.

Artículo 2º—El nivel Político/Ejecutivo lo ejerce el Comité Ejecutivo del Proyecto, el cual será presidido por el Ministro de Agricultura, Ganadería y Alimentación, e integrado por el Viceministro de Agricultura y Alimentación, el Viceministro de Ganadería y Alimentación, los Directores Generales de la Dirección General de Servicios Agrícolas (DIGESA), Dirección General de Bosques y Vida Silvestre (DIGEBOS) y Dirección General de Servicios Pecuarios (DIGESEPE), los Gerentes Generales del Banco Nacional de Desarrollo Agrícola (BANDESA), Instituto de Ciencia y Tecnología Agrícolas (ICTA) e Instituto de Comercialización Agrícola (INDECA), el Coordinador General de la Unidad Sectorial de Planificación Agropecuaria y de Alimentación (USPADA), y el Jefe de la Oficina de Desarrollo Rural de la Agencia para el Desarrollo Internacional (ODR/AID). En ausencia del Ministro de Agricultura, Ganadería y Alimentación, el Comité Ejecutivo será presidido por cualquiera de los dos Viceministros del Ramo.

Artículo 3º—Son funciones del Comité Ejecutivo del Proyecto:

a) Analizar y aprobar la estrategia global del Proyecto y adoptar las decisiones políticas, técnicas, administrativas y financieras relevantes para la apropiada y oportuna ejecución del mismo;
b) Garantizar una apropiada coordinación, participación y apoyo de las oficinas y personas responsables dentro de las unidades ejecutoras involucradas y la AID, a los niveles central y regional, que permita el logro de los objetivos del Proyecto dentro de las condiciones y términos acordados por las partes;
c) Otras funciones que sean compatibles con la naturaleza y finalidad del Comité Ejecutivo del Proyecto.

Artículo 4º—El nivel de Coordinación Técnico/Administrativo Nacional será constituido por la Unidad de Administración del Proyecto y la Oficina de Desarrollo Rural de la Agencia para el Desarrollo Internacional.

Artículo 5º—Son funciones de la Unidad de Administración del Proyecto y la Oficina de Desarrollo Rural de la Agencia para el Desarrollo Internacional:

a) Coordinar, administrar, supervisar y evaluar la ejecución del Proyecto, en estrecha coordinación con el Comité Técnico del Proyecto y con los Comités Regionales de Desarrollo Agrícola (COREDAS) de las regiones que abarca el Proyecto, de acuerdo con las políticas y lineamientos establecidos por el Comité Ejecutivo del Proyecto;
b) Otras funciones que sean compatibles con la naturaleza y finalidad de este nivel de coordinación técnico/administrativo nacional;
c) Las funciones específicas de la Unidad de Administración del Proyecto se establecerán en el Acuerdo Ministerial y Reglamento de Operaciones correspondientes.

Artículo 6º—El nivel de Coordinación Técnico/Administrativo Nacional contempla un sub nivel de apoyo administrativo que estará representado por una Firma Contratista, cuya función consistirá en realizar las actividades de compra y contratación de servicios y bienes para el Proyecto, a requerimiento de las unidades ejecutoras del mismo, por intermedio de la Unidad de Administración del Proyecto.

Artículo 7º—El nivel Técnico/Ejecutivo está constituido por el Comité Técnico del Proyecto, el cual estará integrado por los subdirectores generales y subgerentes generales de DIGESA, DIGEBOS, DIGESEPE, BANDESA, ICTA, INDECA, un representante de ORD/AID y el Coordinador de USPADA, quien lo presidirá; de manera que se garantice acceso inmediato a las máximas autoridades de esta institución, a los directores y responsables técnicos de las oficinas centrales y regionales, y a otros niveles gubernamentales involucrados en la ejecución del Proyecto. El Coordinador Nacional del Proyecto actuará como Secretario Ejecutivo de este Comité.

Artículo 8º—La función principal del Comité Técnico del Proyecto consistirá en dar apoyo a la ejecución del Proyecto, y sus integrantes serán responsables directos de las acciones técnicas, administrativas y financieras relacionadas con la ejecución del mismo, encomendadas a las instituciones que representan. En este sentido, facilitarán y agilizarán las gestiones que sobre el Proyecto, los COREDAS y otros órganos competentes y relacionados, presenten a las oficinas centrales respectivas e impulsarán los diferentes trámites en sus instituciones y en otros niveles de Gobierno.

Artículo 9º—El nivel Ejecutivo Regional está integrado por los representantes regionales de las instituciones involucradas en la ejecución del Proyecto (COREDAS), quienes tendrán las funciones principales siguientes:

a) En base a las políticas y lineamientos del Comité Ejecutivo del Proyecto, formular y aplicar la estrategia regional de ejecución del Proyecto y actividades conexas;
b) Diseñar, planificar, presupuestar y ejecutar bajo la coordinación de los Secretarios Ejecutivos Regionales del Proyecto, las actividades del mismo a nivel institucional y regional;
d) Analizar y resolver problemas puntuales de coordinación regional; realizar evaluaciones trimestrales y otros asuntos relacionados con la ejecución de campo del Proyecto;

189

b) Participar, conjuntamente con las COREDAS y personal técnico y administrativo de las unidades ejecutoras involucradas, en la elaboración de los planes y presupuestos de las actividades del Proyecto a nivel institucional y regional;

c) Realizar análisis, evaluaciones y preparar informes periódicos (mensuales, trimestrales, semestrales y anuales), sobre la ejecución de las actividades regionales del Proyecto y demás acciones relacionadas, identificando los problemas y restricciones y a la vez, recomendando las soluciones y los mecanismos para su implementación;

d) Otras funciones que sean compatibles con la naturaleza y finalidad de sus cargos en relación a la ejecución de las actividades del Proyecto.

Artículo 11.—El presente Acuerdo entrará en vigencia ocho días después de su publicación en el Diario Oficial y deja sin efecto todas las disposiciones ministeriales e institucionales que se opongan al mismo.

Comuníquese.

RODOLFO ESTRADA HURTARTE,
Ministro de Agricultura, Ganadería y Alimentación.

ALFONSO LOARCA PINEDA,
Viceministro de Ganadería y Alimentación.

Amplíese en la cantidad que se indica, el Presupuesto de Ingresos y Egresos del Instituto Nacional de Comercialización Agrícola (INDECA), correspondiente al Ejercicio Fiscal 1988.

ACUERDO GUBERNATIVO NUMERO 1068-88

Palacio Nacional: Guatemala, 30 de noviembre de 1988.

El Presidente de la República,

CONSIDERANDO:

Que se hace necesario otorgar a favor del Instituto Nacional de Comercialización Agrícola (INDECA), una ampliación a su Presupuesto de Ingresos y Egresos vigente, por la cantidad de Q.256 100 (doscientos cincuenta y seis mil cien quetzales exactos), a fin de que pueda contar con los recursos financieros que requiere para poder continuar desarrollando sus programas de trabajo en lo que resta del Ejercicio Fiscal 1988;

CONSIDERANDO:

Que es procedente efectuar la ampliación presupuestaria mencionada, en vista de que se han llenado los requisitos legales correspondientes, y tomando en consideración el Dictamen número 3441, emitido por la Dirección Técnica del Presupuesto, el cual fue aprobado por la Dirección Superior del Ministerio de Finanzas Públicas;

POR TANTO,

En ejercicio de la función que le confiere la Constitución Política de la República de Guatemala, en el artículo 183, incisos e) y q), y lo preceptuado en el Decreto Legislativo 2-86 Ley Orgánica del Presupuesto, artículos 25 y 26,

En Consejo de Ministros,

ACUERDA:

Artículo 1º—Ampliar el Presupuesto de Ingresos del Instituto Nacional de Comercialización Agrícola (INDECA), correspondiente al Ejercicio Fiscal 1988, en la cantidad de Q.256 100 (doscientos cincuenta y seis mil cien quetzales exactos), en la forma siguiente:

1.00.0.000.00	INGRESOS CORRIENTES	Q.216 100
1.11.000.00	Intereses, dividendos y participaciones en utilidades por inversiones de capital	Q.216 100
2.00.0.000.00	INGRESOS DE CAPITAL	40 000
2.40.0.000.00	Transferencias de capital recibidas	
2.42.0.000.00	Otras Transferencias de Capital (del Ministerio de Agricultura, Ganadería y Alimentación)	Q. 40 000
	TOTAL DE INGRESOS	Q.256 100

Artículo 2º—Ampliar el Presupuesto de Egresos del Instituto Nacional de Comercialización Agrícola (INDECA), para el mismo Ejercicio Fiscal, en la cantidad de Q.256 100 (doscientos cincuenta y seis mil cien quetzales exactos), en la siguiente forma:

RESUMEN POR OBJETO ESPECIFICO DEL GASTO

Grupo y Renglón	Concepto	Asignado Q.
	PRESUPUESTO DE FUNCIONAMIENTO	216 000
1	SERVICIOS NO PERSONALES	82 000
165	Primas de Seguros y Fianzas	82 000
2	MATERIALES Y SUMINISTROS	32 000
262	Combustibles y Lubricantes	32 000
3	MAQUINARIA Y EQUIPO	3 000
355	Mobiliario y Equipo de Metal	3 000
6	TRANSFERENCIAS CORRIENTES	79 000
611	Indemnizaciones al Personal	79 000
8	DISMINUCION FINANCIEROS	19 100
811	Deuda Flotante	19 100
	PRESUPUESTO DE OPERACIONES COMERCIALES	40 000
1	SERVICIOS NO PERSONALES	6 500
122	Publicidad y propaganda	2 000
152	Gastos de viáticos en el interior	4 500
2	MATERIALES Y SUMINISTROS	20 500
200	Resumen de renglones del grupo	18 650
262	Combustibles y Lubricantes	11 850
3	MAQUINARIA Y EQUIPO	3 000
344	Equipo Audiovisual	3 000
	TOTAL	256 100

Artículo 3º—Las autoridades del Instituto Nacional de Comercialización Agrícola (INDECA), quedan responsables de la ejecución de los gastos a que se refiere el presente acuerdo, a nivel analítico de grupo y renglón de gasto, programa, subprograma, actividad y/o proyecto en las partidas presupuestarias correspondientes.

Artículo 4º—Con la ampliación a que se refiere este acuerdo, el Presupuesto de Ingresos y Egresos del Instituto Nacional de Comercialización Agrícola (INDECA), correspondiente al Ejercicio Fiscal vigente, asciende a la cantidad de Q 62 497 913 (sesenta y dos millones cuatrocientos noventa y un mil novecientos trece quetzales exactos).

Artículo 5º—El presente acuerdo empieza a regir a partir de la fecha de su publicación en el Diario Oficial.

MARCO VINICIO CEREZO AREVALO.

ROBERTO VICENTE CARPIO NICOLLE,
Vicepresidente de la República.

JUAN FRANCISCO PINTO C.,
Viceministro de Finanzas Públicas,
Encargado del Despacho.

RODOLFO ESTRADA HURTARTE,
Ministro de Agricultura, Ganadería y Alimentación.

JOSE RICARDO GOMEZ GALVEZ,
Ministro de Educación.

SARA I. MISHAAN ROSSELL,
Ministro de Asuntos Específicos.

OSCAR HUMBERTO PINEDA NOBLES,
Ministro de Economía.

ROLAND CASTILLO CONTOUX,
Ministro de Energía y Minas.

ARIEL RIVERA IRIAS,
Viceministro de Relaciones Exteriores.

ANABEABEL PRERA FLORES,
Ministra de Cultura y Deportes.

CARLOS GEHLERT MATA,
Ministro de Salud Pública y Asistencia Social.

MARIO LOPEZ ESTRADA,
Ministro de Comunicaciones, Transporte y Obras Públicas.

JOSE RODOLFO MALDONADO RUIZ,
Ministro de Trabajo y Previsión Social.

HECTOR ALEJANDRO GRAMAJO MORALES,
Ministro de la Defensa Nacional.

RENE DE LEON SCHLOTTER,
Ministro de Desarrollo Urbano y Rural.

ROBERTO ADOLFO VALLE VALDIZAN,
Ministro de Gobernación.

APPENDIX IV.7

CONTACT LIST

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Pedro Pablo Torres Ruiz, BANDESA

José F. Guillén, BANDESA

Astolfo Fumagalli, Former ICTA Manager

Horacio Juárez, ICTA

María Eugenia de Monterroso, AGES

Sr. Domingo Conde, DIGESA

Mario Martinez, Universidad Rafael Landivar

Mike Goldberg, CARE

Ramiro Ortiz, DIGESA

Edgar Pineda, USAID/Guatemala

Mario Broiner, Laboratorio de Suelos

César Cisneros, DIGESA

Ramiro Ortiz, DIGESA

Jack Vaughn, ROCAP

Rodrigo Arias, ICTA

Juan Manuel Herrera, ICTA

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Francisco Meza Rosales, USPADA

Carlos Rolando Juárez, DIGESA, Quetzaltenango

Juan José Chojolán Morales, DIGESA, Quetzaltenango

Luis Chojolán Morales, DIGESA, Quetzaltenango

Jorge Leonidas García, DIGESA, Quetzaltenango

Mario G. García Barrios, DIGESA, Quetzaltenango

Otto Rivera, DIGESA, Quetzaltenango

Marco Antonio Rivera, DIGESA, Quetzaltenango

César Amilcar Medina Aguilar, ICTA

Pérez, Alejandro, DIGESA, (Regional Coordinator of the Small Scale Irrigation Project)

Teodoro García, small farmer from the Cantón La Libertad, Olintepeque

Andrés Guinac Herrera, small farmer from the Cantón La Libertad

Juan López Xicará, Small Scale Irrigation Project

Jorge Luis Rodríguez, DIGESA, Quetzaltenango y San Marcos

Andrés Abelino Ovalle, Esquipulas I Small-Scale Irrigation Project

Julián López, Farmer, Quetzaltenango area

Jacobo Gómez, Farmer, Quetzaltenango area

Mariano García, Farmer, Quetzaltenango area

Bonifacio García, Farmer, Quetzaltenango area

Guadalupe Moblero, Farmer, Quetzaltenango area

Gustavo López M., DIGESEPE, San Marcos

Ovidio Pérez Ixchop, ICTA, Quetzaltenango

Héctor Godínez Orozco, DIGESA, Region V

Oscar Eduardo Chupina, DIGESA, Region V

Prudencio Rodríguez Menéndez, DIGESA, Region V

Pedro Sebaquijay Chiroy, Cuatro Pinos Cooperative

Cecilio Chicop, President, Santa María Cauqué Small Scale Irrigation Project

Pablo Hernández, farmer, Chimaltenango area

Carlos A. Collado, PROGETTAFS, Chimaltenango

Pablo A. Albizures, DIGEBOS, Chimaltenango

Luis Ernesto Barrera, Region V Head, DIGESA

Representatives of 14 communities of the Santa Apolonia area

Saúl Lima, Region V, DIGESA, Soil Conservation

Oscar Rolando Avila, HIDROSA

ANNEX V

M A R K E T I N G

Mr. William Rhett
Development Associates

ANNEX V: MARKETING

Executive Summary

The marketing function in Guatemalan agricultural development should pervade all of the components in that field: irrigation, crop diversification, improvement and quality control, infrastructure in its several aspects, cooperatives and other private sector organizations, certain government institutions, and exports. The function is visible only in limited fashion in these components, and this has only come about in the recent past. Attention to marketing as an AID project component has similarly been severely limited in the past and only recently has begun to be incorporated into project planning. Inter-project synthesis of marketing programs has been lacking and projects suffer from lack of continuity of marketing elements from one project to another. While marketing is spoken of by almost everyone as a needed, critical element, this widespread regard has yet to take shape in an equal degree in planning and program execution by AID, the GOG and Guatemalan private sector institutions.

This is partially due to a lack of understanding of the broader implications of marketing and partly to a narrower local focus on the traditional "commercialization" of products--simply their production, delivery and sale. There is little general appreciation of marketing's influence upon almost all the activities in the agricultural spectrum.

The key to increasing the appreciation and employment of marketing power to the maximum advantage of the Guatemalan farmer is education. Education not solely in how marketing works and what it can do, but in numerous other areas impacting agricultural activities such as crop planning, literacy levels, and the use of simple market intelligence. This educational process is where the success formula originates, and is the major area to which AID should dedicate its efforts.

I. Evaluation Capsulization

A. Major Findings / Conclusions

1. Internal - AID:

a. AID has shown a lack of concern for marketing issues in the past; this appears to be improving, although there is still considerable lack of continuity of programs and central focus on marketing needs from one project to another. Recent individual projects tend to address certain marketing issues, but there is little continuing overall approach to the whole subject from one project to another. Marketing programs tend to "start and stop." The common underlying catalyst for developing a "holistic marketing consciousness" is education and training on everybody's part--the best long-term payback.

b. AID operations involving marketing appear to be overly centralized with insufficient attention to, and involvement in, field communications and project execution. This is in contrast to the GOG policy of decentralization and limits AID management to developing hypotheses only. AID people are seen as treating marketing as an erudite function instead of going out and training and helping farmers. AID project management must be deeply involved with project execution in the field, where the results are to occur, and not fall victim to the "Guatemala City syndrome," administering projects by fiat from headquarters.

c. AID project management should provide sustained support over the long-term, with safeguards to ensure that ongoing monitoring and needed follow-up action is provided. There seems to be little requirement for project executors to provide quantified evidence of performance on a regular basis.

d. AID efforts to improve the lot of the small highlands farmer are weakened by bureaucratic processes which slow fund availability and procurement of badly-needed field support items, i.e., vehicles.

e. Technical assistance / education is basic to developing an understanding of the application of marketing by bureaucrats, field technicians, co-op management and membership, farmers and their wives.

2. External:

a. Distribution, although it functions, is a weak point. Motor transport and export shipping are expensive and unreliable. Farmers are often victimized by middlemen.

b. Market information, chiefly prices, is very important. It could make a big difference to small farmers if delivered effectively; the data is there, but it is not disseminated effectively.

B. Marketing-Related Specific Recommendations

It is recommended that AID:

1. Undertake a global study of marketing in Guatemala which should include, in addition to obvious and conventional aspects such as transportation, processing, storage, and information, the following: how are products chosen for promotions among producers (e.g., how does ICTA decide what crops to test)?; market identification (who identifies marketing opportunities, both internal and external? How does this relate to new product creation?); are the various Guatemalan organizations involved in various aspects of marketing reinforcing each other, competing with each other or ignoring each other?

2. Investigate need for technical assistance to DIGESA extensionists in market-related aspects of crop diversification and use of market information; similarly, assess the value of such assistance to co-ops, possibly using the "Gremial's" current consultant in this.

3. Work with MAGA to clarify/spell out INDECA's mission, responsibilities and activities vis-a-vis marketing, its actual vs. desired interrelationships with AID, DIGESA and DIGESEPE (particularly in the field), and its headquarters interface with ICTA and USPADA. This and the following recommendation could well be incorporated into the forthcoming AID capability study of INDECA--if not already considered.

4. Analyze INDECA plans, priorities and practices, as well as compliance with project assignments in information collection and dissemination, seller-buyer matchmaking and market research.

5. Recommend to INDECA that they evaluate BANDESA return-

on-investment studies of various crops to see if the information is of value to farmers throughout the country. Monitor INDECA in this evaluation, and any subsequent publication or dissemination.

6. Encourage CONAPEX to form a work study group to assess the impact of pending import regulations simplification.

7. Encourage private sector participants to give more support to CONAPEX, including funding.

8. Work with DIGESA, DIGESEPE, GEXPRONT and CONAPEX to develop a program to establish viable standards for agricultural and animal products, the end objective being a "GOG seal of quality." Then, provide appropriate publicity/communications, of the value and criteria of the program to producers.

9. Look into CAEM status, its marketing-related capabilities and goals.

10. Work with GEXPRONT and CONAPEX (perhaps with help from the US Department of Commerce) to ensure foreign Commercial Attaché job specifications are properly defined and the candidates selected are qualified.

11. Encourage GEXPRONT to:

    a) further efforts to identify foreign buyers and maquila investors.

    b) establish an internal marketing function: Coordinator of the (new) Marketing Commission.

    c) ensure member appreciation and proper use of market information.

    d) take the initiative in outreach to smaller co-ops and farmers approaching export readiness status.

    e) organize the annual planning process to involve establishment of quantifiable goals, with quarterly review of progress with AID.

12. Assess value of widespread publication of AID Region VI newsletter "Apuntes Técnicos."

13. Review Educational Section of HAD II Project to provide maximum support for rural radio broadcast of marketing and other important information to highlands farmers.

14. Conduct an overall assessment of installed vs. used storage and processing facilities country-wide together with the status of plans for additional cold storage facilities at La Aurora airport.

C. Lessons Apparent to the Evaluator

1. General:

a. Commercial producers should accept market conditions as the primary element in production planning.

b. Production and marketing systems must expand at a similar rate; both should be monitored closely to eliminate bottlenecks.

c. Plans of all institutions contacted sometimes lack specifics on who does what, when and at what cost. These need provisions for supervision and continuity.

d. Thorough studies of domestic and international markets should be conducted and updated periodically.

e. It is important that public and private sectors work together as cpposed to polarization. CONAPEX and the Gremial are a good example of collaboration.

f. Management is the "Achilles heel" in private sector firms. Management should be trained before full scale marketing operations are undertaken, and marketing technical assistance should precede development of expensive programs.

g. Producer discontent follows upon lack of technical assistance coverage, with subsequent variation in product quality plus misleading price quotations and exploitation by intermediaries.

h. Misleading information and lack of follow-though has weakened the credibility of local radio with small farmers; stations became reluctant to pass on information perceived to be unreliable.

i. Co-ops must demonstrate ability to manage substantial resources.

2. AID-Related

a. Projects with marketing components need to have each

participating agency's institutional capabilities closely assessed. Marketing depends on the institution's ability to carry it out.

b. Projects should build on each other and inter-relate.

c. Based on the results of the global marketing study recommended above, include a marketing component in any new project design; clearly define roles and responsibilities of participating agencies.

d. Any general marketing program must include women (they do almost all the local-market selling).

D. Major Constraints Presently Affecting Marketing

1. Economic weakness, including lack of overall fiscal resources and foreign exchange.

2. Weak physical infrastructure--particularly in distribution--with substantial bottlenecks.

3. Fragmented land holdings.

4. Low education level and education gap between planners/management and doers/producers.

5. No universal language

6. Suspicion of GOG by farmers

7. Paucity of important market /marketing information.

8. Low creditability of marketing providers due to collapse of GUATEXPRO, CECOMERCA.

9. Private sector divisiveness: conservatives vs. progressives.

10. The "Guatemala City syndrome"

11. Farmers' lack of networking.

12. Farmers' lack of growth capital.

13. Farmers' lack of understanding of marketing.

II. INTRODUCTION

A. Thrust of Joint AID/GOG Agricultural Projects

The continual target of these projects has been the small farmer; this audience has been approached in varied ways via irrigation and crop diversification/ improvement programs, programs to strengthen the rural infrastructure, cooperatives, exports, private enterprise and microbusinesses.

Strategies included in these programs have only recently considered marketing issues, assuming that the lot of the small farmer will be improved without an assessment of when, where, by whom, to what degree, and at what profit (or loss) to the small producer the products of the intense production-improvement efforts would be demanded and consumed. Successful commercial agriculture depends on an interplay of production and demand forces.

Marketing-related strategies that have been designed to aid the small farmer will be reviewed in the light of the plans and activities of the various public and private sector institutions which have been or were to have been, involved with the strategies.

B. Execution of AID/GOG Marketing-Related Strategies

1. Marketing Strategies to Strengthen the Small Highlands Farms Sector

Background of AID involvement: the need for marketing was a major conclusion of the Final Evaluation of the Small Farmer Marketing Systems Project (No. 0238); several others have been or are concerned with small highland farmer marketing. Due to CECOMERCA's weaknesses (see section 3.d.), the project had limited success and did not provide the planned support for the Small Farmer Diversification Project (0255), which was to develop domestic and regional Central American Markets.[1]

The AID Agribusiness Project 0276 is to develop marketing channels for small producers, especially small co-ops. The HAD Project 0274 seems broader and considers the marketing of produce domestically, regionally and overseas, as well as the need for information systems being involved with uniform production standards and classifications.

The small farmers' situation: all farmers and technicians are said to agree that "commercialization," i.e. marketing, is the single biggest problem they face; it is

compounded by poor transportation, graft, poor accounting, lack of knowledge on how and where to sell and lack of networking--especially important for small farmers. These are sometimes "cornered" by deals with large buyers: farmers don't get promised equipment, don't get paid, and don't understand--and default on--contracts. Many take on non-traditional crops without proper marketing experience and an understanding of quality control, grading and the need to obtain rapid channels and markets for perishables. Many, lacking market price information and negotiating skills, are at the mercy of intermediaries (although some are by choice, preferring not to organize or contract for transport). In some cases, fear plays a part for preventing small farmer organization; cases of intermediary retaliation and killing of overly-entrepreneurial farmers by "coyotes" have been reported.

Comment: Expanding upon the problem faced by the small highlands farmer, one can add two other marketing--related situations: irrigation development ("mini-riego") and past and present institutional efforts to develop and strengthen an information system that reaches the target audience effectively.

a. Irrigation: Concern has already been expressed over the failure to include marketing considerations in planning irrigation projects--"irrigation is a good investment only if the return justifies the expense." ... There must be viable markets for increased production. Once viable markets are identified, there still remains the need to organize highlands farmers to take advantage of them.[2]

1. Strategy considerations: One estimate is that highlands produce may reach 50 million pounds in three years.[3] There should be a concentrated program to fill local markets first before gearing up into big national or international sales development projects. There is food for all, but the good produce is being shipped out of the local areas. With respect to non-traditional crops, this presents an educational, but nonetheless marketing-related challenge: how best--on a mid-to-long term basis--to educate highlands women on the values and preparation of non-traditional foods--in effect, changing local dietary patterns. A reasonably effective medium could be the development of VCR programs to be shown on TV in local market places. These programs, in addition to nutrition and cooking advice, could present information on family planning, health, and promote the radio information

program described below.

2. Information systems: The pressing need for providing market information to farmers as well as obtaining supply-side data from them has long been recognized. The values of price information to the small farmer range from better planting planning to a weakening of the intermediary system by giving farmers greater bargaining power. It is doubtful "coyotes" can ever be completely replaced, however--they know the markets.

In 1976, the Basic Village Education Project used AM radio broadcasts for a campaign including health and marketing information. Unfortunately, apparently, a fair amount of the information disseminated was misleading and there was lack of follow-up on promised actions to be taken. The credibility of the information was lost vis-a-vis the audience of farmers. Subsequently, the radio stations became reluctant to pass on information without absolute confidence in its value, since they in turn would lose their standing with the audience.

Under the Basic Village Education Project, a network of village "monitors" was set up, using well-respected villagers paid by the radio stations to conduct weekly village meetings. In these, the radio information was reviewed, and farmer feedback obtained--the monitors using cassette recorders and flip charts. (In some of the villages, agronomists were also present.) Test results indicated that in many instances, the monitor "clinched" the radio programs and lent credibility to them, in addition to obtaining valuable comments from the villagers.[4]

With the ending of the project and its assumption by the GOG the funding for, and the monitors themselves, disappeared and the broadcasts under DIGESA auspices became minimal, although there is apparently some residual broadcasting via Radio Momostenango in region VI. Reportedly, 50% of the program content is health; 25% agriculture.

a. Strategy considerations: The need to reexamine the 1976 program and to consider the dissemination plan in the Educational Component of the HAD II Project 0274 with regard to mass-media AM radio marketing (and possibly other) information programs in the

highlands seems compelling. Almost every highlands farmer has a radio.

Such a radio program, directed at farm women, providing useful market price information and supported by local DIGESA guias and representatives (who could become suitable replacements for the former monitors) would go a long way towards resolving the key problem of lack of communications to and from the highlands.

2. Marketing Strategies to Strengthen Public Sector Institutions

a. DIGESA

This agency is probably the public sector agency having provided the broadest and most consistent effect in the agricultural segment and in the Western Highlands in particular, although it is not without its problems. Its field organization, in theory, is well-suited to the task of providing outreach in technical assistance to the lowest level of farming. For example, some 300-350 "extensionistas" can supervise five "guias agricolas", each of whom in turn has five "representantes" reporting to him. Each representante is responsible for regular contact with 25 farm families; thus, in theory, the network would reach between approximately 187,000 - 219,000 farmers.

DIGESA has established a work planning and rating system for extensionistas, and the achievement of goals is recognized. Each extensionista provides a weekly activities plan, with itinerary; all this information is processed manually.

This extension service linkage has been, and is to continue to be, the principal channel to the field for incorporating marketing information and related technical assistance into the local-level production process. Recent efforts in conjunction with the EAT (AID Technical Assistance Field Team operating under Project 0255) in (new) region VI have attempted, with some success, to identify potential large-scale domestic buyers such as Paiz and Pollo Campero. The agency is also beginning efforts to put farmers in direct contact with exporters. The DIGESA organization is also attempting to induce farmers to sell locally; other technical assistance is provided through courses given locally, often using "Gremial" course material, although DIGESA in region VI has apparently little regular contact with the Gremial

organization there.

DIGESA managers and other public sector agency representatives have underscored the organization's mandate in providing technical assistance, "not commercialization" "DIGESA is not a commercialization organization," although a DIGESA executive stated that "commercialization is the critical factor in agricultural development."

DIGESA field people also work closely with DIGESEPE on portioning out farmland between crops and animal husbandry.

Marketing Strategies for Strengthening

DIGESA has reacted positively to AID's basic small farmer development and diversification projects (520-0233 and 0255, respectively), although no specific marketing benefits were mentioned in the interviews. The HAD II Project (0274) is to bring three long-term "marketing specialists" into DIGESA to serve as advisors and trainers; this will be welcomed. Extension agents need training in the marketing-related aspects of crop diversification (which they reportedly are weak on). Also, extensionist training is needed in advising producers of market conditions, buyer identification and qualification, grading standards and quality control, all of which topics are conspicuous by their absence with respect to the farmer. The technical assistance in crop diversification training was to have been undertaken by DIGESA jointly with INDECA; according to the former agency, INDECA has done nothing to collaborate with them and has declined to attend meetings.

Lastly, there exists a considerable amount of farmer disbelief and even resistance to any such government-related local presence (the Almolonga farmers refused to have anything to do with the DIGESA office there, and it was subsequently closed), particularly the case in areas having experienced violence.

DIGESA is planning its own rudimentary price information service, obtaining weekly data from the Gremial (which DIGESA indicated would collect domestic data, as well as international) and distributing photocopied bulletins to farmers via miniriego committees and DIGESA extensionists--the illiteracy problem is recognized. The (new) Region I DIGESA executive interviewed said that there were no programs of radio broadcasts of marketing information to the field which he thought would be a good idea.

b. INDECA

In the 1970/78 Agricultural Development Project (520-0197) INDECA was charged with "creating public marketing programs and to stimulate private sector activities" by implementation of commodity marketing programs and fostering the development of a competitive, private marketing system. The Institute was, with AID support, to provide largely domestic market information: market news reports, price information, including costs and margins, and domestic sales promotion. In addition, under the HAD Project (0274), a market research was to be conducted on internal market potential product differentiation, transportation and market trends, plus work in product quality control in the establishment of appropriate grades and standards. AID-furnished data processing equipment was to be installed (principally for the market information system, with linkage with the Gremial's data base) with INDECA providing training to information system users and ongoing market monitoring process to improve the system.

Opinions of the causes of INDECA's weaknesses range from high turnover (several directors in the last three years, and an apparent exodus of technicians), to purported management corruption (at one point, INDECA became involved in the buying and resale of grain), to poor organization and management in general.

INDECA's development of information channels to and from the field have also been markedly weak.

INDECA stated that there was a manual information system now in place ("the computer is in Accounting awaiting DIGESA"); an AID official termed this system "rudimentary." It purports to provide daily and weekly wholesale and retail prices, classified by origin in four geographic areas, which information is said to be passed to the field. No evidence of reports could be obtained (sample price bulletins were requested but not received because of a strike.) One AID field team had "never seen any." Field information is reportedly collected from farmers by INDECA field personnel on motorcycles, brought to INDECA silos and broadcast by radio to the institute--this procedure was assessed as "bad" by a former INDECA executive. INDECA is said to be initiating a study on how best to obtain this feedback.

INDECA involvement <u>in</u> the field seem generally weak also; AID field people sampled confirmed this: "We have zero communications at the field level with INDECA" "Formal technical assistance with INDECA didn't begin soon enough; the funding didn't come soon enough."

INDECA technical assistance has apparently suffered from lack of direction as well as funding delays. INDECA indicated that they were "not concerned with fruits and vegetables until the last two years," but now they "plan to work with DIGESA in planting the most viable crops." Despite this, they admit they are wary of crop diversification--"we have seen a number of failures, we need to proceed step by step."

Local-level INDECA-AID efforts to set up retail farmers' markets face added problems: limitations on bus-top transport, the need to prevent middlemen from coming into the markets and competing with farmers, and the location of the markets within reasonable walking distance of farms.

Marketing Strategies for Strengthening

INDECA has a training component which plans programs in accounting control, administration, etc, but no mention was made of marketing, nor of training in information systems usage (one of the subjects mandated by 0274). This should be examined. INDECA is also considering training DIGESA field representatives to educate farmers on national and international standards and this should be tracked in conjunction with the planned AID analysis of INDECA, said to be scheduled for late summer.

c. ICTA

Formalized in 1976, this institution has benefitted from Project 520-0232, which improved its capability to develop new and/or improved varieties of crops together with better production techniques, having had, for example, strong success with corn and melon exports to the U.S.--now a national program. The original Small Farmer Diversification Project 0255 (1981-1988) "Assumed ICTA had the technical capability to bring to pass a diversification program involving vegetables, deciduous fruit and livestock--but ICTA has little research experience and was reluctant to provide DIGESA and DIGESEPE with production recommendations."[5]

More recent work has been directed towards perishables, with strong marketing implications in the development of solar dehydration (with both domestic and export potential) of vegetable soup, potatoes, etc. and the goal of giving small fruit farmers more crop delivery flexibility, via small, easily-constructed, cheap storage sheds, using temperature inversion for cooling.

With its advances, ICTA remains a "poverty stricken institution" with little support from Projects 0255 and 0274. It has few workers and practically no transportation, it was reported.

Marketing Strategies for Strengthening

The marketing aspects attending development of saleable new domestic/export products could benefit from additional AID attention and support. Viable new products can relieve some of the strain on domestic basic products for internal consumption, further the product diversification effort, and provide foreign exchange earnings from new markets abroad.

d. BANDESA

This institution has little direct involvement in the marketing process as it does not generally finance marketing activities, although a recent GOG decree (1-89) is said to allow some funding of buying/selling transactions. Also, there is indirect impact on "commercialization" via BANDESA's financing cooperatives' production. They also provide studies on return on investment on various crops, which include cost and price analysis and forecasts. No credit is advanced for export.

Marketing Strategies for Strengthening

Recommendations for improving BANDESA's marketing of its own services have already been advanced. It is suggested that INDECA look closely at BANDESA's individual crop ROI studies to determine the value of publishing these for the producer market.

e. CONAPEX

CONAPEX was founded in 1987 as a joint public-private sector group to coordinate exports and encourage participation of entrepreneurs. A sub-committee, CONACOEX, has been created (with the same 50-50 public-private sector representation) to further the execution of policies set by the parent group. Accomplishments include leading the "ventanilla única" simplification of the formerly highly complex export process which now allows export administration functions to be completed in hours instead of (several) days. CONAPEX also supports incentive legislation for production and export, namely the free trade zone bill, now before the Guatemalan Congress, and supports expansion of Guatemalan commercial attaché representation abroad, to broaden promotion of inbound tourism and foreign investment.

CONAPEX is also working to simplify import regulations, which will have an impact on internal product marketing to a degree that calls for further analysis as details of the new regulations become clear. They have organized a work group to study ways to relieve the high cost of transportation and export shipments and are considering ways to support additional financing options for pre-and-post export activities, and for export-related working capital and foreign market credit insurance.

Marketing Strategies for Strengthening

Insofar, as CONAPEX's activities are related to creating a more permissive legal/governmental/private sector framework for Guatemalan commerce, their activities should be supported. As with other, strictly public sector Guatemalan agencies, they appear strapped for resources; AID should consider lobbying the private sector participants in CONAPEX for greater support thereof; the private sector is thought to play a secondary role at present.

f. DIGESEPE

AID observers cited DIGESEPE as "small, but vigorous." It apparently works closely with DIGESA on feed programs and provides farmers with technical assistance and quality control [illegible] with inputs from "modelos pecuarios." Milk marke[illegible] done via one of two daily cooperatives; quality cont[illegible]nsidered very good.

The agency conducted an AID-supported research study via Project 0255, of regional da[illegible], chicken and pig farmers in 37 municipalities in 1984/85. Th[illegible] useful in terms of providing demographics [illegible]ers. (No copies were availab[illegible]r inclusion in this report since demand had completely [illegible]ted their stock.)

The marketing of wool is impeded by production limitations due to poor quality.

Marketing Strategies for Strengthening

The DIGESEPE (new) Region VI field office visited has not received AID funds nor equipment. GOG funding is said to be minimal. As in other crop-related sectors, there is a need to develop and install a believable set of standards for wool (also applicable to handicrafts) to facilitate export marketing in particular--a GOG "seal of approval" or the like. This, in turn, calls for considerably increased

technical assistance to producers via DIGESEPE.

g. USPADA

This group is charged with coordinating domestic projects and training of producers, e.g., in marketing fruits and vegetables, and in several respects might overlap INDECA. It performs market studies and feasibility analyses of cooperatives although they are not involved in analyzing prices ("INDECA's responsibility"), nor are they involved in export activities. Project priorities are determined by a project technical committee composed of representatives of the different agencies involved. Their Department of Statistics gathers data from other agencies but is said to face a sizable problem of differing criteria and formats for sourcing and recording data.

The respondent at USPADA had no opinion regarding the effectiveness of AID support. The agency said they had no vehicles nor logistical support.

It is rumored that the Minister of Agriculture favors replacing INDECA with USPADA. The implication of this is that considerable strengthening and expansion of USPADA would be needed, specially in field data collection and dissemination.

Marketing Strategies to Strengthen

The lack of definition and cloudiness of mission and responsibility of USPADA vs. INDECA should be a matter of concern to AID--see recommendations, Page 3.

h. Overseas Commercial Attachés

The expansion of this group from 3 to 8 is being considered by the GOG under the auspices of CONAPEX and the Gremial. Both are pressing for assignment of experienced, commercially-oriented candidates from the private sector, in contrast to political appointees. The Gremial appears to have obtained authority to approve or disapprove candidates, precise location of the new posts is as yet undecided. At least one will be in Europe, the others in key U.S. markets. Duties will encompass promotion of tourism and foreign investment.

Marketing Strategies for Strengthening

These overseas representatives could play a major role

in Guatemalan export marketing, namely in:

- Locating foreign market information and secondary sources for the Gremial.
- Promoting Guatemalan export standards, quality and delivery reliability.
- Promoting maquila investment.
- Identification of and contacting prospective foreign importers, brokers and buyers of all kinds.
- Advising these latter of current GOG regulations affecting Guatemalan exports, shipping/cargo considerations, etc.
- Locating qualified technical advisors in many sectors.
- Assisting Guatemalan businessmen on foreign observation trips
- Advising and assisting Guatemalan participants in foreign trade shows and conferences.

i. GUATEXPRO (defunct)

This public-sector agency was created through AID project 520-0201, "Export Development," in 1970/73. During its term, it sent AID-sponsored Guatemalans (including GOG, cooperative and private sector participants) to overseas seminars, provided training in export methodology, entered new overseas markets and increased a number of Guatemalan exports plus the exports of then-new products, including cardamom, flowers, fruit, vegetables, honey and some non-agricultural products. In the opinion of one respondent, GUATEXPRO initiated the process of generating an "export consciousness" in Guatemala, now a goal of the Gremial, which has inherited GUATEXPRO's functions. The latter was shut down precipitently by the GOG in 1983 for as-yet-unexplained "political reasons." A number of its staff now serves in the Gremial.

3. Marketing strategies to strengthen Private Sector

a. Cooperatives/CLUSA

Guatemalan cooperatives result from the tendency of

smaller farmers to organize and of necessity: most of them cannot survive alone (plot fragmentation is one cause) and individual farmers lack the bargaining power to get fair prices, lack financing for production, lack needed technical advice, and lack viable transport. By providing these services to varying degrees, cooperatives participate in the mainstream of marketing by furnishing a means (of varying efficiency) of getting product to market.

The principal thrust of cooperatives is into basic crops: 25% corn, 65% wheat. The former is largely consumed at the source, with some small amounts trickling to market. Cooperatives develop storage and distribution systems but "fell behind" in this, in not advising farmers of the right farming practices nor investments[6]. No market research has been conducted, although some pricing research is underway with outside consultants. Some cooperatives have their own extensionists, but they are said to be overloaded and undertrained.

Three-leading cooperatives (Cuatro Pinos, Magdalena and Flor Fatzunera) have established direct marketing channels with large Guatemalan and U.S. buyers. Others are developing towards this stage, albeit slowly.

AID has recognized the importance of co-op support beginning in 1970/78 with the Cooperatives Development Project 520-0200, a major attempt to fill the marketing vacuum in the co-op sector was made by Project 0238, "Small Farmer Marketing" which set up a national marketing cooperative CECOMERCA--"Central Cooperativa de Mercadeo Agricola"--to provide marketing advice to small farmers, act as a central buying operation with a central market facility in Guatemala City having access to national, regional and overseas export markets, and a market information and transaction-recording system, all with the objective of moving large volumes of diversified crops in an efficient, profitable manner.

For several reasons, (see section 3.d.) CECOMERCA never became self-sufficient, was not effective and was shut down in mid-1983. In the Project 0238 Final Report, a partial replacement was proposed: a joint venture formed by small highlands producers and a marketing base of processing and exports with contacts with U.S. jobbers, operating as a centralized cooperative association able to offer production and investment credit to producers. This did not come about and CECOMERCA's role has never been filled, either by INDECA, other co-ops, nor by DIGESA.

The HAD Project 0274 is to create domestic, regional and

overseas market channels for small co-ops and producers. Activity has been centered in (new) Region I, selecting co-ops with a high organizational level; a couple have more recently been added in (new) Region VI, where co-ops are less developed. Throughout Guatemala, a number of low-caliber co-ops may be found which renege on or change prices to farmers. In this regard, caution should be exercised in generalizing from experience with more advanced co-ops, such as Cuatro Pinos or Rincón Grande[7].

The Agribusiness Project (0276) will provide further assistance to co-ops via CLUSA, now reportedly working with 10 co-ops. The project will identify the best to work with, with potential for export, as well as those now exporting. Under this Project, a U.S. co-op is to provide technical assistance in management and marketing to participating Guatemalan ones, with short courses and observation trips for roughly 240 coop leaders. These leaders will hire a professional manager and accountant and gradually assume their costs. It is foreseen, however, that significant management problems could arise due to inability to handle data processing and management systems if a co-op's membership increases over 20%. A number of traditional-crop co-ops will be trained in computer use under Project 0281, "Technification of Traditional Export Crops." The leading three Guatemalan co-ops are estimated to be able to increase their capacity over five years to 20 million pounds per year if added capital is provided[8].

Marketing Strategies for Strengthening

Outside marketing support is needed by co-ops in a number of areas. First, to identify markets where Guatemalan farmers have a competitive advantage, i.e., the Gremial offers a course in exporting as well as cooperative-specific marketing courses available to Gremial members (which include four co-ops) or non-members. An example is Cuatro Pinos' success with snow peas in the Southeastern U.S., fresh cauliflower, broccoli, and haricots verts to Europe.

Next, selective technical assistance should be provided to train co-op managers in the use of marketing information and in passing it on to members (no co-op is known to have a marketing manager on staff).

Thirdly, co-ops need to know a great deal more about local markets, including upscale ones in Guatemala City, and the requirements of these for grading and packing and the implications of a dedicated sales force. This implies additional technical assistance--co-ops are traditionally "supply-siders" without much understanding of demand.

b. GREMIAL/GEXPRONT

The Gremial de Exportadores de Productos No Tradicionales ("GEXPRONT") got its start in mid 1983 owing to the efforts of half a dozen exporters, with the backing of the Chamber of Industry wanting to address common problems, GUATEXPRO (public sector) having been killed overnight by the then Government. In 1985 AID came into the private sector and GEXPRONT assisted in developing the Agribusiness Project 0276 (1985-90), which also expanded the GEXPRONT Agency. Four aims were set forth: (1) Development of commercial information, (2) Training, (3) Promotion of Investment, (4) Export Promotion. Better and expanded member services were provided, including a Project-mandated marketing information system to provide information on international prices, product quality and shipments and a documentation center with information on regulations and standards. Also sought was a system to disseminate the information, mostly through the public sector to co-ops and farmers. GEXPRONT was also tasked to do market studies, run workshops, and organize trade show participation.

Project 0341, "Private Enterprise Development" (1987/92) will support private-sector non-traditional exports and is to be carried out by GEXPRONT with technical assistance for small and medium entrepreneurs in adapting production to market demands, followed by export promotion.

GEXPRONT has created working commissions (e.g., agriculture, furniture, and maquila development) and has discussed forming one on marketing, not as yet accomplished. These carry out the day-to-day sector-specific problems of GEXPRONT. There are presently some 550 members, including four co-ops: practically all members are medium to large mature businesses in agriculture and other sectors. GEXPRONT management believes they now have 70-75% of potential members; the agency still wants to grow at a rate of 15 net new members per month (some members leave from time to time).

Programs include conducting 50-60 seminars a year in production, marketing, crop management and other subjects. There is no training in the use of marketing information systems. These seminars are open to non-members and public sector people also attend; the seminars are promoted via ads, brochures, mailings (their computers maintains membership and attendee lists) and posters. In 1988, almost 3,000 people attended seminars with 160 companies receiving technical assistance (See GEXPRONT Table 1, following footnotes).

GEXPRONT sponsored a major marketing conference in Quetzaltenango in 1984: over 200 exporters, farmers, processors, U.S. brokers and GOG officials attended. This was followed by the successful Guatemala City "AGRITRADE" fair in 1988.

GEXPRONT has promoted and participated in several foreign trade fairs, including the FMA and United Fruit shows in the U.S. Additional member services include an "alert" service to advise members of rapid changes in market conditions, regulations, etc. via phone, telex or fax, and a "linkage" service to bring sellers together with export buyers. Users are now charged for these services and dues rates have been restructured to reflect increased sales volume of members in a move toward making GEXPRONT self-sufficient (management estimates this will take two years).

A GEXPRONT marketing information system is up and operating well, although there is as yet no electronic link either with the ROCAP data base, or with INDECA as planned. GEXPRONT receives DIGESA prices, Bank of Guatemala statistics, monthly export volume reports and a variety of foreign publications, including periodicals of overseas trade associations of which GEXPRONT is a member. A weekly price bulletin is published (with 200 readers in 100 different product areas. A daily one would be very difficult and impractical). A monthly magazine Data Exporter, also is published together with a monthly bibliographic update of publications received. The GEXPRONT Documentation Center provides a library of information on regulations, standards, etc.

GEXPRONT appears to work fairly closely with public sector agencies, a successful example being the collaboration with CONAPEX (actually a joint public-private sector entity), in bringing about the "ventanilla única" export simplification project. The GEXPRONT Director has had talks with DIGESA and INDECA on crop diversification related to exports.

Working committees are involved with new legislation, including free trade zones; transport (bids are out for consultants to organize a Transport Users' Association to, among other duties, negotiate better services and lower rates with air cargo and ocean freight carriers) and the expansion of commercial attachés abroad.

Marketing Strategies for Strengthening

AID should consider encouraging GEXPRONT to add to its agenda:

- Collaboration with DIGESA, DIGESEPE (and perhaps CONAPEX) to develop a GOG program of product quality certification.

- Further efforts in the "linkage service" to identify and qualify potential buyers abroad. The exporter's main problem is finding qualified, interested buyers, evaluating their honesty, and then establishing and maintaining close personal contact on a real-time basis (Project 0276). Note: GEXFRONT expressly states that it is not contemplating domestic buyer-seller matchmaking.

- Establish an internal marketing function: Coordinator of the Marketing Commission (a one-man commission to start) to oversee the marketing aspects of the many GEXFRONT activities and importantly, to build a program to publicize and promote these activities in Guatemala through the overseas commercial attaché network, to build awareness and appreciation of Guatemalan product quality, and to expand contributive membership.

- Ensure members understand the value of the information available through the organization. "Many don't." Also, member education in information use. "Many think the information itself will solve their problems." Note: The GEXFRONT Training Department has an ongoing program for this.

- Determine the best way to disseminate information in a form most usable to all types of exporters. Note: A consultant is currently working on this.

- Examine ways to make usable information and technical assistance available to smaller co-ops and farmers approaching export competence.

- Develop a method for measuring performance (i.e, in export sales dollars or quetzales, export-related jobs created, and foreign investment) vs. pre-established quantitative goals within the annual Work Plan.

- Monitor progress quarterly, with AID participation (AID should also watch overall GEXFRONT programs on an ongoing basis to ensure that export market "windows" are as wide open as possible).

c. CAEM

This Cámara Empresarial (Chamber of Entrepreneurs) is described as "non-profit, non-political" and began activities in 1984/85. It was composed of entrepreneurs regarded as "younger, more progressive." It has been involved in the "Ventanilla Unica," technical assistance to CONEXPRO, a study on free zone legislation, maquila support and promotion, and private sector participation in conferences and trade shows.

Marketing strategies for Strengthening:

One interviewee stated that CAEM "is not doing so well." It is suggested that AID look into the status, capabilities and activities of CAEM to determine its utility vis-a-vis AID goals, and what might be needed to improve the organization.

4. Decentralization of GOG and Commercial Activity Applicable to Marketing and Effects, if Any

COREDA (Regional Committee for Agricultural Development) appears to be working reasonably well, but there remains the need to expand similar activities to other regions to help speed the decentralization process.

Comment:

Marketing considerations should be involved in location of certain offices whose functions (should) encompass marketing.

III. The USAID Portfolio

A summary listing of AID projects related to marketing since the 1970's is given below.

Project No.	Subject	Year(s)
520-0197	Agriculture Development (Production, marketing)	1970 - 78
520-0201	Export Development (GUATEXPRO established)	1970 - 73
520-0238	Small Farmer Marketing (CECOMERCA established)	1978 - 84

520-0255	Small Farmer Diversification System (Research, extension infrastructure, credit, marketing)	1981 - 88
520-0274	Highlands Agricultural Development (HAD) phase I and II	1983 - 88
	Phase II: Research, extension, infrastructure, credit marketing, training	1988 - 93
520-0276	Agribusiness Development	1985 - 90
520-0286	Cooperative Strengthening	1986 - 91
520-0337	Private Sector Coordination	1985 - 88
520-0377	Microbusiness Promotion	1987 - 90
520-0381	Technification of Traditional Export Crops	1989 - 90

A. Influences Affecting Projects

Circumstances that have affected the foregoing projects include external factors such as the disintegration of Central American Common Market (which impacted Project 0238 adversely and was a contributing element in the failure of CECOMERCA), extensive armed conflicts in the formerly strong export markets of El Salvador and Nicaragua and trade barriers impeding exports to Mexico. Other internal factors have included an overextended or under funded public service network, political turmoil and autocracy (apparently responsible for the demise of GUATEXPRO), the period of violence (which severely affected 0201 and impacted small farmers and co-ops as well as portions of the infrastructure).

B. Changes in AID Approaches

AID forms have also changed over time; a continued public-sector emphasis has been prevalent in AID projects until recently with HAD 0274 and subsequent projects. Another more recent trend in project emphasis has been the attention given non-traditional crops at the expense of traditional ones, which still produce at least 50% of Guatemala's foreign exchange earnings. The small farmer has been a key subject of attention, and correctly so.

Common denominators noticed throughout the more recent (since 1984) projects examined are:

- General absence of any broad-based marketing component in projects and lack of awareness of the pervasive nature of the marketing function in other areas, i.e., infrastructure, crop diversification, irrigation, information system sharing, livestock systems, banking and credit, et.al. The only marketing element in project 0337 (Private Sector Coordination) is a pilot project in wool. Export promotion in project 0341 is just starting. Project 0274 (HAD) end-of-project goals include development of a domestic/international information system, a system of product grades, standards and measurements, to facilitate data gathering, better communications between sellers and buyers, and a greater marketing orientation among small farmers.

- With the exception of the expansion of marketing-related activities from HAD phase I to phase II, there has been little continuity in developing long-term marketing sequences from one project to another. Individual projects have "pecked away" at one particular marketing need or another, in some cases attempting to cure symptoms rather than causes.

Despite these generalities, there is a current example of suggested linkage between projects in the relation between the Agribusiness Project (0276) and HAD II (0274) wherein lies considerable potential for marketing carryover and synthesis. "The mandate of 0276 is broad, and its personnel have good experience with both domestic and international marketing of perishables".

IV XI. Synthesis: Focus and Sustainability

Each of the subjects in this section will be examined in terms of their relevancy of conceptualization, goals and management of marketing aspects of projects by (1) AID, (2) the GOG, and (3) the Guatemalan private sector.

A. Coordination Across Sectors

Productive interaction between public and private sector agencies has varied from unexpectedly good to zero. Some observations on the "interrelations scale" follow. (an asterisk (*) indicates relationships which are considered to be highly important).

Sector	Between	and	Sector	Perceived Interaction
Public	DIGESA	INDECA	Public	Minimal*
		ICTA	Public	Satisfactory* within latter's limitations
		BANDESA	Public	Unable to assess
		DIGESEPE	Public	Good*
		USPADA	Public	Satisfactory*
		Foreign Attachés	Public	Unable to assess*
		CO-OPS	Private	Varying*
		Gremial	Private	Satisfactory*
		CAEM	Private	Unable to assess
		Micro-Businesses	Private	Unable to assess
Public	INDECA	ICTA	Public	Appears minimal*
		BANDESA	Public	Not assessed
		DIGESEPE	Public	Appears minimal
		USPADA	Public	Probably overlap
		Foreign Attachés	Public	Unable to Not assessed*
		CO-OPS	Private	Minimal*
		Gremial	Private	Minimal*
		CAEM	Private	Minimal
		Micro-Businesses	Private	Absent
Public	ICTA	BANDESA	Public	Not observed*
		DIGESEPE	Public	Appears good*
		USPADA	Public	Minimal probably overlap
		Foreign Attachés	Public	Not observed
		CO-OPS	Private	Satisfactory*
		Gremial	Private	Minimal*
		CAEM	Private	Not observed
		Micro-Businesses	Private	Not observed
Public	BANDESA	DIGESEPE	Public	Not observed*
		USPADA	Public	Not observed
		Foreign Attachés	Public	Not observed
		CO-OPS	Private	Appears satisfactory within BANDESA limits*

		Gremial	Private	Not observed
		CAEM	Private	Not observed
		Micro-Businesses	Private	Not observed
Public	DIGESEPE	USFADA	Public	Minimal
		Foreign Attachés	Public	Not observed
		CO-OPS	Private	Good, where relevant*
		Gremial	Private	Zero
		CAEM	Private	Not observed
		Micro-Businesses	Private	Not observed
Public	USFADA	Foreign Attachés	Public	Not observed
		CO-OPS	Private	Minimal
		Gremial	Private	Minimal*
		CAEM	Private	Not observed
		Micro-Businesses	Private	Not observed
Public	Foreign Attachés	CO-OPS	Private	Not observed*
		Gremial	Private	Not observed*
		CAEM	Private	Not observed
		Micro-Businesses	Private	Not observed
Private	CO-OPS	Gremial	Private	Good but only for those exporting non-traditional crops.*
		CAEM	Private	Not observed
		Micro-Businesses	Private	Not observed
Private	Gremial	CAEM	Private	Not observed*
		Micro-Businesses	Private	Fair*

1. <u>AID Relevancy of Conceptualization, goals, and Management</u>

AID conceptualization and goals as related to the marketing aspects of projects involving the above organizations is considered good. It is in the project management of these that shortfalls are felt to occur. The

goals and responsibilities of some of these agencies are not clearly defined, and areas of possible overlap are undoubtedly present. Comments on AID's involvement with this network include:

- "AID has lost its former closeness and involvement with the GOG since the early 1970's."
- "AID sets up (private sector) organizations outside the ministries to run projects (e.g., the Gremial) which don't strengthen the ministries."
- "There is a problem of weakening or replacing existing institutions with weak or temporary ones--when the project ends, what do you have left?"

In some cases, AID has not monitored project progress adequately nor moved to make urgently-needed changes when called for--the CECOMERCA program being an example: "The quality of expatriate assistance to CECOMERCA was low; technical assistance monitoring inadequate; AID staff was reduced to a point that it couldn't provide the intensive supervision needed. "There is no provision in 0255 for ... supervision and continuity."

2. <u>GOG Relevancy of Conceptualization, Goals and Management</u>

Assessment of this was in a large sense outside the capability of the assignment; however, it might be useful to note impressions received of GOG project management, namely that

a. There is a tendency to over-organize, creating additional costly bureaucracies, and to under fund projects.

b. Funding that is authorized is often late.

c. Political favoritism/nepotism still occasionally supplants professional qualifications and personnel assignments.

d. In some cases, corruption and graft seem to be rewarded rather than punished.

e. Little attention is paid to measuring project effectiveness against established goals/bench marks.

3. <u>Private Sector Conceptualization Goals and</u>

Management

As noted, AID did not really get heavily involved in the private sector until after 1985. It has stated it "wants to be responsive to private sector goals" and attempts to place AID private sector programs onto public sector agendae.

The Guatemalan private sector's own program planning and management is spotty. The Gremial stands out as an example of professional, pragmatic and successful setting of goals and following through; some of the smaller, struggling, co-ops are at the opposite side of the spectrum. There is a fair amount of polarization standing in the way of effective private sector planning and implementation: strong elements of the private sector are very conservative--cattlemen, cotton and cane producers and a fair percentage of Gremial members were noted.

Interesting comments: "The private sector is best at collecting information; the public sector is best at dissemination." "Pure private sector activities in the Altiplano have been dominated by the public sector" (this could reflect weak initiative and follow through on the part of private sector groups).

B. Target Population Selection

1. From the AID standpoint: This is seen as satisfactory in that small farmers have been the main beneficiaries. Some commentary was voiced that the Agency disregards (a) the service industries completely and is (b) currently focusing on "fashionable" non-traditional crops at the expense of traditional ones.

2. GOG Target Market Selection: Public sector attention to the field problem has probably exceeded expectations with the qualifications that delivery systems have often not lived up to the conceptualization of the program (allegations of graft, poor administration, delays).

3. Private Sector: Two areas of potential growth are seen: (a) in the co-ops expanding their membership into related target markets, with emphasis on crop-specific co-ops as opposed to mixed ones, (b) extension of Gremial membership into smaller businesses and co-ops and farmers ready or nearly ready to export.

C. Project Impact on the Small Farmer

1. Project Responsiveness to Needs

Project responsiveness to Guatemalan marketing priorities is seen as acceptable overall in the planning sense. Field criticism centered around AID's not communicating with, nor getting involved enough in the field to solve pragmatic local problems. Some AID evaluators were said to exhibit a "superiority complex" vis-a-vis Guatemalans, and to spend insufficient time assessing program impact in rural areas. Field execution of programs, and subsequent evaluation of their impact on a small farmer appear to leave something to be desired, although a number of programs have worked, in soil conservation, intensification, diversification, and irrigation--the latter may eventually prove to have worked too well.

2. Beneficiary access to marketing-related delivery systems

With the exception of the DIGESA field extension network which appears undertrained, overworked and underpaid, and possibly some co-ops with respect to technical assistance and fertilizer/pesticide delivery, small farmer beneficiaries get very little in term of services and the delivery systems are the weak points. A marketing service information system is the prime example. (Section 7, pp. 32 below). This is a vacuum that has apparently existed since the downfall of GUATEXFRO, and one that neither INDECA--nor any other agency--has stepped in fill.

3. Domestic vs. Export Markets

The more advanced product requirements place an additional burden on the small farmer, who for that reason and lack of technical assistance may often turn away from the more exportable non-traditional crops. Technical assistance, education, and market information are vital here, and are supplied in only limited quantities. It is also difficult to find good brokers in foreign markets who speak Spanish; thus the "degree of difficulty" of dealing with export markets is much greater for the small producer than raising more basic products for the domestic markets with which he is more familiar. Given the pressing need by the Guatemalan economy for hard currency earnings, the untapped profit potential of foreign markets and the current production-side emphasis on increasing volume of export-type crops, this difficulty must be overcome. But not at the expense of the domestic market. Both must be developed simultaneously.

4. Traditional vs. Non-Traditional Crops

Comments in paragraph 3 above apply. Statements were offered that there is a weakness in disseminating convincing advice on traditional vs. non-traditional crops: "extensionistas don't talk crop diversification, although farmers talk to one another about it.[10]

There is also the need to increase local consumption of non-traditional crops, both from the nutritional standpoint and that of increasing demand to match rising production; as noted, this is another educational problem that must be faced.

5. Support Systems Physical Infrastructure

Marketing success for the small farmer is closely tied to transportation availability and cost--the latter being very high.[11]

Rural roads are constructed largely according to which "aldea" begs the loudest and offers the greatest local support with labor, materials, and right-of-way donation, not in terms of product production in relation to viable markets (although a socio-economic "impact" study is sometimes made of the area proposed for a road). Once built, support for road maintenance is weak.

Although AID has stated that "rural roads have developed well," note also should be taken of the comment found in project paper 0255: "The marketing infrastructure that was to be established is inadequate to absorb the anticipated diversification production to be generated." In project 0274: "inadequate marketing, storage, processing and rural roads are impediments to rural agricultural development. In fact, an important aim of 0274 is to build a "marketing-processing infrastructure to serve principal production areas to expedite channeling of produce to domestic and export markets.

Storage and processing facilities' capabilities need to be assessed under this project; there are conflicting statements about the availability of storage and plans for its expansion. AID field representatives said one of his region's (VI) major cold storage facilities was used... the infrastructure being not used to the maximum, owing to a lack of understanding of capacity and utility of facilities. There is limited storage at the airport, although those willing to pay for it (and who can afford to reserve space up to a week in advance) sometimes can find space with freight

forwarders. There is no current guarantee of space on cargo aircraft; produce gets priority number four and is sometimes left on the tarmac. A project is reportedly underway to provide cold storage there; this should be investigated as well.

There is an increased interest in freezing plants and their ability to provide the farmer with alternatives for over production or production of product below export standards, but this has yet to be translated into a viable processing base in the uplands. Yet, there is an excess of unused freezer plant capacity in Guatemala according to one AID official.

6. Role of Middlemen

The victimization of small farmers by middlemen or "coyotes" can be reduced through technical assistance in helping farmers to organize, teaching them how to negotiate and to understand their costs, together with provision of continual accurate market price information. In one situation, it was found that middlemen's scales were five pounds light; replacement AID scales were provided, but many farmers wouldn't use them, either out of fear of the coyote (the weight differential being an important portion of his margin) or perhaps distrust of yet another government-supplied "gadget."

7. Role of Marketing-Related Information Systems

Project 0274 end-of-project goals, as noted, include development of such a system for domestic and export crops. The relatively-effective Gremial system has been discussed under that Agency's section as has the proposed rural radio information program. AID field management in (new) Region VI plans to supplement the latter with a radio information bulletin on fruit. The AID office there also provides area (literate) farmers with a monthly marketing newsletter; AID should evaluate this for expansion to other regions--it is a resource that could be used to greater advantage to readers outside the Region.

Field Survey: As an indicator of how farmers and other field workers receive marketing-related information, a small survey was carried out by CCE team members during various field trips. A total of 22 farmers, 5 extensionists/technicians/agents and 1 co-op member responded--see Survey Details (Table 2) following footnotes.

Conclusion: From the very small sample, it seems that small farmers receive some information, but almost entirely

by work of mouth--from neighbors predominantly.

D. Bottlenecks

1. Bottlenecks in the physical infrastructure include:

- Rural roads.
- Lack of local and airport storage facilities (or perhaps not--see section C.5., above).
- Erratic capacity on cargo aircraft.
- Unpredictable port of entry arrival times for some ocean shipping lines.
- The highway to the Caribbean, said to be in bad repair.
- Loading cranes at Puerto Barrios: breakdowns cause backups all along the chain of distribution.
- Poor phone system makes use of modems in computerization of marketing functions impractical.
- Lack of phones in field (DIGESA offices an example).
- Lack of local transport in the field (for extensionists, ICTA et.al.).

2. Bottlenecks in agencies:

- No full-scale automated information system for domestic markets (INDECA: "the computer is in Accounting").

- General information dissemination (DIGESA, INDECA, Gremial).

- AID procurement process (e.g., the GOG had to wait two years for motorcycles).

- AID "bureaucratic" and delay-producing process to authorize funding and expenditures ("letters of permission")

3. Bottlenecks in the private sector:

- Co-op's marketing efforts hamstrung by manual methods in general record keeping and administration.

E. Continuity and Sustainability

Continuity of marketing aspects of programs is addressed in section III, the AID Portfolio. There is a strong need for continuity and consistency in:

- Marketing programs everywhere.
- Project management policies.
- Project management staff and field personnel.
- Public sector management.
- Public sector field personnel.

That the various AID agricultural programs have had a positive compounded effect on their desired target audience is without question, notwithstanding the "start and stop" tendency of individual projects' marketing activities. The marketing component of each new program needs not only to be identified and fleshed out properly, but also measures should be in place to make sure that marketing programs do not "die" when the project ends--and that they support, where appropriate, programs in later projects.

"Politicalization," turnover, and changes in the field including turnover of local "alcaldes" interfere substantially with the successful implementation of continuity in projects of every sort.

Of the numerous marketing-related projects, institutions, and programs viewed, none can be said to be truly self-sustaining or close to that happy state. These agencies lack the resources to support extensive additional AID-promoted marketing programs on their own (e.g., DIGESA has no money for rural radio broadcasts) and will not for the foreseeable future. Co-ops are basically self-sufficient under present economic conditions, but similarly lack resources to support additional programs, such as adding a Marketing Manager to the staff of large, more mature co-ops. The Gremial could conceivably reach self-sufficiency in the mid term, probably more than the two years they predict.

V. ~~VI~~. Marketing Commonalities and Needs of AID/GOG Policies

AID and GOG policies related to marketing appear to share common conditions--insofar, as these policies could be observed; one common condition seems to be a lack of clearly-defined marketing policies, the commonality being the dedication to the small farmer. The other common condition is felt to be weaknesses in the delivery side of programs--in

project execution, in delivery of appropriate funds and supplies, dissemination of needed information, and in monitoring process.

Importantly, a process needs to be developed within AID and within the GOG that will ensure:

1. that all relevant marketing considerations are examined and included as may be appropriate, in both policy formulation and in project design, and

2. that these marketing issues, once identified and incorporated into plans and programs, are carried out to meet established objectives and that adequate field communications and involvement are effectively implemented.

A. Recommendation

It is proposed that AID undertake a global study of marketing in Guatemala, proceeding from the point of view of marketing systems, in all their aspects, rather than from the point of view of the commercialization of any particular product or group of products. It should start with the way products are selected for promotional efforts directed at producers, and include (without limitation) transportation, storage, processing, market identification, and sales promotion, both internally and externally. It should include, importantly, an in-depth look at the organizations involved in all aspects of these efforts.

VI. Project Methodology and Limitations

The marketing evaluation in the CCE Scope of Work allowed 23 person-days of in-country work, plus two days travel. Of the 23 days, one week was needed for background reading and project team briefings, two weeks for field work, including 31 interviews and intra-team discussions, and one week for note organization, drafting, editing, discussing, typing and reproducing the report.

This schedule did not allow for in-depth assessment of marketing-related constraints and opportunities, strategic marketing policies, nor the institutions with which these are involved. In most cases there was time for only one hopefully-representative visit of one hour to a given institution.

Thus, the observation, conclusions and recommendations herein should be considered in this light and taken as brief,

general, illuminations of areas that might bear fruit with further, more detailed investigations. Many of the interviewees' opinions that underlie some of the perceived conditions set forth in this report have not been validated--but were accepted as the best indicators available under the circumstances.

There was a lack of access to respondents who might have provided more specific enlightenment on micro-strategic marketing policies and issues, to substantiate some of the hypotheses offered subjectively herein. While many of the interviewees hold highly responsible jobs, they are entirely concerned with making programs work under trying circumstances, and with making a living. Grand strategic marketing program analysis and planning is neither part of their makeup nor of their assigned responsibilities. The development of a viable marketing strategy for the Guatemalan agricultural sector and the small farmer is not the objective of this evaluation, nor would it be possible. What has been attempted is to point the way towards designing such a study by providing some background organizations and programs involved, perceived strengths and weaknesses and gaps, constraints and opportunities in the present system.

NOTES

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2. Jones, Wohanka and Dulin. op. cit.

3. Interview with Tully Cornich, USAID/Guatemala on February 1, 1989.

4. Conversation with Dr. Edgar Nesman, January 28, 1989.

5. ORD Final Report No. 29, October 1987.

6. Meeting with David Fledderjohn, January 18, 1989.

7. Jones, Wohanka and Dulin, op. cit.

8. Interview with Tully Cornich, USAID/Guatemala on February 1, 1989.

9. Jones, Wohanka and Dulin, (op. cit)

10. CCE Staff field visits January - February 1989.

11. CCE Staff field visits January - February 1989.

Table 1: Summary of Seminar Training Results

1985 - 1988

Year	No. of Events	Persons Trained in Seminars	No. of Companies Receiving Technical Assistance
1988	65	2,832	160
1987	56	2,083	192
1986	22	1,057	---
1985	5	278	---

Table 2: Marketing Information Field Survey

Interviewees were asked the following questions:

1. What information has been furnished you, and with what frequency concerning:

   a. market conditions in general?
   b. market prices?
   c. the best types or quality of agricultural products to cultivate and when?
   d. specific opportunities with buyers?

If respondents answered "yes" to any of the above questions, they were then asked:

2. a. In what form was the information provided?

   [ ] personal conversation
   [ ] informal conference
   [ ] printed bulletin
   [ ] other (to be specified)

The results were as follows (multiple answers were received from many respondents):

	(Unspecific)		Via				
Question	Yes*	No	Co-op	Neighbors	Intermediaries	Market	DIGESA
1 (a)		5	1	6	4	2	3
1	Pacific Sun Co.						
1	BANDESA						
2	Cuatro Pinos Co-op						
1	COCADE **						
1	INACOOP						
1	Gremial						
1 (b)		6	1	9	5	3	1
1	Cuatro Pinos Co-op						
1	COCADE						
1	FEDECOMERO						
1	Pacific Sun Co.						

1 (c)	3	0	7	6	2	2

1 Cuatro Pinos Co-op
1 COCADE
1 Commercial Houses
1 INACOOP
1 Pacific Sun Co.

1 (d)	4	1	10	3	0	2

1 INACOOP
1 Pacific Sun Co.

Question	Via Personal Conversations	Via Informal Conference	Via Fax
2 (a)	21	6	1

* No specific "yes" answers were received--all indicated some source

** Netherlands Economic Assistance Program

APPENDIX V.1

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APPENDIX V.2

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ANNEX VI

H E A L T H

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ANNEX VI: HEALTH

USAID CONTRIBUTION TO HEALTH AND HEALTH SERVICES IN GUATEMALA

1. Introduction

This discussion forms part of a "cross cutting evaluation" of United States support of development activities in Guatemala over the past forty years. In this section broad strategies and improvements in the areas of health, family planning, nutrition, water and sanitation are reviewed. This review is by necessity general, and its considerations and conclusions are intended to be normative.[1]

Over the last four decades AID has financed at least 28 separate health and population projects.[2] A list of projects, with budget allocations, stated goals and objectives, and general results is included as Table 1 at the end of this section. The level of investment in the health sector has steadily grown, totalling about US$ 60 million in loans and grants over the last twenty years, with a constant increase in absolute and adjusted terms. This year (1989) the Mission will dedicate about US$ 10 million to health and population activities, representing close to 8% of the current Mission budget. The cumulative allocation for health and family planning activities is shown in the set of figures in Appendix 1.

This evaluation does not attempt to judge the individual successes or failures of this complex array of projects. Rather, stepping back from the specifics it addresses several broader questions. How has the health of the Guatemalan population changed after 30 years, and to what extent has the Maya (rural) population participated in this change?[3] How have health services changed as a result of AID support? What effect have AID sponsored programs had upon slowing the rate of population growth? What differences have AID's interventions made at the community level? And finally, as AID now looks to the future, what general lessons can be inferred from the past?

2. How has the health of the population changed over the past 30 years?

In light of thousands of person-years of effort on the part of many talented and dedicated Guatemalans and AID officials, and tens of millions of dollars spent, has the health of the people, particularly the rural poor, gotten any better? The simple, honest answer is that is has, though much less than had been expected or hoped. Some key indicators have shown significant improvement, though overall the level of health of

the Altiplano population is still far from what can be considered acceptable.

For the country as a whole, there has certainly been some positive changes. Some of the indicative changes are shown below. All of these figures should be read as general indicators of trends and not as precise rates.[4,5] Additional figures from various sources, which support the general trends described, are attached in Appendix 1 at the end of this section.

* Life expectancy has increased from about 53 to about 61 (a 15% increase) in the fifteen years ending in 1987;

* Infant mortality decreased from 110 per 1,000 live births in 1965 to 56 per 1,000 in 1987 (about a 40% reduction);[6]

* Maternal mortality decreased from 3.6 per 1,000 births (livebirths) in 1952 to somewhere between 1.0 and 1.7 per 1,000 in 1983;[7]

* The crude death rate dropped from per 24.2 per 1,000 population in 1952 to 8.7 in 1985;[8]

* Just over half of the population probably now has access to safe water;[9]

These same kinds of changes have also occurred in the highlands, though generally, far less dramatically than in the country as a whole. Evidence of success is concentrated in certain areas which have been more responsive to project activity. For example,

* Infant mortality in the Altiplano area lowered from the 1950 departmental average of 132 per 1,000, but remains well above the national average.[10]

* The crude death rate for the Maya population overall dropped from 24.9 per 1,000 in 1950 to 16.3 in 1973;[11]

* Somewhere between 24% and 39% of the Altiplano population had access to safe water as of 1986.[12]

Within the rural areas, those areas with a higher percentage of Maya in the population have historically suffered higher overall mortality rates than areas with a lower percentage of Maya.[15]

In spite of advances, the basic health indicators are very poor. As a prime example, immunization levels of children under one year of age are reported to be the worst in Latin America, lower than Haiti or Bolivia.[16] In 1987 the percentage of children nationwide, under one year of age with completed immunizations were: DPT-16%, Polio-18%, BCG-34%, and Measles-24%. Part of this low apparent coverage may be explained by a tendency not to immunize children until after their first birthday, and rates do improve for children in the one to four year age group.[17] The 1987 Demographic Health Survey estimates coverage for one to two year old children to be about twice as high.[18] Reports seen during field visits in some departments indicate that these rates are now showing significant improvement in some areas as a result of Child Survival Program activities and immunization campaigns. Another broad indicator of health status is maternal mortality, which reveals availability and use of the full range of safe pregnancy-related services, is one of the highest rates in Latin America at 1.2 per 1,000.

The nutritional status of the children in the Altiplano area remains quite poor. A study conducted by INCAP in 1980 indicated that 85% of all Altiplano children under five years of age were suffering from some degree of malnutrition, the highest of any region of the country.[19] While data from health centers shows a far lower prevalence of malnutrition, this is to a large extent based on children making visits to the health center, a sample which is biased in favor of children who tend to be more carefully monitored by their mothers and to utilize services more often. There is the possibility that many people in the general population do not perceive or identify malnutrition.[20]

The period of widespread violence in the Altiplano in the early 1980's had a direct impact (deaths and injury) on the health of the population. Deaths and illness directly resulting from the violence of this period are an issue outside the scope of this discussion. A much wider, indirect impact interrupting health programs, food production, and other key areas of activity is of concern to this "cross-cutting evaluation". While it is a complex task to sort out the factors which are associated with changes seen during this period, the infant mortality rate for the highlands points to significant disruption of services, as shown in a figure in Appendix 1.[21]

The reader will have noticed and can appreciate that specific quantitative indicators are not at all precise or consistent, and cannot be directly compared without risk of

significant error. Trends indicating that the health of the Maya population has certainly improved over the past several decades are nevertheless evident, though Maya health is still far worse than the national average and in ways comparable to the health status of the Ladino population of twenty or more years ago. National figures for Guatemala indicate poorer health than other Latin American countries of similar socio-economic status. Many indicators which were improving until 1980 or so showed a marked reversal, and are now showing positive change once again.

3. How have health services changed through the years of AID support?

If then, the overall health of the Mayan people remains poor after years of sustained efforts and support, what if anything has changed? If not necessarily far better health, are there at least better services? And if so, for whom?

DEVELOPMENT OF AN URBAN, CURATIVE HEALTH SYSTEM

When AID's predecessor began working in Guatemala 40 years ago, there were virtually no modern-sector curative facilities that were affordable and physically accessible to the vast majority of poor, rural people. The Ministry of Public Health might more appropriately have been called the Ministry of Urban Health. Reflecting the conventional medical wisdom of the day, AID began its support for public health at what it considered to be the top: helping to establish Roosevelt Hospital and other major curative centers.

During the mid 1960's, several AID loans expanded infrastructure as well as helping to create the present administrative and professional cupola for public health. Infrastructural development, personnel training, and policies all centered around a curative, urban based system. Throughout the 1950's and 1960's AID projects concentrated on training health professionals, including physicians and dentists, in largely curative services, and to build facilities in which to provide those services. Other activities involved "traditional" public health (such as sanitation); some were focused (e.g. malaria control); one project delivered curative services in some rural areas on a rather small scale.

Guatemala made two policy decisions during the mid-60s that shaped the pattern -- and indirectly, AID's role -- for the next twenty years of health service expansion. First, the Government of guatemala (GOG) chose not to follow Costa Rica's bold move of integrating its health and social security systems.

In practical terms, even though these two institutions serve different segments of the population, Guatemala committed itself to two underfinanced, physician-run, urban-oriented, curative systems. These effectively competed for health investments, leaving the rural area largely uncovered even by curative services.[20] Second, through accelerated external borrowing to fill out the parallel urban systems with buildings and personnel (mostly from the IDB, secondarily from AID), an expanding requirement was created for resources to keep pace with the inevitable growth of recurring expenses.

Necessarily, both of these decisions tilted government expenditures toward urban, curative, physician-oriented services, setting the pattern for future expansion of the system. This pattern of government spending has continued, even in recent times. Between 1986-88, for example, Ministry of Health expenditure on hospitals more than doubled, accounting for 75% of the total MOH budget (See Table 2 at the end of this section). Expenditures on rural health have also kept pace, but have not increased their share of total health expenditures. Rural health expenditures as a percent of total MOH expenditures (including capital and recurrent costs, based on GOG allocated revenues) has remained constant at between 13% and 14% each of the last four years.

Even within the curative care system the allocation of resources is uneven. Two hospitals in the capital city consume 75%. of the curative expenditures which cover 35 hospitals throughout the country. An international development agency recently provided an assessment of this curative oriented system by determining that...

> "...about 60 percent of all cases treated in hospitals could have been treated more cheaply and efficiently in health posts and rural health centers. Poor allocation of existing resources has resulted in a proportionate share of expenditures on personnel, with only modest amounts allocated for needed goods and services and only about one-fifth of what is needed allocated for maintenance and equipment."[21]

All of this emphasis on curative care did not yield a strong curative system, however. The large specialized hospitals are beset by problems of poor maintenance and inefficiencies, which are in turn related to low utilization relative to capacity. The General Hospital in the capital, for example, operates at perhaps 30% of capacity due to these kinds of problems.

Thus over the past twenty years, the GOG, the IDB and to a lesser extent AID, has financed the expansion of physical resources in largely urban areas. The "chain" of health loans provided by AID has also been directed to the human side.

Moreover, for 20 years AID has been attempting to try to shift the focus steadily toward the rural poor.

DEVELOPMENT OF A RURAL, PREVENTION ORIENTED HEALTH SYSTEM

As modern health services in the Altiplano were virtually non-existent until thirty years ago, rural health projects have been pursued from ground zero. Most activities have therefore centered around introduction of basic services, and essential interventions such as immunization of children, family planning, making safe drinking water available and, more recently, preventing childhood deaths due to diarrhea. Most of the successes in the areas which have shown marked improvement in reducing diarrheal diseases and immunizable diseases can be ascribed to these kinds of activities. For other, more intractable categories of illness --those directly related to poverty, such as upper respiratory infection exacerbated by malnutrition, which is a major cause of morbidity and mortality among Maya children -- progress has been far less steady.

AID's most significant and lasting contribution to rural health has been its support of a system of primary health care, a low-cost, community oriented strategy which emphasizes prevention and education along with basic health and sanitation services. By early 1970's, AID shifted its concentration away from the urban, largely curative programs to establish prevention oriented rural services. This support included the establishment of a network of rural health centers and health posts and the development of a cadre of health auxiliaries who could extend basic services throughout the rural areas. This shift in health care strategies was contemporaneous with the global shift in health sector strategies in the direction of primary health care.

The allocation of all MOH resources over this time shows that rural health did not significantly increase its share of all Ministry resources, but what absolute increases there were can largely be traced to AID. Again this was reflected in gains in infrastructure and training. The establishment and strengthening of rural health posts was a stated objective of AID projects by 1973. This shift in AID focus contributed to the emergence of expanded primary health care in the 1970's.

Rural health coverage, especially for the poor in the highlands, has been largely allocated to the discretion and project cycles of external funders, chiefly AID. Conceptually and financially, AID became the primary force in laying the groundwork for a system of rural health delivery. Much of what one finds today under the rubric of "health care" in the highlands is a product of AID thinking, negotiating, and financial and technical support over the past 20 years.

It is conceivable however that, to the extent that efforts concentrated on rural health, AID has indirectly supported the MOH's curative hospital system by freeing MOH resources for non-rural activities. This could also be said of all foreign assistance to the health sector, and the question of public financing of the health sector, and of the macro-economic effects of public financing, deserve serious attention. Nevertheless the trend over this period was clearly toward a broader participation in the health sector by the population including the rural poor, with AID policies and projects influencing the direction of the extension of MOH services.

DEVELOPMENT OF RURAL HEALTH MANPOWER

Most notable of this overall contribution to rural health has been the development of a network of rural health technicians, community-oriented auxiliary nurses, midwives trained in modern techniques, rural health promoters, and community health volunteers. The centerpiece of this program was the two-year training school set up at Quirigua, which eventually trained a cadre of over 500 community-oriented, para-medical rural health technicians (known as TSR's), who in turn helped train more than 22,000 community level health workers. These workers form a system which links national level resources and projects to the communities throughout the Altiplano. Each of the TSR's, works with a number of communities. At the community level the TSR works through a network of promoters to conduct specific primary health care activities. These promoters are motivated volunteers selected by the communities and given training in primary health care. The promoters are in turn supported by other community health volunteers who, while not receiving the level of training that promoters receive, assist and facilitate the community based strategy. Through these networks of community based workers the TSR's have been the backbone of the health service network in the Altiplano.

Midwives, or "Traditional Birth Attendants" (TBA's), who attend the vast majority of deliveries of babies in the Altiplano and who are the primary source of information for pregnant women, have also been brought into the overall training and delivery system with support by AID and other international agencies.[22] The intention of AID support in this areas has been to use trained TBA's to help lower the risk of maternal, fetal and neonatal morbidity and mortality by providing basic pre-natal care information, antiseptic deliveries, and by referring pregnant women to professional providers. This approach has not been highly successful. TBA's have not been fully incorporated into the primary health care system; by and large they operate without supervision, they fail to refer patients to facilities

for proper prenatal care and assessment and, in some cases, cause tremendous damage to pregnant women by practices such as giving highly dangerous injection. Overall the rural population continues to prefer the older, more experiences midwives to the younger "trained" ones.

One effect which is emerging from training of paraprofessionals is the emergence of a new career category. The number of technicians and promoters who have moved on to other tasks is unknown, but it is clear that mobility is taking place. Individuals originally trained in the MOH move into positions with PVO's or with APROFAM (the IPPF affiliate), for example. This has had the effect of creating an incipient path for mobility. On the level of unremunerated workers, community level promoters trained in health often assume other roles, such as in agriculture promotion or in positions of community leadership. For example a health promoter in Canton Patzaracmac in Totonicapan took it on himself to build a small storage shed adjacent to his house from which to distribute community owned food to community members, a process seen in many parts of the highlands. All in all, the attrition of a health worker from a specific program is not necessarily an undesirable event, though this positive versus negative effects of attrition cannot be determined without regular follow-up of trainees.

ESTABLISHMENT OF HEALTH SERVICES IN THE HIGHLANDS

Today, the MOH estimates that 30% of the rural population is covered by health facilities, compared with the target population of 80%. When one considers proximity to health centers or health posts the potential or hypothetical coverage could be much higher, as many rural families live within a half hour distance from a ministry health facility. When one considers the maximum potential coverage by existing nurse auxiliaries, promoters and volunteers this figure could be even higher.

Those facilities which are geographically accessible are not necessarily well used. Obstacles (in terms of absence of bi-lingual staff, lack of medicines, or hours of operation) still impede access to services. During the course of this evaluation, the majority of the health centers and health posts which were visited in Solola, Totonicapan and Quetzaltenango were closed or unstaffed due to vacations, meetings, or other reasons (it was in mid-January, indeed at the tail end of the Christmas vacation). The health promoter network also experiences a great deal of inactivity. Dropout attrition, apathy and passiveness still affect many of these field level operations. In any event it is certain that the solution to increased coverage or improved health impact is not mere physical expansion of roads and

facilities, but rather overall improvements in distribution and effectiveness.

Some competition also exists due to private sector, especially religious facilities, which often provide a better quality of services than the MOH facilities, due to provision of medicines or better personal attention. It is estimated that perhaps one percent of the total population is covered by church provided services; if these were concentrated in rural areas the coverage of the rural population might be two percent. Of course presence of competition can potentially have either positive or negative effects, but in this case the question is one of whether there is overall a rational allocation of MOH resources in light of other services, and in light of the kinds of services already provided which are underutilized.

In trying to explain why highland health facilities are typically underutilized, health officials are prone to invoke an array of mysterious "cultural barriers". Yet actual interviews with individuals in the highlands make use patterns far easier to understand, suggesting at times a passiveness on the part of the providers, at times an inappropriateness of tactics. These "cultural barriers" are for the most part not so mysterious, and are much more amenable to changes in the approaches employed by health service planners and providers than these individuals are wont to admit. A few quotes from users in the Altiplano suggest how obvious some of the problems seem from a user perspective.

> "I don't know (about services available at the health center), but a neighbor told me he took his five children to the health center. They were all sick, and the Doctor said they needed ten shots each. That's fifty shots, at one Quetzal each. Nobody around here has that much money!" (Related by a young father of six in San Vicente Buenabaj, Momostenango, Totonicapan.

> "We can't afford medicines. We just take care of ourselves." (A migrant worker in San Carlos Sija, Quetzaltenango, having recently returned from the coast.)

> "They don't give you any medicines there (at the MOH health center). The other (Evangelical) clinic charges (75 cents), but they give you medicine".

> "The people in these villages don't want to be pushed. If you try to force them to immunize they resist; not because they disagree with immunization, but because they don't want to have things imposed on them." (Official of an inter-community Mayan development organization in Solola.)

The most recent phase of this targeted rural health strategy is through "channeling". This involves intensive child

survival activities whereby children are identified and their immunization coverage tracked by promoters who monitor the progress toward full immunization coverage, and who also educate the mothers of these children in the use of oral rehydration therapy (ORT) and, in some areas, in family planning.[23] These more intensified services have shown positive results; for instance, the widespread use of ORT as a preventive measure against childhood death, first as a result of the establishment of the health posts and health promoters, and later through the focused child survival programs, is evident though uneven. Prevalence of ORT use has been raised from under 1% to between 15% and 20%, but is far short of the stated objective of 80%. These efforts have generally been aimed at the poorest groups in the population. In many areas in the Altiplano where these kinds of AID supported primary health care activities have been established, these may be the only services available.

Some areas seem to function very well. One such area is in San Marcos, an area which had notable successes and in which highly motivated individuals work together and are well integrated into the communities they serve. Interviews in this area underscored a system of cooperation between the communities, the health programs, and the Civil Registry, in which health professionals, TSR's, trained TBA's, health promoters and volunteers have brought diarrheal diseases under control in the past few years, cutting the infant mortality rate in half in some districts of San Marcos. This is a model of success, but success is not the prevailing norm in the Altiplano.

PROVISION OF SAFE WATER SUPPLIES

Expansion of potable water in the Altiplano has been much more successful. Clean water installation is one of the most cost-effective means of health improvement, and is probably the single most important factor in reducing diarrheal diseases, which is the largest killer of children in the Altiplano. Potable water is also a need which communities often identify on their own, and therefore have a much stronger tendency to participate willingly. AID has invested heavily in five main water projects since the mid-1970's.

In its own thinking, AID has gradually shifted over to a community-based participatory methodologies for provision of water supply. This is illustrated by Agua del Pueblo and CARE projects that have received sustained AID support. Community water committees have formed an essential part of the water projects, often providing a key issue of broad community interest around which participation can form. The GOG adopted this methodology to expand potable water supplies in rural areas under AID financed programs, and has continued to pursue this approach

since then. As a result of these efforts, the proportion of the Guatemalan population with easy access to potable water has improved from an estimated 14% in 1973 to about 52% now, though it is much lower in the highlands.[24]

However, the provision of potable water is getting more difficult and more expensive.[25] This is because "the second half is harder than the first half." The easily accessible water sources have been used, and communities that don't have clean water are generally those that are high above gravity flow water source (i.e. pumps), are cut off from a good water source, and are generally disorganized, very poor, and without strong leadership.

As population has continued to expand, much of the "remaining 50%" of the people not covered by potable water are not found in communities without water, but are rather widely dispersed outside the range of existing systems. These are often a younger and poorer population. It is very difficult to extend services to these people, as there is not much community incentive to launch collective water projects in these cases. Furthermore, environmental problems such as deforestation and pesticide contamination have reduced the quantity and quality of what available ground water there is.

CONTRIBUTIONS THROUGH OTHER HEALTH DELIVERY MECHANISMS

AID has also contributed through numerous other mechanisms. Malaria control has received AID support over the years, especially in the early years of U.S. health activities in Guatemala when it was believe that eradication was an achievable goal. With AID support, INCAP (the Nutritional Institute for Central America and Panama) has become one of Latin America's most important nutritional research organizations. The list of additional private sector institutions which have received substantial support in Altiplano health activities is headed by CARE, CARITAS and APROFAM.

All in all there has been a tremendous amount of work carried out in establishing, developing and extending services into the Altiplano. As examples of the volume of these services, during the four years ending in 1988 years, over 125,000 radio spots have disseminated information about child health throughout the country, many in native languages. During this period well over one half million episodes have been treated by ORT, 20,000 latrines have been built, potable water has been extended to a significant proportion of the population, and some 350,000 children and pregnant or lactating women have received supplementary food through Title II programs.

services and to improve overall capacity and efficiency. This also has implications for post-audit accountability.

Thus overall in the area of health and water, we see that the segments of the population which have received services, and in which a more significant impact can be detected, tend to be those segments which are more easily reached, more easily organized, and more easily brought under the existing network of services. Despite years of talk and effort in institutional strengthening the MOH, the largest single provider of health services and the principal implementing agency participating in AID projects, has continued to be a largely unresponsive and lethargic. The MOH is typified by deficiencies in administrative performance, in maintenance, lack of coordination between the MOH and IGSS, and what has been termed a "conspiracy against the expansion of primary health care". This institution does not currently possess the capacity to sufficiently address the needs of the Altiplano, and it is questionable to what extent the new changes will enable it do so or, if so, how long it will take.

AID has without question been a sustaining force in the expansion for primary health care to the rural population. It is clear that primary health care services, though they may still be deficient and may not have brought the high impact desired, can largely be attributed to AID. This is reflected in budgets made available for primary health care. Total GOG expenditures (capital and recurrent) in primary health care for 1989 are estimated at about 10.5 million Quetzales, or a little over four million dollars.[28] AID's contribution to primary health care is significantly more than this amount. And this does not take into account support of another key component of primary health care, which is the availability of family planning services.

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4. What Effect Has AID Had on the Availability and Use of Family Planning Services?

Population is in every sense the denominator of economic development. When a country's population doubles every 20 years or so as Guatemala's has, more schools must be built, domestic production must be doubled, more roads must be built, and so forth, simply to maintain the same levels on a per capita basis. On the other hand, more land becomes deforested, more waste is produced, and the dependency ratio (of children to productive adults) becomes ever greater. Population therefore impacts not merely on the family which must care for itself, but on development in the broadest sense. Yet population is another area in which AID might rightly feel that it "has to run faster and faster just to stay in the same place" -- at least in the highlands.

The number of arable hectares per farm family has declined by over 37% (see Figure 1 below), placing parts of the highlands among the world's more densely population rural areas. With barely enough arable land to support the current population of Guatemala, the problem of a rapidly expanding population becomes a crucial one.

FIGURE 1

LAND AVAILABLE FOR AGRICULTURE USE PER CAPITA

ALTIPLANO AND NATIONAL, 1964 to 1982 [29]

(Hectares per person)

	1964	1973	1982	CHANGE, 1974-1982
Sacatepequez	1.43	1.52	0.96	-32.9%
Chimaltenango	0.94	0.78	0.59	-37.2%
Solola	0.68	0.57	0.48	-29.4%
Totonicapan	0.35	0.29	0.22	-37.1%
Quetzaltenango	0.84	0.74	0.56	-33.3%
San Marcos	0.62	0.53	0.38	-38.7%
Huehuetenango	1.11	0.88	0.62	-44.1%
El Quiche	1.70	1.37	1.01	-40.6%
ALTIPLANO MEAN	0.96	0.84	0.60	-37.2%
NATIONAL MEAN	1.82	1.52	1.11	-39.0%

It is estimated that at least three hectares in the more highly productive areas, and in some areas as many as seven hectares, is considered to be the minimum area necessary to support an average Mayan family. Considering this requirement in relation to the above figure, it is apparent that if the land is highly productive there will be just enough to support the population for another two decades, while in the areas where it is less productive it is now already overpopulated. Of course this growth in population puts pressures on the urban centers, including Altiplano urban areas as well as Guatemala City, as people migrate from the Altiplano.

During the last 20 years, AID has invested some $20 million in 4 major family planning projects in Guatemala. About this same amount will be spent in the next three years. While these projects have routinely identified the Mayan population as a priority area, relatively few services have actually been provided to this population. Family planning has continued to be a predominately urban activity. The percentage of family planning acceptors among Mayan women has risen to a mere 5.5. In light of a doubling of population since a little over twenty years ago, there are many more women not practicing family planning than there are practicing women. Exacerbating the problem of the expanding population is the fact that young females are entering reproductive age at a rate faster than expanding services are able to match.

Family planning efforts have encountered a special set of problems. Probably more than any other single area of activity undertaken by AID, family planning has been attacked at different times from all directions by dissident political groups, by the church, and even by the government itself. So, in light of AID's apparent inability to significantly increase use of family planning in the highlands, is it fair to conclude that AID's programs have been a failure? After all, not only are contraceptive use rates low, but what slight demographic improvements there are cannot be clearly ascribed to the interventions that AID/Guatemala supported. The United Nations Funds for Population Activities (UNFPA), the International Planned Parenthood Federation (IPPF), and other local and international groups have also made contributions in the area of family planning.[30] Nonetheless, in its support of family planning, AID has come to be indelibly associated with a politically unpopular cause that has cost much good will, and this has provided a handle for groups which want to discredit AID in the country.

Developing and implementing family planning has been a learning process. In the early years, AID imagined that family planning programs would be readily accepted by the population and eventually be self-sustaining and would be incorporated into the Ministry of Health, and then more recently, that the civilian

government would embrace family planning. In light of the experience of these programs, this scenario is not realistic. Family planning will probably require special effort and special-case treatment well into the foreseeable future.

Since the inception of family planning projects in 1967, AID has funnelled most of its support of family planning activities through APROFAM, a private provider of family planning services and the country's IPPF affiliate. Over the course of this partnership APROFAM has developed into one of Latin America's strongest family planning organizations. It has evolved from a small family planning concern in the capitol city into a nationwide network of clinics, promoters and distributors, supported by laboratories, supply systems, mass communication and education services, and internal training and evaluation units.

Other private sector delivery systems have been sustained by AID. Beginning in 1982, a private contraceptive social marketing delivery system (IPROFASA) was developed to contraceptive use and to distribute contraceptives through a retail marketing system. This project is expected to attain eventual self-sufficiency. A community-based family health education project (AGES) is developing integrated education, health and family planning projects based on the needs, desires and attitudes of the beneficiaries themselves, rather than attempting to implement projects in a manner which would most likely lead to the sets of problems seen when programs are "pushed" on communities. AGES's projects are developed with full community participation at every step, from preliminary discussions and introduction through implementation. This project is expanding, while demonstrating to project planners the long gestation period required for integrated community based approaches. In short, AGES employs a "community enabling" (or demand side) model, as opposed to a "push" (or supply side) model. Most recently, AID has begun establishing an umbrella organization which will serve as an apparatus to stimulate, finance and administer the expansion of the private sector delivery system for maternal and child health, including family planning, through the many non-governmental organizations. This will allow the introduction of programs such as pre-natal care into organizations such as the ubiquitous cooperatives which have the trust and participation of members. This in turn opens up a network of private sector delivery channels through which integrated family planning services can potentially also be offered.

Expansion of family planning activities through the public sector has followed a much less unwavering path. After initial receptivity in the late 1960's, the MOH ordered a suspension of all delivery of family planning services through MOH facilities in 1979. While this reflected the opinions of key decision makers rather than a more general policy stance, the MOH has

until recently been somewhat less than enthusiastic in its provision of family planning services. In recent years the MOH delivery system has become much more involved in training and equipping health centers and health posts to provide family planning services.

As family planning projects are generally much more "vertical" (that is focused or single purpose), the general thrust of these activities has tended to change much less over time. The major shift has been from simple urban based systems to a more broadly encompassing set of services to the populations, including the Altiplano population, which lacked access to services, to what is now becoming a more comprehensive and integrated set of services.

The inherent difficulty in family planning programs in Guatemala is that those who have a greater propensity to accept services are those who will respond most readily to those services. And in the highland social norms militate against use of family planning. Social institutions place a high value on having children, and fertility is positively reinforced. There is also an economic dimension, well documented in the family planning literature, in which children are perceived as an economic asset to the family, assisting in production as they grow and supporting the elder family members as adults.

Misinformation has been widely disseminated in the highlands early in the introduction of family planning, on the part of certain religious, social and political groups which saw family planning as immoral, genocidal or otherwise threatening. Negative information, in the same manner as bad news, spreads quite rapidly and has a lasting effect. Subsequent efforts have in many instances solidified that negativity. Examples from interviews with individuals in the highlands can best express these points.

> "The communities with which we work don't want health promoters from the Ministry of health because they work with AFROFAM." (Spoken by an official of an inter-community grass roots organization in Solola.)
>
> "They (apparently opponents of family planning) told us that these methods cause sterility. We know that this isn't always the case, but we just don't like the idea." (Spoken by the husband of a health promoter in Chuixtoca, Totonicapan.)
>
> "I don't know, but I've always been told that God decides how many children we will have." (Spoken by a young man and echoed by his companions at a cross-paths in Buena Vista, Totonicapan.)

"People don't agree with that (family planning) here. There is somebody (who provides contraceptives) in x (a nearby Aldea), but here we just don't like the idea". (Spoken by a health promoter of twenty years' service in Canton Patzaracmac, Totonicapan.)

Even though wide acceptance of family planning will be slow to accrue over time, AID is certain to continue this crucial activity. There are broader reasons for this commitment beyond those mentioned above. It will take as long as another generation for use to increase to the levels needed to stabilize the population, but for those Mayan women of the next generation, who are likely to be better educated and who may have more independence of reproductive choices, the groundwork will have been laid.

Some research has shown that there is a wide desire among Mayans to limit family size. Yet in discussions with Mayas in the Altiplano, there is no single topic which receives such unanimity of disapproval; during the course of the current evaluation, every time the words "Family Planning" were brought up the interviewees would shake their heads. This contradiction would seem to indicate that while not disagreeing with the principal of limiting family size, the "pushing" of family planning is not desired.

Establishing quantitative annual output targets (number of distributors in place, number of condoms distributed, number of new acceptors enrolled) and placing these targets at the forefront of all activity is in many ways counterproductive to the expansion of family planning in the Altiplano. The new orientation and approach of the Mission, which places family planning within the context of better maternal and child health, will do much to shift in this direction. Flexibility in developing community based approaches, in the context of increased education and enhanced standards of living, will in the long run be most effective in developing sustainable programs and increasing contraceptive use.

Through its twenty years of efforts AID has without question been the driving force behind the establishment of an institutional delivery system of family planning services in both the public and private sectors. But progress has not come easy, and future progress is certain to be even more difficult. It is doubtful that the per unit cost of providing family planning services will be reduced in the near future, as the more accessible population has already been reached; that is, there exists an upward cost curve with regard to expansion of family planning services.[31] More intensive, specialized and costly approaches other than the increased "pushing" of programs to meet quotas can be expected if family planning is going to be widely accepted before a more generalized state of education and economic development is attained.

5. What Differences Have AID's Interventions Made at the Community Level?

There is no question but that in many of the areas where these AID-sponsored health programs have been at work, there is a clear improvement in access to health services, in sanitary conditions and water supply, in immunization levels and knowledge of ORT, and in resulting improvements in childhood morbidity and mortality. As discussed above, however, these successes have not been uniform.

Ironically, one of the most durable impacts of AID's "health interventions" may well be a non-health result: a legacy of better organized communities. This fits in nicely with the consensus reached at Alma Atta.

One of the most widely found characteristics of the Altiplano communities is the formation of community groups or committees to address a specific objective or problem area. Committees form around issues such as the local school, the upcoming festival, or transportation. These committees often dissolve after a time, with or without achieving their purpose; or they may dissolve and reform over and over again. Many times the same individuals are members of several committees, or the most active individuals may be regular participants in any committee or group which happens to come together.

The committee represents the community for an activity or a set of activities. It is the committee which interacts with the TSR or the other representative of the "outside". The health promoter is often instrumental in the formation and interactions with the committee, but membership is much broader than promoters.

Formation of committees was, however, a potentially dangerous activity during the years of violence. As a result, this kind of community organization activity slowed down considerably during that period. This characteristic of the Altiplano community seems to have had sufficient resiliency nonetheless, as committees are once again forming and re-forming to address a range of community needs.

Community health programs have been adept at exploiting this inherent community organization. TSR's in particular have spearheaded committee formation as a normal step of their activities. In many instances, the TSR acts in the role of a community leader.

To the extent that there exists demand for child survival services, the ability of committees to form around an issue is probably a key factor in sustainability of services. If all immunization and ORT were to suddenly be taken away from communities which actively participate, the thousands of existing

and as-yet-unformed committees would be the most likely entities to form to bring those services back.

Leadership is a key element in the establishment and development of health activities through committees. The health promoters are key motivators in organizing communities, and without their influence many of the community organizations would not take place. In many instance the promoters (whether working in health, agriculture, or some other activities) are the most effective community leaders to be found. Yet leadership is a difficult quality to measure. As such it is difficult to program the cultivation of leadership into programs.

6. Intersectoral Considerations

The relationship of health and nutritional programs to other sectors is of interest in the context of overall community development. As a case in point, we can consider the prevalence of malnourishment among children of the Altiplano area. Mention was made above of a study which found that 85% of the children under five years of age in the region suffered from some degree of malnutrition. The same study identified the characteristics of the families in which malnourished children are concentrated. These characteristics were:[32,33]

* Living in the rural area, especially in the Western Highlands
* Belonging to a Mayan ethnic group
* Having an illiterate head of family
* Being minifundistas or salaried farm workers
* When the head of family migrates for periods of less than two months to cotton farms on the Pacific Coastal plain
* Using water from rain, rivers or lakes which are exposed to human and animal excrements
* Living and sleeping in the same room where food is prepared and eaten

It is clear beyond question, as demonstrated by this study, that nutrition is not an isolated matter distinct from land ownership, literacy, or migration. The same is true of all health and family planning considerations.

The manner in which education, economic well being and health and family size are all linked is well documented in the development literature. The "theory of culmination" is a model which fits well, and which sees all of these sectors as moving together in an upward spiral until a certain base level of well being is achieved in a community or in a nation.[34] This conceptual orientation sees any activity as a point of entry into the community, which then facilitates other changes essential to development.[35]

7. In Conclusion: What Can Be Inferred From the Past as We Look to the Future?

Despite substantial resources invested by AID over 40 years -- primarily in hospital care -- there continue to be high infant mortality rates, high birthrates, widespread malnutrition and low coverage of immunization and other preventive services in the Altiplano. As a result of past infrastructural investment, the system is now "wired" ever more strongly (in terms of budgets, though not rhetorically) toward physician-based, urban-oriented, curative care. Enormous will and effort will be needed to reverse this wiring.

Most progress in health as been a result of the "easy steps", i.e., establishment of programs and activities among those communities with a propensity to change. AID's role has been to push in the direction of rural health care, preventative medicine, decentralization of services, community-based service delivery, family planning, and the introduction of rural water and sanitation services. Progress in these areas has been frustratingly slow. The next set of steps will surely be more difficult, complex, and costly than the first, "easy" set of steps (i.e., progress against inoculable diseases versus progress against poverty-related diseases; water systems for those who have easy access to potable ground water versus water systems for those who do not have easy access to potable ground water; setting up urban family planning services versus making services truly accessible to the Mayan population; building rural health post versus providing quality services within rural health posts). Nevertheless, much basic physical, human, and institutional infrastructure has been put in place, and we are at least pointing in the right direction.

Ironically, one of AID's most important "health interventions" has been a non-health intervention: a legacy of better organized communities. Much of the communal organizational infrastructure that AID helped build in the late 1970s was destroyed during the violence and economic deterioration of the 1980s. However, that infrastructure is now reforming, and it creates a significant opportunity on which to build future rural programs.

AID has learned through much experience that progress in health depends on the development of human "software" -- that the "hardware" (the buildings, the supplies) are relatively less important. In this regard, the 1990s will be a far different era than the 1960s or 1970s. There is now a relatively better educated village population in the highlands. Even though many individual projects have failed or not been sustained, the technicians who worked on them now provide continuity and constitute an impressive resource of national experience in health. A generation of relatively better educated young women is starting to participate in projects and institutional activities. Moreover, a generation of young Mayan professionals

is increasingly vocal. Even though the problems are worse than ever, the human resources to confront them are better.

Those changes in the social fabric of the Altiplano, as diversified as that fabric is, are the changes which have proven more resistant to political o. social stress and which will have the most lasting success. These include the formation of community leaders and committees willing to interact with groups outside the community. These changes also include the initiation and growth, albeit slow, of a constituency for services which will improve the health and well-being of the population.

In those areas where successes in health are apparent (high immunization levels, wide use of ORT, low infant mortality rates, practicing family planning), there is a strong likelihood that there is a certain multi-sectoral synergism at play. Those communities responding to child survival interventions, for example, generally seem to also respond to agricultural innovations and diversification, to education, and to other key activities. Those which do not seem as responsive to health or family planning are not responsive to terracing, to diversification, or other programs.[36] In short, there is a division between participants or acceptors and those who choose not to participate and accept. And choice is the proper concept, as many unresponsive areas and communities have had at least nominal access to programs. What is unclear is the extent to which "intervening variables" such as past interaction with implementing institutions or the influence of key community leaders determines the course of participation.

Constituencies have been built in both health and family planning. If health services such as promoters and TSR's were eliminated in the Altiplano, committees would doubtless form to express the desire for these services. Water and sanitation services are a central theme in communities throughout the Altiplano. Constituents may not be quite so vocal in demanding family planning services in the Altiplano, but throughout the country they would certainly be heard, and constituency in the Altiplano is slowly following.

Constituency building will in the course of the coming decades facilitate the institutionalization of these services and strengthen their integration into the social fabric. Many individual categories of services, such as water and ORT, are quite sustainable in their own right. Other services such as family planning are likely to require substantial support throughout the near future. While the Constitution does now state the right of families to decide on the number and spacing of children (Article 47), there is no clear government policy which would lead the public and private sectors in regard to family planning, underscoring the importance of sustained AID leadership in this area. Full financial sustainability in terms of user supported, self-financing services cannot be expected in the near future. The whole strategy of sustainability must take

into account social and participatory sustainability (i.e., constituencies), as well as institutional and programmatic sustainability.

Overall AID has, through its sustained efforts, influenced policy in both health and population. In health the MOH has, throughout this process, incorporated primary health care and, more recently, child survival, into its operating philosophy. While this might not be reflected in the budget of the MOH, it is quite evident in the presence of the MOH in communities and villages, and in the attitudes and orientation of the field workers from physicians down. The MOH is still the largest single provider of health services and the largest single provider of family planning services in the country.

Primary health care and family planning services in Guatemala are largely dependent on AID support, and this dependency can be expected to continue well into the future. Health and family planning activities are now both moving into a more difficult, "diminishing return" phase. Beyond the maintenance and expansion of basic services, broad strategies aimed at increasing the social and educational level of the community as a whole, and of women in particular, will probably have a greater impact albeit indirect on health, than the specific services which are provided through health and family planning projects.

TABLE 1

SUMMARY OF AID SUPPORT FOR HEALTH AND POPULATION, 1950-1989

PROJECT	YEARS	AMOUNT/US$*1000	OBJECTIVES/ACCOMPLISHMENTS
0002	1950's	N/A	Established the Servicio Inter-americano de Salud Pública (SCISP)
0023	1950's	N/A	Provided training in nutrition to medical professionals
0035	1950's	N/A	Provided training for dental professionals
0085	1950's	N/A	Developed basic public health/sant. services
0095	1950's	N/A	Attempted to eradicate malaria
0129	1960's	N/A	Attempted to establish private sector health cooperatives
0130	1960's	N/A	Supported the Servicio Inter-americano de Salud Pública (SCISP)
0131	1960's	N/A	Established the Roosevelt General Hospital
0132	1960's	N/A	Support basic public health/sanitation activities
0163	1963	N/A	Provided rural health mobile clinics
0189	67-79	4,811	Established family planning services through APROFAM, MOH
0206	71-76	2,340	Trained health promoters; established village level health posts
0218	73-80	3,400	Provided loans for expansion of rural health services
0230	76-79	561	Attempted to strengthen management in MOH; cancelled at mid-project
0231	75-77	N/A	Extended potable water and latrines in rural areas
0237	77-80	1,050	Disseminated information and provided services for family planning in rural areas
0244	77-77	24	Extended potable water and latrines in rural areas
0251	80-85	9,500	Trained and equipped nurses, health promoters and midwives to provide primary health care
0263	80-85	1,978	Expanded the network and coverage of family planning services
0288	82-88	12,116	Expanded the network and coverage of family planning services
0298	84-86	500	Expanded coverage of potable water and latrines in rural areas
0335	85-88	1,000	Expanded coverage of potable water and latrines in rural areas
0339	85-89	16,518	Supported training and expansion of concentrated child survival services
0357	88-91	19,600	Expanded the network and coverage of family planning services

TABLE 2

MINISTRY OF HEALTH'S EXPENDITURE FOR
CURATIVE AND PREVENTIVE MEDICINE, 1985-88
(millions of quetzales)

	1985	1986	1987	1988
Total Financing	46.9	50.0	72.6	97.9
Hospitals as % of total	76.3%	77.0%	74.7%	75.2%
Rural health as % of total	13.9%	13.8%	12.7%	14.0%
Curative Medicine				
General hospitals	32.6	35.2	49.8	67.5
Specialized hospitals	3.2	3.3	4.4	6.0
Total	35.8	38.5	54.2	73.5
Preventive Medicine				
Sanitation	0.8	0.7	0.8	1.1
Epidemiology	3.8	3.9	8.4	9.6
Rural health centers and health posts	6.5	6.9	9.2	13.7
Total	11.1	11.5	18.4	24.4

Source: Ministry of Health, Planning and Budgeting Unit; World Bank

NOTES

1. This section was prepared during three weeks of January 1989 by Laurence Day, Baudilio Lopez and Sheldon Annis. Among the many individuals providing valuable information for this review (listed in Appendix I), special mention should be made of David Lazar of Development Associates and Gary Smith and Jane Lyons AID/Guatemala.

2. The evaluation team was not able to identify all AID projects during the course of this activity. Information concerning many projects, particular those from the 1950's and 1960's, could not be located.

3. Owing to the inconsistency of available data, this discussion will its focus between the Altiplano, the Maya population in general, and the rural population in general. This is considered a reasonable compromise with patchy data as in many ways the quality of life of the three groups are inextricably linked and therefore comparable.

4. These indicators are intended to be normative. Different sources provide different rates, but the general trend is reflected in these figures, which are derived from sources including the 1989 Congressional Presentation, the 1987 INCAP/Westinghouse Demographic Health Survey, and several other sources.

5. As an indication of the difficulty of obtaining reliable data, this evaluation team, while trying to obtain historical data, learned that the MOH had no original data from the Altiplano dating from before 1983.

6. Different sources place this rate higher, for example 73/1000 (1987 Demographic Health Survey); AID project documents place this rate at 67/1000. The trend nevertheless has been downward.

7. As reported in the Expansion of Family Planning Services Project Paper, 1983 (520-0288).

8. 1952 figure from the archives of the Departamento de Bio-estadistica de Sanidad Publica/Direccion General de Estadistica; the latter rate is from the Demographic Yearbook: 1986, New York: United Nations, 1988

9. A 1987 report by the AID centrally funded WASH (Water and Sanitation for Health Project) estimated 25.6% of the rural population had easy access to safe water (Draft of the "Evaluation of the Environmental Component of the

Community Based Integrated Health and Nutrition Project", USAID, Guatemala: November 1988. PAHO estimated 51% in 1988. Persons interviewed challenged these figures, some claiming it to be grossly underestimated, others claiming the reverse to be the case.

10. The figures in Appendix 1 show this higher IMR. Infant mortality is grossly underestimated in the Altiplano region, largely due to under reporting. La Mortalidad en Guatemala, 1950-1980, by the Secretaria General del Consejo Nacional de Planificacion Economica/ Direccion de Planificacion Global, Departamento de Poblacion y Empleo (July, 1983), reported the following Infant Mortality Rates for the Altiplano departments:

Solola	76.6
Totonicapan	93.3
Quetzaltenango	75.1
San Marcos	55.8
Huehuetenango	32.7
Quiche	53.1
Sacatepequez	73.3
Chimaltenango	77.0
MEAN	67.0

These rates are thoroughly inconsistent with other evidence of infant mortality rates in the Altiplano. The authors are not attempting to establish a firm rate here; the evidence of decreases is sufficient to indicate a trend.

11. ibid. This 1973 crude death rate for the Maya is about the same as the Ladino crude death rate 23 years earlier.

12. The lower figure is reported by the World Bank (memorandum dated June 1988), the higher figure by COPECA (Comite Permanente de Coordinacion de Agua Potable y Sanamiento), 1986 (no publication title).

13. Comparing these for the period 1950 to 1964, we see the difference shown below. Part of this difference can be attributed to the younger (more at risk) Maya population.

CRUDE MORTALITY RATES BASED ON CONCENTRATION OF MAYA, 1950 and 1964*

	1950	1964	CHANGE
Less than 30% Maya	17.8%	13.1%	Down 4.7%
More than 70% Maya	24.5%	18.5%	Down 6.0%

* Source: COPECA (Comite Permanente de Coordinacion de Agua Potable y Sanamiento, 1986. La Mortalidad en Guatemala, 1950-1980, Secretaria General del Consejo de Planificación Económica/Dirección de Planificación Global,

Depto. de Población y Empleo (July 1983).

14. Boletin Informativo PAI: Programa Ampliado de Inmunizacion en las Americas, Volume 10, No. 3: June, 1988.

15. This can be explained by a prevailing belief among many rural people that immunizations are not safe for infants.

16. DPT: 35.9%, Polio: 39.3%, Measles: 55.3%, BCG: 50.7%.

17. Regionalization of Nutritional Problems in Guatemala, SGCNPE/INCAP, 1980.

18. To the extent to which this is the case, it would suggest a common phenomenon. If one's child looks about the same size and weight as other children in the community, this would appear normal to most individuals. Perceptions change, however; among the Navajo of the Southwestern U.S., for example, obesity is considered the normal physical condition, such that when photographs of earlier generations of Navajo in traditional costume are shown to obese individuals they do not recognize the subjects in the photos as being of their same tribe.

19. This is not to argue a direct connection, but merely to suggest a plausible set of factors which could account for the reversal of the trend of improving health indicators. The impact of the effects of the disruption of food production, of the activities of committees and health workers, forced migration, and other factors would be expected to show a one or two year delay. Other factors, such as more intensive "channelling" and resulting increased reporting, could also help account for this upturn in infant mortality.

20. It could be argued that, since IGSS serves a specific population, that these two institutions are complementary rather than redundant. This argument will not be elaborated here; the purpose is merely to emphasize the curative, urban based emphasis of the public sector health system during the period under discussion.

21. This information, prepared by a non-U.S. government international agency, was provided in a paper which is not for public distribution. This is not from the same document with restricted distribution mentioned above.

22. Primarily through the Community Based Health and Nutrition Systems project ending in 1985 (529-0251), and continuing on a smaller scale through current projects.

23. For a more detailed description of the "channelling" strategy many documents can be found, including Metologia de Canalizacion en Acciones de Salud, prepared and printed under AID 520-0339 by the Ministerio de Salud Publica y Asistencia Social/ Programa de Inmunizaciones, Terapia de Rehidracion Oral y Supervivencia Infantil, Diciembre 1986.

24. As reported in the draft version of the AID/Guatemala CDSS Update: FY 1990-FY 1994, December, 1988. There is much debate about actual coverage in the rural areas however, with many estimates falling far above and far below these figures.

25. A negative aspect of potable water systems which can be widely observed in the Altiplano is that potable water, convenient as it is once installed, is now often used for non-human consumption. This water is tapped for washing clothes, for irrigation, and many other purposes. Of course this is an expensive way to irrigate the fields.

26. These problems have been identified in nearly all documents on the subject but have not truly been rectified. A good overview of the persistent problems can be found in the child survival evaluation "Programa de Inmunizacion, Terapia de Rehidracion Oral y Supervivencia Infantil - Guatemala" prepared for the Mission by PRITECH in 1987.

27. A change in a official often leads directly to several month's delay. As one very specific example, an activity or project requiring a new official's is necessarily slowed down until the official can be fully informed and agreement can be reached about policies and procedures.

28. This is comprised of Q. 3.6 million from the Ministry of Health, Q 4.9 million from the Ministry of Community and Public Works, and Q. 2.0 million from UNESPA.

29. Direccion General de Estadistica/Secretaria General del Consejo Nacional de Planificacion Economica. Estimaciones de Poblaciones 1979 a 2000. Instituto Geografico Nacional/ Secretaria General del Consejo Nacional de Planificacion/Economica e Instituto Nacional Forestal y Cifras de los Censos de Poblacion.

30. These agencies are often also operating with a substantial contribution from central AID funding.

31. Cost per contraceptive acceptor per year under AID sponsored projects varies, reaching a high of about $60 under the social marketing project. During discussion

with migrant workers. it became clear that these workers receive some Q.3.20 per day for their work, less than the Q.5.00 often reported. Of this amount, about Q.2.00 is spent on food, leaving a net gain of perhaps Q.1.20, or Q.300 to Q.400 per year on a full time basis. Comparing this with the current expenditures per couple-year-protection (CYP) through AID funded programs, we see that the cost of one acceptor in a year of the social marketing project is roughly comparable to what the migrant worker from the Altiplano earns net in six months of work. The intrigue of alternative, more direct approaches is salient. This is not to suggest direct payment for practicing family planning, but rather to consider approaches such as the AGES program of Maya scholarships in this context.

32. Regionalizacion de Problems Nutricionales en Guatemala, SGCNOE/INCAP, 1980; found in Guatemala Agriculture Sector Review, USAID/Guatemala/ORD Report No. 24.

33. The other side of these variables "discovered" to be associated with malnutrition it that these are the characteristics of the vast majority of the population living in the Altiplano.

34. See Gunder Myrdal, "Theory of Culmination", in Etziono and Etziono (Eds.), 1971, Social Change. New York: Basic Books.

35. The recent administrative restructuring in the AID Mission is timely, as health, population, nutrition, education and even judicial and democratic initiatives are now organized under a single Office of Human Resource Development.

36. This is a "very general" observation. With respect to family planning in particular, there may be no association between response to family planning and response to other initiatives or activities.

APPENDIX VI.1

CONTACT LIST

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APPENDIX VI.2

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ANNEX VII

RURAL EDUCATION

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RURAL EDUCATION IN THE GUATEMALAN HIGHLANDS

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

II. EDUCATION AND DEVELOPMENT

III. STUDY METHODOLOGY

IV. EDUCATION AND THE SITUATION IN THE GUATEMALAN RURAL HIGHLANDS

V. USAID SPONSORED PROJECTS FOR EDUCATIONAL DEVELOPMENT

VI. FINDINGS

VII. RECOMMENDATIONS

APPENDIX

VII.1. LIST OF DOCUMENTS REVIEWED

VII.2. LIST OF CONTACTS

VII.3. GUIDELINES FOR INTERVIEWS AND DOCUMENT REVIEW

APPENDIX VII: RURAL EDUCATION

I EXECUTIVE SUMMARY

The principal focus of this study has been the effect of USAID sponsored projects on education in the rural highlands of Guatemala since the late 1950's. It was conducted in conjunction with the Cross Cutting Evaluation which considered all related sectors in the development process and not just education alone. Rural people comprise the majority of the population in Guatemala as they do in many of the developing countries of the world. The educational needs of this sector have never been adequately met and, due to increasing population pressure and a depleting resource base, become even more acute today.

There are four areas of need that can be considered in the evaluation of education in any society: 1. General or basic education of the kind that is usually carried on in school; 2. Family Improvement Education that is often part of the traditions that are taught in the family but that have been included in some formal and non-formal educational programs; 3. Community Improvement Education that is part of the informal learning experiences of the individual or included in adult education programs; and 4. Occupational Education which is usually part of the traditional learning within the family or included in special training programs. Both the government of Guatemala and USAID have been involved in meeting all of these needs.

The methodology used in this study was composed of a review of the available documents and informal interviewing. All of the documents on USAID related projects since 1950 were reviewed. These same projects found in the documents were discussed with personnel in AID and the Guatemalan government in terms of goals, activities, organization and the results. Finally, visits were made to selected communities of the rural highlands to verify the material found in the documents and earlier interviews.

Prior to the study of project documents, an investigation was made to determine the context in which education takes place in the rural highlands. It was found that Guatemala has the largest population in Central America, almost 60% rural, with a density only surpassed by El Salvador, and has the highest proportion of Indian population in the region. The population is growing at a rapid rate and 43% are below 15 years old. Over half of the economically active population are engaged in agriculture although the land is highly concentrated in the hands of few owners and the economic product is unevenly distributed with the poorest 20% only receiving 6% of the product. The nutrition and sanitary conditions are also low.

There are many problems directly related to education and particularly education in the highlands. They have been summarized as follows: isolated villages, migrant labor, perception of little utility in education and especially for girls, low quality of instruction, highest failure rates, high dropout rate among Mayan children, children working, few textbooks, as well as out of date and irrelevant course content.

As for the adult population in the rural highlands, in the early 1980's it was found that 22% could not sign their names and only about 1/3rd could read simple sentences and could be classified as functionally literate; only about 40% had had any schooling and about 20% only had finished 4th grade. Further, for those of Mayan language background, 47.8% were without any schooling and had little knowledge of health practices or agricultural technology. There were 68.6% that spoke a Mayan language in the western region.

The United States Government has assisted Guatemala in a number of educational projects, starting in the 1950 with some of regional nature. The projects conducted under the auspices of USAID have been grouped in five areas: 1. school construction; 2. rural primary education; 3 non-formal education, 4. bilingual education and 5. educational administration. These projects have been generally successful and there are some "strands" that can be traced through these AID sponsored projects and into the present educational system in Guatemala. Some examples of this are: 1. The construction practices that were used in the PEMEP schools served as an example for later construction because they were not destroyed by the earthquake; 2. The training program that was started in the Normal School at Sta. Lucia Utatlan was helpful later in starting the Bilingual Education project; 3. The program that was used to help 'maestros empiricos' upgrade their training in the 1960's served as a model to upgrade the 'promotores bilingues' in the 1980's; 4. The process of participatory investigation that was used by the early 'promotores sociales' helped establish a method of community investigation built into other programs later; 5. The curriculum review that started in the PEMEP program was the idea behind later sector-wide curriculum reform; 6. The 'metodo eclectico' used in the early pilot schools was responsible for later changes in primary education; 7. Much of the experience of the 'castillanizacion' program was incorporated in the later bilingual education program; 8. The idea for regionalization got a strong push in the teacher's discussions during the 'encuentros educativos' which USAID helped sponsor.

After reviewing the documents, conducting the interviews and visiting the local communities there are some impressions that are presented with the caution that they are based on limited investigation. These impressions are: there is a continued need for educational assistance because the problems are greater than before; educational assistance must be more than traditional in-school learning if the needs are to be met; some means must be found to get resources directly to the local community level

without always going through the sometimes-cumbersome bureaucracy of central government; the local "promoters" that have been trained over the years continue to be very effective although a number of them were killed during the violence; professional envy has often accompanied AID (and other internationally-sponsored projects because of resource availability that others did not have; radio education projects have been successful although not all of the elements of the original success have been continued; regionalization is being worked on but still is far from a reality in operation; the bilingual program is working well and the participants see this and the scholarship program opening up new channels for needed social change; even though outside help is needed, local participation is important and the agreements that are made for assistance should be known to leaders at all levels; and, there is a need for simple literature to help in the radio education and post-literacy programs.

Finally, the impressions convert to a number of recommendations: 1. continue the bilingual program and push for more bilingual-bicultural persons in decision making positions; 2. provision of support services for teachers; 3. development of a radio education program to compliment the primary school program; 4. strengthening of educational administration; 5. continue the scholarship program for rural highland students; 6. start an independent program of educational research; 7. support the formation of interagency councils at the regional and community level; 8. work to establish more local school committees; 9. give special emphasis to post-literacy written materials; 10. make the details of project agreements known to regional and local leaders; and, 11. free AID project related personnel so that they can make frequent field visits.

II EDUCATION FOR DEVELOPMENT IN THE RURAL HIGHLANDS OF GUATEMALA

USAID has been involved in many development projects and programs in the period of time covered by this cross-cutting evaluation. Every project has had an educational component or at least included some training activities. These activities have varied from counter-part instruction and guidance to lengthy programs of formal education or scholarship programs. Many of these projects have included the people of the rural highlands in their target audience.

In Guatemala, as throughout the developing world, rural people comprise the majority of the population and almost all of them are potential clients for some type of educational activity. Despite the migration to urban areas, and a lowering proportion of rural population, the real number of people living in the rural areas continues to increase and the educational needs along with them. There is also an ever increasing proportion of the rural population that are children and youth due to high birth rates and the increasing infant survival rates. This younger sector of the population makes special demands on the educational resources of the country.

Population pressure also makes additional demands on educational facilities in that agricultural production, land use, natural resource limitations and the need for new rural employment opportunities make new knowledge a necessity even to maintain a constant level of living for the new generations. If improvements in the level of living are expected, then the need is even greater.

There are four areas of needs that are useful in looking at education for rural development:

> "1. GENERAL OR BASIC EDUCATION: literacy, numeracy, and elementary understanding of science and one's environment, -- what primary and general secondary schools seek to achieve.
>
> 2. FAMILY IMPROVEMENT EDUCATION: designed primarily to impart knowledge, skills and attitudes, useful in improving the quality of family life, on such subjects as health and nutrition, homemaking and child care, home repairs and improvements, family planning, and so on.
>
> 3. COMMUNITY IMPROVEMENT EDUCATION:: designed to strengthen local and national institutions and processes through instruction in such matters as local and national government, cooperatives, community projects, and the like.

4. OCCUPATIONAL EDUCATION: designed to develop particular knowledge and skills associated with various economic activities and useful in making a living". (Coombs and Ahmed, 1974.)

These four areas of need are met through formal, non-formal and informal educational activities. Formal educational activities are carried out in the schools to need many of the needs. There are also many nonformal educational activities that are carried out in an organized fashion but outside of the school. Agricultural extension education is a good example of this. The informal educational activities such as radio listening and newspaper reading are also an important means for learning even though they may not be organized as such. Even in traditional society, informal learning is an important means of learning the necessary skills for survival. The USAID program in Guatemala has assisted in educational programs that have addressed almost all of the needs listed in the four areas above. Both formal and nonformal types of programs have been sponsored. It is likely that a great deal of informal education has also resulted from past AID programs as well, although not always intended.

The following sections of this report, will address both the educational needs of the rural highlands as well as the projects that have been part of the USAID assistance during the past few years. These are reviewed through documents, through contacts with both AID and Government of Guatemala officials and, most important, at the field level.

III STUDY METHODOLOGY

The principal focus of this study has been the effect of USAID sponsored projects on education in the rural highlands of Guatemala over the past few years. I was looking for evidence of the effectiveness of long range committment by USAID in the solution of education related problems. I was also looking for the effectiveness of coordination and cooperation of USAID sponsored projects with other projects, programs and agencies.

My study activities included: review of documents, discussion with personnel from USAID, Government of Guatemala, project agencies, regional administrators, and external informants. I also tried to visit as many communities as possible to talk with teachers, students and parents as well as see the buildings, equipment and and educational materials.

The list of documents consulted is found in Appendix A. There is also a list of contacts found in Appendix B. I used the GUIDELINES FOR INTERVIEWING AND DOCUMENT REVIEW found in Appendix C for all of the study activities.

In the review of documents I tried to identify the education related problems in the rural highlands and how they changed over time. At the same time I was looking for the USAID education related projects that were destined specifically for the rural highlands and how they were connected to the problems. Finally, I was looking for evidence of impact from the projects. Evaluation reports were not available on all of the projects but these were included in the review when available.

In my interviews with people at different levels I was looking for verification of the the things found in the documents. I also requested additional names of people that should be interviewed and additional documents that should be reviewed. The lists "snow balled" to the extent that they were longer than the time available to exhaust them.

The visits to the local communities were the most important aspects of verification but not always the easiest. I was looking for material evidence of project impact (school buildings, teaching materials, students, etc..) and for the perceptions and opinions of those related to the programs. In many situations this required an interpreter and the help of a person who had access to the community.

Approximately one week was given to each of four activities: document review, interviewing agency personnel, field visits and report writing.

IV THE SETTING FOR RURAL EDUCATION IN THE GUATEMALAN HIGHLANDS

Rural education in the highlands takes place within a national socio-economic context that is important to outline at the onset. Basic indicators from the available documents are listed in the following paragraphs. (Material taken from Bogue 1985; Diaz-Briquets 1986; Seligson 1989; USAID Guatemala 1988a; and World Bank 1988.)

A. GENERAL SITUATION IN GUATEMALA: (Where appropriate, a comparison is made to other countries in Central America)

1. Total population = 8.2 million, the largest in Central America.

2. Rural population = 59%; only surpassed by Honduras.

3. Population density = 201 per square mile; only surpassed by El Salvador.

4. Racial/cultural mix = 55% Indian and 30% Spanish; highest proportion of Indians.

5. Population growth in 1980's = 2.9%; only surpassed by Honduras.

6. Population under 15 years of age = 43%; only surpassed by Honduras.

7. Economically active population engaged in agriculture = 55%; only surpassed by Honduras.

8. Per capita GNP = $930; with lowest 1/5th receiving 6% and highest 1/5th receiving 55% of total GNP.

9. Proportion of land used in crops = 16%; only surpassed by El Salvador.

10. Crop land per each 100 population = 20 hectares; only El Salvador has less.

11. Farm size: 78% of the farms have less than 3.5 Hectares but this accounts for only 10% of the total farm area. At the same time only 1% of the farms are over 450 Hectares and this includes 34 % of the total farm area of the country.

12. High malnutrition levels for children under 5 years old with 72% having "some malnutrition" and 34% being classified as "at risk".

13. Toilet facilities: 60% with no toilet facilities.

B. GENERAL EDUCATIONAL SITUATION:

More specifically, rural education in the highlands takes place within the general context of education for the country as a whole. The following information is gathered from the most recent documents available.

1. Literacy rate = 52%; the lowest in Central America.

2. Percentage of primary age in school = 69%; the lowest in Central America.

3. Percentage of secondary age in school = 16%; the lowest in Central America.

4. Educational Investment = 1.8% OF GDP and lowest in Central America.

5. Proportion of national budget in education = 16.4%.

C. THE SITUATION OF PRIMARY EDUCATION:

1. Proportion of education budget for primary = 43%; as compared to 53% in 1974 and 69% in 1966.

2. Proportion that finish primary = less than 50%.

3. Repeat drop-out rate: 18.9 instruction years required for each person finishing primary; was 52.9 years in 1978

4. Proportion of multiple grade classrooms = 90%.

5. Present total classroom capacity is only equivalent to the approximate number of children of first grade age.

6. Slightly more than half of the children who enter the first grade do so at age 7. A few enter at age 6, the others at 8, 9, or 10 years. Primary consists of six grades, so that a child who enters at age 7 and completes the 6th grade without failing is 12 or 13 years old upon completion of primary school.

7. Course content or materials in local schools is not centrally controlled so there is great variation from school to school.

8. Many schools have no blackboards or furniture; many students have no pencil or paper.

D. THE SITUATION WITH TEACHERS AND TEACHER TRAINING:

1. Presently 20,000 normal school graduates although not enough to cover all eligible students if enrolled.

2. Normal schools have been evaluated as "overgrown, underqualified, misdirected, discriminatory, inbred and inefficient".

3. School supervision is considered lacking with few visits and inadequate coverage.

4. Teacher identification with the local community is considered low with most teachers commuting from other areas and, in spite of the gains from the bilingual program, many do not speak the local language.

5. Inservice teacher training has helped to upgrade the level of preparation of many teachers that did not have a degree.

6. The course content of primary education is considered highly urban oriented.

7. Most of the education budget (90%) is dedicated to salaries which leaves little for materials and supplies.

E. CHARACTERISTICS OF RURAL EDUCATION IN HIGHLANDS:

In spite of the programs that USAID, the Government of Guatemala and other international agencies have carried out in the last few years, the needs are greater than ever before for assistance. All of the problems that stem from the general situation listed earlier are found in the rural highlands. Other reports have summarized the situation with the following: isolated villages -- migrant labor -- perception of little utility and especially for girls -- low quality of instruction -- highest failure rates -- high dropout rate among Mayan children -- children working -- few textbooks -- out of date and irrelevant course content -- etc..

In 1984/5 it was found that 22 % of the rural adult population could not sign their names and only about 1/3rd could read simple sentences and could be classified as functionally literate; only about 40% had had any schooling and only about 20% had finished 4th grade. Further, for those of Mayan language background, 47.8% were without any schooling and had little knowledge of health practices or agricultural technology. There were 68.6% that spoke a Mayan language in the western region.

F. GUATEMALAN GOVERNMENT EDUCATIONAL POLICY IN THE 1980'S

The government of Guatemala, with the help of USAID and other international agencies, has tried to remedy some of the problems present earlier. The education policy during the last 10 years has been directed at: extension to rural and other marginal areas and at the same time more depth in programs; more bilingual coverage; promotion of literacy programs; increase materials, equipment, furniture and textbooks; revise primary and secondary content with special emphasis on technical and occupational courses; reorganize structure to provide a national center for textbooks and materials; creation of a new school building unit; reorganize the personnel directorate; create a bilingual program (PRONEBI); and create an education research and planning sector (USIPE).

The following offices have been established within the Ministry of Education in order to better meet the educational needs:

-DEPARTMENT OF RURAL PRIMARY EDUCATION which is the operating agency for the rural primary schools.

-DEPARTMENT OF MATERIALS PRODUCTION which prepares teaching materials for rural schools.

-PAIN, a program to assist pre-school children and their mothers in marginal urban and rural areas, sponsored by UNICEF.

-PRONEBI, the program with responsibility for the bilingual program which operates at pre-primary and primary levels in areas where there are high concentrations of indigenous people with special supervisors.

-DIRECTORATE OF AESTHETIC EDUCATION which provides supervision and in-service training in the fine arts to teachers in the capital.

-DIRECTORATE OF GENERAL SUPERVISION which provides supervision to areas outside the capital. In each department, there is at least one supervisor, who is responsible for servicing primary and secondary schools, both public and private. In larger departments there is a head supervisor with supervisors of districts within the department. All of these are responsible for both primary and secondary education.

-DIRECTORATE OF PHYSICAL EDUCATION AND HEALTH which supervises physical education in the primary schools. The supervisors attached to this office are responsible for activities in the capital city.

-CENTER FOR AUDIO VISUAL PRODUCTION which is responsible for preparing materials and distributing them to schools. Eight sub centers are distributed throughout the country to perform this

function in the regional areas.

-NEPADE, which succeeds the FARMERS' SCHOOL. These centers for development have a central and satellite schools to offer a complete primary school in isolated rural areas. The central school provides grades 4 to 6, and the satellite schools offer grades 1 to 3.

-NATIONAL SCHOLARSHIP PROGRAM FOR INDIGENOUS STUDENTS. Proposed as a 'talent search' to select Mayan students who can move directly into universities. Should provide 200/ year.

-UNIVERSITY RESIDENT CENTER FOR INDIGENOUS STUDENTS. This also should help in fostering university study in the Guatemala City centers.

-NATIONAL EDUCATIONAL ASSOCIATION OR FOUNDATION OF INDIGENOUS PROFESSIONALS. This was established as a support mechanism for Mayan professionals based on a group of about 20 that now exists.

-NATIONAL DIRECTORATE OF NON-FORMAL EDUCATION. Established in 1982 to coordinate the adult and non-formal educational needs.

As can be noted from the information presented in this section, there are many problems that exist in the rural highlands. It can also be noted that there are already institutional structures in place to work toward their solution. The projects that USAID has participated in have helped in the development of some of these institutions. The next section reviews these projects.

V SUMMARY OF USAID EDUCATION PROJECTS

A full abstract of each of the education projects that USAID has participated in since the late 1960's is available to the Mission but has not been included here. The projects are grouped here in the general areas of: 1. school construction, 2. rural primary education, 3. non-formal education, 4. bilingual education, and 5. educational administration. The format used by Seeley (1983) in his evaluation report is a useful guide in summarizing the USAID projects here.

SCHOOL CONSTRUCTION: Construction components were included in a number of projects (015, 025, and 029). Most of the construction has been directed at primary education although there are no figures to indicate what proportion of this was destined for the highlands. Much of the construction was functionally designed to meet changes in course content. The sites were well selected although in the reconstruction projects the space was often limitted. The size of the buildings was adequate at the time of building but soon were too small for the enrollment. There were some problems in the latrines built in the early projects but this was improved in the later ones. Not all of the special facilities have been used efficiently and maintenance has been a problem. The basic construction of the early schools has withstood time and earthquake damage and served as a model in later construction.

RURAL PRIMARY SCHOOL EDUCATION: Curricular reform was included as a part of a number of the USAID sponsored projects (015, 025, and 029). Teacher training and textbook preparation was also included in the same projects. The concept of regional/satellite schools was included in two of the projects (015 and 025). In evaluating the outcome of these early projects it was concluded that many of the changes that have taken place in the primary school curriculum would not have taken place without USAID help and there has continued to be a spread effect. The textbooks were a great help but the supply soon became inadequate and now is almost nonexistent. Special audio visual and vocational related equipment that was provided did not work out well. The regional-satellite concept worked well at first but has since been generally discontinued.

NONFORMAL EDUCATION: There have been a number of USAID related nonformal education projects in Guatemala (228, BVE and 281). Radio education was an important part of this effort. In the early evaluations it was found that this provided a low cost and effective medium to get messages to the rural populations. It was also found to be effective to reach people in the highlands in their own language. In part, the effectiveness was due to the personal contact of trained promoters called 'monitors'. This

effort has since been taken over by the Guatemalan Ministry of Education and the idea has also been used in other sectors. The promoters are no longer a direct part of the BVE program and the content of the programs does not seem to be as appealing to the listeners. Interagency coordination has also been more difficult in recent years so that there is some duplication of effort.

BILINGUAL EDUCATION. The Bilingual Education project (258) is similar to the earlier "castellanizacion" project that was operating in the 1960s. It has been an effective means of improving retention and promotion in the highland schools and has been evaluated as highly successful. During the violence there was some opposition to the use of Mayan languages and many of the educators and linguists were considered a threat and killed. At the present time the program seems to be working very well.

EDUCATIONAL ADMINISTRATION. A number of the USAID assisted projects have had administration strengthening components. At the time of the Seeley (1983) evaluation it was too early to judge the impact. The lack of job continuity of high level personnel was noted in an earlier assessment. With the frequent changes in Ministry of Education personnel due to changes in government, the trained person may not be in the position long enough to make an impact although it does help produce a cadre of trained persons for future programs.

THREADS AND STRANDS RUNNING THROUGH AID PROGRAMS. During the verification interviews and community visits I was given examples of a number of strands of past USAID projects that run through later projects and ongoing educational programs; (some of them may be unintended):

1. The construction practices that were used in the PEMEP schools served as an example for later construction because they were not destroyed by the earthquake;

2. The training program that was started in the Normal School at Sta. Lucia Utatlan was helpful later in starting the Bilingual Education project;

3. The program that was used to help 'maestros empiricos' upgrade their training in the 1960's served as a model to upgrade the 'promotores bilingues' in the 1980's;

4. The process of participatory investigation that was used by the early 'promotores sociales' helped establish a method of community investigation built into other programs later;

5. The curriculum review that started in the PEMEP program was the idea behind later sector-wide curriculum reform;

6. The 'metodo eclectico' used in the early pilot schools was responsible for later changes in primary education;

7. Much of the experience of the 'castillanizacion' program was incorporated in the later bilingual education program;

8. The idea for regionalization got a strong push in the teacher's discussions during the 'encuentros educativos' which USAID helped sponsor;

VI IMPRESSIONS

After reviewing the documents, talking with agency personnel and visiting the field, I am left with a number of impressions related to rural education in the Guatemalan Highlands and the role of USAID intervention. These are presented with a warning that they are impressions based on only four weeks of study and less than one-third of that spent in field verification. My previous work in EDUCATION BASICA RURAL and EDUCACION EXTRA-ESCOLAR have helped in the investigation as well as the years spent in rural education and agricultural projects in other countries in Latin America, yet these impressions would need further verification before they could be taken as fact. I hope they will serve as points worthy of consideration as plans are made for future USAID activities in Guatemala.

CONTINUED NEED FOR EDUCATIONAL ASSISTANCE: In spite of the success of AID and GOG educational projects in the past, the actual number of unschooled in Guatemala may have actually increased due to population growth. At the same time that population increases have added pressures on the educational facilities, the educational expectations of the people have also increased so that the situation may be more desperate today than it was ten years ago. Specific recommendations for this continued USAID assistance are found in the section that follows.

EDUCATION FOR DEVELOPMENT. It is also clear that traditional educational programs are not enough for the development priorities of Guatemala . Some of the pioneer work done by PEMEP and other AID assisted programs in the past have helped in the introduction of new information, attitudes and skills in the educational sector in Guatemala. In the examination of other sectors such as agriculture and health it is clear that there are problems such as population increase, soil erosion, marketing, etc.. that must become part of the school instruction programs as well as in the non-formal educational programs if development needs are to be met. Radio education, scholarship programs, post-literacy reading materials, and interagency coordination can all help meet this need.

EDUCATION AND THE PRIVATE SECTOR: A comment in the evaluation report on one private sector project states: "it is probably not prudent to select an inexperienced PVO to manage a large complex rural non formal education program". This might lead us to believe that unless projects are channeled through the regular governmental institutions they can not be carried out successfully nor are they likely to be continued later. In almost every community we visited there were requests for assistance with local projects. These are not really private

individual initiatives but they represent community projects that the people themselves have initiated and lack part of the resources necessary to carry out. For example, the EEE program works with the people to analyze their needs, organize and then work on projects of mutual benefit. If a fund such as the AID Small Projects Fund were available to them, it would offer assistance outside the regular public sector channels and could strengthen local initiatives as a result. The 8% municipal fund is another way to get resources directly to the local community.

IMPORTANCE OF COMMUNITY 'PROMOTORES': The work of the 'promotor' was mentioned in the documents and verified in the discussions with agency personnel and in the local communities. Some have told me that there are likely more than 3,000 that have been trained since the first program for "Promotores Sociales" was initiated more than 20 years ago. Others have said that this was one of the most important investments that AID has made over the years in strengthening the local communities. I am told that these workers have moved to different agencies as one project is phased out and another begins but remain close to the community as leaders, organizers and brokers to outside services. The bilingual training program, scholarships, local and regional coordination of development projects, and post literacy printed materials are all ways to strengthen the work of the promoter.

PROFESSIONAL ENVY AND AID RELATED PROJECTS. One of the problems that is hard to prevent is that of professional envy when special resources are available for some projects and not for others. This is true with the Bilingual Education Program, yet there is little doubt in the minds of many that the resources that were invested in this program would not have reached the proposed destination if a new parallel structure had not been established. Still, it has created some envy when there are materials and supplies available in one situation and not in another. This is the dilemma of financing new projects; new structures must be established to make it work and yet the backlash of envy may kill it when the experimental stage is over. Even during project life it can prevent necessary inter-departmental and inter-agency cooperation. I did not sense it at a destructive level in the present AID projects yet it is there and a reality to be considered in all projects. One suggestion made by an agency official was that there is little envy when projects focus on areas where there are few services available, therefore, USAID might want to consider placing projects in those kind of areas.

RADIO FEEDBACK SYSTEM. When the Basic Village Education project was in its experimental stage, it was found that the Monitor (a type of local promoter) was an essential part of the message delivery system. It was also found that this person played an important role in feed-back so that the message stayed on target and helped the impersonal mass-media become more personal. The monitors were not included in the ongoing program and I was told

by some of the farmers that this was one of the reasons why they were not following the agricultural advice as they did before. I'm sure there are other reasons as well but it could be an important part of future radio-related programs and included in the proposed project for radio supplements to primary education.

RADIO CREDIBILITY. I found in the past and again in this trip that radio stations work hard to gain credibility and even harder to maintain it. In the early life of the Basic Village Education program we found that credibility was lost when market information was given to the station and the farmers acted on that information only to find out later that it wasn't true. I found the same thing true in my visit to the radio station in Momostenango this time. They had developed a close relationship with the local health committee and had helped with a very successful vaccination campaign. On the other hand they admitted that they were reluctant to push other educational campaigns too hard because too often the agency did not follow through. This is important because marketing seems to be crucial in the new agricultural diversification program and marketing information by radio could help. Radio stations will be reluctant to broadcast it if it is not accurate. Radio credibility is an important factor to consider in the proposed primary radio education project. It is also important when radio is a part of coordinated development projects at the community and regional level.

THE REALITY OF REGIONALIZATION. I found a great deal of interest in the plans for regionalization of the educational sector. In my discussions in Guatemala City I had the impression that things were moving along rather well but this was not confirmed in the field. Instead of long lines in Guatemala City for teacher appointments, at least part of this process is now carried out in the regional offices. Yet, I was told that the confirmation of the appointments is still done in Guatemala City and that is where the decisions are made. I had expected more enthusiasm for regionalization in the field than in Guatemala City but did not find it. Regionalization will need continual reinforcement in the future. Perhaps it could be strengthening by allocating some USAID resources directly to the regions. The recommendation on administrative strengthening also is related to this concern.

CHANGES IN MINISTRY PERSONNEL. This topic came up while discussing the success and failure of AID related projects of the past. Frequent changes in project personnel over the life of the project were cited as one of the problems inhibiting project success. Politics was the most frequent reason given for this. It is interesting that the lack of continuity in AID personnel was also mentioned. Decentralization and working through non-governmental organizations could help with this problem. (See recommendations No. 4 and 6).

BILINGUAL PROGRAM AND CULTURAL PRIDE. There must be some weak spots and difficulties in the Bilingual program but I didn't hear them at any level. In the field, I visited many schools and talked with the teachers, promoters, supervisors and students. The conversations usually started out calm but often became emotional. The dignity of being addressed in your own language and feeling respect for your own cultural heritage seems to be a reality. More than once I heard the phrase, "look at me, I am living proof that this program works"! The improvement in retention and promotion rates for the early primary grades is also impressive. This program certainly should be continued and expanded.

EDUCATION AND MIGRATION TO THE COAST. The seasonal migration of highland workers to the coast is a topic addressed in the agricultural sector report and it also relates to education. At the time of our visits to the highland communities during this study we found that many of the schools were not in session although the school year had officially started. One of the reasons is the absence of the father from the home due to coastal work. Sometimes the whole family is away but even if it is only the father it effects the children attending. One teacher told us that a number of the families would not have the modest registration fee until the father returned. He also said that the children sometimes had to stay home to work until the father came or often they just needed the extra push of the father's authority to get them there. Because of the increase in off farm work, this is a difficult problem to solve. The formation and strengthening of local school committees could be a help. I sensed in one situation that the school-community relationship was antagonistic and weak in others. (See recommendation No. 9)

EDUCATION, VIOLENCE and SUSTAINABILITY. We were told that during the violence the Mayan languagE radio broadcasts were suspended. The example was given of two broadcasters that did not heed the warning and were later ambushed and killed. The Basic Village Education station was off the air for eight months during that period due to a transformer failure; they were also warned. I was also told that at least 200 promoters were killed during this period; partly because of the close identification with the communities and their leadership position. Examples were given of whole communities that had to leave their territory and how the promotors served as guides and brokers when they located in new area. The 'brokerage' role was one that they had been taught and used previously as they contacted outside agencies for information and other resources for community projects. The training and use of promoters here been built into a number of the AID assisted projects. This has worked out well and should be continued. A number of the recommendations are indirectly related to the training and use of promoters. (See recommendations 1, 2, 3, 8, 10 and 13).

IMPORTANCE OF CONSULTANTS. There was some comment on the role of national and international consultants on AID related projects in the past. It was suggested that more care should be used in their selection and that they should be in the right place at the right time. (See recommendations 12 and 14.)

POST-LITERACY PROGRAMS. The common problem of literacy program followup found throughout the world was mentioned here also. There is a lack of good reading material for those that finish the first stage so that many revert back to illiteracy. Our own study, conducted in Guatemala in 1980, concluded that simple but practical literature served as an incentive for adults to participate in literacy programs and helped them carry the skill on to a functional level. (See recommendation 10.)

LOCAL PARTICIPATION. The importance of local participation in projects was mentioned in a number of the interviews. One example that was given was the "tri-partita" approach where the government agency, the municipality, and the local community worked together on projects. This seems to follow the findings of a recent World Bank review of projects conducted over the last 20 years. They found that local participation was a key element in lasting project success. (See recommendations 7, 8, 9, 12, 13 and 14.)

WOMEN IN DEVELOPMENT. We found that almost half of the promoters that have been trained in the Educacion Extraescolar program are women. About half of the bilingual teachers that we talked to in the schools were women. There were more men than women enrolled in the bilingual teacher training program at the Sta. Lucia Utatalan Normal School. This is an important aspect that can be included in the future scholarship programs. It can also be part of a policy to appoint bilingual-bicultural people in administrative positions. If it were part of the project agreements that were public knowledge, it would soon be implimented. (See recommendations 5, 11 and 12.)

THE IMPORTANCE OF SCHOLARSHIPS. This was mentioned particularly in the bilingual program. The feeling that access to key educational positions will only become open to those who are prepared was expressed by a number in the program. They also felt that some of the scholarships that were designated for students of Mayan background had not always been used for that purpose.

The bilingual program was contrasted to earlier programs that seemed to some to be promoted 'to help the rural Mayan population' although the actual benefits went in a different direction. This seemed to be one of the important factors in the favorable response.

There seemed to be general knowledge of the contents of the recent project agreements among the project supervisors even at the field level. They also seemed to be willing to call public attention to any apparent diversion of resources and felt it their moral duty to do so. In the use of scholarships as well as any other resource that becomes available through USAID assistance, it is important that the agreements be known at the field level. This is one way that accountability can be improved and is of particular importance in the rural highlands. (See recommendation 12.)

VEHICLE FOR SOCIAL CHANGE. I found that the bilingual-bicultural aspect of the recent programs gave new hope to those that felt marginalized and frustrated before. Some expressed the belief that there were now peaceful opportunities for needed social change rather than violent confrontation. Access to training, skills and decision making positions made this possible. (Recommendations 1, 4, 5, 7, 8, 9, 11, 12, and 13 are related to this point.)

The specific recommendations that are related to these impressions are found in the following section.

VII RECOMMENDATIONS

In terms of recommendations, I found those included in the strategy paper entitled, "USAID-GUATEMALA EDUCATION STRATEGY FOR 1990-1994" in line with my observations and worthy of listing here.

1. "Continue support for the development, improvement, institutionalization and expansion of the BILINGUAL EDUCATION program through PRONEBI". The importance of this project was verified throughout the study.

2. "Provide a series of support services directly to primary school teachers working in the classroom through inservice training, teaching materials, and achievement testing". The teaching materials are an important part of training if teachers are to move beyond the philosophy that "teaching is telling" to one of "learning is based on dialogue and discovery". Supervision is also a needed part of support and each visit of the supervisor can be an inservice training opportunity.

3. "Develop and pilot test on a medium scale at least two different alternative nonformal primary education delivery systems using the RADECO model from the Dominican Republic and the ESCUELA NUEVA model from Colombia". The PARAGUAY RURAL RADIO EDUCATION model might also be useful because of the bilingual nature of the students in that program. There is another outcome from this kind of education that is not always anticipated. It was found in Paraguay that all of the teachers wanted the workbook materials prepared for radio listeners. Radio educational materials, to be effective, must be very well organized and the learning objectives well outlined. The product was a workbook that served well in any learning situation.

4. "Support improvement of education administration through: technical assistance and training in administrative procedures; decentralization of administrative functions by helping move decision making to the regional centers and communities; helping in gathering and disseminating management information; and providing computerized data links from the central MOE offices to the regional administrative offices". The information system should start with a minimum level of useful information so that it does not bog down as has happened in many other cases. Perhaps more important than the development of a technical system for management information is the opportunity for individuals to learn new management and supervision techniques. Lack of management skills was one of the frequent problems mentioned at all levels during this study.

"Regional administration strengthening" will need all of the help that it can get but it is philosophical as well as technical. The present appointment system is related to power and patronage and this will change only slowly. At the community level, the school is seen by some as "an alien institution" that is someone else's responsibility.

5. "Continue to seek ways to improve the access of underprivileged and indigenous students to higher education through scholarship and training programs such as the ALTIPLANO HIGHER EDUCATION and MERIT SCHOLARSHIP programs". This should also be integrated with the other sector development plans so that Mayan speaking professionals can be prepared in health and agriculture.

6. "Support a program of independent educational research that will provide accurate and useful statistics for the measurement of the progress of educational development for a period of at least ten years". This should have a strong "bottom-up" approach so that the information gathered at the local level will also be useful in planning and decision making at that level. It is important that the philosophy and methodology of "participatory investigation" be part of this strategy. The independent nature may help give the continuity that is needed for this type of project. It also may serve as a model for other educational services that can best be provided through non-governmental organizations.

In addition to those strategies found in the 1990-1994 planning paper, I would like to add some related recommendations. Some are already included in the planning paper but they are worthy of listing separately.

7. Support regional interagency (education, health, agriculture, etc..) development councils that will provide a forum for discussion and coordination of development efforts. This might be done through providing funds for 'interchange seminars' or some other forum setting. This will need further discussion in USAID circles so that all sectors can work together.

8. Support and encourage community efforts to bring the teachers, promoters and other agency representatives together for coordination of development activities and better use of resources. This is the same idea as presented above but now focused at the community level. This was one of the ideas behind Educacion Extraescolar but it seems to have gotten lost. It cannot be done unless other sectors, such as health and agriculture are behind it.

9. Work toward the formation and strengthening of local school committees. This can be part of the inservice training of teachers and supervisors but will need to be specified if it is to happen.

10. Give special emphasis to the production of post-literacy materials related to daily life activities (health, agriculture, family life, cultural traditions, etc..) that can be used by those finishing the literacy programs, the radio-education programs and those that have finished the third grade primary school classes.

11. Continue to support the placement of bilingual-bicultural persons in decision making positions in the educational agencies. This should also include the placement of women in these positions.

12. Continue to make the details of the USAID/Guatemalan Government agreements available and known to regional and local leaders so that functionaries are held accountable for their actions.

13. Reactivate the AID fund for community self-help projects so that communities can have direct help to compliment local resources. The important thing is for communities to have access to direct help at the local level for projects that they are already working on. The new municipal fund can also help with this need and may be the best answer in the long run. This recommendation is also one that needs multi-sector consideration.

14. Make it possible that all AID personnel with project responsibilities be able to make random site visits at the beneficiary level as part of monthly duties. This will require that they be free from central office meetings and reports for a period of time each month. In the Seeley (1983) report it was noted that small (and large) "bottlenecks" were often responsible for the delay and failure of some important aspects of educational projects in the past. I also have the impressions that this is the case now. It often takes a personal visit to the end point of the delivery system (the client or beneficiary) to detect this. There is a greater chance of a timely remedy if these visits are done periodically. I would also recommend that beneficiary visits be built into the local agency personnel scope of work.

APPENDIX VIII.1

LIST OF DOCUMENTS

AED. 1978a.
Guatemala Education Sector Assessment. Washington: Academy for Educational Development and LA-DR-EHR-Agency for International Development.

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APPENDIX VII.2

LIST OF CONTACTS

Gordon STRAUB - ORD USAID-G - 11 January

Richard MARTIN - OHRD USAID-G - 11 January

Gilberto MENDEZ - OHRD USAID-G - 13 January

Patricio BARRIGA - Former project leader EDUCACION EXTRA ESCOLAR - 18 January

Lic. Buenaventura DE LEON - CONALFA - Guatemala City - 20 January

Lic. Jose Maria GALINDO - CONALFA - Guatemala City - 20 January

Lica. Mercedes GUNTHER - USIPE - Guatemala City - 20 January

Lic. Felix SARAZUA Patzan - SOCIO EDUCATIVO RURAL - Guatemala City - 23 January

Director, Administrator and Sub-Director of ESCUELA DE FORMACION AGRICOLA - Solola - 24 January

Sergio JIMENEZ Guerra - Administrator, ESCUELA NORMAL DE SANTA LUCIA UTATLAN - Solola- 24 January

Bilingual Promoter - Regional Primary School - Xekemeya of Momostenango - 25 January

Community work group - Water Reservior Project - Xekemeya Centro, Momostenango - 25 January

Farm family with mini-riego and gardening project - Xekemeya Centro, Momostenango - 25 January

Jose Francisco GUINEA - Director, RADIO MOMOSTENANGO - Momostenango Centro - 25 January

Faustino POROJ - Former team leader in EDUCACION BASICA RURAL - Momostenango Centro -25 January

Radio station personnel -RADIO MOMOSTENANGO - Momostenango Centro - 25 January

Farmers - Former members of EDUCACION BASICA RURAL radio forum groups - near Momostenango Centro - 25 January

Administrator BANDESA - Momostenango, Centro - 25 January

Prof. Siguantay - Supervisor EDUCACION BILINGUE - Nahuala Centro - 26 January

Group of six teachers in EDUCACION BILINGUE training course - Nahuala Centro - 26 January

Ofelia TAHAY Gomez - Coordinadora de CONALFA - Nahuala Centro - 26 January

Teachers and site visits at three EDUCACION BILINGUE primary schools in cantones: XEPATUJ, PALANQUIX and PATZITE of Nahaula - 26 January

Lic. Gmo. RODRIGUEZ - Regional Coordinator, EDUCACION EXTRA ESCOLAR - Quezaltenango Centro - 27 January

Directors of planning, training and radio material preparation - EDUCACION EXTRA ESCOLAR - 27 January

Lic. Jose Camilo CHAN Ajche - Regional Coordinator of PRONEBI - Quezaltenango Centro - 27 January

APPENDIX VII.3

GUIDELINES FOR INTERVIEWING AND DOCUMENT REVIEW

A. WHAT ARE THE IMPORTANT EDUCATION PROJECTS?

B. WHO ARE THE IMPORTANT CONTACT PERSONS?
(AID,MOE,AGENCY,EXTERNAL,REGION,COMMUNITY,CLIENT)

C. FOR EACH PROJECT:
WHAT PROBLEMS/NEEDS ADDRESSED

WHAT WAS TARGET GROUP

WHAT WERE GOALS AND OBJECTIVES

WHAT WERE EXPECTED OUTCOMES/INDICATORS

HOW WAS IT ORGANIZED AND ADMINISTERED

HOW WAS IT RELATED TO OTHER PROJECTS/AGENCIES

WHAT WERE MAJOR ACTIVITIES

WHAT KIND OF CONSTRAINTS

WHAT WERE THE MAJOR OUTCOMES/RESULTS

WHAT UNEXPECTED OUTCOMES

WHAT COSTS/BENEFITS

WHAT REMAINS TODAY

WHERE ARE THE CLIENTS TODAY

WHAT LEARNED

WHAT ELSE NEEDED/NOW OR FUTURE

WHO ARE KEY INFORMANTS

WHERE DOCUMENTATION

D. OUTCOME MEASUREMENTS -- HOW MANY:

PEOPLE PARTICIPATING

WHAT LEVELS

WHAT LANGUAGE/S

WHAT CONTENT

ANY VOCATIONAL COMPONENT

HOW EARNING CAPACITY INCREASED

QUALITY OF INSTRUCTION

HOW EXTENSIVE OUTREACH/COVERAGE

ANY INTERINSTITUTIONAL COOPERATION

WHAT AGR CONTENT AND RELATION TO MAG

E. WHAT EFFECT ON MAJOR AID GOALS:

'ECONOMIC STABILIZATION'

'SUSTAINED ECONOMIC GROWTH'

'WIDER SHARING'

'PROMOTING DEMOCRACY'

ALSO--------

'INSTITUTION BUILDING'

'SUSTAINABILITY VS DEPENDENCY'

ANNEX VIII

AGRICULTURAL MARKETING

Ing. Fernando García-Salas
Consultores Agroindustriales

TABLE OF CONTENTS

		Page
I.	Introduction	1
II.	Present Situation	2
	1. Facilitating Functions	2
	1.1 Market Intelligence	2
	1.2 Standarization and Regulations	4
	1.3 Financing	7
	2. Physical Functions	8
	3. Exchange Functions	9
III.	Conclusions and Recommendations	10
	1. Conclusions	10
	2. Recommendations	12

I. INTRODUCTION

During the 1950's, AID Projects had as major objective the task of building some of the roads needed to open new agricultural areas and develop interregional commercial exchange.

During the 1960's, an institution responsible for dealing with problems concerning marketing storage and processing of agricultural products was established. Late in the 1960's, this institution obtained support to expand its marketing facilities. This institution is that which we now know as INDECA (Instituto Nacional de Comercialización Agrícola).

During the early 1970's, support to develop INDECA's institutional capabilities increased through two new projects. The purpose of one of these (AID-520-0197) was directed to personnel training, implementation of marketing programs, developing of market news reports and activating domestic sale promotions. The variant at that time was that INDECA reduced its scope of work and began specializing in basic grains (corn, beans, rice, wheat, sorghum), leaving all other commodities lacking a monitoring institution.

At the same time, a cooperative federation (FECOAR) had a marketing component within a project, of assisting its members in some way. Also, the export notion appears in the marketing picture, and GUATEXPRO is formed. GUATEXPRO's responsibilities included promoting exports of non-traditional products and developing or helping in the development of the infrastructure needed to reach new international markets.

Late in the 1970's, a specific marketing project was launched. This project's (CECOMERCA) goal was the exporting of fresh vegetables to the Central American Common Market and the provision of a dependable market for cooperatives and small farmers living near the area. (Appendix 1, Graphs 3 & 5)..

During the 1980's, the concept of export crops and crop diversification was emphasized, and a series of projects were designed to support these ideas. One of these projects (AID-520-0276) had a well-defined marketing aspect, and the Guild of Exports of Non-Traditional Products was formed. The Guild is helping in the development of the infrastructure needed to develop exports and is continuing the work formerly performed by GUATEXPRO.

These past approaches to marketing made it clear that AID lacked a specific strategy to develop different elements of the marketing component.

It was not until recently that marketing was seen as a critical factor; however, emphasis was placed into highly sophisticated markets (i.e., U.S., Europe) and other markets were forgotten (i.e., local, Central American, Mexico, Caribbean), enlarging the critical point of view of marketing.

It is the author's intention to describe the present situation for various marketing functions in order to facilitate future AID strategies in approaching each of these functions.

II. PRESENT SITUATION

1. Facilitating Functions (Macro Level)

Facilitating functions are defined as those that allow a good or smooth performance in the buying and selling of different commodities. Most of these functions must be designed and implemented at a Macro level. In other words, they are the set of conditions that structure the market and they must be well known.

1.1 Market Intelligence

It is necessary to develop a center or centers that collect, interpret, and disseminate the variety of data necessary to aid in the marketing process. It is clear that with the support provided to INDECA in the 1960's and late 70's, the objective was that an institution monitor the information for the local market. The efforts of building up INDECA's capacity were useless, as currently, INDECA has failed to provide any type of useful data for the domestic market. Even the assistance provided by INDECA through the years concerning basic grains (INDECA's specialty) has been very poor. A great majority of the people interviewed thought that INDECA is the worst institution in the public sector. This institution's malfunction has created a vacuum for a long time and has produced a constraint in the development of the local market.

Market information is non-existent and producers and buyers have lacked contact among themselves. This

situation limits producers in finding the best market channel for their products. This is one of the reasons why middlemen ("coyotes") still play an important role in Guatemala's marketing process. The "coyote" knows where producers and buyers are, and he also has the information needed to negotiate with both sides. Also, lack of local market information has limited our producer on the decision-making process of what, when and how much to produce. This limitation reveals the importance of training and providing assistance to producers, enabling them to learn to make decisions based on market information.

Therefore, it is necessary to attend the domestic market. We must keep in mind that for many producers, if not for the majority (Appendix 1, Graph 1), the domestic market is still the main outlet and is considered lower risk than export markets. Not everyone is able to jump to export markets overnight, and if support is given to the local market, a sounder base for future export markets is being developed.

On the other hand, the Guild of Exporters of Non-Traditional Products was formed to promote exports. Instead of working with the public sector, as was the case with GUATEXPRO, it was chosen to function with the private sector. It is the writer's opinion that this will assure the existence of this institution for a longer period of time, as it is not depending on any political changes of the GOG. Through the years of its existence, the Guild has done a good job. Its main activity has definitely been on the side of lobbying on behalf of Guatemalan exporters. (Appendix 1, Graphs 2 & 6). Some achievements obtained through the Guild's lobbying have been: (a) a fair exchange rate for exporters, (b) the "ventanilla única," (c) the cancellation of FLOMERCA, and, just recently, (d) the establishment of CONAPEX (Consejo Nacional de Promoción de Exportaciones). Through CONAPEX, the private and public sectors are working together, for the first time, with an only objective--to promote exports. CONAPEX submitted two new laws stimulating foreign investment in the country for Congress' revision. One of these is the "Maquila" Law, and the other is the duty-free zones ("zonas francas").

In addition, the Guild's training, promotion and market information centers have been improving their performance over the years. However, the main problem they face now is that they reach a small amount of people. Normally, the Guild only serves its 550 members, few of them being cooperatives in the

highlands. Even with its new branch just recently established in Quetzaltenango, the problem will not be overcome. In the countryside, the Guild is taking an image as a small group of persons having access to relevant information, which gives them an advantage when doing business. This image is very dangerous when considering the Guild's future performance. To worsen the problem, the Guild is facing a capitalization problem become self-sufficient. Recently, the Guild increased its fees to members, in an effort to overcome its capitalization problem. This measure will continue to limit the amount of persons utilizing Guild services. Therefore, the participation of public sector institutions is necessary to broaden Guild services.

The only AID project having certain sustainability in approaching facilitating functions is the Agribusiness Development Project (520-0276), with the Guild component. The GUATEXPRO Project (520-0201) was the base project for better Guild development. However, the main difference between GUATEXPRO and the Guild is that the Guild's lobbying has been more on the local side, while GUATEXPRO has the advantage of lobbying locally and internationally (through its "agregados comerciales" abroad). It seems that strategies change by projects and a long-term strategy for building or strengthening facilitating functions is non-existent.

Also, AID and the Guild have approached the exports of non-traditional products with a market window strategy. Based on this strategy, the Guild develops its work in training, promotion and market information. This strategy could be good in the short run, but could have difficulties in the long run in view of the fact that markets tend to mature and market windows close. Therefore, in the long run, <u>competitiveness</u> will be the key to success in international markets. With this objective in mind, it is necessary to develop the right programs in training, promotion and market information.

1.2 <u>Standardization and Regulations</u>

All institutions involved in market intelligence are obligated to inform buyers and sellers on the existing standards and regulations concerning a specific market. It is assumed that through standardization and regulations, the concentration process is simplified because it allows the grouping of similar lots of commodities. It is believed that an effective standardization is basic to an efficient pricing

process, as it allows consumers to make his needs known largely through price differentials.

Once again, INDECA should have been the institution responsible for setting the standards and regulations for the domestic market, but has done nothing. During a meeting recently held with staff members of INDECA, the possibility of a new project of setting standards and regulations for the local market was mentioned. It is the writer's opinion that INDECA should be advised that it should carry out a careful study of consumer behavior in the domestic market to see if it is responsive to quality and quantity standards. We should be reminded that, as a result of the lack of these standards, producers, as good managers, mixed good and poor quality product in order to sell all its production. However, through time, the consumer got to know that when he buys a product, not all of what he is buying is of the same quality. Therefore, the consumer established a bargaining system to overcome losses for poor quality product. If quality standards are set without a deep study of consumer behavior, the producer could result affected by this, as he will lack the freedom to mix the qualities of his product and sell, if not all, at least most of his production.

It is early to establish how effective this standardization system would be for the local market. Certainly, if the standardization system can be applied in the local market, it will, in addition, pressure the extension service institution, DIGESA, and the research institute, ICTA, which have up until now been working on their own agenda. DIGESA should be obligated of making available new cultural practices that ensure not only higher yields but also higher yields of better quality product. The extension service should assist the producer with post-harvesting techniques to preserve in the best possible way the quality of the product until it reaches the target market. In addition, for the consumer's safety DIGESA should enforce regulations on the use of pesticides, as such regulations are non-existent.

ICTA has been non-responsive to market needs. With an established market standardization system, ICTA would probably become more responsive. Concerning ICTA, examples of three different commodities can be given, in which the research and development of different varieties were driven by agronomic aspects, forgetting marketing aspects. One of these is rice. ICTA developed two varieties having higher yields and better resistance to diseases than the varieties existing at

the time. The varieties developed poor milling qualities and their price is lower than other varieties.

ICTA also developed a variety of garlic, which adapted very well to Guatemala's weather conditions, but the size of the garlic's head was too small and had little market acceptance. The Producers' Association of Aguacatán (Asociación de Agricultores de Aguacatán) saw itself in the need of importing garlic seed from Mexico to comply with the market's demand for big garlic heads. This association performed its own research experiments on variety adaptation and gave the seed to ICTA for further research and to provide them with the results. ICTA has failed to return with any results to be shared with the association.

The last example concerns potatoes. The production of certified seed of a variety known as "Loman" is being reduced drastically. This is mainly because the variety was greatly affected by various types of diseases and ICTA started developing new potato varieties that would allow better resistance to diseases. However, once again when developing the new varieties, ICTA forgot market demand and the new varieties developed have not had as good a quality as the Loman. The latter had special characteristics for making french fries, causing restaurant chains, i.e., McDonalds, Burger Shops, and Pollo Campero, to have a special interest in buying such variety. By using ICTA's varieties, the producer will lack access to such markets and buyers (restaurant chains) will probably go into production in order to satisfy their demand.

The Guild provides its members with the standards and regulations for exporting to various international markets (i.e., U.S., Europe, Canada, etc.). In what concerns quality and quantity standards, it seems that the Guild has had no problems, as these standards are normally published by the importing country, and they don't vary very often.

DIGESA is involved in small-scale irrigation and diversification projects. Some areas working under these projects are going into production of non-traditional products for export. It is strongly recommended that DIGESA work closer with the Guild in what concerns these projects. Cooperatives, associations and individual farmers would find that working with an extension service assisting them in quality control is of great help.

Some time ago, the Guild invited ICTA to experiment

with different varieties of a list of fifteen products. The results of this study would play a contributing part in validating recommendations for future promotions of the products on the list. ICTA's reply was that at that time they were not interested, and that they lacked the funds to experiment with new crops. Hence, it should be strongly recommended that ICTA be involved in research projects involving variety adaptation, keeping in mind the needs of exporters/producers, as well as in maintaining closer communications with the Guild.

A future problem, specially concerning exports to U.S. markets, will be the flow of information on pesticides regulations (authorized pesticides and authorized pesticide residues). The Guild is continuously receiving publications on the changes of these regulations, but a delay in obtaining this information can mean great losses to exporters. It seems contradictory that the EPA (Environmental Protection Agency) and the FDA (Food and Drug Administration), whose regulations change constantly fail to have a representative in Guatemala, while APHIS, whose regulations seldom vary, does have a representative for the Central American area. Having an EPA and FDA representative in Guatemala is of great importance, and would make the Guild's assistance in pesticide regulations much more effective. Another institution that should participate in knowing and informing on pesticide regulations should be DIGESA. Failing to know about pesticide regulations could result in limitations of market outlets for small farmers' non-traditional products.

1.3 Financing

It has been said that once you have the marketing aspects taken care of, financing becomes the major constraint; however, it could also work the other way around, and Guatemala is in this kind of situation. Although BANDESA and AID have a long list of requirements, loans have been made accessible to many producers one way or another. The problem has been that both, BANDESA and AID, have given first priority to production aspects, causing marketing to become the loose end in loan assistance. Most producer delinquencies to BANDESA are the result of bad market deals.

BANDESA should provide assistance in marketing, or at least include it in its long list of requirements. It should verify: (a) that product will be harvested at

the right market time, (b) that sale price is reasonable, (c) any possibility of contracts, etc.

Once again, middlemen ("coyotes") play an important role concerning financing aspects. The coyote tells the producer what to produce, gives the producer money (loan), which will be later discounted when the product is harvested, fails to ask for requirements of any kind, and assures a market for the product at a determined price and pays immediately after receiving the produce without any additional discounting.

It is also necessary to begin thinking about loans covering the marketing process itself, for national and international markets. As an example, some local freezing plants withhold payments from producers for up to 35 days, leaving the producer with financing needs during that period of time, and they are many times forced to use very expensive funds.

Some cooperatives exporting non-traditional products have very similar problems when the broker withholds payment for long periods of time, affecting the cooperative's cash flow and subsequent payments to its members. This specific problem has affected the credibility of many cooperatives, jeopardizing their future performance.

2. Physical Functions

Physical functions include transportation, gathering centers, storage or storage services, and processing.

The AID project of access roads, farm to market roads and tertiary roads has allowed the transportation of products from new agricultural areas to near-by markets. Coordination to stimulate private investment near these new agricultural areas is needed, in order to achieve a decentralization of storage and processing plants.

At the present time, the few existing storage facilities that provide services for non-traditional products, i.e., sorting, packing and cold storage are located in Guatemala City. In addition, almost all of the processing/freezing plants are located near or in Guatemala City. There is one plant in Teculután--in the eastern part of the country. It has just recently been known that ALCOSA (Alimentos Congelados, S. A.), a freezing/processing plant located in the outskirts of Guatemala City, will open a new freezing plant in Quetzaltenango. This new plant will certainly bring new market opportunities to the departments of Sololá,

Totonicapán, Huehuetenango and San Marcos, where the Small Farmer Diversification Systems Project (520-0255) had its main effect. It seems that credit lines for Agribusiness Development which had the purpose of creating and supporting some decentralization have yielded fair results.

It is important to consider that if emphasis is still put on export of non-traditional products, it will be necessary to promote the establishment of facilities which will help lower the farmers' physical risk when producing highly perishable crops. Also, close attention should be given to freezing plants, as they represent a good alternative market for second quality product and can provide a learning process for new and small farmer organizations that are unwilling or unable to risk too much at the beginning when changing from traditional to non-traditional crops. (Appendix 1, Graphs 3, 4, and 5).

3. Exchange Functions

These functions involve the actual buying and selling of goods under favorable terms. It wasn't until the 1980's that AID began having projects better integrated in taking the market component into consideration. Most AID support has been on the selling side, assisting organized groups that produce and market together.

Major problems confronted by AID in assisting these groups are set forth below.

- Failing to make a careful selection of the groups to be assisted, based mainly on motivation and interest.

- Lack of intensive assistance during long-term periods. It must be kept in mind that small farmers have been more involved in production than in anything else, and therefore, training and assistance in other components should be a must.

- Planning of the project should involve all parties concerned. Projects should be designed to respond to the needs of the people being assisted. Furthermore, the project should grow according to the capital generated, and not create a lot of fixed costs and financial obligations that could jeopardize the project's success.

- Lack of involvement on behalf of technical advisors, in the sense that they should take responsibilities for some actions.

- AID is not implementing good market contacts and marketing strategies.

The work CLUSA has been carrying out ir assisting cooperatives and Farmer Associations is a good example in picturing the problems mentioned above. The Cooperative Rincón Grande has been intensively assisted, the technical advisor is well involved in the project and its people; market contacts and marketing strategies have been established. Most of the investment has been through crop technification, not fancy cold storage. Facilities have been built, but the exporting process is already taking place. It seems that the project has high possibilities of becoming a success, or at least all the steps have been taken towards lowering the risk of failure. On the other hand, Cooperative Magdalena has lacked intensive assistance, especially in marketing. The technical advisor has been involved with the project and its people. Fancy facilities have been built, but no assistance in market contacts and marketing strategies have been provided.

In addition, CECOMERCA's case reflects some of problems AID has had in assisting specific projects. This does not imply that everything was AID's fault, but with intensive technical assistance and better monitoring of the project, the external factor could have been better overcome.

Projects concerned with assistance to organized groups should include promotions among local buyers. The private sector could begin looking at these groups as alternative suppliers of various products. There is a marked distrust between private sector and small farmers; however, this is changing and through adequate promotion and by putting both parties in contact, this market channel can be activated.

The fact that producers are seeking "dependable" markets--not necessarily the most profitable--is a matter that should be considered. Furthermore, buyers are seeking "dependable" high-quality source of products. Therefore, operating a market channel with these two parties, which are so different, but with so much in common, should not be a difficult task.

III. CONCLUSIONS AND RECOMMENDATIONS

1. Conclusions:

Market Intelligence

- Support provided to build INDECA's institutional

capacity was in vain.

- INDECA's malfunction has been created a vacuum for a long time and has produced a constraint in the local market development.

- Without local market information, the "coyotes" still play an important role in the marketing process.

- Without a sounder local market base, expanding to foreign markets implies greater risk.

- When working with the public sector (GUATEXPRO), the risk of political changes are higher and the sustainability concept is weaker.

- The Guild of Exporters of Non-Traditional Products has performed a good job, concerning local lobbying, to support non-traditional exports. However, it has failed at an international level.

- Guild's services have improved, but currently reach a very small portion of the population.

- AID's long-term strategies to strengthen facilitating functions are non-existent.

- The market window strategy to develop exports of non-traditional products is good in the short run.

Standardization and Regulations

- INDECA has done nothing in establishing standards and regulations for the local market.

- With established standards and regulations, DIGESA and ICTA would probably be more responsive to market needs.

- Even when the Guild has all the standards information, its distribution is very limited.

- The Guild has a lag time in receiving changes in pesticide regulations for international markets.

- There is a need to have EPA and FDA representatives in Guatemala.

Financing

- Provision of funds for loans has concentrated only in

production.

- BANDESA fails to verity and assist marketing aspects of a project when analyzing a loan.

- The "coyotes" plan an important role concerning financing.

- Credit lines to finance the marketing process itself are non-existent.

Physical Functions

- Road projects have made accessible products from new agricultural areas to near-by markets.

- The centralization problem of the few storage facilities still exists.

- Processing plants, mainly freezing operations, are concentrated near or in Guatemala City.

- Freezing plants represent a good alternative market for second quality produce and provide a learning process to farmers.

Exchange Functions

- AID has just begun to integrate the marketing component into its projects.

- Intensive assistance during long periods of time is non-existent, or exists in a poor manner.

- Projects should respond to the needs of the parties involved.

2. Recommendations

Market Intelligence

- If support is given to INDECA, it shoult only be to develop INDECA's institutional capabilities in order to be able to handle basic grains.

- Produce markets (vegetables and fruits) should be monitored by an institution other than INDECA. A private institution would be better.

- Local market information must be developed to activate local markets.

- The Guild of Exporters of Non-Traditional Products must continue with local lobbying and should begin international lobbying.

- The Guild must work closer to DIGESA and ICTA to reach a larger portion of the population.

- AID must develop long-term strategies to strengthen the facilitating functions.

- AID sould revise the market windown strategy for non-traditional products and evaluate the limitations and risks in a long-term period.

Standarization and Regulations

- INDECA must be helped in developing standards and regulations for basic grains, after carrying out a careful study.

- An institution other than INDECA should develop standards and regulations for produce markets (vegetables and fruits) with the active particiDation of DIGESA and ICTA.

- The Guild should inform DIGESA of quality st\ndards for international markets.

- Representatives of the EPA and the FDA should be established in Guatemala to avoid the Guild's lag time in receiving pesticide regulation changes.

- The Guild should inform DIGESA on pesticides regulations for international markets.

Financing

- BANDESA should verify and assist marketing aspects of a project when analyzing a loan.

- It is necessary to develop credit lines to finance the marketing process.

Physical Functions

- Promotion for the decentralization of gathering centers, storage and processing facilities through credit lines and assistance should be emphasized.

- Organized groups should be urged to use freezing plant markets.

Exchange Functions

- AID should integrate marketing into its projects and consider it as one of its main components.

- Long-term, intensive assistance should be implemented in each project.

- Marketing should be emphasized, especially when it concerns market contacts and marketing strategies.

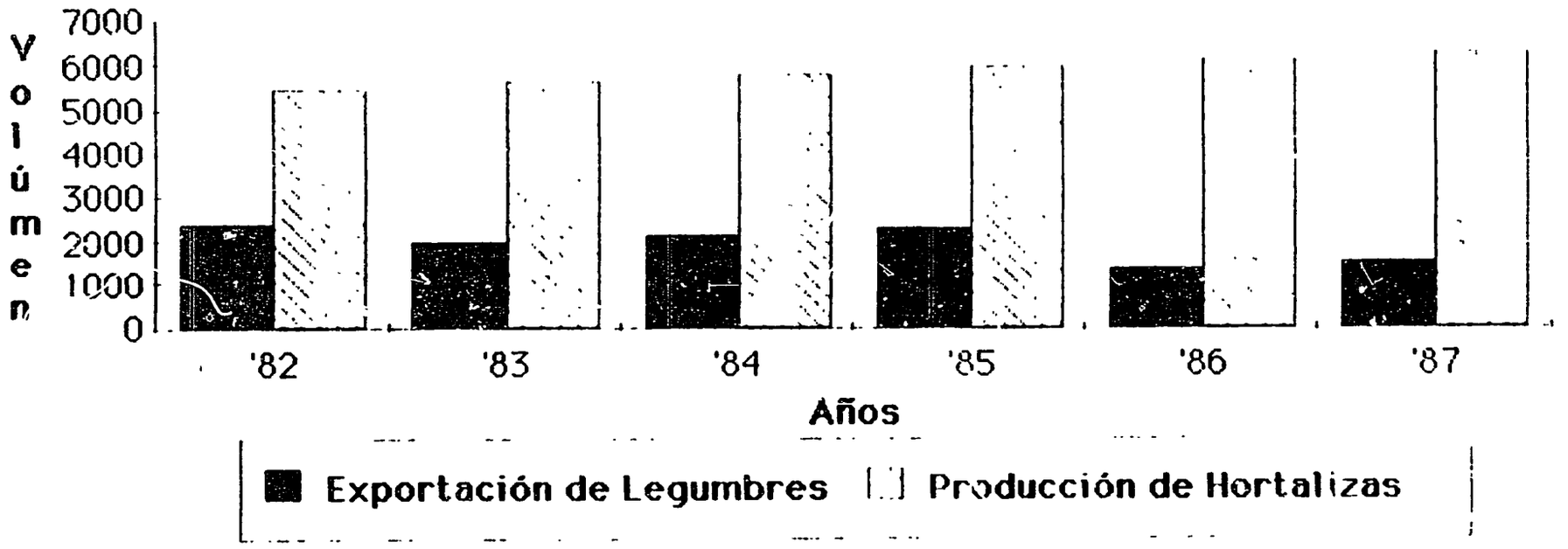
- Organized groups should be assisted in promoting their production within the private sector.

APPENDIX 1

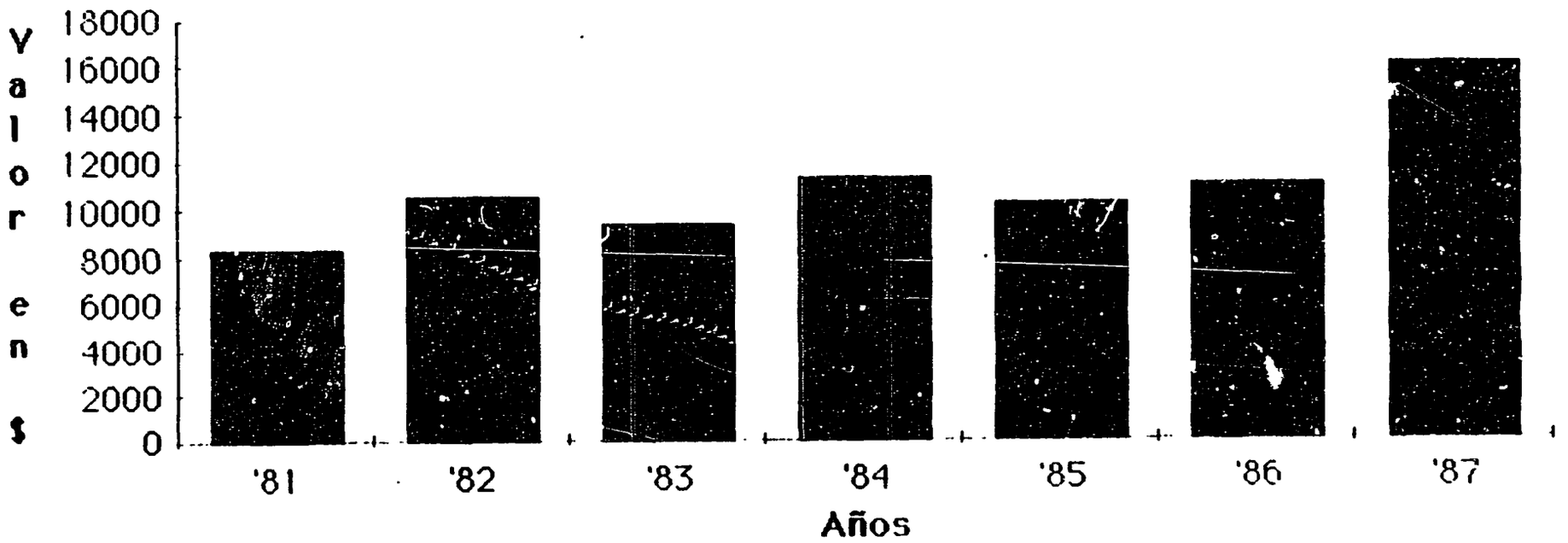
GRAPHS

Source: Banco de Guatemala

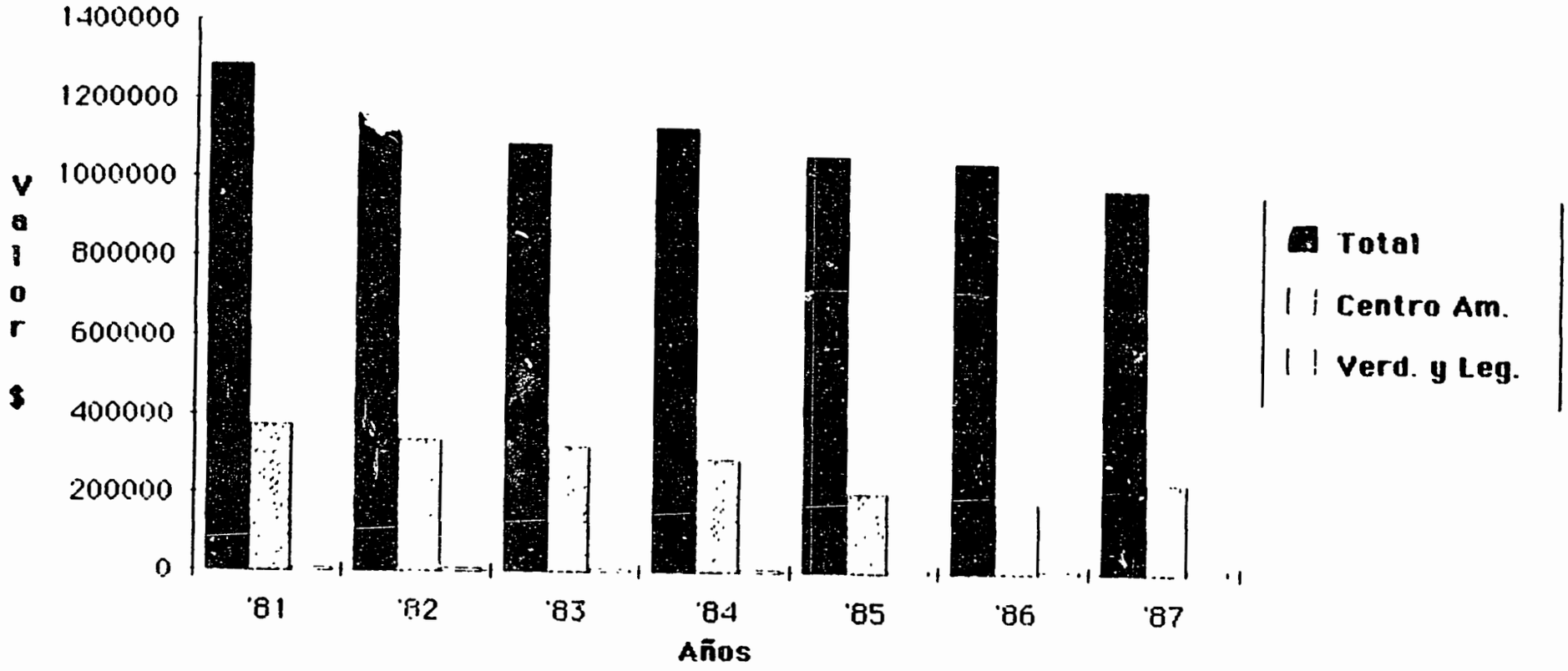
GRAPH No. 1
LEGUMBRES / HORTALIZAS
Volúmen de las Exportaciones y Producción
(en miles de qq.)
AÑOS: 1982 - 1987



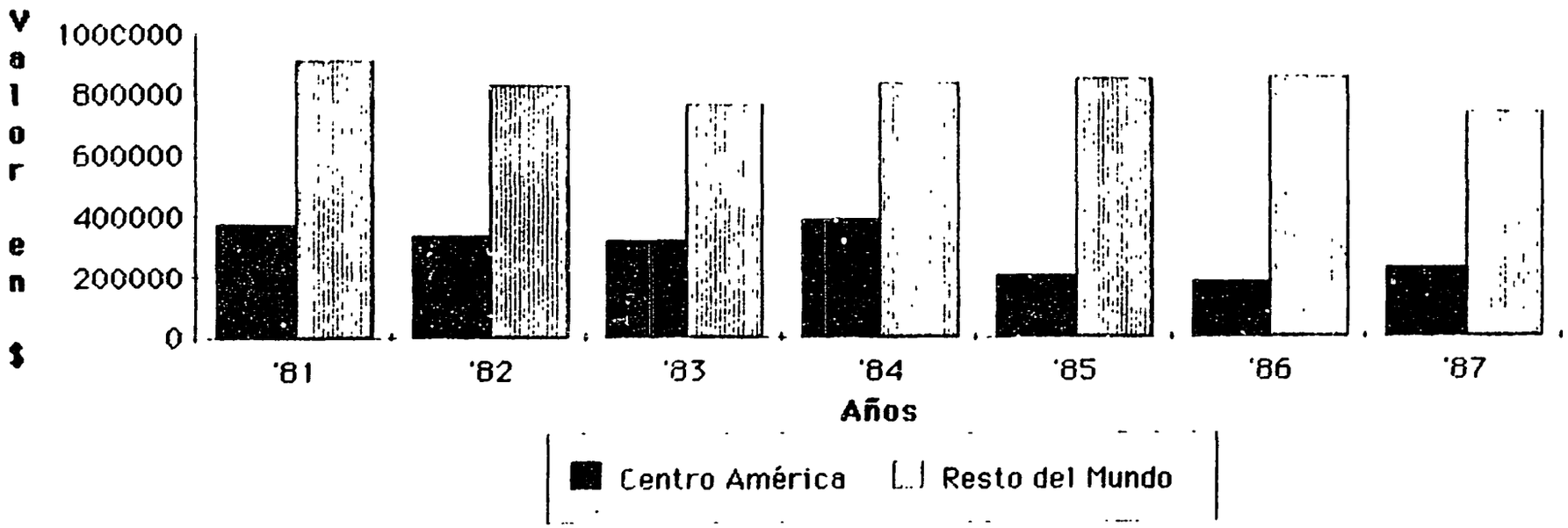
GRAPH No. 2
VALOR (FOB) DE LAS EXPORTACIONES
de Verduras y Legumbres
AÑOS: 1981 - 1987
(en miles de dólares)



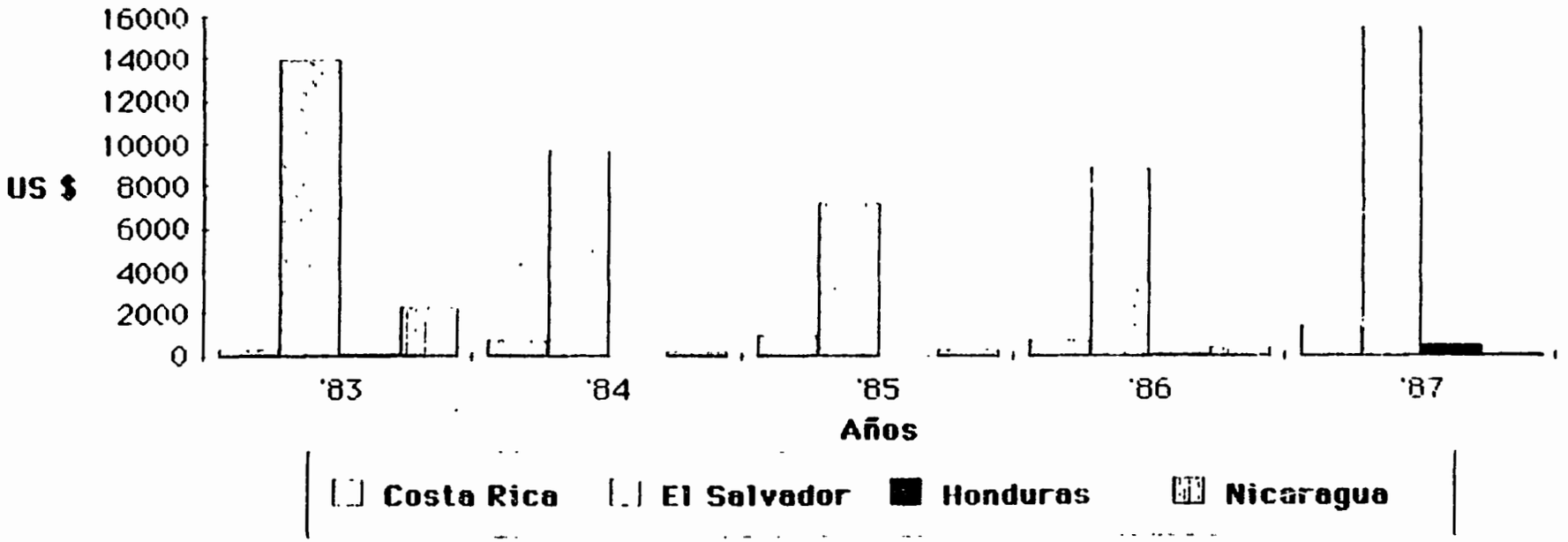
GRAPH No. 3
VALOR FOB DE LAS EXPORTACIONES
(en miles de Dólares ($))
1981 -1987



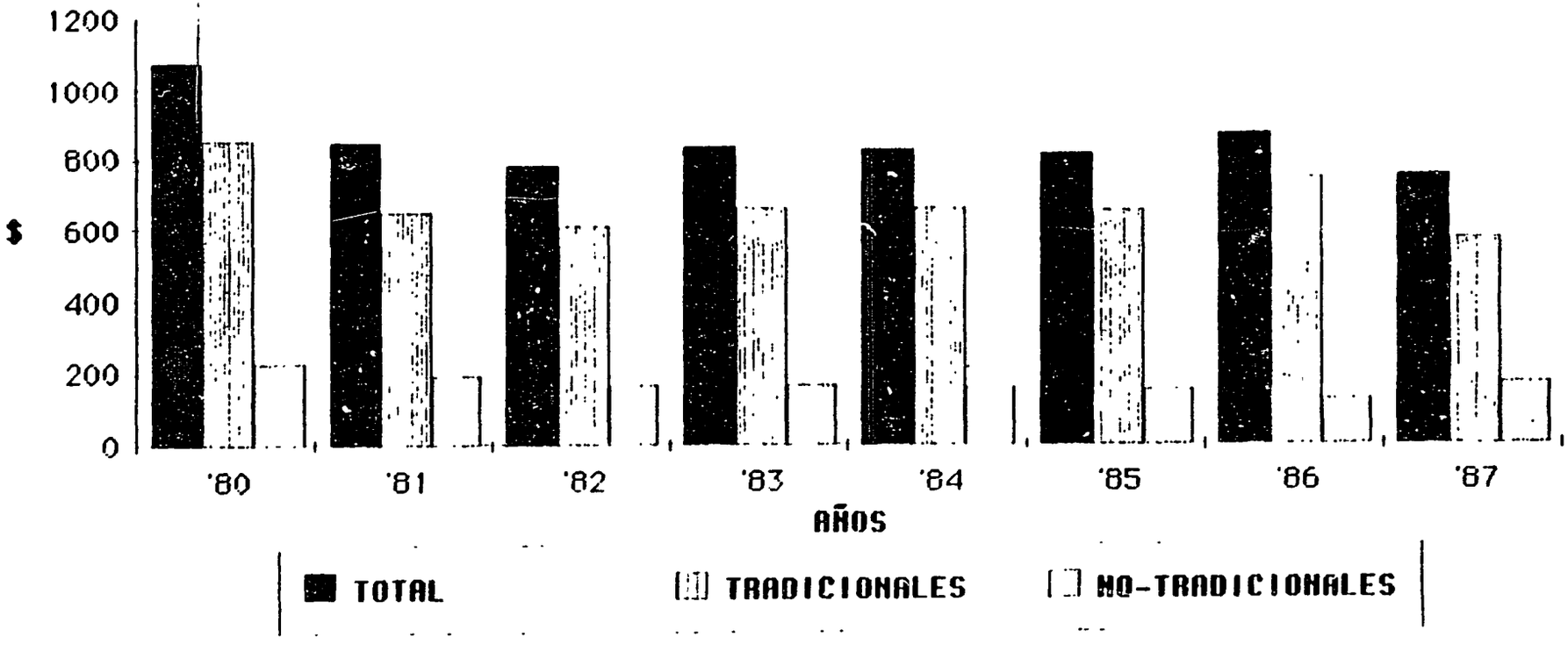
GRAPH No. 4
VALOR (FOB) DE LAS EXPORTACIONES
a Centroamérica y el Resto del Mundo
AÑOS: 1981 - 1987
(Miles de dólares)



GRAPH No. 5
VALOR FOB DE LAS EXPORTACIONES A CENTROAMERICA
VERDURAS Y LEGUMBRES
AÑOS: 1983 - 1987
(en miles de US $)



GRAPH No. 6
VALOR (FOB) DE LAS EXPORTACIONES
(en miles de US $)



APPENDIX 2

CONTACT LIST

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30. Marshall Kirby, Area Director, APHIS.

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39. Edwin Yapur Ovalle, Head of DIGESA Regional Office in Sololá.

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42. Manolo Diaz Solis, General Manager, Guild of Exporters of Non-Traditional Products--Quetzaltenango Branch.

43. José Alberto de Paz, General Manager, Cooperativa Xelac.

44. Mario Zum, President of Cooperativa Xelac.

APPENDIX 3

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333

Final Report of the Cross-Cutting Evaluation:

Institutional Development

Submitted By:

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Consultores Agroindustriales de Guatemala

USAID/Guatemala, February 1989

EXECUTIVE SUMMARY

A. According to the terms of reference, the Cross Cutting Evaluation of USAID work in Guatemala during the last forty years was to be achieved gaining insight regarding (1) the set of factors or traits that account for the most successful experiences of project designing, implementation and evaluation; and (2) the general trends of AID-supported projects in the last forty years in Guatemala.

B. Concerning the specific aspect of institutional development, the task was defined as gaining insight into (1) the process of institutionalization of AID-supported projects as ordinary institutional programs; and (2) the institutions' accommodations to participate in the project negotiations, implementation, evaluations and follow-up.

C. Procedures for the Cross Cutting Evaluation of institutional development included (1) review of 23 official project papers, evaluations and other documents; (2) visits to 14 institutions that have participated in project implementation; (3) interviews with 35 officers, technicians and representatives of GOG and private institutions, all of which have been past and recent project protagonists; (4) visits to 7 field sites in the Western Highlands, three sites in the Central Highlands and 4 sites in the eastern highlands. All of these sites were or are project scenarios.

D. Highlight of Evaluation Results.

1. Conditions of the national system for information gathering, analyzing and divulgating: (a) Functions of several GOG institutions involved overlap; there is a waste of resources, duplication of costs and mutual interference; (b) there is lack of communication and coordination among the entities; (c) the information produced and available is fragmentary, incomplete, outdated and biased; (d) there is lack of interaction between the policy and strategy-making levels and the information system; (e) there is a relative divorce between the planning and the research functions or the planning and the executing functions.

2. However, the current trend towards decentralization and regionalization of research, planning and decision-making provides an opportunity to improve the institutional effectiveness and coordination, in the national system of information, if properly

10. In monitoring project implementation, clear distinctions must be made between technical monitoring and implementing decision-making, and between fiscalization and directing. A direct intervention of AID in the direction of projects will be resented as intrusive and coercive.

11. A cultural appropriateness of project procedures, management (institutions) and technology (beneficiaries) must be secured through a cross-cultural outlook during the feasibility study.

I.E. SOCIAL SOUNDNESS ASSESSMENTS MUST BE TAKEN MORE SERIOUSLY

12. Project evaluation must be oriented by the project's original goals, and objectives. Evaluation must be participative, too. An evaluation after the PACD termination would inform about the project's real impact.

13. Up until now, AID strength and resources have concentrated on and have been used during the life of the project. This negatively affects the follow-up. Penniless institutions cannot carry on technical assistance, provision of inputs, vehicle maintenance and other expenditures. A financial follow-up must be carefully planned for every project.

A.I.D. HAS THIS PROBLEM, TOO.

14. Careful planning is needed too for technical, logistical and administrative follow-up. Training of implementors for the follow-up stage seems to be the most critical need.

// JONES, ET. AL AGREE

15. A substitution plan for funds to follow-up projects could be the following:

Stage	Funding Entity
I	100% AID
II	50% AID; 50% GOG
III	25% AID; 75% GOG
IV	100% GOG

16. People currently designing projects are not the ones evaluating them; and those who learn the lessons during the project's life are not the ones designing subsequent projects. This has to do with lack of adequate planning of ex-patriate USAID technicians staying in Guatemala.

17. AID should explore possibilities of expanding its projects outreach to new areas within the Western

Highlands, like the western shores of Lake Atitlán, the Cuchumatanes and the Transveral Strip of the North. Also, AID should expand into new regions like the southeast coast, the eastern highlands, and the Petén areas.

18. Special attention should be given to plan qualitative aspects of project implementation. This is one of the weakest aspects of project design, implementation, monitoring, evaluation and follow-up.

19. Special attention should be given also to the selection of both expatriate and local technical advisors. With the former, the problem has been one of lack of cross-cultural training, lack of ability to co-work with nationals in project base-line and feasibility studies; in project designing, monitoring and evaluation. However, technical assistance seems to be the most problematic area for ethnocentric ex-patriate advisors.

20. "Preaching without getting converted" is a precarious way of dealing with local institutional hyper-bureaucratization, slowness, inefficiency. AID Guatemala can and should be exemplary of effectiveness and ~~hastiness~~ to national institutions; thus, AID Guatemala itself should institutionalize these traits.

21. Evidences of impact in the long term and therefore of institutionalization brought in by AID-supported projects in Guatemala in the last 50 or 40 years can be found in the Sectors of Education, Agriculture, Health and Infrastructure. AID contributions to Guatemala's development have been substantial.

D. On the basis of project evaluation experiences and the Cross Cutting Evaluation, it seems necessary to establish a Department at AID specifically in charge of evaluations and base-line and feasibility studies, particulary trained to apply a cross-cultural participative methodology. Its staff should comprise technicians taking care of quantitative aspects and technicians taking care of qualitative aspects.

TABLE OF CONTENTS

		Page
Executive Summary		1
Introduction		1
I.	Evaluation Background and Methodology	2
II.	Evaluation Results	4
	A. The Project Process	4
	B. Information Systems Situation	5
	C. Project Inception and Designing	9
	D. Project Implementation	15
	E. Project Monitoring and Evaluations	20
	F. Project Termination	22
	G. Institutional Development: The Lessons-Learning Process	24
III.	Conclusions and Recommendations	32
	A. Conclusions	32
	B. Recommendations	34
References		
Appendices		

TABLE OF APPENDICES

1. Introductory Meetings

2. Documents Reviewed

3. Persons Interviewed and Institutions Visited

4. Empirical Data Base

5. Chart of Travels and Field Sites Visited

INTRODUCTION

This is the final report of the section of Institutional Development in the Cross Cutting Evaluation of USAID work in Guatemala in the last forty years. The report includes three main sections: first, the Evaluation Background and methodology; second, research results, and third, conclusions and recommendations. A minimum of bibliographic references is included. Lastly, five appendices complete the report, including a list of official documents reviewed, places and organizations visited, persons interviewed, a geographic chart of activities, and a series of summaries of the interviews held (the empirical base of this report).

In analyzing the data, six aspects proved important: the Projects' processes, the existing information systems situation in the country; and the particular phases of project negotiations and designing; project implementation monitoring and feed-back: project endings and evaluations and the proper institutional development including the lessons learning process and its impact upon following projects. In the same order, these aspects are treated as subsections of the evaluation results.

The conclusions ~~somehow~~ summarize the results, and the recommendations are strategic responses to them.

Field data was obtained through documentary reviews, field visits and interviews.

This apprehension, both with the validity and the reliability of the results springs out the fact that the writer has been involved in AID project execution and evaluation during the past several years in Guatemala and he wants to diminish the impact of his own perceptions and experiences upon the collected data. That is why the empirical data has been carefully processed, and herein included.

The Executive Summary selects the most relevant features of the report so that USAID reactions may be oriented to the areas of main emphasis.

I. EVALUATION BACKGROUND AND METHODOLOGY

According to the terms of reference, the Cross Cutting Evaluation of USAID work in Guatemala during the last forty years was not intended to be a quantitative one, in terms of measuring values of variables and associations among them, with strictly defined universe and samples, and highly structured data-gathering instruments, and numerical analyses. Instead of this, the Evaluation Team members were instructed to gain the deepest possible insight regarding the set of factors or traits that account for the most successful experiences of project designing, implementation and evaluation. Insight should be gained also regarding the general trends of AID-supported projects in the last forty years in Guatemala.

Concerning the specific aspect of institution building, the task was defined as gaining insight, in the general trends of the institutions "accommodations" to receive, implement and then terminate the projects; particularly the impacts that these trends have upon the delivery of services to beneficiaries, and the development, within the institution, of specific capacities and mechanisms for following up the projects as ordinary institutional programs. Thus, reviewing documents, visiting institutions, observing accommodations and accomplishments, talking to both yesterday's and today's project protagonists in the actual scenarios became methodological requirements.

The work plan for the institutional development assessment included:

First Week: Starting meetings, objective and methodological consensus and planning of activities. Starting the documentary study.

Second Week: Documentary reviews continued.

Third Week: Visits to institutions and interviews with old protagonists in Guatemala City, its outskirts, and the Eastern Highlands

Fourth Week: (1) Visits to institutions in Quetzaltenango, Huehuetenango and Totonicapán; (2) Interviews with old and current project officers; (3) visits to field sites of project implementation and interviews with project officers and beneficiaries.

Fifth Week: Data processing and discussions with the Team Technical Specialists, for exchanging information and assessing validity and reliability

aspects.

Sixth Week: Working with Team Leaders to develop the Team's and individual reports.

A direct communication was kept along the six weeks, between the writer and the Team Leader, Dr. Gary H. Smith; the American Team Leader, Mr. Dave Lazar; the Guatemalan Team Leader, Ing. Francisco Rohrmann; and other Team members, specially Dr. José Alvarez, the Information Systems Specialist and Lic. Gregorio Tum, an AID/Guatemala delegate.

Travels to countryside institutions and field sites of project implementation were carried out with Mr. Dave Lazar, Institutional Development specialist; Ing. Fernando Garcia-Salas, Marketing specialist and Lic. Gregorio Tum, General Sociologist.

Notes were elaborated with important documentary contents, field observations and summaries of interviews. The data was stored in software; the content analyses were carried out on print-outs and drafts of this report were distributed and discussed with other team members.

II. EVALUATION RESULTS

A. The Project's Process

For the particular purposes of the Cross Cutting Evaluation, it will be convenient to see AID (and predecessors) during the last forty years in Guatemala as a process that started in the 1950's continuing unto this day, which consists of a simultaneous series of projects and programs. The process has been, through time, growing, getting more complex and fluctuating under political, economic and domestic changes. At the same time, the organizational structure responsible for managing the programs, and develop and support the projects--AID Guatemala--has been institutionally developing as more positions and relationships among positions are created to accommodate new and enlarged functions.

Nevertheless, the projects themselves, as identifiable components of the process, consist of a series of interconnected stages, necessary to substantiate concrete actions.

According to most reporters, these stages are:

- Inception
- First explorations to substantiate the idea
- Writing of a first working document
- Intervention of a consultant group to conduct a feasibility study and develop a project paper
- Negotiations between AID officers and GOG or private representatives
- Agreement signed
- Implementation of project
- Monitoring and auditing
- Mid-term and final evaluations
- Termination (PACD) and follow-up

However, the same reporters warn that in practice there are deviations from the scheme, like accepting a project paper prepared by a private organization instead of the first four moments. There is also variation at the PACD; a project could not be terminated, but modified and absorbed within another project; some projects have follow-ups, but others don't.

AT ANY RATE,

~~Anyhow~~, the scheme is necessary as a background for discussing AID aspects involved in the projects' inception, implementation, evaluation, termination and follow-up.

B. Information Systems Situation

As a background to discuss GOG aspects involved in project processes, it is necessary here to describe the existing conditions of basic information production, distribution, use and effects.

According to the documents and reporters, several entities have been created in the last years in the GOG sphere to generate, distribute and utilize basic information regarding the conditions, problems, needs, resources and possibilities of the important sectors of the national life, such as population, production, commerce, industry, health and education. Production of statistics is an old practice in the region, but it was institutionalized after the liberal reformer Justo Rufino Barrios created the Ministerio de Fomento in the 1880's. It was not until the 1950's, though, that the Sección de Estadísticas Continuas was established. Some surveys were carried out on ad hoc bases. At that time, the problem was the processing of data. However, before the 1970's there was not a program of systematic surveys and diagnostics. In the 1960's the Dirección General de Estadística replaced the Sección de Estadísticas Continuas. The 1970's saw the creation of other entities for data collection and diagnostics. The Dirección General de Estadística (General Bureau of Statistics) was organized in the Ministry of Economy (which substituted the old Ministerio de Fomento) to perform regular census and survey activities. Almost at the same time, the National Council of Economic Planning was created, to perform the extremely important task of the sectorial and global national planning of GOG programs.

A special office was created in the Ministry of Agriculture to render services in agricultural information (SNIAG).

In the late 1960's, under the guidance of the National Council of Economic Planning, special units were created within the Ministries of Agriculture, Education and Health, as counterparts for SEGEPLAN, which were responsible for carrying out research and planning functions. USIPE for Education; USPA for Agriculture and USPSS for Health. These units were to collect and process basic information about sectorial conditions, to prepare diagnoses and divulge results; also, they were to provide the Ministries with the inputs needed to make policy and strategic decisions.

The Bank of Guatemala also created the Department of Socio-economic Studies, including in its functions socio-economic surveys and diagnostics. USPA became USPADA, and the Dirección General de Estadística became the Instituto

Nacional de Estadistica (INE).

The present situation of information systems, as described by its protagonists, is difficult, but can be summarized in several aspects.

First, the functions of the entities overlap, at least in theory. Officers representing these entities depict the situation in terms of "waste of resources," "duplication or triplication of costs," "mutual interference."

Second, there is a lack of communication and coordination among the entities, which causes institutional inefficiency and stagnation: "We need it, but we don't do it because its their duty; and they need it and don't do it because they say its our duty."

Third, there is a lack of updated information for policy making and programming purposes. The technical specialists of the Cross Cutting Evaluation Team visited several of these officers. The writer requested macroeconomic figures in the Department of Socio-economic Studies at the Banco de Guatemala. They had some for the period 1956 - 1978; the series was incomplete and consisted of a few macro-economic indicators. That was all they had. The political changes after the current government's ascension dislocated USPADA's technical capacity. Under project 520-0233 a component of information allowed USPA to develop a sample frame to carry out agronomic surveys, with technical assistance in 1976. USPA technicians assigned to the sample frame division became highly specialized in using the frame and designing surveys, instruments and analyzing data. Several surveys and baseline studies were carried out by them. Starting in 1985, one by one specialists of the team had been marginalized and obligated to resign. Today, all of them work in the recently-created Departamento de Estadistica at the Ministry of Finance. The former Sample Frame Division at USPADA was cancelled and a Research Division was created. This does not use the sample frame any more, since no one took care nor is taking care of up dating it and is outdated. They do not use the last national census' figures (1979) either, for the same reason. Instead, they are using a list frame prepared by INE.

The Sectorial Units in the Ministries of Health and Education, in the same way, lack the financial and technical capacities to conduct research and generate information. For this reason, they lack basic information.

Fourth, there is a lack of feedback at the Ministries on the part of the Sectorial Unites (USPADA, USIPE, USPSS). Thus, authorities like Ministers or Vice-Ministers or General

and Regional Directors have to formulate their policies and design their strategies with relative independence from reliable information about concrete conditions, problems, needs, resources and possibilities. That is why there are people saying: "The problems in this region are not being addressed by the government programs and decisions;" or "We don't understand how the Ministry decides the budget...we have had this problem here for years and when we ask the authorities to do something about it, they answer that there is not money for this."

Not only the Sectorial Units fail to provide the decision-makers with the pretendedly necessary inputs, but it is the Ministries which are providing the Sectorial Units with some basic information generated at community levels by executing institutions.

Fifth, there is a rather negative relationship between the information-gathering centers (Sectorial Units, SEGEPLAN, INE) and the implementing agencies, with the possible exception of the agricultural sector, where DIGESA and DIGESEPE generate basic field information for USPADA.

The most common characterization of the relationships between the Sectorial Units or SEGEPLAN and the implementing agencies (dependent of the Ministries) is that the former are "mere clubs of academic, without pragmatic sense, who cannot, but be an obstacle to the implementation of programs and projects." Thus, planners and researchers lack credibility in the sectors.

Sixth, the plans prepared by SEGEPLAN lack an adequate base of empirical information; however, on the other hand, real GOG work in the country, achieved through the Ministries and their executing agencies, do not pay too much attention to SEGEPLAN products, except for protocolary purposes.

In summary, the existing situation of the national information systems is a precarious one: institutional balkanization, overlapping of functions, inefficiency, waste of resources, outdated and fragmented information, and no necessary relationships exist between the information-gathering efforts and the decision-making process. Thus, the institutional activity of planning is disconnected from its necessary sources and users, and, for practical purposes, is null.

Under these circumstances, there is but little hope that the concept of long-term planning can be adequately implemented by SEGEPLAN, the Sectorial Units, the Ministries and the implementing agencies. A special effort should be made, though, to strengthen field data collection activities

of the implementing institutions like DIGESA, DIGESEPE, Direcciones Regionales de Educación, Dirección General de Servicios de Salud, and others.

Nevertheless, some developments, both in the GOG and the private sectors show how fruitful can AID support be for improving the sectorial and national information systems. One of them is the creation of decentralized regional executive positions in Education, Agriculture, Health and Development.

In the public agricultural sector, most institutions rely on DIGESA to obtain first hand field information. This is understandable, since the institution having the strongest field presence is DIGESA. The Executive Secretariats of the Regional Committees for Agricultural Development (COREDA), which comprises the Regional Directors of the Sector institutions, are currently being established. The strongest link of this Secretary is going to be with USPADA. This will assure (1) a more active regional presence of USPADA; and (2) a more systematic field data collection on DIGESA's part under USPADA's guide. AID contribution to this has been: (1) the strengthening of COREDA through project 520-0255; (2) the provision to USPADA of computerized equipment and related technical assistance; (3) the relationship of the Technical Assistance Team (EAT) members (of project 520-0255) with USPADA officers, through which the idea of a regional presence of USPADA was several times contemplated.

GOOD TO KNOW E.A.T. HAD SOME IMPACT ON POLICY!

Another development is the program of cultural research by the Institute of Linguistics, of the Universidad Rafael Landivar. This is providing cultural inputs for bilingual educational literature. This will link field research and educational planning better. This is an AID-supported project within the national bilingual education program.

Also in the agricultural sector, with the support provided by AID, the National Institute of Agricultural Marketing (INDECA), a system of market information is being established with computer terminals in each region, with the central station in Guatemala City. The system will collect and disseminate market information. INDECA carries out a survey of intentions of production and a survey of forecasts of production ever year, from February to May and from August to November, respectively. They currently have five field surveyors who make 5,800 interviews nationally. Very few surveyors; very small sample (out of a half a million farms). However, this is a start that deserves support and development.

HAD II?

AGAIN, HAD II?

However, despite these opportunities of development, it is clear that up to now no effort is being made to centralize *

the data collection, research and planning activities within each sector, nor create a system of intersectorial connections.

C. Project Inception and Designing

If several AID officers are asked which are the steps that should be given to generate and develop a Project, several schemes would emerge, perhaps as many as the reporters. Most of them, though, would agree in the following general scheme: (1) The Country Director requests from an Office Director some information regarding specific problem areas in the country, in order to take some actions to intervene in the problems/situation and provide some preventive and/or remedial programs in cooperation with the GOG, private institutions, or community segments. (2) The Office Director who is closer related to the problem area will request from his officers more information and suggestions regarding the problematic situation and possible actions on the part of AID, in cooperation with the GOG or private institutions or community organizations. (3) Office members will usually get in touch with representatives of private or public sector institutions legally or practically related to the problem situation; they will collect more information through documentary analyses, field visits and interviews; and will prepare a base document for the Office Director; (4) Following discussions with Office members and technicians, the Office Director will present the document (whether in its original form or revised) to the Country Director. (5) After holding discussions, he will recommend direct consultations with the GOG Ministry, Vice-Ministry or with the private institution or organization involved. (6) Representatives of the Ministry, Vice-Ministry or organization involved will then obtain a copy of the AID document, enriched, during the process, with public or private inputs, and will become the Project Paper.

A common alternative departs from the former scheme after point (4); a group of expatriate short-term consultants will then be hired to carry out a feasibility study and produce a Project Paper. Some in-house AID representatives might join the group. This group would interview GOG or private representatives, would make field visits and interviews, and would produce the document including feasibility study results, and the basic proposal is developed. If accepted by AID, this would become the Project Paper.

If this is a Project to be implemented by GOG institutions (and most of the Project are), the former have accepted objectives, purposes, goals, procedures, various

organizational arrangements, budget obligations, occasionally some technical assistance, and always administrative responsibility and accountability.

Both GOG officers and technicians have made, though, specific observations about this process, identifying factors of success and/or criticizing negative factors.

1. One set of observations has to do with the adequate inception. The first idea of a project can be born in a comfortable office in a fancy building at the Capital City. Nothing wrong with that; what comes afterwards is what matters. Because after an AID officer or authority has an idea of doing something about a certain problem area, a direct contact must be procured and made not only with concerned private or GOG institutions, but also representatives and members of the target communities.

2. Contact with communities must take the following form: a participant base and feasibility study should be carried out with community members about local problems, needs, resources and potential. Among the problems identified by AID, GOG and community members, is that these same agents would select those with the highest priority and best possibilities of solution. This participant study of basic local needs complies simultaneously with the recommendations of doing a baseline study; a feasibility study, and participation of Guatemalan technicians, involvement in the community and AID officers. The participant community members are selected by the same community. Presumably, the local development promoter, the local agricultural representative and other local promoters--already chosen by the community--would participate.

   All of those interviewed coincided in the observation that a baseline study is as important as a feasibility study, and that participation of GOG technicians is as important as the participation of AID consultants and/or officers. For instance, PRONEBI is regarded as a successful project because it started with a baseline study. Project 520-0255 is held as positive, among other things, because it included several institutions of the agricultural sectors; thus, the team should include technicians representing these institutions. This did not happen in the CECOMERCA feasibility study.

3. Why is the project of Development of Agroindustries with the Gremial de Exportadores de Productos No-Tradicionales successful? Among other things, because the original project paper was prepared by the

interested institution. It could be read here by the interested community. The same thing is happening in Phase II of Project 520-T-037, and Sexual Education Project with AGES.

In other words, participation by AID is necessary and inevitable from the very beginning; however, so is the community and multi-institutional technician participation. This is what Guatemalans would like: "an appropriate and sound AID participation," and "not a direct and impositive one." Americans can be in a hurry, but Guatemala is not the United States. The business of development takes not only an adaptation of local interests to AID; actually, it takes more of an adaptation of AID to community interests among its members. AID must participate in community interests. On the other hand, there must also be a communion between the Project's interests and GOG or its institutions' interests. Criteria of priorities cannot be transplanted from the U.S. to Guatemala.

4. From another angle, this way of participating by AID requires from it a better relationship to the national life. For instance, more acquaintances and friends should be made at the GOG and the private institutions, but even more at the field and community level. This way, AID can learn which institutions and persons are trustworthy as possible project implementors. It is an awkward position for AID to take, playing the role of watchman and a policeman over non-trustworthy organizations and people. If a relationship of confidence cannot be established, it would perhaps be better not to begin any project, or promote it with another organization. This is because the use of the project resources and facilities cannot be controlled that much really.

5. From the fact that an organization is relatively trustworthy, it does not follow that can be overburdened with several projects and/or components at the same time. DIGESA is starting to show some symptoms of this problem. INSTITUTIONAL OVERLOAD

6. One dilemma is "putting new wine inside old bags" versus creating para-systems. In the first case, the prospect implementing organization is so obsolete and inefficient, that a dynamic project would simply create an insoluble problem of stagnation, both for the project and the organization. The immediate alternative seems to be creating a new executing unit within the organization, the criticized "para-system." The problems arising between the organization and the para-

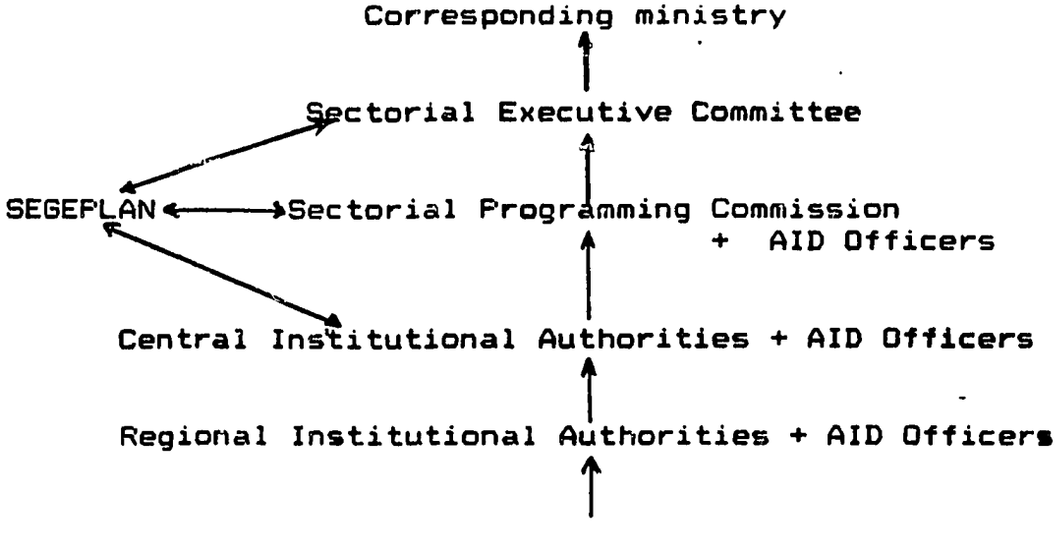
system range from lack of cooperation to active blocking, as happened, to a certain extent, in project 520-0255 between UCPRODA and COREDA, or the EAT and the institutions, or CORECO and COREDA.

The cost of the para-systems seems to be high in every case, and it would be advisable to explore alternatives. One of them is a program of institutional strengthening emphasizing training and organizational modernization, before the project takes place, or as a preliminary phase within the project. A Spanish proverb says: "Slow down if you are in a hurry."

7. A necessary consideration is that of the laws affecting the project's feasibility and implementation. Most feasibility studies do not include a study of the laws. Sometimes these laws affect the project, not during the actual implementation, but afterwards, in the termination phase, like what happened to CECOMERCA.

8. The envisaged project goals and objectives must be realistic. Political distortions, both internal and external to the institutions are a daily reality in Guatemala. Organizations in the Education, Health and Agricultural sectors are not the exception. This is another reason for AID officers to gain more acquaintances and connections in the public, private and communal sectors in Guatemala. AID officers and personnel cannot live in Guatemala like in a "ghetto", despite the necessary safety measures.

9. The process of planning and programming also should take place bottom-up. If the base problems and needs have been identified through a community-participant methodology, the elaboration of the project paper can follow the hierarchical line:



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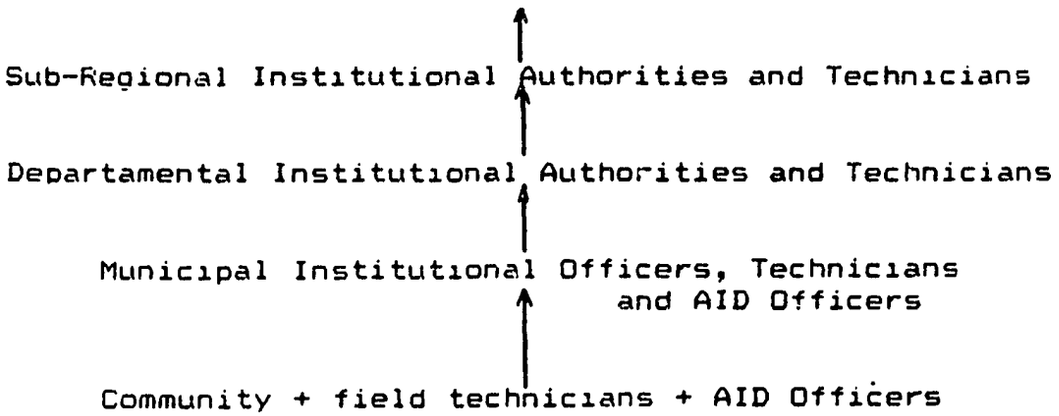

In the case of the Ministry of Agriculture, bottom-up, at municipal levels are DIGESA agencies and some BANDESA "rural delegations;" DIGESEPE[1], ICTA, INDECA and DIGEBOS appear at department level. COREDA's include the sectorial institution sub-regional directors; COREDA consists of the Regional Directors of the Sectorial institutions. Since the Project implementation involves all these levels, the institution representatives at each level have requested the opportunity of participating in the planning and programming of the project. They tend to forget the community, though, which explains, at least partially, why the communities are alienated from the Project's implementation efforts. Even the opportunity of credit for agricultural purposes with BANDESA are not being used by the farmers. However, with the exception of programs through AGES, AID has failed to contemplate the community as an appropriate interlocutor, someone to make business with.

In a sense, this bottom-up planning and programming is already taking place. With the help of local promoters--who act as "cultural brokers"--important groups of local family heads elaborate "project profiles" (drafts of initial ideas towards a Project) at village level. Then they come to the Municipal agencies. If possible, they assist the farmers in solving the need. When this is not possible, the request is channeled through the Municipal agency to the Departmental Chieftaincy. If it can, it fulfills the necessity; if not, it channels it to the sub-regional Direction. If a solution cannot be obtained here, the request would go to the Regional Director.

In generating, planning and programming a new project or

1/ Creation of Local Councils for Livestock Development, with volunteer promoters is envisaged

component, AID can and should follow the same bottom-up system of channels. A wider community participation, though, must be secured.

10. Participation of the different sectorial institutions in the planning and programming system described above must also secure a reasonable distribution of rights and duties, resources and administrative support. If, for instance, scholarships, vehicles, financial resources are allocated on ad hoc, unequal basis and less fortunate participants have failed to participate in the programming, an unnecessary source of conflict is being created.

11. According to a subset of interviewed project participants, a key factor for success is that the ~~prospect~~ PROJECT implementors should have an appropriate mentality, a managerial mentality. They would quote AID's experience with the Gremial de Exportadores de Productos No-Tradicionales, as an illustration. For any given purpose, it would be possible to find conservative, entrepreneurial and marginal mentalities.

12. Such as interviewed GOG technicians and officers put it, the consistent trend on the part of GOG institutions has been either to delay or unfulfill prior commitments regarding counterpart funding and support.

AID officers see this as something regrettable in the past, but unnecessary now since the Economic Support Funds (ESF) can be legally used by the GOG to obligate and disburse counterpart funds. Even so, there are some probabilities that the delays will continue, since they OFTEN have to do with ~~the~~ local political ~~game~~.

The planning and programming of the counterpart funding, though, is essential for the institutional development in the sense of following-up an AID-supported project as an ordinary institutional program. Thus, this is extremely important in the stage of project inception and design.

An illustration. The Project of Basic Village Education is a successful case of institutionalization. According to the Chief of PRograms, since its inception, the funding of the project was planned as follows:

	Funding
First Stage	100% from AID
Second Stage	50% from AID and 50% from GOG
Third Stage	25% from AID and 75% from GOG

Fourth Stage 100% GOG

In this way, the path towards project institutionalization is cleared up since the very beginning. One can but wonder why this strategy cannot be used to upgrade the probabilities of institutionalizing agricultural and educational projects. A rational doubt exists about these probabilities in the health sector, where nothing like "recoverable funds" (credit) is injected to the projects, but where GOG assigns each year a smaller budget in terms of the National Budget proportions.

D. Project Implementation

Obviously, the most important stage of the project process is its inception and designing. During its implementation, though, some of the good things of the design (in the project paper) can be poorly implemented and hence distorted. On the contrary, during its implementation, some minor flaws of the planning can be straightened out by a responsible and sound implementation. Therefore, observations of protagonists regarding "good" and "bad, illustrations on how to implement, are important. Some of them have been partially used in the former section.

The main observations are:

1. Regarding the project area. Insistence in certain traditional areas which are relatively saturated of development agencies, can be explained only on the basis of the strength of customs and habit, when other areas in the country are equally or even more in need.

   New areas can be and need to be assisted in the country.

   AID should not get out of the central western Highlands. However, other sub-areas in the Highlands like the upper Cuchumatanes, west and south shores of Atitlán Lake, and transversal northern strip, are equally in need of developmental help. In addition, other areas like the eastern highlands, the southeast coast, the northern coast, and the Petén area, are also indicated.

   DOESN'T IMPLY THAT AID SHOULD BE IN THESE AREAS

2. The target population. AID projects in the agricultural section are mainly addressed to the adult man. This is reasonable, since most of the farmers are adult men. However, there are many agricultural women. Since most single women or widows do not inherit land legally, it is extremely difficult for them (or even impossible) to get credit from local banks. Consequently, special

arrangements should be made to improve the female use of credit. On the other hand, women traditionally care of small livestock in rural areas, both indigenas and ladinos. Thus, the inclusion of small livestock components in projects like 520-0255 would make the presence of female veterinarian and zoo-technicians a convenience and a need. Also, credit and technical assistance should be made available to the poor, landless women .

However, economic activities other than agriculture, such as handcrafts and small domestic industries, in which both male and female participate, could be developed through AID projects.

Up until now, children are being addressed through health and education projects and mothers through health projects.

3. The implementing agencies. During the stage of project design, the decision of which institutions are to participate is taken. Projects like the HAD II, which are multi-institutional are better accepted. Consequently, special programs of institutional development could precede other components, so that a relationship of confidence could be developed between AID, the institutions, and the community. The participation of both the institutions and the community should secure a commonality of criteria, interests and objectives, but also gain a stronger commitment on the part of the institutions in the project.

4. The training of the implementing personnel. If a--community and institutions--participant baseline and feasibility study will be the first step, specific training in the philosophy and methodology of the participant studies will be needed by the first implementors.

Then, if some institutional building is expected, so that an AID-supported project get converted into an ordinary institutional program, then these institutional developments must be carefully planned. The implementing personnel should acquire, through specific training, the specific capacities for executing the project and following it up upon PACD termination.

GOG HIRING & CIVIL SERVICE POLICIES ARE RELEVANT HERE.

Trainers, trainees and technical advisors should be carefully selected, on the basis of their meeting specific qualifications. When the process of selection is only formally, but not substantially carried out, problems result. Even PRONEBI, which is seen as a

successful project, had problems at its initiation, since the training of bilingual educational supervisors was not adequate enough. Some of the trainers did not meet necessary qualifications and the plan of training had not been previously validated.

A different case, is that of the Regional Directors of Education, who were trained under an effort supported by AID. This training was carefully planned and duly executed.

5. Distribution of resources. It is already known that presently, Guatemalan public institutions lack almost all of the resources needed to effectively operate. Under these circumstances, if for implementing a project a participating institution receives vehicles, fuel, per diem, scholarships, and a operational budget, and another equally participant institution fails to receive these same benefits, a conflict is being created. The former will be active for the project and the latter will not cooperate with it, and would even block its movements.

Consequently, this participation must function as co-participation. If participation is less than that, there won't be cooperation, but competition in the negative sense. This almost happened at the very beginning of project 520-0255, concerning what ICTA was getting while other's were not getting it.

6. Sequence Implementation Letters. Most projects implemented though public institutions are moved forward in discrete time units marked by the sequence implementation letters. Most institution leaders and technicians interviewed made complaints about the current practice of AID of authorizing every expenditure incurred by the institution. They argue that AID should trust the institution more.

However, the real problem was identified by a representative of a private organization: lack of planning capacity. Since most public planners are not detailed enough, the specific expenditures to be incurred during the fiscal year do not appear in the budget sent to AID for approval. The Gremial de Exportadores de Productos No-Tradicionales tried the new strategy: in order to avoid the time-consuming practice of requesting authorization for every expenditure and waiting for the implementation letter, they prepare a one-year budget which includes every possible expenditure. AID authorized it and the Gremial can do all of its expenditures without having to wait of the

SIL.

Arthur Young considers that this same strategy could be adopted by public institutions.

7. The qualitative aspects. If problems and negative experiences pointed out by interviewed project protagonists are reviewed, one will find that they have to do with the so called "intangible non-quantitative, qualitative" aspects.

The need for training has already been underlined. Lack of adequate training caused problems in PRONEBI, but also in the AID-ROCAP's textbook program in the 1960's, and in projects 520-025 and 520-029. Most training problems had to do with a rather frequent attitude of undervaluing that which cannot be touched, measured or counted. This includes a certain disregard to social and cultural aspects of the projects.

Social soundness or social feasibility sections in many project paper show how little importance these aspects are conveyed. Even the "experts" in charge of these sections suffer from the symptom of underestimating non-material aspects. No wonder the qualitative aspect is not well and precisely defined in the project, even in the Education sector. Because designers have difficulty in concretely defining qualitative activities, i.e., their goals and objectives, implementors necessarily find it even more difficult to execute and attain them. This is the reason why in evaluations made, weaker aspects are those which are qualitative. This problem is affecting PRONEBI. Qualitative aspects of the bilingual teaching method are going bad, according to the evaluators, like in PRODEPRIR.

8. Technical assistance. At the outset, members of public institutions point out to the fact that many ex-patriate technical advisors are not carefully chosen. In their own terms, "simple minded people hire someone whose Spanish is not good enough and who not only does not understand Latin American culture, but sometimes openly dislikes it prejudiciously. However, he is hired anyway because he has good qualifications in the U.S."

This problem affected PEMEM and maybe 520-0255.

Regarding both ex-patriate and local technical assistance, most people interviewed argued in favor of locating every advisor within the local institution. Again, in the Small Farmer Diversification Systems Project (520-0255), this was argued. Another experience

with 520-0237 showed that this fragmentation of technical assistance causes a dilution of its effectiveness, since technicians are absorbed into bureaucratic routines.

Regarding the first point, what is required is a careful selection of ex-patriate technicians. They must be cross-culturally sensitive. Regarding the second point, the situation will change according to the nature of project components. A decision will be required in each project.

9. Delays: "The projects' leper." Delays both in AID and public institutions. Everyone justifying his respective red tape and bureaucracy. Delays in delivering money, furniture, equipment, materials.

This does not mean that there have not been good experiences. INFOM regards its relationship with AID as "excellent; everything came out just in time," speaking of the late 1970's and early 80's. Decisions to make bureaucratic procedures more rational and less complicated are needed, not additional comments.

10. Cultural appropriateness of the procedures for project execution.

AID administrative procedures are resulting somehow complicated for BANDESA. Suspicion springs out that not only for them. The experience of 520-K-036, Assistance to Small Cooperatives, proves this.

However, not only administrative procedures are complex. Unfortunately, the technology needed to execute the projects is often more complex than convenient for illiterate poor indigenous beneficiaries.

Thus, the baseline and feasibility study should determine concrete forms of cultural appropriateness in each case.

11. Selection of beneficiaries: Need for criteria and correct applications. A frequent complaint of institution officers and technicians, particulary from DIGESEPE and BANDESA, is that beneficiaries are frequently poorly chosen. Although this applies more to projects in the agricultural sector, a word of warning is important also for other sectors.

Beneficiaries of project 520-0255 were supposed to acquire from its participation, improved small farms, verily "model farms." This implies that the candidates

should belong to the average type of farm. Instead, farmers with the best local farmers were chosen by DIGESA extensionists. This, of course, would save a lot of work and the institution and the project would have faster results. However, this is not convincing enough. Nevertheless, many beneficiaries from previous projects are still indebted and perhaps they do not plan to repay the loan. Whether this will happen because they failed in their little enterprise or not, this is still a problem for institutionalization. Some failed because they lacked specific experience with the project components involved; or technical assistance failed; or marketing arrangements failed.

The best candidates for success with specific project components are those with some experience relating to the component, with enough means to secure the minimum of success, and not be indebted at the time of their selection.

However, in any case, project implementors should have clear, adequate criteria for selecting beneficiaries, and for judging their correct application.

E. Project Monitoring and Evaluations

Along project implementation, several possibilities for monitoring are open. Implementing institutions' members can monitor, evaluate and control their own efforts. The community and the beneficiaries can and must be trained to do their own monitoring evaluation and feed-back in their projects. However, what is at stake here now is AID effort to monitor, evaluate and feed-back the project.

1. The most important moment for the monitoring and evaluation is the project design. If the project paper states not only goals, objectives and procedures, but also definite ways of carrying out the monitorization and evaluation, and these are agreed on by all participants, the probabilities of causing harshness, tension and conflict, diminish.

   For various reasons, specific ways to monitor and evaluate the project are either weak or unilateralized in project papers. If they are weak, implementing agencies do not protest, but when the monitoring and/or evaluation takes place, they are felt like "police tactics," "intrusion," "abuses of power." When monitorization procedures are well defined and precise, usually they have been designed by AID. Institutions' technicians complain that they usually have nothing to

do with project designing, specifically with the designing of monitoring procedures and methodology of evaluation--not to say anything about the community.

Consequently, in this particular aspect a conscious effort is needed on the part of AID to improve the participation of all protagonists and improve the project papers.

2. The distribution of financial, logistical, technical and administrative resources has to do also with the monitoring of the project. There is not a real possibility of preventing the misuse of project resources. And AID does not have enough field personnel to enforce the legal use of these resources at all times. Being realistic, the problem is of scarcity; institutional infrastructure is poor in the public sector. Only through a realistic provision of resources can their misuse be dealt with.

However, emphasis of monitoring activities after all, are not mainly concerned with watching the use of resources. It has to be a cultural problem putting the main emphasis on that.

3. Fiscalization and auditing. Practically all of those interviewed belonging to GOG institutions recognize the legitimacy of AID fiscalization and auditing. They recognize also that the GOG auditing are somewhat very much spaced out (every two years) and are most of the time very superficial.

They also recognize the fact that for a proper use of the funds and project resources, and the project success in general, it is important that AID provide fiscalization and auditing mechanisms.

However, a word of warning is also expressed by them: The term "fiscalization" should not be confused with "imposition." The decision-making process within a project is a function of its implementors. The fiscalization and auditing processes must be judgments made on the appropriateness of some of these decisions post facto, which does not impede feed-backs.

Technical assistance is not to be confused either with fiscalization functions. More than one technical assistant in a project (whether local or ex-patriates) have been requested not only to monitor, but also to fiscalize. This is awkward for the technician and unacceptable for the institutior, and is not commendable.

4. Concerning the evaluation, some GOG institutions, i.e., INDECA, have the idea that feasibility studies are a sort of evaluation. Representatives of this institution say that in the past, some expatriate technicians hired by AID came, did some kind of study related to INDECA, prepared reports, submitted them to AID, and to this date, INDECA does not know, officially or unofficially, the contents of the report.

   The message is that even feasibility studies, diagnosis and evaluations must be participative, in the sense that members of the institutions concerned, be also members of the evaluating team. And, of course, the results of the efforts should be communicated officially to the institution. This really seems elementary.

5. An interesting and important idea regarding project evaluations came from an institutional expert: There is a need for evaluations, not only during the project's life or at is PACD termination (Final Evaluation), but also some time after its termination. If such project supposed an institutionalization and follow-up, this evaluation would find out just how much institutionalization and follow-up has occurred.

   However, even if the project was not supposed to have any institutionalization and follow-up, such evaluation would be useful, say four or five years after project termination, to measure the project's impact. A real impact is supposed to be apparent not only during the PACD. Furthermore, according to the project's nature, its most important results can come just after its PACD termination. This is something that a mechanical and irreflective understanding of the pattern of the mid-term and final evaluations, by necessity, defeat.

F. Project Termination

The main point here is not the termination itself, but the follow-up; there have been observations concerning both of these.

1. A recurrent observation is that there is in the AID policy itself one element that discourages the institutionalization of projects: The manner in which funding is planned. AID's mind is concentrated upon the project's life. The most important decisions are made for this, even if the PACD is so short (2-5 years) to see real results. If the most important thing is what happens in those years of implementation, all of the

available money should be spent on it. No money can be available after PACD termination. For this same reason, AID has agreed to use the Economic Support Funds for allowing GOG to obligate and spend "counterpart funds."

Thus, no money is left to allow institution follow-up of the project, and no provision is made in GOG institutions' budgets to face this stage.

For sure, there must be a way out of these catch-22 type of problem.

2. Lack of money is not the only problem. In the preceding sections, we have been hammering the importance of training; the Project of Basic Village Education is a positive illustration of this. Not only the planners carefully planned the substitution of AID funds for GOG funds during the project's life, but also they placed strong emphasis in training. Upon PACD termination, all staff members were already using the training they had had in the project for its follow-up.

Consequently, the strategic value of training for project follow-ups upon PACD termination, cannot really be overemphasized.

3. Complementing the preceding paragraphs, provision must be made in the project's budget for substituting AID funds for GOG funds, in a gradual manner, as it was done in the Basic Village Education Program.

4. Most of the institutions's representatives interviewed coincided that every project should have, upon termination of its ordinary PACD, a follow-up stage of two-three years. In the absence of this, all projects find it difficult or otherwise impossible to have a follow-up, not only at AID-supported projects, but also with nearly all funding agencies.

5. Another aspect that has proved important for the follow-up is that of the kind of equipment provided to the project as part as the logistic support. Vehicles made in the U.S. are extremely expensive to maintain. Can GOG institutions afford these vehicles' maintenance, without additional budget funds? If the vehicles were Asian, parts and technology needed for their maintenance would be abundant in the local market and their price would be lower.

6. Finally, upon PACD termination of certain difficult problems, liquidation problems arise. Take for instance CECOMERCA. Vehicles, machines and equipment cannot be

sold, rented out or disposed of, since they are pignorated by BANDESA. In other words, there has been termination, but not liquidation. Can AID intervene again and help solve the problem?

G. Institutional Development: The Lessons-learning Process

The phenomenon we call "institutional development" has been taking place in Guatemala, both inside and outside AID.

Evidently, AID has been growing in numbers of vertical and horizontal positions; and the functions are growing both qualitatively and quantitatively. And it is evident, too, that the GOG and private institutions have been growing in number, size and complexity.

However, is this internal growth in AID and out of AID directed to make project designing, implementation and follow-up more expeditе, efficient and impacting? The answer can only be "yes" and "no."

1. Let's first talk about GOG institutions. According to AID officers and technicians, yes, there has been not only growth , but some real institutional development. As illustrations, the capacity to negotiate and contract. This has happened in projects of access roads and rural electrification, environmental conservation, small scale irrigation systems, and soil conservation.

   Some vestiges of old projects can also be mentioned in health and education.

   However, in seeing how the Dirección Técnica del Presupuesto handles project funds, how the national auditing system does not really dig in in the projects' accounting; in seeing the institutions' bureaucratic "trabas," the slowness and the red tape, the internal and external political interference, one cannot help but recognize that the institutional development achieved is minimum. For some observers and reporters, it is null. However, in an objective way, what matters is that some institutional development, the one that has been identified, has been really achieved. This is important as a basis for building up, since it provides a sense of achievement and stirs up further motivation.

2. There is a dimension where it is difficult to trace the border between AID and GOG achievements: The national scenario. AFter 40 years and almost a billion of U.S. dollar investment, it is just fair to recognize the role of AID in national development.

The following are some of the narrations obtained from GOG top officers.

a. Education Sector

As usual, it has been said that in the Education Sector everything is lost upon the project's PACD termination. However, it is not true, but it might be true that most of the times GOG is not strongly convinced that a follow-up is deserved even with some sacrifices; and on the other hand, part of these fear springs out of on the fact that most projects do not include specific training for the follow-up.

In the Education Sector, top officers can recall the technical and financial assistance GOG was receiving from the Servicios Cooperativos Interamericanos de Educación (SCIDE) in 1945, when the curriculum for the National Normal School "Pedro Molina" was designed.

In those days, the system of satellite schools started to function, which was designed to pump up village kids to regional urban schools. At this time, the new idea of a curricular adequation, which today is a key idea in the educational development, appeared. A practical component was injected and nationwide applied.

During the late 1950's and early 1960's, SCIDE prepared a program of professionalization for non-graduate "empirical" school teachers, since more than 80% of them did not have their degree. Today, less than 1% needs it.

In taking care of village schools and village teachers, rural education became institucionalized in Guatemala. A strong precedent for the Basic Village Education Program, the Non-formal National Education Program and Socio-Educativo Rural. SCIDE also started the program of textbook production. Subsequently, ODECA-ROCAP came with the RTAC-I; and later the RTAC-II, the textbook program for college and university students. CENALTEX is today the GOG institution in charge of producing textbooks.

Then came the Program of Improvement of Primary Education (PEMEP). This program strengthened the infrastructure. During the 1976 earthquake, most school buildings in Guatemala were destroyed. However, those built by PEMEP remained, and the "modular building" became the norm.

Bilingual education was fostered as an AID-supported project for the first time at the Santa Lucía Utatlán Regional Normal School. Today, bilingual education is a Constitutional mandate and continues through the National Programs for Bilingual Education. The National Non-Formal Education Program also emphasizes the work through bilingual promoters. Thus, bilingual education is institutionalized not only at the pre-primary school level, but also in primary, secondary and Non-formal systems.

The new coming Dirección de Tecnología Educativa will be a follow-up for the Basic Village Education Program.

The AID-supported program of ICA is also recalled as a strong push towards rural education within farmers, and plantations on the south coast. These programs provided teachers, supervisors, minimum school buildings, textbooks, medical care and urbanization. This was part of the system of satellite schools. In 1964, GOG absorbed the project as an ordinary program.

SCIDE became ACEN in 1964; ACEN became OPIE and OPIE became USIPE, the present sectorial unit of planning and research.

In 1986, there were 8,204 high schools in Guatemala. The Program of Improvement of the High School Education built 27 school buildings. Although this was not very significant for the national school system, it was a contribution.

Both projects 520-025 and 520-029 included tangible and qualitative components. Although the qualitative ones are extremely weak, almost non-existent, other buildings were added.

Concerning illustrations of institutionalization during the project's PACD, we have the Basic Village Education Program. First, it was planned as a financial institutionalization:

Stage	Funding
I	100% AID
II	50% AID; 50% GOG
III	25% AID; 75% GOG
IV	100% GOG

The institutionalization of personnel was also planned. Emphasis during the first two stages was the

training of staff to carry out the project at full capacity, without the need of ex-patriate technical assistance.

Planning of the logistical and administrative institutionalization was also carried out.

b. Agricultural Sector

According to leading top GOG Officers in the Agricultural Sector, there has been American technical and financial assistance for the Guatemalan agricultural public sector since 1950, at the National Institute of Agriculture and Livestock. The assistance was obtained from the Servicio Cooperativo Interamericano de Agricultura. (SCIDE).

Since then, a series of projects oriented to soil conservation, introduction of new varieties, pest control and fertilization have followed. More recently, project components themselves have diversified: In 1976, Project 520-218 with technical assistance for production of vegetables, flowers, staple and fruits; also in 1976, project 520-T-026 with small scale irrigation and soil conservation; then, CECOMERCA in 1976 (520-T-030); in 1983-89, the 520-0255 and in 1987, the 520-T-037 (HAD I), and also the PIL-416.

According to interviewed technicians and officers, Project 520-0255, the Small Farmers Diversification Systems Project was, after all, the most impacting one. First, it was a multi-component project, thus involving several sectorial institutions (DIGESA, DIGESEPE, USPADA, BANDESA, ICTA, INCAP); second, communities participated as such; third, it was a five-year project with some antecedents in 520-T-026 and a follow-up of HAD I and HAD II (adding DIGEBOS and INDECA); fourth, it included a component of institutional strengthening in addition to bi-national technical assistance.

Some of the institutional impacts of 520-0255 have been a direct strengthening of the Regional Committee for Development (COREDA). Although it existed long before the project, many of its protagonists feel that it was sort of "loose" and the Project cohesioned it.

Second, it was a direct impact bringing in the system of bottom-up inter-institutional planning and programming. As described earlier in this report, starting with the extensionists in every component, and every institution, COSUREDA and COREDA put together and

integrate regional plans and programs. This system of planning is congruent with recent GOG efforts to regionalize the government. It has resisted political changes through several governmental periods.

By introducing a marketing component, 520-0255 helped to change the institutions' vision of the production process. Farmers now do not stay in their millenary traditional market places; they keep moving, looking for better markets. As an anthropologist, the writer feels this is one of the most significant cultural changes currently taking place in the Western Highlands of Guatemala, a change for economic modernization.

Given the traditional economic structure of the Guatemalan Society, carefully described by "the green book," and the social and dangerous tensions that this creates, it is just logical and serious to look for some kind of solution or relief. A politically and socially acceptable solution in today's Guatemala has been the program of land market, buying land and selling it on credit basis to small farmers' associations. According to officers of this program supported by AID through the Penny Foundation, it has caused a positive and serious impact in the Foundation. In their own words, it has become and "operational model." It integrates activities like literacy, farm management, crop specialization, credit. In addition, the project has caused an integration of Penny Foundation programs, and it represents also a program of introduction of gradual cultural change. This is very significant since the Penny Foundation is a private organization.

INDECA is another public institution in a process of internal changes induced by its relationship to AID-supported projects, and oriented to more efficiency. The factors of inefficiency have been identified and the corresponding measures have been designed. Actions are being taken to implement the measures, like negotiating a fuller participation in the Project of the Highlands Agricultural Development II (HAD II) with AID; the designing and functioning of a system of market information supported by a computerized system, and technical and financial assistance from AID. Given the paramount importance of marketing for the development of Guatemala, both INDECA and the Gremial de Exportadores de Productos No-Tradicionales deserve a top position in AID priorities.

c. Infrastructure

The importance of infrastructure, i.e., access roads, bridges, electrification and others, in a developing country like Guatemala is unquestionable. Its impact can be assessed in different terms. They begun in the country before AID projects and will continue after any PACD termination. In this sense, they are institutionalized.

However, the institutional experience--at INFOM, the Ministry of Communications and Transport, and local municipal governments--of carrying out these types of projects has been one of institutional development in different aspects.

After the 1976 earthquake, external financing of projects obligated INFOM to create a coordinating unit. Today, it is still functioning, not as a separate unit but integrated to INFOM networks.

In the Ministry of Communications and Transport, a similar unit was created, following the experience with 520-0255's UCPRODA. It functions in complete integration with the Dirección General de Caminos. Even though there are dissimilarities in salaries and logistical support between the staff of the Coordinating Unit and the Dirección's staff, this has not caused the problems of envy that were caused in Project 520-0255.

In a way, local municipal governments are also benefitting from U.S. funds, through the 8% of the National GOG budget constitutionally allocated to them. However, it is clear that the 8% funds are not an AID project. Anyway, the funds are being used by the municipal governments to strengthen the educational and health infrastructure, both in villages and towns.

d. Health

As it appears, the institutionalization of AID-supported projects as ordinary institutional programs in the GOG Health Sector is not marching on. Present AID projects with the Ministry of Health do not have GOG counterpart funds. Furthermore, the proportion of the National budget allocated to the Ministry of Health has been diminishing in the last five years. Thus, the probabilities of having the Ministry of Health take care of the follow-up of projects currently supported by AID, upon termination of their PACD, are, for all practical purposes, null.

However, other funding agencies (OMS, UNICEF, etc.) are helping the Ministry of Health to go ahead with programs like immunization and basic health. On the other hand, the promoters of rural health should be considered a permanent acquisition on the part of the communities; also, the training of "comadronas" (midwives). Thus, past programs have rendered durable results, and, in this sense, there is an institutionalization. The promoters are actually financed by the communities in the sense of paying for their services. Consequently, this type of projects have an automatic follow-up without the need of GOG funds.

H.8. AID/G

The internal institutionalization of AID/Guatemala, for an increased efficiency and effectiveness regarding projects has to do directly with the so called "lessons-learning process."

Every mid-term or final evaluation, every auditing and every seminar held on every project, provides scores of lessons to AID about the results of its procedures. Success and failures permit to distinguish between what ought to be done and what ought not to be done in the future. Thus, the lessons are there in the protagonists minds, the material results and the evaluation reports.

Now, who learns the lessons to be applied in following actions, procedures and projects at AID? On an average, an ex-patriate officer remains in the country for four years. So he sees only the last part of some projects and the first part of others, due to the fact that projects usually last from two to four years. Of course, some officers last longer in the country and some projects last less than 4 years. However, the problem is: what officers stay enough time in the country to learn in his own skin the lessons and apply them in designing new projects and procedures?

Another difficult aspect, why are the designers of new projects (short-term consultants) not the same people that learned the lessons through the project's implementation?

There is only one acceptable evidence that the lessons--learning process--namely, the institutional development--is taking place in AID/Guatemala: not to repeat procedures that render negative results, that cause

despite the fact that professional evaluators are saying to AID that "this is an inconvenient procedure," then the only explanation left is that AID Guatemala does not accept that the procedure is inconvenient. And here we come back to the cross-cultural question: On what grounds is the situation to be judged? On imported criteria, or on the evident results obtained? Thus, the solution of the ethnocentric problem will bring in the answer to these questions. In any case, this aspect deserves a careful consideration and solution.

III. CONCLUSIONS AND RECOMMENDATIONS

In general, the recommendations included correspond to the conclusions in the same order.

A. Conclusions

1. Currently, most of what can be called the project inception and design takes place inside AID, and the preliminary negotiations take place between AID officers and GOG officers. Target groups and the community, although they are subsequent protagonists, do not participate in the project designing and negotiation.

2. Both in the organizational and functional aspects, the condition of the national system of information gathering, analyses and divulging, is a precarious one.

3. Efforts towards planning or policy and strategy making occur without an adequate information basis. Similarly, there is a divorce between the functions of planning and implementing in the public sector.

4. However, on the existing information infrastructure and human resources, a better organized, equipped, trained and supported national system for information gathering, analyses and distribution can be built.

5. The most successful projects start with a baseline study to determine the relative social and economic importance of local needs and problems in addition to studying feasibility.

6. Since the very beginning, successful projects involve not only AID and GOG, but also the community and representatives of target groups.

7. In the successful projects, there has been a previous relationship of mutual trustworthiness between AID and the implementing agency or institution.

8. The successful project is implemented by several sectorial institutions and is multi-component; however, the implementing institutions are not over-burdened by several projects at the same time (whether of AID or other agencies).

9. The successful implementation requires adequate project designing and negotiation, really taking into account what the community or technicians of the implementing institutions have to say.

10. In successful projects, a careful study of pertinent laws is included.

11. In the successful project the "local cultural brokers,"--DIGESA's Guia Agricola, Promotor Bilingüe, Promotor de Salud Rural, Representante Agropecuario, etc.--play an outstanding role at the inception, designing, negotiation, implementation, evaluation and follow-up of a project.

12. The distribution of financial, logistical, technical, administrative and training resources among the implementing institution is a paramount factor for co-participation, cooperation, coordination and communication during the project's implementation.

13. The successful project does not inject into the community unnecessarily complicated administrative or technological systems.

14. Failure is associated with lack of the above-mentioned factors, or in their weak application; however, an inadequate plan of training, before and during the project's life seems to be the most important negative factor.

15. A concentration of AID efforts in certain areas of the Western Highlands is evident, i.e., adult males and agricultural production, school buildings and oral rehydration.

16. Another important negative factor is an inadequate selection of beneficiaries.

17. All GOG and private technicians interviewed recognize AID's legitimacy for monitoring, fiscalizing, evaluating and auditing of projects, but claim for a better distinction between the technical monitoring and the decision-making of the implementation stage. Also, claim for a clearer distinction between a financial fiscalization and a technical management is made.

18. Some weak aspects of AID-supported projects are qualitative ones, like training, organizational improvement, community involvement, leadership, lessons-learning, and so on.

19. Although AID experience is multifold regarding project designing, implementation and evaluation, the lessons-learning process is somewhat hindered by a degree of inflexibility in procedures of designing, implementation and termination.

20. The weakest aspect of the project process is the follow-up after termination, because no rational steps are taken to prepare and implement the follow-up.

21. The capacity of negotiation and contracting is a positive illustration of institutional development when concerning projects of rural access roads, small scale irrigation, soil conservation and diversification. Poor illustrations are marketing and training.

22. Those seeds planted by AID predecessors around the 1950's germinated in robust and big trees: from SCIDA, SCIDE and SCIDS have sprung out the sectorial units of research and planning, institutions like ICTA, USPADA, USIPE, and the idea of a necessary mechanism of central coordination for planning, research and decision-making. Permanent acquisition on the part of the Health and Education public sectors through AID-supported projects have been documented in several ways.

23. One of AID's problems to learn lessons is that those evaluating the projects are not the ones designing them; and the system of personnel mobility inside AID.

B. Recommendations

1. Community members and representatives of the target groups and institutional technicians must become involved in the stages of baseline and feasibility studies, and inception and designing of the projects.

2. Institutional efforts to supply basic field information must be strengthened at the same time that a top-level effort is made to improve communication, interaction, coordination and co-participation in the national public system of information gathering, analyzing and divulgating.

3. The production, analysis and distribution of basic field information must be improved in order to up-grade connections between research and planning, and between planning and policy and strategy making functions.

4. Base-line and feasibility studies must be institutionalized as a sine qua non condition to start new projects or project phases.

5. Base-line and feasibility studies must be participative, involving community and target group representatives, and institutions' technicians.

6. A wider acquaintance of AID offirers with Guatemalan society and its institutions is needed, in order to build relationships of confidence with potential implementors.

7. Projects must be, if possible, multi-institutional and multi-component, without overburdening the implementing institution.

8. Listening to what the community and target group representatives have to say is not enough; their input must become an integral part of the project's design, implementation and evaluation.

9. A careful study of the laws pertinent to a project must be included in every feasibility study, taking into consideration not only the situations during the project's life, but also possible problems of termination and liquidation.

10. Local "cultural brokers" like Guias Agricolas, Voluntarios Pecuarios, Promotores Bilingües, Promotores de Salud Rural, Representantes Agropecuarios and Promotores de Desarrollo must play an outstanding role during the project's inception, designing, negotiation, implementation, evaluation and follow-up, as strategic cross-cultural channels and communicators.

11. In order to upgrade institutional co-participation, cooperation, coordination and communication all along the projects process, a rational and mutually agreed distribution of financial, logistical, technical and administrative results must be achieved.

12. A careful study of the cultural appropriateness of administrative procedures proposed to institutions and of the technology proposed to beneficiaries must be done during the feasibility and base-line study, or later.

13. Regarding how to secure a successful follow-up, it must be carefully planned in its financial, technical, logistic and administrative aspects. Training of the implementors seems to be the paramount factor.

14. New areas within the Western Highlands, like the west shores of Lake Atitlán, the Cuchumatanes and the Franja Transversal; and new regions like the Eastern Highlands, the Southeast Coast and the Petén area deserve support for development. In the same way, handcrafts, trading and service supply deserve consideration as new developmental means.

15. In any case, a careful planning of beneficiary selection is needed in every project design, in order to secure repayment of loans, adoption of technology and better results.

16. Careful distinctions between technical monitoring and decision-making of the implementation stage must be planned and incorporated to the projects. Also, a distinction between financial fiscalization and technical management must be fully discussed, devised and incorporated into the projects.

17. True experts in qualitative aspects of development--and not dilettante ones--should be integrated to the team of base-line feasibility, project design, monitoring, evaluating and follow-up. This will improve organization, communication, cross-cultural appropriateness, community participation, leadership, training, lessons-leaning and other aspects.

18. An effective mechanism must be devised to interconnect the lessons-learning and the project designing and evaluation. Basically, the same technicians should participate in both phases of the project.

19. It seems necessary to plan the presence in Guatemala of ex-patriate AID staff to respond to the needs of interconnecting lessons-learning and project designing, instead of responding, mainly to internal bureaucratic needs.

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APPENDIX 1

Introductory Meetings

1. US and Guatemalan Consultants with Dr. Gary Smith and Mr. Tom Kellerman, at AID's Annex 3.

2. US and Guatemalan Consultants with Mr. Anthony Cauterucci, et.al. at AID main building

3. US and Guatemalan Consultants with U.S. Embassador in Guatemala, Mr. George Michels.

4. US and Guatemalan consultans with the GOG Vice-Minister of Agriculture, Ing. Carlos de León Prera.

5. The CCE Team - First meeting, at Central CCE Office

APPENDIX 2

Documents Reviewed

AID

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APPENDIX 3

PERSONS INTERVIEWED AND INSTITUTIONS VISITED

1. Lic. Buenaventura de León, Head of the Natinoal Commission of Literacy (CONALFA), regarding PRONEBI.

2. Lic. José María Galindo, Ministry of Education, former head of the PRODEPRIR (Program for Improvement of Rural Primary Schools).

3. Lic. Mercedes Günther, former head of Non-Formal Eduation National Program, and present head of USIPE (the Planning and Research Unit of the Education Sector).

4. Lic. Ricardo Curruchiche, head of the Department of Socio-Economic Studies of the Banco de Guatemala, regarding statistical series of macro social indicators.

5. Dr. Gary Smith, AID, regarding how interest in information systems begun and evolved in Guatemalan public institutions related to AID supported projects.

6. Perito Agrónomo Domingo Conde Prera, Jefe de Proyectos de la Dirección General de Servicios Agrícolas (DIGESA).

7. Profesor Félix Sarazúa Patán, Director de Socio Educativo Rural, Ministerio de Educación.

8. Ing. Agrónomo Armando Fletes, Director Administrativo del Instituto de Ciencia y Tecnología Agrícola (ICTA), y Coordinador de la Comisión de Programación del Sector Público Agrícola (USPADA).

9. Agrónomo y Economista Ricardo Santa Cruz Rubí, Gerente General de la Gremial de Exportadores de Productos No-Tradicionales de Guatemala, Ex-Gerente del Instituto Nacional de Comercialización Agrícola (INDECA) Y Ex-Técnico de AID Guatemala.

10. Lic. Homero Jeréz, Director General de Educación y Ex-Director de la Unidad Sectorial de Investigación y Planeamiento Educativo (USIPE) y Ex-Director del Proyecto de Desarrollo de la Educación Primaria Rural en Guatemala (PRODEPRIR).

11. Lic. German Chew, Coordinador de Proyectos Rurales de la Dirección de Extensión de la Universidad Rafael Landivar, Ex-Asesor del Despacho del Ministro de Educación, Ex-Coordinador de Proyectos en USIPE, Consultor Educativo de OEA (Organización de Estados

Americanos) de UNESCO (Servicios de Cooperación Educativa de las Naciones Unidas) y el BID (Banco Interamericano de Desarrollo). Ex-Funcionario del Proyecto de Mejoramiento de la Educación Media en Guatemala (PEMEP).

12. Lic. Arnoldo Escobar, Jefe de Extensión de la Universidad Rafael Landivar, Ex-Funcionario del Proyecto de Asistencia Técnica a la Educación Media (PATEM), Fundador y Primer Director de la Dirección General de Educación en Guatemala, y Fundador y Primer Director de la Unidad Sectorial de Investigación y Planeamiento Educativo. (USIPE).

13. Ing. Agrónomo Carlos Anzueto, Coordinator del Programa de Compra de Tierras de la Fundación del Centavo, Ex-Director Regional de DIGESA (Región I, Quetzaltenango) y Ex-Presidente de la Coordinadora Regional de Desarrollo Agropecuario (CORECA).

14. Ing. Byron Contreras, Jefe del Departamento de Estudios de la Unidad Sectorial de Planificación Agrícola, Pecuaria y de Alimentación (USPADA), y ex-miembro de la Sección de Marco Muestral de USPADA.

15. Ing. Agrónomo Eliseo Herrarte, Gerente General del Instituto Nacional de Comercialización Agrícola (INDECA) y ex-jefe de la Unidad de Coordinación del Proyecto USAID 520-0255 (UCPRODA) Y ex-Director de Promoción y Organización del Ministerio de Desarrollo Urbano y Rudal (MINDES).

16. Dr. Jorge Chang, Coordinador de Proyectos de Salud de AID, ex-funcionario del Ministerio de Salud de Guatemala y ex-miembro del Hospital Herrera Llerandi en Guatemala.

17. Dr. Alfonso Loarca Pineda, Vice-Ministro de Ganadería, ex-miembro del Equipo de Asistencia Técnica (EAT) del Proyecto 520-0255, ex-funcionario de DIGESEPE y Proyectos HOPE y HEIFFERT, y fundador de DIGESEPE; ex-funcionario de DIGESA.

18. Ing. César Lacayo, Director de Obras Municipales del Instituto Nacional de Fomento Municipal (INFOM).

19. Lic. Jorge Poitevin, Jefe Administrativo de la División de Obras Municipales de INFOM.

20. Lic. Carlos Soto, Jefe de Planificación de la División de Obras Municipales de INFOM.

21. Lic. Gustavo Leal, Coordinador Técnico de

USAID/Guatemala, ex-gerente de BANDESA y ex-jefe de programación de AID.

22. Sr. José Gabriel García Chen, Alcalde de San Juan Sacatepéquez, Departamento de Guatemala

23. Sr. Roberto Salguero, Secretario Municipal, San Pedro Sacatepéquez, Departamento de Guatemala.

24. Sr. Armando Castañeda, Secretario Municipal, Villanueva, Departamento de Guatemala

25. Sr. Alfonso de León, Secretario Municipal, Patzún, Departamento de Chimaltenango.

26. Alcalde Auxiliar y Comité para el Desarrollo Comunitario, Chipiacul, Patzún, Departamento de Chimaltenango.

27. Comité "Visión Mundial," enfermera del Puesto de Salud y promotor de APROFAM, Xepatán, Patzún.

28. Prof. Luis Dardón, Alcalde en Funciones, Gustatoya, Departamento de El Progreso.

29. Ing. Fausto Aragón, Gerente General Regional de BANDESA en Quetzaltenango.

30. Contador Ariel Méndez, BANDESA, Quetzaltenango

31. Agronomista Germán Cutz, BANDESA, Quetzaltenango

32. Lic. Jorge García, Consultor para el Desarrollo de Material de Entrenamiento del Equipo Técnico de Asistencia del 520-0255.

33. Dr. Veterinario Jacques Sigal, COSUREDA, miembro en Quetzaltenango y Director sub-regional de DIGESEPE en Quetzaltenango

34. Agrónomo Marco Tulio García, President de la Asociación de Agricultores de Aguacatán.

35. Lic. Manolo Díaz Solís, Gerente General de la Gremial de Exportadores de Productos No-Tradicionales, Sucursal Quetzaltenango.

36. Contador José Antonio de Paz, Gerente de la Cooperativa de Productores de Leche (Xelac) en San Cristóbal, Totonicapán.

Sr. Mario Sun, Presidente de la Cooperativa de

Productores de Leche (Xelac) en San Cristóbal, Totonicapán.

37. Sr. Mike Kimes, Consultor Técnico de CLUSA para la Asociación de Agricultores de Aguacatán y la Cooperativa de Productores de Manzana de Chichicastenango.

38. Ing. Agrónomo Giovanni Godoy, Consultor de Mercadeo para el Proyecto 520-0255 en Quetzaltenango.

39. Sr. Amado Rodríguez, Secretario de DIGESA en Huehuetenango

40. Contador Juan Cardona, Jefe de la Agencia de BANDESA en Huehuetenango.

41. Una mujer campesina en Aguacatán.

APPENDIX 4

File Danilo A. Palma, Cross Cutting Evaluation fieldwork notes:

A. Guatemala City interviews.

Case
01 Lic. Ricardo Curruchiche, Director del Departamento de Estudios Socio-económicos del Banco de Guatemala.

Objetivo: Obtener series estadísticas sobre la economía de Guatemala.

Las funciones normales del departamento de estudios socio-económicos del Banco de Guatemala son de análisis. No es su función recolectar información primaria. Pero en vista de que INE, USPADA y otras entidades responsables de recolectar información primaria no lo hacen sistemáticamente, regularmente y completamente, no se cuenta con series estadísticas completas para las principales variables económicas y sociales de Guatemala, ni siquiera para los años recientes. No obstante el Departamento de Estudios Socio-económicos ha podido elaborar algunas series sobre variables macroeconómicas desde los '50's hasta la fecha. El Lic. Curruchiche nos entregó una hoja con estas series. (La tiene el Ing. Francisco Rohrman).

El Lic. Curruchiche estima que del Marco Muestral de USPADA el Banco de Guatemala no puede hacer uso. Al contrario, USPADA solicita información al Banco y al INE. Existe una gran duplicidad de responsabilidades de generación de información primaria en el sector público pero ninguna de las instituciones cumple a cabalidad con la función. Por eso el Banco de Guatemala ha tenido que distraer parte de su personal y recursos haciendo algunas encuestas. En general, el Banco no confia en la validez de la información obtenida por otras entidades. No existe comunicación entre el Departamento de Estudios Socioeconómicos del Banco y el INE o USPADA u otras entidades que generan información. No hay planes de establecerla. Parece que el Banco no necesita o dice no necesitar tal comunicación.

02 Dr, Gary Smith, con experiencia en Guatemala en los últimos 17 años, varias veces consultor de AID y actualmente empleado del Departamento de Agricultura de USA destacado en la Misión AID en Guatemala. Fue director del Equipo de Asistencia Técnica del Proyecto 520-0255. Diseñó la Evaluación Intersectorial (Cross Cut Evluation) y es el Team Leader del Equipo de esta evaluación. Ofreció ser informante sobre las tendencias de la situación socioeconómica de

Guatemala en los últimos años, sobre el trabajo de la Misión AID en Guatemala en los últimos años y sobre las tendencias en las relaciones entre AID Guatemala y las instituciones públicas y privadas guatemaltecas.

El Dr.Smith empezó con AID en Guatemala con los Proyectos 520-0233 en 1976. Pero desde 1968 había tenido contactos con Ricardo Avila cuando éste tomaba clases de inglés.
Según el Dr. Smith no hay una buena conceptualización sobre cómo hacer funcionar el sistema de información del sector público agrícola desde el punto de vista del usuario o de los usuarios. Los años '70's fueron de arreglos entre AID, USDA, y GOG. Antes de 1970 no hubo encuestas ni diagnósticas por programas sistemáticos. Solo en bases ad hoc. El rol de USPA antes del 70 fue nulo. Aunque en el Ministerio de Economía se había establecido la Sección de Estadísticas Continuas desde los años 50-60. En aquel entonces el problema era el procesamiento de datos. La idea en los años 70 era que USPA daba insumos al Ministro.

Cuáales han sido las restricciones, desde el punto de vista de los usuarios? Qué tipo de comunicación debe haber? Cómo ha contribuido esto al éxito de los programas? Hay formas de eludir los problemas? Que formas de control son mas útiles? Gantt, PERT,Correlación simple, Programación lineal? Qué hemos aprendido? Cuáles son las alternativas?
Dave Lazar pregunta: Según el usuario del campo, qué debe haber recibido y que no lo ha recibido?

Debe hablarse con los "old timers", como Ricardo Avila, César Reyes, José Luis Reyes, Armando Fletes, etc. Deben hacerse pocas preguntas a muchos informantes de diferentes características. Debe entrevistarse a protagonistas claves. En DIGESA Victor Mayorga, Mingo Conde, Carlos Anzueto, Jaime Solórzano, José Luis Monterroso. En DIGESEPE al Dr. Efraín de Leon Regil, al Dr. Alfonso Loarca. En ICTA al Ing Fumagalli, a Pinto, Fletes y Maco Maldonado. En USPADA, Adán Rodríguez, Ricardo Avila, Eliseo Herrarte, Rudy Lima, Byron Ponce, Hugo Orellana,. En BANDESA Luis Felipe Xitumul, Gustavo Leal, Walter Armendariz, En INDECA Ricardo Santa Cruz, Eliseo Herrarte.

03 Dr.Gary Smith, Segunda consulta, acerca de las preguntas precisas a plantear a los entrevistados. Como antecedente de esta consulta, el Dr. Dave Lazar me dio instrucciones de esperar 3 dias para que el Lic. Gregorio Tum pudiera terminar su Scope of Work, y poder integrarlo con el mio.

Con el Dr. Smith, las tareas del Institutional Development specialist son: Primera, averiguar cuales son las percepciones de los protagonistas claves de lo que está pasando ahora y lo que pasó antes? Segunda, revisar los

resultados obtenidos por los compañeros especialistas técnicos del equipo de la evaluación, y obtener de ello alguna confirmación de las percepciones de los protagonistas o bien nuevas hipótesis de trabajo. Tercera, contrastar lo sucedido con lo que se esperaba, es consistente?.

Traduciéndolo a preguntas:

1. Por cuánto tiempo ha tenido usted relación con proyectos apoyados por la AID.
2. Cuáles han sido esos proyectos, en que instituciones?
3. Qué efectos han tenido esos proyectos en las instituciones que los han ejecutado.
4. Cuáles han sido las limitaciones mas importantes para que la institución ejecutara esas preguntas?
   sobre la administración
   la comunicacion
   coordinación del trabajo
   servicios a los usuarios o beneficiarios
   la calidad de los recursos humanos
5. Qué ven de positivo o de negativo en lo que ha pasado a la institución como consecuencia de las relaciones de la institución con la AID a través de los años.

04 Lic. Buenaventura De Leon, ex-funcionario de MOGAL, del MINISTERIO DE EDUCACION, y actual Director General de la Comisión Nacional de Alfabetización (CONALFA).

1) El Banco Mundial se dedica a obras materiales visibles. AID proporciona ayuda mixta, para obra material y obra cualitativa. Algunos proyectos son bipartitos AID-GOG, otros son tripartitos AID-GOG-Comunidad,. como algunos con Socioeducativo Rural. A veces Municipalidad-vecinos-AID.

2) PRONEBI es el proyecto más ambicioso y grande que AID ha promovido en Educación. Lo más importante de señalar es que tal proyecto partió de un estudio de base.

3) Con fondos de AID en la Universidad Rafael Landivar, bajo la direccion de la Licda. Guillermina Herrera se está realizando una investigación cultural, buscando contenidos para una literatura educativa para indígenas.

4)Becas es otro beneficio que AID ha traído.

5)Apoyo a investigación educativa.

6) Sería bueno hablar con Camilo Chan, Cesar Tzul y otros supervisores educativos del PRONEBI.

7)LECCIONES APRENDIDAS:
a.-La investigación de base evita la dependencia porque si es

participa compromete a los participantes.
b.-Cuando la capacitación es inexistente o inadecuada se crean problemas, por ejemplo, a los supervisores de educación no se les dio una capacitación adecuada. Casi hubo una huelga.
c.- Los materiales bilingües se están consolidando, aunque el uso de la lengua materna ya se hacía. Además se han obtenido libros, rotafolios y otros materiales.

8)Aclarando lo de los antecedentes de la educación bilingüe en Guatemala : En la Pedro Molina se utiliza la lengua Cakchiquel, y se enseña también, pero más que todo para desarrollo de la comunidad. En la Escuela Normal de Totonicapán se enseña Quiché y en Quiché, pero no para educación bilingüe. En Santa Lucía Utatlán se enseña en tres lenguas (Quiché, Cakchiquel y Tzutuhil).

9) En el sector privado, AID está financiando a la Asociación de Amigos del País.

10)En un año, de Dic.87 a Dic.88, CONALFA ha logrado 133,000 alfabetizados. De 1944 acá ha habido 11 campañas de alfabetización.1

05 Lic. José María Galindo, Jefe de Bodega de CONALFA, La Comisión Nacional de Alfabetización. Ex-Director de Socio-educativo Rural.

1)El 90 % de los animadores (alfabetizadores) de CONALFA son hombres. Cuando el grupo era mixto, se aceptaban animadores de ambos sexos.

2) Las etapas del programa de alfabetización son la preparación, realización y refuerzo. Se hace en la lengua de la comunidad con una metodología guatemalteca. Aparte es el Departamento de Alfabetización del Ministerio y aparte CONALFA.

3)Otras dependencias que han hecho alfabetización son EBR, PEMEP, Alfabetización del Ejército.

4) PRODEPRIR se arruinó. Cayó en construcción de edificios escolares. El Lic. Galindo era el Director del Trabajo Cualitativo, que incluye adecuación curricular y adecuación administrativa. Según el Convenio AID-Guate, debía tener su propia estructura y esto no se cumplió. Se hizo con UCPE.
incluía:
Región I: Jutiapa, Jalapa, Chiquimula
Región II: Alta y Baja Verapaz
Region III: Quiché, Huehue y San Marcos y Toto.
Los edificios escolares se encuentran en la Región I. Celia Ana Cortez era la consultora para adecuación curricular.

Por razones de presupuesto, PRODEPRIR se adscribió a Socioeducativo Rural y EDUPRIMUR se adscribió a USIPE.

5)El Lic. Galindo planteó los problemas pero el convenio ya estaba firmado. Los modelos de edificios no son adecuados. Fueron Q35 millones para 4 años, el 80% de los fondos eran de AID, el resto de GOG. El convenio se firmó en España en 1981. Empezó a funcionar en 1984, pero el personal guatemalteco principió en el 81. Están pidiendo prórroga. Se hicieron 293 construcciones, 80 reparaciones y 40 ampliaciones. USIPE seleccionó las comunidades. En estas escuelas se iba a dar un sobresueldo del 75% a maestros que ya estuvieran trabajando en esas escuelas, en lugar de nombrar maestros nuevos.

6) Qué impacto tuvo la Guía Curricular no sólo en la Escuela sino en la familia y la comunidad? Cada escuela debió tener instructores de artes industriales y agropecuario. Los núcleos escolares campesinos desaparecieron en 1968. PRODEPRIR incluía las Escuelas regionales de Monjas, Santa Lucía Utatlán. La Pedro Molina no se integró. German Chew trabajó en el pensum de Monjas y Santa Lucía. Los consultores de PRODEPRIR llegaron tarde. Falló el apoyo de GOG al proyecto. No se ofreció la contrapartida. También falló la selección del personal. Se cumplió lo formal pero faltó creatividad. Lo empezó Homero Jerez, pero le faltó apoyo.

7) PRONEBI dejó de ser proyecto y se convirtió en programa.

06 Licenciada Mercedes Gunther, Directora de USIPE.

1) Trabajó en el campo. Empezaron a trabajar en las Escuelas Satélites. Estas debían ser proveedoras de alumnos para las Escuelas Regionales. Pero la demanda local llenó las Regionales. Fue un buen intento para mover ideas hacia una reforma curricular. Aquí se hizo la primera adecuación para todo el país. Se reforzó la parte práctica.

2) PEMEP dejó una semilla que fructificó en el sistema curricular. Se fortaleció la infraestructura; se cayeron las escuelas con el terremoto de 1976 pero no las de PEMEP:ligeras, asísmicas. El adobe hasta ahora está volviendo. A partir del PEMEP se quedó la semilla de construcciones modulares. Luego el Banco MUNDIAL impulsó PEMEP II con módulos.

3) Se ha contribuido a la descentralización, porque se atiende lo rural, solo perativamente. En Santa Lucía UTATLAN se contribuyó también a la Educación Bilingüe. La Alameda se había quedado estática. Santa Lucía sigue siendo el epicentro'empezó de la nada. Se aceptó primero solo 10 lenguas.

Luego todas. PRONEBI toma preferentemente maestros bilingües de Santa Lucía. Otros tienen plazas de maestros. De la primera promoción, de 85 contrataron 55. De las siguientes, menos. Se les marginó. Ahora son altamente cotizados.

4)A finales de los 50's y durante los 60's , SCIDE hizo un programa de profesionalización de maestros empíricos. Se logró una categoría profesional. LOGROS; Ahora sólo hay 1% de maestros empíricos en primaria. Sólo 60% de los de nivel medio están profesionalizados. Afectó a todo el país. Ahora la enseñanza bilingüe está institucionalizada a nivel primario. Antes era solo a nivel preprimario.
Alfabetización por TV. El Ejército editaba los folletos de lecturas en los 60's. En tiempo de Lucas se reportaron 450,000 alfabetizados. Sólo área urbana.

5)El SCIDE inició la producción del libro de texto y distribución a las escuelas que los solicitaran. Luego ROCAP con el RTALC I. CENALTEX trabaja para todo el país. con préstamos del Banco Mundial.

6) EBR se está convirtiendo en Dirección de Tecnología Educativa.

7)Las dos estaciones de radio funcionan a la deriva. Se pretendía originalmente que la radio sirviera a todas las instituciones del estado y aun privadas no lucrativas. Educación extraEscolar alquila tiempo en radios privadas. No se crearon más plazas de promotores bilingües de educación extraescolar porque eso hubiera conducido a otro para-sistema educativo (CENALTEX daba un libro para cada 3 alumnos). Guatemala no tiene como formar a alguien en educación no formal.

8) De SCIDE también vino USIPE.

El programa de EEE enfatiza el trabajo de promotores bilingües.

07 Prof. Félix Sarazúa Patzán, Director de Socio-Educativo Rural, Ex Miembro del Consejo de Estado por los groups étnicos Cackchiqueles en tiempo del Gral. Ríos Montt.

1. En tiempo de Peralta había 11 parcelamientos con profesores nombrados bajo un programa de AID llamado ICA. Daba cuadernos a los niños y mucho material didáctico y 1 visita médica al mes. Cada maestro ganaba Q150 al mes, cuando los demás maestros ganaban Q70. Ydigoras absorbió las escuelas en 1964. Con esto también se urbanizó el casco de las fincas. Las parcelas estaban en occidente y oriente. Eran 60

maestros en los 11 parcelamientos en toda la costa. En un parcelamiento se ponía la Escuela Central y alrededor de estas las satélites. Todos eran maestros titulados. El curriculum era el oficial. La embajada de USA proveía la capacitación. Duró 4 años afuera del GOG. Se utilizó el método eléctrico para la enseñanza de la lectoescritura. Uno de los maestros lo articuló. La oficina de parcelamientos imprimió los folletos y todos lo utilizaron. Ahora es universal. El eléctrico revolucionó a los otros métodos. En los colegios caros se usan el Palau. El aprestamiento es el mismo en la metodologiía bilingüe. El supervisor de la eeducación bilingüe es el que antes era el orientador de castellanización.

2. AID donó $500 mil para la regionalización. DERFAM tiene 8 orientadores. Los directores regionales fueron nombrados en 1986. Lo primero que hicieron fue un estudio de necesidades; de enero a marzo de 1987 hicieron el plan anual. El ministro Gómez les puso 3 consultores. Se ejecutaron estrategias hasta Noviembre 1987. El apoyo de AID fue para equipamiento de oficinas y capacitación de los 3 directores regionales y los 22 directores departamentales de educación. La idea de la descentralización responde a motivaciones administrativas. En los encuentros educativos organizados por la Viceministra Galo, se planteó la regionalización educativa. El Dr. Gilberto Méndez de AID habia participado en la elaboración del anteproyecto de regionalización. INAP va a hacer la capacitación. El GOG ya dio presupuesto. Parece que AID dará otro financiamiento. Los sindicatos se opusieron. El 10% de maestros también se opusieron. A Ralón, el de Educación Extraescolar no lo quieren. El partido lo ha sostenido allí.

3. NUFED se inició en Francia. Es una alternativa para que el joven campesino no abandone la tierra. Están 15 días en su casa y 1 semana en el internado. Pero el Centro tiene apenas Q0.63 por persona al día para comida. Hay 7 centros y están pidiendo 10 más. Hay en San José Chirijuyú, Tulumajillo, San José Chicalaquix (Sija). Se funda un centro NUFED para 5 aldeas. Es un básico con orientación agrícola.

4. PAIN es un programa de atención a niños menores de 5 años. Se forman monitores en aldeas. Enseñan a los niños a lavarse la cara, a mantenerse limpios. NO TIENEN SUELDO SINO ALIMENTOS POR TRBAJO. (del PL480).

5. PRODEPRIR tiene que construir 176 escuelas. Se ha construido el 80%. Alfredo Tay ES EL NUEVO COORDINADOR

de aspectos cualitativos.

08 P.A. Domingo Conde Frera, Jefe de Proyectos de la Dirección General de Servicios Agrícolas (DIGESA). Ex Director Regional de DIGESA en Quetzaltenango, Ex Coordinador de Coreda y participante en varios proyectos apoyados por AID.

1. Mingo Conde ha participado en 1976 en el 520/218, proyecto de asistencia técnica en producción de hortalizas, flores, granos básicos y frutales. En 1976 en el 520-T-026 (PL-488-84), que tenía Miniriego y Conservación de Suelos. En 1978 en el 520-T-030, la Central Cooperativa de mercadeo agrícola, CECOMERCA. Luego en el T-034 y en T-037. También en el PL-416.

2. El mejor aceptado fue el T-034, porque incluyó varias instituciones con participación de las comunidades del sector. La fase II del T-037 involucra además a INDECA y DIGEBOS.

3. Con el T-034 empezó el CORECO. Los COSUREDAS ya existían como instancia menor del COREDA. A nivel de coordinación general con el T-034 se empezó la programación conjunta en la Región VI. Hoy se hace así en las otras. Cada COREDA pide a sus CONSUREDAS la programación del sector. YA RESISTIO VARIOS GOBIERNOS. DEBE CONTINUAR.

4. La actual Región IV (Jalapa, Jutiapa, Santa Rosa, se parece a la VI) ya tenían un sistema anterior introducido por IICA. De años para acá, la AID está en las regiones II Verapaces, III Izabal, IV Jutiapa, VI Mazate. Se debe reforzar la programación conjunta.

5. Se deben "chapinizar" los proyectos. Que los asesores sean guatemaltecos. Deben estar en las instituciones. Desde la elaboración del "project paper," como está sucediendo en la fase II del T-037.

6. Cada institución tiene sus propias necesidades. DIGESA necesita más profesionales y DIGESEPE también. Equipamiento es el problema de DIGESA. INDECA necesita personal profesional o adiestramiento al personal actual. Necesita un equipo computarizado para información de mercadeo.

7. Las instituciones acuden a DIGESA, es la fuente de apoyo. Se van a crear los secretriados ejecutivos del COREDA, quienes van a ser los jefes del sector. Su vinculación más fuerte va a ser con USPADA.

8. A BANDESA se le ha pedido descentralizar. En la fase II se incluye un consenso de que las operaciones de BANDESA y sus decisiones sean descentralizadas.

9. HAY QUE EVITAR LA INGERENCIA DIRECTA Y FUEREDE DE AID EN LA EJECUCION. Debe haber claridad desde el principio en el Project Paper.

10. En el IAN habia americanos en 1950.

09 Lic. Ricardo Santa Cruz, Gerente de la Gremial de Exportadores de Productos No-Tradicionales, ex-gerente de INDECA, ex-técnico de AID y ex-evaluador de proyectos de AID.

1. El proyecto con la Gremial es la experiencia de AID con el Sector privado, por primera vez. Es un proyecto de desarrollo de agroindustrias. Qué es lo que lo hace diferente?
   a. Fue una iniciativa de la institución interesada
   b. El anteproyecto original fue hecho por la gremial
   c. La iniciativa privada tiene personal estable. El GOG y AID no siempre.
   d. Los ejecutores tienen amplio, margen de discrecionalidad. Originalmente AID intervenia mucho, trataba la Gremial como si fuera del sector público. En los primeros 18 meses del proyecto, se emitieron 20 PIL; en los siguientes 2 años, sólo 5.
   e. RSC programó todo el primer año para no tener que esperar SIL. Es posible hacerlo con el GOG también. Así lo estimó Arthur Young.
   f. Cuando la rell AID/Inst es de confianza, no hay problema. El año fiscal empieza en octubre. Se llevó 18 meses pare empezar el proyecto. A pesar de que estaba todo aprobado, hubo que operar a través de SIL con Manteiga. Es oficina nueva y se ciñe al pie de la letra.

EVITAR
1. Agobiar a la institución con nuevos proyectos
2. Iniciar proyectos sin una buena relación con los ejecutores, antes de cualquier financiamiento.

RECOMENDACIONES
1. Que AID participe más en los diversos sectores, no como AID oficialmente, sino sus funcionarios extraoficialmente.
2. Que se investigue bien la confiabilidad de los ejecutores potenciales.
3. El uso d elos recurso sno se puede ocntrolar. Solo se crea tensión. Debe revisarse la capacidad instalada. Se puede hacer como parte de refuerzo institucional.

4. Las reacciones de AID deben ser oportunas.

010 Lic. Homero Jerez, Director General de Educación, ex-director de USIPE, ex-director de PRODEPRIR y relacionado con varios proyectos apoyados por AID en el MINISTERIO DE EDUCACION.

1. Cuando hay asistencia exterior, cada país debe meditarlo bien. AID ha tenido muy buenos programas. El 025, el 029 y PRONEBI. La filosofía y los objetivos han sido correctos. Pero se han metido en una estructura obsoleta, ineficaz.

2. Del 025 y el 029 quedan edificios, equipamientos. Algunas capacitaciones que recibieron los maestros puedfen ser recordadas. PERO SOLO ESO HA QUEDADO. PRONEBI ha sido muy bueno, pero ha distorsionado a Socioeducativo. Socioeducativo se ha convertido casi en solo PRONEBI. Lo demás (NUFED, PAIN, DERFAM y otros) son apéndices. Bien podría desaparecer socioeducativo como tal y quedar como Dirección de Educación Bilingüe. Sería mejor PRONEBI.

3. Desde el principio habia problemas; se creaba una dirección dentro de otra dirección. Los impactos de DERFAM, PAIN, NUFED, son ínfimos.

4. Lo cualitativo de PRODEPRIR no caminó. EDUPRIMUR por el estilo.

RECOMENDACIONES

1. Que cada proyecto tenga un seguimiento de 2 a 4 años. La Radio de Salamá no ha empezado ypodría quedarse así. Sin eso no se puede continuar. Cuando ello smanejan el proyecto tienen recursos; cuando se lo dejan a la institución, ya no hay recursos.

2. Que la contrapartida se fije en montos y con fechas de desembolsos.

3. Que participen los funcionarios nacionales, NO HA HABIDO ECO A LAS PARTICIPACIONES.

PRODEPRIR es del Banco Interamericano. Publica libros igual que PRONEBI. En eso se empalma con AID.

11 Lic. German Chew, Director de Proyectos Rurales de la Universidad Rafael Landivar, Dirección de Extensión, ex-asesor del Despacho de Educación, ex-consultor de PRONEBI, ex-consultor de OEA, de UNESCO. Ha tenido

relación con diferentes proyectos apoyados por AID y el Banco Mundial.

1. Desde el PROGRAMA de la Normal Pedro Molina, 1945, hubo asesoría a la elaboración del pensum. Manuel Arce de Costa Rica estuvo 13 años. El pensum para el estudiante de la normal fue elaborado. Allí se dio también el programa de profesionalización de Maestros Empíricos. El SCIDE era asistencia de USA a Guate. Luego SCIDE se convirtió en ACEN en el '66. En 1965, se liquidó ese programa. El equipo y materiales pasaron al Ministerio de Educación.

2. El programa de textos ODECA/ROCAP del '64 al '71. Las evaluaciones no fueron buenas. Se mandó gente, representantes ante ODECA/ROCAP de El Salvador. Sólo se avalaron lo que ya estaba hecho. . LOS LIBROS VENIAN HECHOS DE USA. El problema era el procedimiento para aprobar los textos. La Iglesia Católica intervino. Hubo 2 tipos de problemas: uno en Guatemala hubo dificultades de entrega de textos; y segundo, problemas de contenido. Se analizó en el Ministerio y en la Facultad de Humanidades, en tiempo de Martínez Durán.

3. Luego de editados, un millón por país, se almacenaron.

4. Se dificultó la reedición. Las placas las apropiaron los impresores privados salvadoreños. De eso no quedó nada. Y no tuvo seguimiento.
   a. No se actualizó en contenido
   b. La edición
   De eso no quedó nada. Podía haber quedado el de Matemáticas y el de Ciencias Naturales. No hubo suficiente capacitación para el manejo de los textos.

5. Otro fracaso fue el del 025 y el del 029. Se tenía que actualizar a los maestros de primaria y secundaria. Los préstamos PEMEP I y II QUE DEJARON? La AID no exigió que se respetaran los objetivos. Solo quedan edificios. No hubo capacitación. Las guías curriculares no existen.

6. Una evaluación mostró que alumnos de escuelas convencionales salían mejor preparados que los de PEMEP. AID no supervisó. El Banco Mundial sí controla.

7. No se programó realisticamente, los remanentes se regalan, sin control. Ni siquiera quedaron las guías curriculares. LO QUE QUEDO DE PEMEM I Y II fueron vicios. AID NO FISCALIZO, SE BASO EN INFORMES.

8. Especialistas de la Universidad de Nuevo México hicieron

una evaluación de PRONEBI y consideran que es un fracaso.

9. En la regionalización se compró material y equipo. Con atraso. Según la evaluación de Patrick, no hay bingüilismo.

BALANCE

1. Ha quedado obra física y equipo. NO parece haber impacto cualitativo. Se ha fomentado desorden y corrupción. Sólo hay ejecución financiera adecuada.

2. Se cubre más del 50% de la matrícula rural en Guatemala, la no bilingüe. PRONEBI sólo cubre 400 escuelas.

12 Lic. Arnoldo Escobar, Director de Extensión de la Universidad Rafael Landívar, fundador y primer director de la Dirección General de Educación, ex-jefe de OPIE y fundador y primer director de USIPE. Ha tenido relación con proyectos apoyados por AID y el BID, tales como PEMEM y PATEM.

1. En USIPE se hizo un convenio para lo del 029 y PEMEP II. Luego se hizo una evaluación. En la URL ha tenido contacto con los dos programas bilingües, con el 029 (FORPEM) y con CINDEG.

2. El problema de la institucionalización es que cuando AID se aparta, los proyectos se deshacen. Comenzó a fallar por culpa de GOG. Enviaron personas no capacitadas para el programa. Nose estudió la adecuación cultural de los edificios escolares. En timepo de Guillermo Putseys, se fundó USIPE y ésta tenía fricción con la Dirección de PEMEM. Los supervisores eran gente esogida. Las escuelas eran muy lujosas, fuera de realidad. Los edificios de PEMEM igual. El objetivo era que todo el sistema se moldeara alrededor de este sistema.

3. En 1986, habia 8204 escuelas. PEMEM hizo 27 escuelas. Muy poco para cambiar al sistema. Los pocos efectos tienden a desaparecer. Los gobiernos no están convencidos ni preparados para el siguimiento. Si se evaluara, no se detectaría el efecto.

4. Aún los mismos ministros sentían mucha presión de parte de AID, con respecto a la filosofía de los proyectos.

5. Operación Escuela, tripartito, en tiempo de Chinchilla Aguilar. Algunos asesores de AID ignoraban la cultura local y no eran expertos en educación. Eran

impositivos.

6. La AID empezó la preocupación por la educación bilingüe en 1977. Aceptaban el criterio de Mercy y el mío: educar en lengua materna. Les interesaba los textos (ODECA/ROCAP). Hizo falta más estudio de la cultura local. Pero fue lo único que se hizo. Eran muy didácticos, de buena calidad, de letra clara.

7. FORPEM, se mandó a los becarios cuando ya se iba a terminar el programa. Se hacían informes.

8. En cuanto a criterios, la AID no ha intervenido. Ha dado libertad. Sólo fiscaliza lo del dinero. Ha sido positivo en lo de la organización.

9. CINDEG sigue produciendo; todo el equipo lo donó AID, pero ahora CINDEG no recibe dinero directamente de AID. A través de UNESCO, viene de Chile un poco de dinero.

10. AID no influyó en la creación de la Dirección de Educación Normaly y Bachillerato, ni en la creación de la Dirección General de Educación.

11. El problema es de transferencia de fondos de AID para cosas ajenas a los proyectos. El Banco Mundial es más imponente que AID. En lo del seguimiento, hay problema con poryectos no solo de AID sino de todas las agencias.

12. Hace falta mística en los oficiales de AID, más identificación con el país; deberían ser apóstoles administrativos, como misioneros. AID debe cuidar su imagen relativa a APROFAM. Hay varios mitos relativos a AID. Uno el de su relación con maniobras relativas a disminuir las tasas de fertilidad en el país. Otro es el de que esterilizan población indígena a través de leche. Otro es que experimentan nuevos fármacos en Guatemala sin conocimiento de los conejillos de indias.

13. OTRA RECOMENDACION A AID es que confíe más en la iniciativa privada. Que le dé más oportunidad de participación, por ejemplo a la Asociación de Amigos del País. Otro ejemplo, a la Sra. de Marcucci en lo de prevención de drogadicción. Se tiene el dato de que el 16% de profesionales universitarios mueren por alcohol y tabaco.

13 Ing. Carlos Anzueto, Coordinador del Programa de Compra y Venta de Tierras con la Fundación del Centavo, ex-Director Regional de DIGESA en la Región de Quetzaltenango y ex-coordinador de COREDA y CORECO

1. El programa se inició en 1984 con $1 millón para 3 años. En el 85, se obtuvo $1 millón más para terminar en Ag. del 88. Por el nuevo convenio del 85 se inició otro proyecto de $7.5 millones que finaliza en Ag. del 91. Se ha visto bien. Se ha constituido en un modelo operativo. Ha tenido muchas evaluaciones. Se hizo un baseline hace 3 años.

2. Actualmente se tienen 28 fincas. Lo difícil es el punto 0 en cada finca. Se ha hecho u nestudio sobre conciencia ecológica entre los usuarios. El feedback no funciona. Del lado financiero y evaluativo ha sido constante.

3. En cada finca se hace labor de desarrollo: crédito para producción y crédito para la compra de la tierra. La planificación que se tiene es para diez años y se incluyen, actividades sencundarias como proceso educativo, administración y especialización en el cultivo de la vocación de la finca.

4. La fundación tiene 26 años de trabajo. Empezó con el programa de crédito agrícola. Se hicieron ensayos sobre crédito para compra de tierra. El beneficiario no tiene garantía para crédito, pero se hace una garantía solidaria de grupo, hipotecando el inmueble.

5. Los créditos son de tipo bancario (16%); hay un trámite administrativo. El agricultor hace su solicitud. La funcación ha trabajado también en vivienda rural. El proyecto ha permitido integrar todos los programas de la fundación.

6. No hay asistencia técnica. Pero ha habido pequeñas consultorías. El enfoque es productivista; requiere una fase de despegue para cambios culturales seriados.

7. El programa ha sido evaluado por Randy Screen, Guillermo Pedroni, Stephen Stewart y Virginia Lambert. Podría extenderse el programa a nuevas cooperativas. Se ha incorporado la mujer al proceso de desarrollo. Se ha logrado castellanizar. Las 28 fincas comprenden unas 3,800 familias.

8. Se ha hecho un apropuesta a AID para una extensión permanente. En este momento, no lo es. La Fundación pone una contrapartida del 50% del costo de compra. Lo que se necesita actualmente es una inyección de capital. Está dentro de las proyecciones de AID. Ahora tienen dinero hasta para el 91. Muy probablemente entonces les den más.

9. Trasladar al grupo de campesinos e instalarlos es un problema complejo: se necesita comida, vivienda, medicina, dinero, agua. Las fincas están en las zonas norte y sur (Escuintla, Guatemala, El Progreso), sur/oriente (Santa Rosa, Jutiapa, Jalapa) sur/occidental (Mazatenango, Reu, San Marcos, Quetzaltenango, Escuintla) y el Altiplano Central (Chimaltenango, Quiché sur y Sololá). No ha entrado en occidente ni en la franja transversal.

10. La información sobre fincas disponibles viene a través de propietarios que venden, grupos de campesinos interesados, corredores de bienes raíces, representantes regionales de la fundación. La fundación pone anuncios de prensa.

14 Agr. Byron Contreras, Jefe de la Sección de Planificación de USPADA.

1. ICTA, DG DE ESTADISTICA, INDECA, DIGESA son los proveedores de información. Ahora USPADA es usuaria; con los datos elabora diagnósticos para rubros. Se han producido 15: oleaginosas, maiz, frijol, arroz, café, alimentos (encuentas). Para el 89 implementar el sistema de vigilancia alimenticio y nutricional (SIUSNA). Se ha encontrado que el marco muestral está desactualizado.

2. Hay problema con los conceptos de segmento abierto y cerrado. Ahora se está usando el marco de lista del INE. El Censo del 79 está obsoleto. Se han realizado unas 4 o 5 encuentas con apoyo de AID.

15 Ing. Armando Fletes, Coordinador de la Junta Sectorial de Programación del Sector Agricola, Pecuario y de Alimentación con sede en USPADA, Jefe Administrativo del ICTA y ex-representante de ICTA ante el Proyecto 520-0255.

1. Los proyectos deben ser multi-institucionales, y según las necesidades y vocaciones de la zona, la región o todo el pais.

2. En este momento, las prioridades son granos básicos, diversificación, recursos naturales renovables e infraestructuras de riego y conservación de suelos.

3. HAY QUE EVITAR LOS PARA/SISTEMAS, para evitar las duplicidadees, las interferencias y los problemas. El

producto de la institución debe ser el servicio. USPADA recibe información de todo el sistema, la centraliza y analiza.

4. Lo que se necesita es una interacción coordinada de las instituciones del sector para generar desarrollo. El celo surge cuando hay competenci ay no coparticipación.

5. Se hizo el plan operativo regional 88. Se está haciendo el plan operativo departamental 89. En el 90 se hará el plan operativo municipal. Qué posibilidad de sobreviviencia tiene? En las condiciones de este momento, sí va a sobrevivir.

6. El sector público agropecuario se habia adelantado a la regionalización y desconcentración. Un asesor de AID nos abrió los ojos el año antepasado. Ahora tenemos pleno respaldo. COPROSEC (Consejo de Programación Sectorial). A.F. es el presidente. El ministro pidió a POA. A la semana siguiente, lo presentaron. El vice-ministro lo aprobó. Salió en septiembre del 88. Ya pidió el del 89. Ya se hizo a nivel departamental. USPADA lo respalda.

7. Debe eespecializarse cada comunidad o zona, para no crear competencia dentro de la propia comunidad.

8. Ahora todo plan debe ser articulado con las caracteristicas económicas locales.

9. La tendencia del ICTA ahora es la investigación enclaustrada.

10. La asistencia técnica debe estar en los programas institucionales correspondientes, en la ejecución de metas, y que por lo menos el 40% del personal sea nacional.

11. De cada municipio elevan programas integrados anuales (sectoriales) a USPADA. A quí se analizan a niveles municipal y de departamento. Lo hace el COPROSEC con ayuda de analistas. Luego se integran departamentos de cada región y lugeo todas las regiones. La programación vene de abajo-arriba. Aquí (USPADA) aplica las políticas sectoriales. Se pueden hacer modificaciones; SE LE ASIGNA SEGUN PRIORIDAD. La vocación del municipio se hace viendo el censo y lo que los técnicos proponen. (Tienden a lo que ya se hace en el municipio). Es necesario fortalecer lo que ya se hace.

12. Debe proveerse bestias (caballos, mulas) a los extensionistas. LOS VEHICULOS AUTOMOTORES se van en un

70% para usos personales.

RECOMENDACIONES

1. Que AID haga un análisis de la legislación que afecta lo agropecuario. Se debe legislar apropiadamente.
2. Deben agilizarse las operaciones de plazo crítico.
3. Que haya cumplimiento de la contrapartida nacional.
4. Que se respete lo escrito en los convenios.
5. Que el gobierno tenga planes de mediano y largo plazo. Que haya objetivos claros.

16 Ing. Agr. Eliseo Herrarte, Gerente General del Instituto Nacional de Comercialización Agrícola (INDECA), ex-jefe de Organización del Ministerio de Desarrollo (MINDES), ex-coordinador del Proyecto 520-0255, ex-consultor de AID para elaborar el MARCO muestral de USPADA, ex-asesor del Ministro de Agricultura, Ganadería y Alimentación.
--Lic. Mario Herrera, Coordinador de Planificación de INDECA
--Ing. César Portillo

1. AID está cambiando su manera de ver a INDECA. Ha apoyado producción, pero este año AID participa con INDECA a través del proyecto sistemas de diversificación de cultivos del altiplano. Apoyará con un sistema de información (computarizado). Ya se ve un acercamiento de AID a INDECA.

2. He tenido oportunidad de trabajar con DIGESA, ICTA, INDECA, en contacto con proyectos de AID.

3. MH; colaborábamos con AID, pero ellos con nosotros no. Descubrimos que había un programa de capacitación e INDECA no estaba incluida. Han venido consultores. Han identificado nuestras necesidades, han rendido informes a AID, no los conocemos.

   Luego ya se hizo un proyecto de comercialización. El monto de la ayuda fue reducido. El círculo se está rompiendo. El programa contempla fortalecimiento institucional: un sistema de computación para todas las dependencias de INDECA, información de mercado, capacitación, incluyendo en administración.

4. El ministro, con la Gremial de Exportadores de Productos No-Tradicionales ha convenido que la Gremial e INDECA nos quedemos trabajando juntos. Se han contemplado consultorías de 18 meses. En unos 4 años, para 1992. Hemos visto problemas de AID con otras instituciones: les viene el equipo tard

5. Necesitamos el sistema computarizado y 3 campos de asesorías. Se va a recomendar la capacitación. Se va a hacer en 1989. Para 1990 se consolidará el Programa en forma organizada. Están haciendo el estudio de ajuste presupuestarios para abreviar los proyectos y una 2a. fase de consolidación. Nose sabe qué va a salir. Se espera que la ayuda de AID venga en el trimestre primero, antes de que se inaugure la nueva central de mercadeo.

6. Ya tienen un sistema de captación de información. Se buscará hacer la más eficiente. Se dedicarán solo a eso. Se tendrá una terminal en cada delegación Regional y un radio transmisor. Van a estar interconectadas con la Gremial de Exportadores. LOS PROPIOS AGRICULTORES SERAN FUENTE DE INFORMACION. Se ha intentado enviar telegramas a las alcaldías, dando y pidiendo información. Ha habido contacto con las gobernaciones. No ha sido funcional. Los productores están organizados. Se les puede visitar y encuestar con cierta frecuencia. Se buscarán programas de radio.

7. Se les comunicarán normas de calidad internacional, a través de extensionistas de DIGESA. INDECA/GREMIAL las estudiarán. Se capacitará al personal de DIGESA. Se tratará de unificar el sistema de medidas.

8. INDECA tiene 150 usuarios semanales; REALIZAN ESTUDIOS DE COMERCIALIZACION O SON PRODUCTORES.

9. El programa de Ferias del agricultor ha permitido contacto con los productores de hortalizas, INDECA tiene una buena imagen con ellos.
C.P.; ha ido cambiando poco a poco la imagen. Se enfatizaba el grano básico, pero ahora con hortalizas y frutas, desde hace años.

10. La falta de mercado hizo que algunos que tenían miniriego volvieran al maiz. La saturación de hortalizas botó los precios. Ahora INDECA y DIGESA están coordinándose para caracterizar normas de calidad.

11. Se van a implementar en 1989 los mercados móviles. Va a surgir la necesidad de centros de acopio; se necesitará infraestructura para mejorar la calidad. Este va a ser un año de transición. NECESITAMOS FORTALECIMIENTO INTERNO.

12. Apoyo de mayor financiamiento en coas específicas: Agroindustria, infraestructuras de comercialización, almacenes

13. El Ing. César Portillo se refiere al programa de silos privados. Hay 7 instalaciones, 2 en Petén, 1 en Quiché, 1 en Suchitepéquez y 1 en Huehuetenango. Fueron de apoyo al movimiento cooperativo, pero ya no funcionan (maíz y arroz).

14. Cinco técnicos de INDECA se han ido a especializar. Solo 2 están aquí. Tres ya no trabajan acá. AID ha proporcionado libros técnicos, pero cabe esperar de ella asistencia técnica, local y externa. En la terminal, todos los días hay pérdidas de productos. Se podría solucionar con asistencia técnica en mercadeo, nacional e internacional. No se necesita gran infraestructura para comercializar en el exterior. Cuartos fríos podrían fracasar, como los silos privados.

15. De todos los proyectos de AID, cuáles tienen mayor impacto social? Deberían hacerse evaluaciones, no sólo de los impactos en la vida de los proyectos, sino también después, cuando AID se ha retirado.

16. Sólo se puede garantizar buenos resultados si la iniciativa viene de abajo. Eso pasó con los silos. Se piensa conseguir mercados a través de la Gremial. AID debería formar especialistas en mercados nacionales, con becas; y traer otros especialistas. Se requiere el contacto internacional.

M.H.: Qué pasó con el CECOMERCA? Vinieron unos expertos americanos, estuvieron un semana en la Terminal y luego escribieron su informe. INDECA no estuvo de acuerdo. No era culturalmente apropiado. Se dejó en manos de la gente, no se les había capacitado. No tuvo un buen estudio de featibilidad. CECOMERCA estaba para exportar a Centroamérica. En el estudio de factibilidad, no se dio participación a las instituciones. Tenían prisa los americanos. Ahora sí se ha previsto todo esto. Somos un poco escépticos sobre incrementos de producción. Más que becas de capacitación, lo que necesitamos es roce internacional. Se hará un estudio muy completo.

E.F.: Cómo integraron los estudios básicos con ICTA? INDECA debe identificar qué productos son demandados y en qué épooca y con qué características. Que ICTA genere el germoplasma. Que DIGESA COPROSEC, surgió CIPREDA. Si ICTA no responde, se puede recurrir a la iniciativa privada. Pueden contratarse entonces estudios de mercado con la iniciativa privada. Nunca se ha usado. Se pudo haber usado en granos básicos pero tampoco se usó, hablando del marco muestral. (Pero INDECA sí usa el Censo del 79).

17. INDECA requeriría de AID ayuda para pronósticos. Hacen dos encuestas por año, intenciones de producción y pronósticos de producción. INDECA autoriza licencias de exportación e importación. Feb. Mayo, Encuesta Nacional sobre producción de maíz, frijol, arroz, sorgo, manías y ajonjolí (intenciones de siembra). Agosto/Noviembre la segunda encuesta. La unidad tiene 5 encuestadores. USAN UNA MUESTRA PRE-ESTABLECIDA. Se pasan 5,800 boletas a nivel nacional de 500,000 fincas. El INE estimó 28 millones de quintales de maíz. INDECA estimó 30 millones. Pero INE tiene los resultados tiene los resultados un año tarde.

18. Hace 10 años se argumentó que se necesitaba un sistema de encuesta. Se hizo el marco muestral. HOY ESTAMOS EN LA MISMA SITUACION.

19. INDECA elabora boletines diarios, semanales y mensuales, con precios según el origen del producto y los centros de mayoreo. 140 precios diarios se recaban. HAY 4 REPORTEROS EN REU, XELA, JUTIAPA Y CHIQUIMULA / IXABAL. EN MOTO, A 1 DEPARTAMENTO POR DIA. Se hacen estudios de mercado. Se ha hecho de ajo, panela, cardamomo, maní. En la Unidad de Producción, se editan resultados de las encuestas. Hay usuarios de 150 boletines semanales. LOS DIARIOS SE USAN ENTRE EL PERSONAL.

20. Que la ejecución del presupuesto fuera más ágil, fluida; menos burocratizada. Se va a crear una oficina de INDECA para este proyecto, para hacer más fluida la ejecución.

17 Dr. Jorge Chang, Oficial de Proyectos de Salud, División de Recursos Humanos de AID, ex-funcionario del Ministerio de Salud y Asistencia Social, y ex-médico del Hospital Herrera Llerandi.

1. El Dr. Chang tiene 4 años en AID. En el Ministerio de Salud, trabajó como contraparte del 520-0251, sistemas comunitarios de atención primaria y saneamiento.

2. Ahora se acabó atención primaria, para iniciar inmunización y terapia de rehidratación oral. Sigue saneamiento, con lo demás, como 520-0339; se firmó en el 85 y continuará hasta el 91. Ha tenido varias enmiendas para cubrir rehidratación oral. LA TERCERA ENMIENDA FUE PARA REFORZAR ADMINISTRACION E INFORMACION. Este proyecto trabaja con el 70% del Ministerio y no contempla contrapartida (solo IVA). Sólo es donación. Lo quieren para manejar como préstamo, pero no tiene

fondo rotatorio. Aquí no se trata de que la contrapartida va lenta, sino que no hay.

3. Antes del '85, AID aportaba poco en salud. Ahora hay dos posibilidades: si la política de la misión es mantener la cobertura, tendrá que mantener proyectos.

4. La planificación familiar incluye a APROFAM, IPROFASA Y AGES.

5. Trabajando como sector entraría GOG Y ONG. Ya estaba el GOG haciendo algo.

6. La rehidratación oral será permanente. La inmunización ha sido básicamente realizada por el GOG con ayuda de UNICEF y Rotarios hasta el 91.

7. El GOG sabe que el programa es prioritarios. El presupuesto real asignado a Salud, sin embargo, ha bajado. Los hospitales son la principal carga. Con la iniciativa privada es lo de planificación familar. Sólo se está institucionalizando lo de las sales. Existe amenaza de epidemia de paludismo y dengue.

8. En el 85, la encuesta demostró una cobertura del 5%. Hoy llegan a un 50%. Los programas si ayudan. El ideal sería llegar al 80%. En el '51, la comunicación no era tan intensa, pero del '85 para acá, es muy intensa. La relación de AID con el Ministerio es excelente.

9. Con SEGEPLAN, sólo se hace la negociación.

18 Dr. Alfonso Loarca Pineda, Viceministro de Ganadería, ex-consultor pecuario del Equipo de Asistencia Técnica del Proyecto 520-0255, ex-funcionario de DIGESEPE, ex-funcionario de DIGESA, fundador de DIGESEPE, ex-funcionario de HOPE y HEIFERT.

PROBLEMAS

1. Ayuda condicionada; por falta de políticas precisas se tienen que aceptar condiciones casi sin darse cuenta. Son sentidas como abusos. Ejemplo, los pozos. El riego vuelca la producción a la exportación; se desabastece el mercado local. Primero se debió haber reforestado. Luego racionalizar el uso del agua y luego la diversificación. El BID también y misiones de otros países.

2. Se crean desniveles salariales y de prestaciones. El personal del proyecto está mejor, luego el gobierno no tiene recursos para continuar eso.

3. La calidad e la asistencia técnica.

4. El GOG no cumple todo lo que acepta.

ASPECTOS POSITIVOS
1. El apoyo financiero

2. El apoyo técnico

RAZON
No hay comunicación de base entre los intereses de GOG y AID. Se improvisa mucho. Se importan criterics. Los periodos de 2 o 3 años son muy breves. PRIMERO DEBEMOS FIJAR NOSOTROS NUESTRAS POLITICAS.
Las políticas de AID a mediano y largo plaza deberian ser

1. Que la AT se de en los términos reales.

2. Que se aclaren los objetivos

3. Una buena planificación

4. Proyectos prioritarios para ambos, no sólo para uno de los dos.

5. La AID deberia apoyar proyectos prioritarios. Lo pecuario es prioritario y no lo apoya.

AID Y BID trasladaron su staff de Honduras a Guatemala.

19 Ing. César Lacayo, Jefe de la Sección de Planificación de INFOM, ha tenido responsabilidad en varios proyectos apoyados por AID.

1. Hemos hecho 844 obras del 76 al 86 por Q15,747,761.00

2. Del 76 al 77, tuvimos 563 obras dentro del programa DR/5, Emergencia del Terremoto: reconstrucción de puentes, alcantarillados. AID se portó muy bien.

3. Antes de eso, del 72 al 74 tuvimos el 520-L-017 por Q3 millones para acueducots, alcantarillados, rastros, y puestos de salud. Sólo por esta vez. NO HUBO PROBLEMAS.

4. Luego tuvimos el 520-W-027. Hicimos 103 obras por Q8,128,600 entre acueductos, alcantarillados. 33 edificios, mercados, rastros. 15 electrificaciones. Estudio de basura.

5. Actualmente INFOM tiene 10 regiones, en cada una un ingeniero supervisor, y se incluye asistencia técnica en los municipios, en ingeniería, administración (contabilidad), jurídica, financiera, créditos, ejecución, explotación de empresas municipales.

6. MINDES y UNEPAR operan a nivel de aldea; INFOM a nivel de cabecera municipal. Se coordinan.

7. Los proyectos se seleccionaban antes a base de solicitudes. Ahora está la 5a. etapa del BID. Ya se tiene un plan de acueductos y red de agua de las municipalidades. Se ejecutará en el 90. Todavía existen proyectos autofinanciables: fábricas de cemento líquido en Jutiapa, carretones y tractores para transportar productos, mercados.

8. INFOM asesora a las municipalidades respecto de sus contratos con particulares para ejecutar el 8%. INFOM quiere involucrar en proyectos el 50% del dinero que cada municipalidad va a recibir.

9. Sólo XELA, Cobán, Mixco, LExuintla, lVillaneuva, la Capital, Jalapa, Coatepeque, tienen la capacidad de identificar proyectos y ejecutarlos.

10. INFOM da cursos de capacitación anual a empleados administrativos, y para organizar catastros. Pare INFOM es prioritario el agua y el alcantarillado.

11. La división de Asesoría Municipal no contempla ingeniería, sólo administración

RECOMENDACIONES

1. Que AID invierta a través del INFOM

20 Lic. Jorge Poitevin, Jefe de la División de Finanzas del INFOM

1. En los 70s INFOM tuvo relación con AID. El W-027 fue el último; terminó en el 83. Se han estado recuperando fondos de fideicomiso. El 76/13 era para fortalecimiento institucional de las municipalidades, con cuatro cmoponentes; uno de ellos empresas municipales.

2. La relación con AID la vio de cerca. Siempre fue buena. Los fondos llegaron a tiempo. Dieron prórroga de 3 años. Desconoce por qué no se ha restablecido contacto con AID, como agencia proveedora de recursos. Parece que hay pláticas para fortalecimiento administrativo.

3. La División Financiera se ocupa de planificación financiera y asistencia técnica a través de créditos. INFOM tiene una carter de unos Q25 millones; además, tiene fondos del BID (6-71, acueductos para 18 municipalidades); Q20 millones (y el PBM, desarrollo muncipal; Q18 millones). Están terminando adoquinado, paso de agua, puentes, salón municipal.

4. Los ingresos de las municipalidades vienen de arbitrios y tasas, empresas municipales. OTROS FONDOS POR IMPUESTOS SOBRE AGUARDIENTE, GASOLINA. Finanzas lo sitúa en INFOM. Aparte es el 8%. El fondo de Finanzas se distribuye según las poblaciones y la ley del impuesto. LA LEY DE municipalidades establece qué parte se destina a funcionamiento y cuál para inversión. El impuesto único sobre inmuebles lo canaliza el INFOM sólo en los años 88 y 89. En el 90, las municipalidades recaudarán el impuesto, no el INFOM.

21 Lic. Jorge Soto, Jefe de Proyectos del INFOM.

1. Las reglas de la AID han sido flexibles en todo. No hubo problemas, excepto en lo que de las contrapartidas nacionales.

2. Cuando se acabó el apoyo financiero de AID, el programa se vino abajo. A veces se le presentan a AID proyectos. Luego son evaluados. UN SEGUNDO EVALUADOR DISCREPA DEL PRIMERO. Esto provoca problemas en los informes. Quienes vinieron no fueron los más indicados. Eso fue en el 78/81. Se crearon las 10 regionales con Dario Villatoro en tiempo de Rios Montt.

3. Se ha creado una unidad coordinadora que monitorea la ejecución del financiamiento externo. PERO no una unidad ejecutora separada.

4. En 1979 se creó un programa computarizado para inventar servicios y programas. Se evalúan generalmente los programas, no el apoyo. El inventario sirvió muy parcialmente y está abandonado. El estudio de AID se pasó a SEGEPLAN y a la Universidad de Iowa.

5. Ahora se hace un perfil municipal de 7 hojas. El juego tiene 1600 hojas. Ejemplares se pueden encontrar en el Banco de Guatemala, en Planificación Económica y en el Minsterio de Finanzas. También en UNEPAR. Se guardó uno en INFOM.

6. Hasta 1980 se restringen las politicas. En el 80 se usó

por primera vez el concepto de preinversión. Se empezó a trabajar el municipio. En el 84 se hizo el primer plan grande con 7 programas, unos municipales y un componente de eficiencia, fortalecimiento institucional.

7. Con el cambio de gobierno en el 83, se modifició el INFOM. Abrió los horizontes institucionales. Se empezó a pensar que las municipalidades debian hacer más que obras de inversión. Se impulsaron las asociaciones frente a los Consejos Departamentales de Desarrollo.

8. Se crearon las oficinas regionales. Antes de eso, en el sótano, se creó un dormitorio municipal para visitantes.

9. Una cosa criticable es que los programas de AID tienden a tecnologías más complicadas que lo culturalmente apropiado. Los rastros se quedaron sin utilizar. En los mercados sucede lo mismo. Otra cosa, muy complicados los sistemas de decisión.

10. INFOM hizo talleres de requerimientos paa la adecuación cultural de las obras. Deberia haber un responsable en cada programa.

22 Lic. Gustavo Leal, Técnico de AID, ex Gerente General de BANDESA, ex-jefe de programación de AID.

1. AID diseña los proyectos con componentes concretos, como electrificación, vacunación; simultáneamente se desarrollo un parasistema (unidad de administración). En algunos casos, esto resulta bien, cuando se toma en cuenta la estructura de GOG. En caminos rurales, con la Dir. Gral. de Caminos, ha dado buen resultado. Es caso excepcionalmente eficiente. Salud y Educación no han dado el mismo resultado. Las unidades creadas son islas, con desnivel de recursos. En Caminos no ocurrió asi; hubo desnivel pero la Dir. Gral. de Caminos lo asimiló bien.

2. En BANDESA el error era que todas las agencias les daban recursos pero no la capacidad institucional para manejarlos bien (capacidad instalada y asistencia técnica), y apoyo logistico, mobiliario y equipo.

3. En BANDESA, la junta directiva tiene otras preocupaciones. La administración present problemas pero no da soluciones. Hay distorsión politica externa e interna. BANDESA está recibiendo financiamiento para 4 regiones. Es la primera vez que un organismo internacional lo hace. Pero BANDESA no responde.

4. El plan de descentralización no se les exigió. Hay 4 condiciones: decisions de crédito, sistemas contables, sistema financiero y sistema de cobros, todo se ha pedido que sea regional.

5. El pequeño y mediano agricultor pagan. Lo irrecuperable de BANDESA lo tiene politicos, cuelludos y largos. L que pasa es que no se les cobra a los agricultores, o no se dan asistencia técnica. (Empezó a reaccionar con intentos de corrupción).

6. Tienen $100 millones para agribusiness, desde el 83, sin utilizar. Del PL-480 tiene Q1 millón. Anorita tienen otros $11 millones. Y tienen 37 agencias. Ni los bancos privados son tan descentralizados. El GOG, con criterio politico, triplicó la asistencia crediticia. Tiene nivels de pérdida y de iliquidez pavorosa. La mora es de Q120 millones; hay problemas con federaciones de cooperativas.

7. Mr. Cauterucci, Barry Lennon y el Lic. Leal han estado en contacto con la Junta Directiva. Bob Laport hizo una evaluación. El plan de las 4 regiones es sólo de AID. El BID se retiró (PROSIDAP), iban a ser $40 millones, algo como el T-034. AID está buscando alternativas, como lo de ANACAFE.

8. Se siente que en los últimos años ha habido desarrollo institucional. Ha mejorado la capacidad de negociación y contratación. Pero va lento. Se ha desarrollado en proyectos de caminos y electrificación rural, conservación ambiental, riego y conservación de suelos. Lo mismo las empresas agroexportadoras.

9. Desde que se formó el Economic support fund, AID y el GOG han firmado un convenio según el cual GOG puede pagar la contrapartida con estos fondos. Hace unos 3 o 4 años era problema lo de la contrapartida. Ha habido cambios en las leyes. Una entidad puede ejecutar hasta Q150,000 sin licitar. PERO LOS ESF SON SOLO UTILIZABLES MIENTRAS EXISTIA EL PROGRAMA.

B. Countryside Interviews

23 Sr. José Gabriel García Chen, Alcalde Municipal de San Juan Sacatepéquez.

1. El INFOM ayuda con asistencia tecnica y fondos de préstamo. Le dieron Q139,000 para un nuevo pozo mecánico de agua potable. Asesoria técnica para cualquier problema; INFOM manda su técnico. La Municipalidad no tiene técnicos. También dan AT para nuevas obras. Se hacen cargo de los proyectos; no cobran. Hacen el estudio de los planos, y supervisan la ejecución. La municipalidad sólo pone mano de obra y materiales. Con el 8%, aunque un poco atrasado, se realizan otras obras. Es Corporacion de 5 años. Ya tiene 3. Su preocupación ha sido el agua. Pidió préstamo porque no estaba seguro que le iban a dar el 8%. Entre las obras se cuenta el pozo mecánico, un auditorio municipal, adoquinamiento en varias calles urbanas. Le parece al Alcalde que las obras rurales son más urgentes.

2. Se ha introducido agua en 3 aldeas, se han construido 5 escuelas, se ha ampliado 5 escuelas. El ministerio de educación deberia hacerlo, pero no les alcanzan los recursos. Se retrasa la construcción de escuelas. Se han construido puestos de salud. El ministerio ha hecho 3 puestos. San Juan tiene 13 aldeas y 43 caserios y colonias. Se está ayudando a introducir electricidad en varios lugares. También se han construido edificios de varias auxiliaturas.

3. Ha habido instituciones y embajadas que han ayudado. La Universidad Francisco Marroquin ha enviado estudiantes de medicina de último año para atender los puestos de salud. No regalan la medicina pero la subsidian. Visión Mundial no solo ayuda a construir escuelas sino que también paga algunos maestros. Otros maestros trabajan ad honorem. Han solicitado plazas al Ministerio de Educación pero en el 88 sólo 1 dio. Algunos maestros que no son de aquí son nombrados pero al ver las aldeas no se quedan. Tal vez el 40% de la gente no habla casi nada de Castellano.

4. CONALFA tiene alfabetizadores bilingües. OTRAS ORGANIZACIONES SON rED integral y AID pero no sabe cómo ni dónde. No han llegado al Despacho. No conocen a AGES. Las embajadas de Canadá y China[Japón?] han ayudado. Hay DIGESA y DIGESEPE, pero no se han visto miniriegos. No hay agencia de BANDESA.

5. LA PRODUCCION LOCAL es de Flores, Verduras, maiz, frijol, muebles de sala, tejido tipico. La maquila, la

costurería y las camiserías están en San Pedro Sacatepéquez. Hoy no se consigue mano de obra, albañiles ni carpinteros.

6. Están dejando la agricultura por la tapicería y mueblería. Al mueblero puede ganar hasta Q30 por día.

7. La comunidad escoge a los promotores. Los va a capacitar MINDESA. No hay unidad técnica que apoya a la municipalidad.

8. Visión mundial no promueve la religión; trabajan en educación, y por el pobre.

24 El Secretario Municipal de San Pedro Sacatepéquez, Roberto Salguero.

1. Camisas maquiladas es el principal producto de San Pedro Sacatepéquez. Aquí hay subfilial de la Gremial de Exportadores de PNT. Camisas, pantalones, pantalonetas. Hay mujeres tejedoras. La ropa de Santiago Sacatepéquez la hacen aquí. En telar de palito. Hay poca carpintería. La otra actividad importante es hacer ropa y venderla. O comprar ropa hecha y venderla.Otros van a otros lugares a comprar ropa y venderla. Antes del terremoto no se veía la prosperidad.

2. En las areas rurales sí hay problema. Los que viven cerca de Guatemala van a trabajar allá. Los que ya saben coser trabajan aquí. Pocos son apicultores. La gente deja la agricultura y se dedica a la maquila. Chiyani es la aldea más pobre. Todos son agricultores, y algunos van a la capital. Pero la agricultura es muy pobre.

3. Aquí hay floricultores en 2 o 3 cuerdas arrendadas. Aquí, por pieza se gana mas o menos Q8/Q10 al día. El alcalde tiene en su casa sus 7/8 máquinas. Casi todos los dueños de taller tienen vehículo;cada vehículo tiene su ruta. Recorren el país.

4. Aquí a la gente joven le preocupa la educación. Casi no hay analfabetismo. No hay uniones de hecho. Son casados.

5. El INFOM últimamente no ha respondido mucho las solicitudes de la Muni. Esta quiere comprar un terreno con nacimiento de agua. Se solicitó dictamen técnico. Fue negativo. INFOM dice que no hay suficiente aforo. La Muni se va a ir a UNEPAR.

6. INFOM no ha dado colaboración económica. No ha habido necesidad. Las corporaciones anteriores dejaron deudas

por adoquinamiento. Pero el INFOM si envia la asistentia técnica. Este año sólo asesoria presupuestaria y dictámenes. Es buena la asesoria.

7. Con el 8% se estan construyendo, ampliando la escuela de los Ortiz y Cruz de Piedra.

8. Los trámites con el MINISTERIO DE EDUCACION para plazas de maestro son muy tardados. El antiguo edificio de la Muni fue cedido a la Escuela de Párvulos. PUESTOS DESalud no se han construido. Pero si hay y funcionan bien.

9. No hay DIGESA, ni DIGESEPE, ni DIGEBOS, ni BANDESA. Van a San Juan o a Guatemala. De San Juan a Guate son Qo.65 de pasaje. de San Pedro a Guate son Qo.50.

10. Hay de 2500a 2800 fábricas maquiladoras. Cada una paga Q2.oo pero muchos no pagan[impuesto anual a la Muni\]. Están en las casas, no son declarados. Hay quienes tienen 20 máquinas.

11. Japón ha ayudado; la calle principal se llama Ichikawa. Construyó el parque y algunas calles.

25 Con el Secretario Municipal de la Municipalidad de Villanueva.

1. Villanueva recibe mucha influencia de la Capital. Hay 70 a 80 camionetas por la mañana, que transportan villanovenses que trabajan en la capital. Las principales industrias locales son GALCASA, PINCASA, INCESA STANDARD, MONOLIT, DURALITA Y OTRAS.VN comienza en la 35 calle de la zona 11. La Central de Mayoreo es ejecutada por una unidad ejecutora ad hoc del GOG.

2. En cuanto a las aldeas. Bárcenas es agricultora. Hay fuerte desempleo. La Colonia El Tablón no tiene electricidad. Se va a instalar un núcleo de fábricas nuevas. Va a trabajar a través de maquila. Oficinistas, Peritos contadores, maestros, están sin empleo.

3. Aqui se distribuyó fertilizante subsidiado. Las partes altas son agricolas; las bajas son vecinas de Amatitlán y son industriales. El Tablón, La Ranchería, Bárcenas. DIGESA no tiene sede aqui.

4. INFOM no nos ha dado ninguna información.Dio un crédito para el proyecto de drenaje[3 colectores, red 2aria y planta de tratamiento]. Están tomando agua contaminada la gente de aqui pues los pozos son profundos. Hay hasta

4 o 5 pozos en las casas. A veces perforan en la calle. Lasnapas featicas contaminan los mantos. Ahora las aguas negras van al rio Platanitos y Villalobos.

5. INFOM dio Q300mil de los Q800 mil necesarios. Hizo el estudio y cobró Q72 mil. Unos Q300 mil vienen del 8%. INFOM diseña la planta. Se tuvo que comprar 4 manzanas.

6. 1986 fue el primer año del 8%. VN era una delas 4 municipalidades del país que podia cobrar la renta inmobiliaria,[con Chinautla, Mixco y Quetzaltenango!]. Ahora la Muni tiene el 8% y además un subsidio que compensa el ingreso por impuesto único. Se ha trabajado a lo empirico.

7. No hay organismos ayudando. INTA trabaja en Bárcenas. Desconocen si el Ministerio de Agricultura trabaja. No ha habido ayuda concreta del MINDES PERO SI ESTAN ORGANIZANDO COMITES LOCALES. Están haciendo planteamientos y ya no al capricho sino conscientes de sus necesidades.

26 Con el Secretario de la Municipalidad de Patzun, Chimaltenango,

1. La agricultura es la principal actividad. Se siembra maiz, trigo, arveja china, hortalizas, industria textil doméstica. El 80% de la gente es bilingüe.

2. INFOM ha cooperado bastante en crédito para adquisición de bombas eléctricas para agua potable, y con asistencia técnica a los proyectos. También ha dado cursos de capacitación para el tesorero.

3. Con el 8% se ha procedido a la reconstrucción de escuelas; también con ayuda internacional de la Iglesia Noruega, en Xepatan, Las Camelias, Chipiacul.

4. Hay problema en el tramo de carretera abierto por los mexicanos para el terremoto;hoy se necesita el tramo Godinez/Patzun, via Los chocoyos. Obras públicas construye edificios muy pequeños.

5. Al momento no hay en ejecución proyectos del MINDES. Sólo hay promotores. Sabemos que ellos van a ser los alcaldes auxiliaresPatzun tiene 12 aldeasy 35 caserios

27 Con el Síndico 1o. de la Municipalidad de Guastatoya, Prof. Luis Dardón.

1. Economia del casco urbano: el 75 % de los negocios de la cabecera son propiedad de personas de las aldeas [tiendas, abarroterias]. La gente del casco urbano trabaja en Guatemala. Viajan todos los días. O viven en Guatemala.

2. Aquí se cultiva tomate, chile, tabaco y melón. Los de las aldeas cultivan un poco y la gente de la cabecera también.Hay 7500 habitantes urbanos y 9000 rurales, 16000 en total. Hay mucho desempleo. Una promoción del Colegio Presbiteriano hizo un seminario y recogió información muy valiosa sobre el Municipio de Guastatoya.

3. El 8% ayuda mucho. La industria genera ingresos a las municipalidades. Donde no hay industria nohay arbitrios U el 8% es esencial. Se está adoquinando. Son 14 aldeas. Se les dio parte equitativa a cada aldea,unos Q15000. Quedaron Q 140000 para la cabecera.

4. La contraloria decide que del 8% no se pueden construir escuelas. La Municipalidad construyó. En plan tripartito si se puede.

5 Plan Foster internacional a ayudado en carretera a la aldea El Naranjo, 25 kms. (entronca a planes de Carrillo), Jalapa, introducción de agua potable, puentes. Apoyan a Salud, a través del Ministerio. Hay Hospital [Centro Integrado de Salud] equipado. Falta medicina. La muni da apoyo logistico al Hospital.

6. Si las comunidades tienen un proyecto se vienen lo a la Muni. Aqui lo revisan. Al estar bien, si la muni lo puede ejecutar, lo hace. Si no, lo pasa a gobernación y ellos lo canalizan. OTRAS DEPENDENCIAS PODRIAN PRESTAR ASISTENCIA TECNICA A LA MUNI PERO CUESTA. EL 8% ES SOLO PARA EJECUCION DE OBRAS. ESTUDIOS DE FACTIBILIDAD NO. Estos se hacen con fondos propios.

7. El INFOM ayuda con los estudios de factibilidad, se haga la obra con ellos o no. Pero es tardado. Hay que pagar los viáticos. Otras dependencias pueden ejecutar las obras. En proyectos rurales se trabaja con el Ministerio de Agricultura. Ellos piden el terreno para reforestar. Se les concede y se les da apoyo logistico y mano de obra.

8. 12% de analfabetismo es la cifra de CONALFA. Se proyecta a las comunidades. Gente de 18/40 años si se acepta en el programa. Todas las comunidades tienen su escuela. Hay profesionalss en las aldeas. En Santa Rita Plan Foster puso una academia de mecanografia con 8 máquinas

de escribir. Hay un Instituto Vocacional, el Presbiteriano. Y esta el Industrial Monctécnico. Perito en Electricidad y en soldadura. Cada año salen 30 técnicos. En el Colegio salen unos 60 cada ano. Los que quieren salir de maestros van a Chiquimula, Jalapa y Guatemala.

9. La planta hidroeléctrica de Guastatoya esta en el Rio Comages en San Agustin Acasaguastlan. Tiene 25 años. El MINDES ha dado asesoría técnica.

10. INFOM imparte cursos a Tesoreria, Secretaria, Conserjes; y en la Unidad de Orientación del INFOM preparan al personal cuando es necesario. A esta corporación le dió capacitación sobre el manejo del 8%. Este año van a pedir crédito al INFOM para lo de los pozos de aguas negras. Si colabora el MINDES con supervisión de obras en marcha. En la carretera a Santa Rita participan Plan, MINDES y la Muni. Adoquin y remodelación del salón comunal en Santa Rita, y en Casas Viejas bomba de agua. habia 2 horas diarias de agua en Guastatoya, ahora hay 7 horas.

28 Ing.Agr. Fausto Aragón, Jefe Regional de BANDESA en la Región de occidente, Contador German Cutz, Asistente del Jefe Regional de BANDESA,y el Contador Ariel Mendez, ex-jefe de la Agencia de BANDESA en Huehuetenango y Subjefe de la Agencia Regional de BANDESA en Quetzaltenango.

1. Algo positivo de AID han sido las asesorias y el apoyo logistico. Pero el apoyo logistico ha estado condicionado. Las asignaciones se hacen muy a destiempo.

2. Las SIL se retrasan mucho. Con el 0255 y el T-037 hay más autonomia.

3. El presupuesto está demasiado corto. Los COREDAS no apoyan mucho.

4. Muchos no pagan sus créditos porque se hicieron shows; se mencionó mucho AID y la gente dice: es regalo no hay que pagarlo.

5. Hay mucha burocracia en la adquisición de asuntos logisticos.

6. Dejan el proyecto en manos de la institución cuando ya no hay presupuesto de operaciones. Si los vehiculos adquiridos fueran mas baratos [se refiere a los pick-ups azules grandes americanos] para BANDESA seria menos dificil el seguimiento.

7. Los recursos logisticos asignados agarran otro camino. No llegan directamente al sitio de la asignación. Mucho se queda en Guatemala. AID puede mejorar esto haciendo que los Directores Regionales progrmen la adjudicación. A los regionales no se les ha dado participación en el momento de la progrmación.

8. AID debería supervisar con mayor frecuencia el uso de los recursos. Debe fiscalizar. LAS AUDITORIAS FALLAN; SON MUY SUPERFICIALES. LA AUDITORIA DEL GOBIERNO VIENE CADA 2 ANOS.

9. EN EL 0274 SI PARITICIPARON LOS REGIONALES de cada institución. Debe planificarse regionalmente.

29 Lic. Jorge García, Consultor en Producción de Materiales de Capacitación del Equipo de Asistencia Técnica del 520/0255.

1. EBR es el ejemplo tipico de institucionalización. Empezó en el 73. AID terminó en el 78. La solución al problema de los fondos de operación fue hacer 3 etapas:
   - Etapa financiada por AID.
   - Etapa de 50% de GOG y 5o% de AID.
   - Etapa de 75% de GOG y 25% de AID
   - 100% GOG.

2. El énfasis en las primeras dos etapas fue de capacitación para que el personal fuera después capaz de asumir la responsabilidad. Se planificó el aumento gradual de la contrapartida anualmente. Sólo ONSEC se oponia. Todos entraron por contrato. A los 2 años se les dieron plaza fija. En el convenio inicial debe programarse al incremento de contrapartida. Al momento de hacer el presupuesto AID no tiene un negociador que en este momento interactua con los programadores institucionales.

3. La institucionalizacion debe ser planificada. Debe ejecutarse desde que se inicia el proyecto. La capacitación debe orientar a la institucionalización tecnica. Se necesita ademas, institucionalizacion logistca, administrativa, financiera y en todo sentido.

4. Se necesita en AID y en las instituciones personal especifico para la institucionalización, capacitado, que manibre en las oficinas del Estado. Debe ser el Director o Jefe de la institución.

30 Dr. Veterinario Jacques Sigal, Jefe Subregional Vi en Quetzaltenango y miembro del COSUREDA Subregional.

1. Algunos de los problemas con los proyectos de AID han sido una mala selección de los usuarios de crédito. Hay problemas de morosidad. No se han establecido criterios o no se aplican, para seleccionar un beneficiario.

2. Los técnicos de DIGESEPE fallaron en crear una forma de evaluación del candidato. Estos deberían tener experiencia en crédito y experiencia pecuaria. Debería también tenerse un seguimiento, visitas conjuntas BANDESA/ DIGESEPE.

3. En esta etapa de transición, hay capital recuperado; hay otro capital que se puede recuperar por la vía ordinaria; hay otro capital que tendrá que recuperarse por vía judicial. Los cálculos de morosidad de BANDESA son menores que los de DIGESEPE. De julio a diciembre bajó la morosidad del 664 al 48%.

4. En si los módulos son funcionales. Con lo que se ha recuperado se puede operar 1 o 2 años máximo. AID debería darle a DIGESEPE motos para los auxiliares pecuarios, para ampliar cobertura

5. La línea 6-30 de BANDESA es pecuaria pero con intereses más altos. No se ha dado coordinación interinstitucional a nivel finca en este subregión de San Marcos en algunos lugares sí. Hay celo interinstitucional. BANDESA evalúa superficialmente.

6. Con DIGESA no hay coordinación sino celo interinstitucional. Con pecuario de ICTA sí hay coordinación.

7. Los representantes pecuarios son compartidos por todo el sector. DIGESA los paga y los toma como sus empleados exclusivos. Está a la defensiva. Cree que se los van a quitar. Sí podrían funcionar para todas las instituciones del Sector. Se les dio capacitación pecuaria. DIGESA hace programación quincenal. La programación conjunta será la solución. El técnico de DIGESEPE debe entregarle su programación para que el de DIGESA, la inserte. Si DIGESA lo dice, el representante agropecuario lo hace. Los seleccionan las comunidades.

8. Hay COSUREDAS en San Marcos, Totonicapán, Quetzaltenango, Sololá, El Quiché y Huehuetenango. Los integran INDECA, BANDESA, ICTA, DIGESA, DIGESEPE, INACOP, DIGEBOS. Se reunen cada 15 días o según la necesidad. Funcionan para coordinar las actividades

interinstitucionales.

9. Las preocupaciones principales de los COSUREDAS son: los representantes agropecuarios, fertilizantes para DIGESA, ferias del agricultor, sanidad animal, capacitación para los representantes. A principios de ano hacen una programación conjunta. Cada COSUREDA manda su programación a COREDA; ellos la juntan. Cada Institución hace su plan operativo por municipio. COREDA lo integra y hace el Plan Operativo Regional. Ya esta programado el del 90.

10. Hay una buena comunicación con el MINDES. Los niveles son Consejo Nacional de Desarrollo, Consejo Regional de Desarrollo, Consejo Subregional de D., Consejo Departamental de D., Consejo Municipal de D. y Consejo local de D, a nivel de aldea. Mas afin es la unidad técnica; aquí si están los técnicos. A nivel de aldea va a entrar COLDEP, Consejo de Desarrollo Pecuario [son comunitarios]. La agencia de DIGESEPE más cercana al COLDEP es la Agencia Departamental.

31 Agronomista Marco Tulio Garcia, Gerente de la Asociación de Agricultores [ajeros] de Aguacatán, Huehuetenango.

1. La Asociación tiene 1 año y 4 meses. Los miembros pertenecieron a cooperativas. La mayoria no; son pero de una cooperativa de vivienda y una cooperativa de ahorro y crédito.

2. No habia comercialización de ajo criollo, por sus caracteristicas en el mercado internacional. El ajo criollo va para Centroamérica y Panamá. El 90% del ajo que se produce es criollo; el 10% es ajo mejorado.

3. German Obregón, ex-consultor del EAT para comercialización en el 0255, y CLUSA, trabajaron juntos. Luego que se fue Obregón se perdió el contacto con CLUSA y con AID.

4. Los productores pesan el producto en el campo. Luego se empaca y se mete a un camión fletado por la asociación, compitiendo con el intermediario[son 3 grandes, que tiraron de Q100 a Q150 mil en el "dumping" del año pasado.

5. CLUSA no pudo entrar en lo del ajo criollo. Tienen relación con CLUSA desde el 87. El aporte de CLUSA fue abrir el mercado. La Asociación trajo la semilla. En el 86 una de IMEX les dio la idea de la semilla. En septiembre del 87 pidieron apoyo al 0255 y este

consiguió la semilla. El Ing. Giovanni Reyes del EAT era partidario del contacto directo con el ajo criollo. Pero de la semilla nueva Godoy consiguió el comprador de Costa Rica.

6. El ICTA vino porque vio una plaga. El 0255 hizo una donación de 250 quintales de ajo mejorado de rechazo de Zelaya, Guanajuato. Probaron un poco.

7. CLUSA provee asesoría administrativa y técnica. Con lo de la plaga, CLUSA llevó muestras a Guatemala y resultó un nemátodo.

8. El problema con el ICTA es que viene, ponen una parcel, luego vienen otra vez a los seis meses; la parcela fracasa. La gente lo ve y no creen en ellos. La Asociación por su propio recurso esta experimentando en diferentes altitudes y climas, para producir la semilla aquí y no traerla de México.

9. Están construyento su centro de acopio con fondos de Reconstrucción Nacional [Q19 o Q20mil]. El año pasado la Asociación pidió a BANDESA Q400 mil, para acabar con los intermediarios. Tienen un fondo de Q45mil para comercializar ajo criollo. Sacaban 1 furgón semanal. Quieren ensayar con espárrago.

10. La gente no está bien educada. Eso es probable. Necesitan que algunas aprendan inglés, técnicas de procesamiento industrial de ajo. El gobierno les da apoyo: crédito para conseguir la semilla. También proporciona personal técnico. CLUSA puso un agrónomo y un administrador. Finanzas puso 1 contador y 1 técnico en desarrollo de la comunidad.

11. Lo de la caida de precios no fue lo del ajo argentino sino que los productores no tienen control sobre el mercado capitalino, sino los intermediarios. El sitio de concentración del ajo en la capital esta en la 28 calle de la zona 8. Los compradores salvadoreños y hondureños llegan allí. Hay dos grandes intermediarios de Aguacatán y de Santa Rosa. Uno de aquí tiene camión. La asociación maneja un 40% de la producción total de ajo de Aguacatán. Los intermediarios ya arruinaron a otra asociación.

32 Sr. Amado García, Secretario de la Dirección Subregional de DIGESA en Huehuetenango, Subregion VII.2 [el Subdirector Regional es el Agrónomo Virgilio López]

1. COSUREDA se reune aquí cada 15 días o según la

necesidad. Actualmente están haciendo un diagnóstico de producción agrícola actual en cada municipio. Coordina las actividades interinstitucionales a nivel subregional del sector agropecuario y de alimentación. Cada institución hace su plan y lo resume COSUREDA.

2. Incluye los programas de las agencias.

3. El T-034 ha ayudaco a los programadores. Ha unido a las instituciones.

4. Lo que se espera de AID es financiamiento a través de BANDESA para pequeños y medianos agricultores.

5. Si el 0274 va a tener los mismos objetivos que el T-034 va a ser de gran beneficio. Se necesitan vehículos, sobre todo motos y cursos de capacitación.

6. Los representantes agropecuarios los paga DIGESA pero trabajan también con DIGESEPE. DIGESEPE se ve perjudicado cuando no se recontrata a los representantes. Ahora se tienen 189 representantes agropecuarios. Desde noviembre se programa el trabajo de ellos.

33 P. Contador Juan Cardona, Jefe de la Agencia de BANDESA en Huehuetenango, ex-jefe de la Agencia de BANDESA en Quetzaltenango, ex-representante de BANDESA ante el 0255.

1. BANDESA ha sugerido cambios en los procedimientos de los proyectos. Se encuentran en el documento PROGRAMA OPERATIVO DEL DISTRITO REGIONAL I, QUETZALTENANGO, Del Departamento de Fideicomisos.

2. Se sugiere la creación de un reglamento único que debiera aceptar AID. Ahora para cada linea hay un manual diferente. Es problema para la capacitación. No se debe aceptar todo lo que AID pida. El costo de un crédito es entre Q75 a Q90, pero hay que agregar luz, agua, teléfono, personal de la central.

3. AID debe financiar créditos integrales; produccion, comercialización, vivienda, etc.

4. El T-034 vino a cambiar la visión; se aumentó la producción sin componente de comercialización.

5. Los agricultores están ahora buscando mercados buenos para sus productos; no se quedan solo donde es la tradición, como ha estado sucediendo [el cambio] en

Chiquirichapa.
6. Hay un proyecto de parque Agroindustrial en Quetzaltenango. La comercializaciondebe dar la respuesta a las preguntas de AID.\Hay que averiguar que quiere el consumidor, como lo quiere, donde, cuando, a que precio.
7. Cada fideicomiso debe tener un componente de refuerzo institucionaly de apoyo logistico.
8. Deben ampliarse los volumenes de fideicomiso. \Ahora ha habido de 25 a 30mil creditos anuales, por unos Q40 a Q50 millones. Es muy poco para el pais Se necesitan de Q200 a Q300 millones.
9. Vinieron tecnicos de FIDA para el proyecto de desarrollo de los Cuchumatanes.

34. Lic. Manolo Diaz, Gerente de la Gremial de Exportadores de Productos No Tradicionales, Filial Quetzaltenango.

1. La gremial de Exp. de Prod. NT se formo a raiz de un seminario sobre comercializacion que no tuvo exportadores. Se hicieron seminarios para motivar a la exportacion. Se formo la filial de occidente. Se tuvo asesoria para exportacion. Luego contrataron al Lic. Dias.
2. El esfuerzo para hacer que la gente exportara no fructifico. Mejor se le pregunto a la gente que queria. Se formaron tres grupos:agricultores, Artesanos y maquiladores.
3. En agricultura el talon de Aquiles ha sido el manejo post/cosecha y la comercializacion. Otro problema es el traslado del producto al aeropuerto de Guatemala. La solucion es un aeropuerto en Quetzaltenango. Se tienen 85 agremiados, el 50% son exportadores. La mayoria de exportadores estan dedicandose a exportar artesanias.
4. La clave para que la institucion que ejecuta el programa aprenda en el proceso es que ya tenga la mentalidad apropiada. En este caso mentalidad gerencial.
5. En cuanto a la confiabilidad de los brokers, esta ha sido detectada por la Gremial en Guatemala. Se distribuyen circulares con advertencias.
6. El ICTA manda gente a la gremial creyendo que esta puede indicar a los agricultores que pueden sembrar. Es al reves.Tanto ICTA como DIGESEPE tienen criterios conservadores que impiden la modernizacion para exportar.
7. Falta comunicacion entre BANDESA central y Quetzaltenango. Aqui no conocian la linea de credito para exportacion.
8. Lo interesante es que el peque;o pro[illegible] si esta tomando la actitud empresarial exportadora. Las [illegible]dadesque se encuentran aqui pueden tipificarse [illegible]generador, conservacionista, marginal.
9.Hay prejuicios politicos e ideologicos.
10. Hay comite pro construccion del aeropuerto, con participacion de la municipalidad, la gremial, los propietarios de naves, MINDES,

35 Lic. Jose Alberto De Paz, Gerente de la Cooperativa de Productores de Leche de occidente [XELAC], y el Sr.Mario Sun,Presidente de la Junta Directiva de la Cooperativa., en San Cristobal Totonicapan, Totonicapan.

1. En el Programa de la Cuenca del Caribe se situaron Q50 millones para las cooperativas. Solo quedaron Q4 millones para fideicomisos de cooperativas. Pero por encima de las decisiones de AID, BANDESA agrego otras 16 condiciones. Solo INACOP uso fondos para el K036.
2. Hay un proyecto de financiamiento de la AID, por Q10millones,pero no ha habido nada realmente. Solo referencias negativas tenemos de las experiencias de otros con AID, por ejemplo CECOMERCA y los Manzaneros de Chichicastenango.
3. XELAC no ha tenido ningun eco con el GOG. El apoyo Suizo ha permitido tener lo que tienen. No vamos a servir de justificacion de proyectosinsuficientemente satisfactorios '[dp:hay prejuicio ideologico].
4. A nivel de produccion lo que se necesita es desarrollar a los productores. El precio tope impide incentivar al productos. El Estado deberia cubrir las necesidades. DIGESEPE no apoya.
5. Deberia haberuna linea de financiamiento para comprar ganado, al alcance de los asociados. La cooperativa no puede dar el financciamiento.
6. AID debe afrontar los problemas de liquidacion. Por ejemplo CECOMERCA.
7. Deberia haber una linea de credito para comprar leche y tierra.
8. Con el K036 no todo es culpa de AID. INACOP dio el dinero a 50 cooperativas. Solo 27 estan morosas. Solo Q100 mil de credito ubico el K036 contra Q1 millon de costos de operacion en el primer ano.
9. XELAC no esta federada. Si creen en la integracion de similares.

36 Reunion del CCET el 30/1/89.

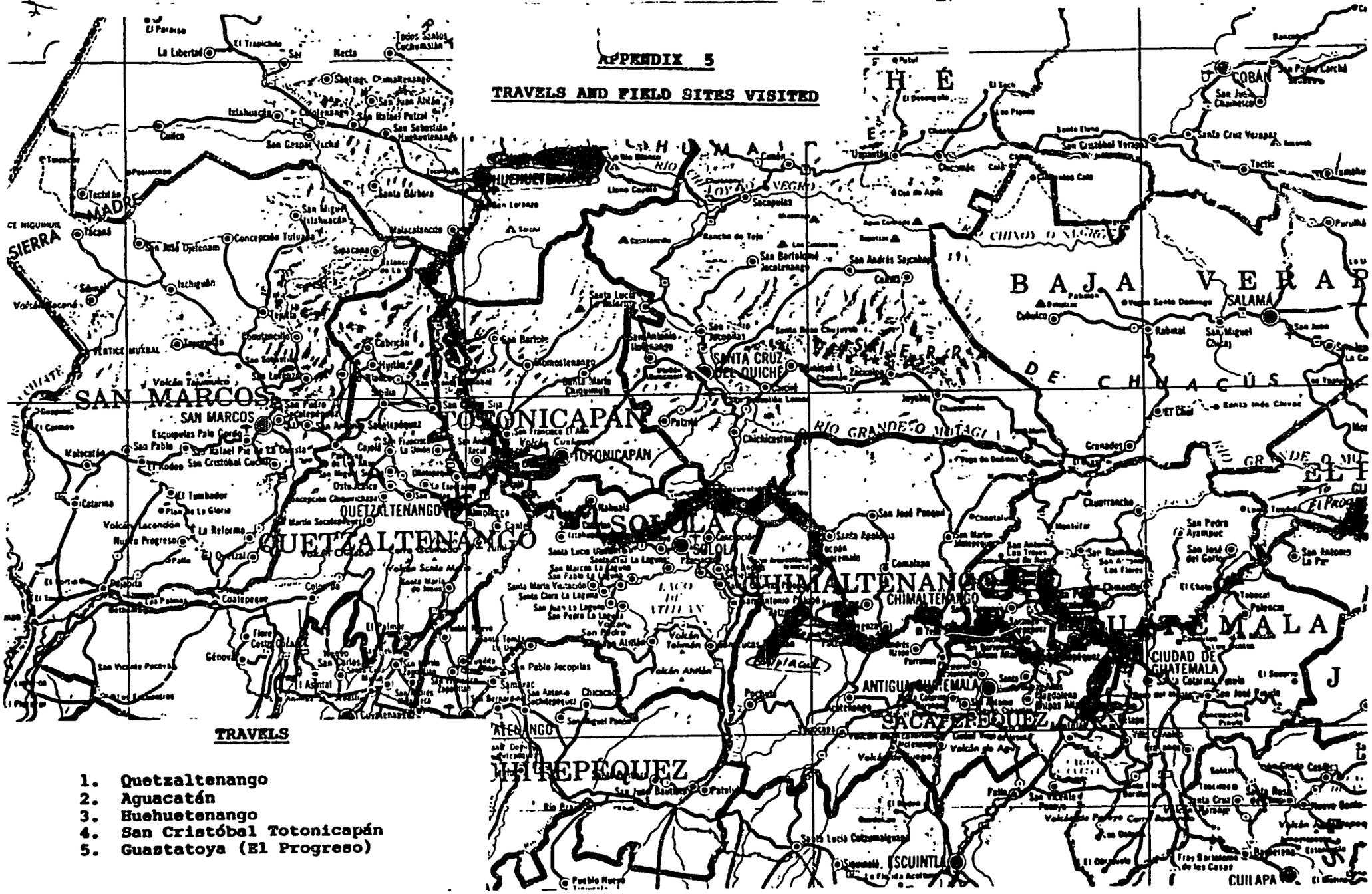
E.Nesman:los promotoressociales empezaron en los anos 60s.
G.Tum: Algunos de los promotores aprendieron a trabajar en peque;os proyectos en la URL.
E.N: La radio de Momostenango trabaja mucho con EEE. Solo hacen un 25% de educacion;el50% es salud. El Director de la Radio es miembro del comite de salud. A EEE le tocaba preparar a los promotores de EBR. No lo hizo y se acabo la fase de monitoreo. RadioMOMO es la uica bilingue de EEE.
DL:hay envidia, no celos interinstitucionales.
B.Leport: visito las cajas rurales, y encontro que la calidad de los empleados ex excelente en destreza y dedicacion. Que la mayoria de las familias rurales no reciben credito de

BANDESA. El crtedito es necesario pero no esencial. Elcredito es operado mayormente por los intermediarios. Que hay mucha morosidad. Los de DIGESEPE son los que tienen mas.
R.Castro:
1. BANDESA presta sus propios fondos al 15% y los de AID al 8%,
2. Por que los campesinos no piden credito a BANDESA por los costos transaccionales, muy altos.
3. Elsector informal esta creciendo al 3%.
4. La limitacion de mercados impide a los miniriegos desarrollar todo su potencia.
5. En San Marcos DIGESA organizo a los productores locales para comercializar juntos y competir con los almolonguenos y salvadorenos.
6. Los de DIGESA no saben como seleccionar sujetos de credito con capacidad de pago de la deuda.
Earl Jones: El ICTA carece de todo probablemente por cierta inflexibilidad de ICTA. No reciben ayuda . Particularmenterechazaron el concepto de investigacion delProyecto T034. Tienen una perspectiva de mas largo plazo. Si hacen algo es al lado de la carretera.
Tito French: A que se refiere usted Earl?
EJ: No hay muchas parcelas demostrativas o de trasnferencia. Lo que vimos estaba mal cuidado.
RCastro: En 1986 el presupuesto de ICTA era de Q1.5 millones. Ahora es de Q5.5 millones.
EJ:
1. Lo que vimos de pecuario fue muy bueno. DIGESA Y DIGESEPE trabajan duro en alimentacion animal.
2. Hay un par de cooperativas que hay logrado subir los precios de la leche.
3. Hay problemas con los caudales de agua.
4. Los fondos de AID estan tres veces autorizados, peroDIGESA no los obtiene.
5. Se viene el gran problema de la falta de agua, por deforestacion.
F.Rohrman:
1. No hay politicas de creacion institucional.
2. Las actuales instituciones del SPAgricola fueron creadas casi al mismo tiempo[Arana, 70s]. 15 anos mas tarde no hay coordinacion.
E Jones:
1. La gremial de EXpde PNT no acepta a los almolonguenos.
2. Los de la gremial actuan como coyotes.
FGS:
1.Un rol delos coyotes es ense;ar a la gente como negociar.
DP:
1. La planificacion no esta institucionalizada en Guatemala, no es parte de nuestra mentalidad, de nuestra cultura.
2. El proceso de toma de decisiones de los sectores no toma en cuanta lo planeado.
3. eL CARACTER DE LOS PLANES NO ES HOLISTICO

4. La informacion que sirve de base tanto a planificadores como a ejecutores es deficiente, desfazada, y no hay relacion entre la informacion y la toma de decisiones.
5.LAS ENTIDADES ejecutoras estan divorciadas de SEGEPLAN.

APPENDIX 5

TRAVELS AND FIELD SITES VISITED



TRAVELS

1. Quetzaltenango
2. Aguacatán
3. Huehuetenango
4. San Cristóbal Totonicapán
5. Guastatoya (El Progreso)

Final Report of the Cross-Cutting Evaluation:

Information Systems

Submitted by:

Dr. José Alvarez
Ing. Francisco Rohrmann
Consultores Agroindustriales de Guatemala

USAID/Guatemala, February 1989

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I. INTRODUCTION

One of the tasks assigned to the Cross Cutting Evaluation team involves the evaluation of the impacts that AID projects have had on information systems. Since there has been no specific project dealing with that subject per se, this report deals with projects that have generated an information component within themselves. It also discusses the generation, availability and flow of information within the Guatemalan Government, AID and the private sector.

The procedure followed included the review of evaluation materials for some of the projects complemented with the reading of relevant secondary sources and personal interviews. Since the purpose of the evaluation was not to conduct a thorough analysis of information systems in Guatemala, a list of recommendations is not included. Suggestions or comments, however, appear in some of the sections.

Following this Introduction, the second section deals with information and coordination in the public sector. It includes data sources and availability; a discussion of the role, structure, need and effectiveness of USPADA; and a description of the flow of information. The third section deals with the private sector, some of the organizations, their role and their potential for collaboration with the public sector. The fourth section describes AID's information flow of projects and also monitoring and implementation. Finally, an attempt at evaluating project impacts is made.

II. INFORMATION AND COORDINATION IN THE PUBLIC SECTOR

A. Data Sources and Availability

A previous study conducted a detailed investigation of sources of agricultural-related data.1 What follows is a summary by institution. It is important to point out that the accessibility of all the information was considered good while the quality was ranked high, medium or low. These two items are not included in the following summary.

INDECA:

(a) Planting intentions of basic grains are collected annually at the municipal, departmental, regional and national levels.

(b) Harvesting predictions of basic grains are collected annually at the municipal, departmental, regional and national levels.

(c) Inventories in state silos are collected weekly at the national level.

(d) Consumer prices are collected daily at the Urban and Regional Central.

DIGESA:

(a) Availability of certified seed is collected quarterly and annually at the national level.

(b) Production prediction of cotton seed is collected annually at the national level.

(c) Availability of pesticides is collected monthly at the national level.

(d) Irrigated area is collected monthly at the irrigation units level.

(e) Production costs of agricultural products in irrigated areas are collected monthly at the irrigation units level.

(f) Swine production is collected monthly at the irrigation units level.

(g) Area planted to pastures in irrigation units is collected monthly at the irrigation units level.

(h) Number of beef and dairy cattle heads in irrigation units is collected monthly at the irrigation units level.

DIGESEPE:

(a) Milk production is collected annually at the national level.

(b) Production of fish and edible aquatic species is collected monthly at the national level.

(c) Inventory of avian enterprises was collected once at the national level.

(d) Avian population is collected annually at the national level.

(e) Swine population is collected annually at the national level.

(f) Imports and exports of inputs and products for

cattle activities are collected monthly at the national level.

(g) Wholesale and consumer prices of fish and edible aquatic species are collected weekly at the national level.

INE:

(a) Status of crops and harvesting is collected monthly at the municipal level.

(b) Continuous agricultural statistics including production, area and availability of sugarcane, rice, wheat, bananas, coffee, cotton, beef and dairy cattle products, and animal feed are collected monthly at the municipal, departmental and national levels.

(c) Food balance sheets are developed annually at the national level.

(d) Income and expense surveys are conducted from time to time at the national level.

(e) Farm prices are collected monthly at the municipal level.

(f) Consumer price index is developed daily at the national level.

(g) Consumer prices are collected daily at the national level.

BANDESA:

(a) Credit assistance to agriculture and livestock is collected monthly at the national level.

(b) Agricultural production costs and returns are collected from time to time at the national level.

BANCO DE GUATEMALA:

(a) Credit assistance to agriculture and livestock is collected annually at the national level.

(b) Agricultural products costs are collected annually at the national level.

(c) Production, imports and exports of the main agricultural products for domestic consumption are collected annually at the national level.

(d) Production, imports and exports of the main agricultural products are collected annually at the national level.

(e) Consumer prices are collected annually at the national level.

(f) Wholesale prices are collected annually at the national level.

USFADA:

(a) Production costs of small and medium size farmers was collected once at the national level.

(b) Area and agricultural production of small and medium size farmers was collected once at the national level.

(c) Agricultural and livestock production of small and medium size farmers was collected once at the national level.

(d) Balance sheets with time series data by item or group of products from agriculture, livestock and forestry are available on a permanent basis at the national level.

(e) Destination of agricultural products from small and medium size farmers was collected once at the national level.

(f) Agricultural marketing of small and medium size farmers was collected once at the national level.

(g) Time series data of prices by item or group of products from agriculture, livestock and forestry are available on a permanent basis at the national level.

DITEPESCA:

(a) Production of fish and edible aquatic species are collected quarterly and annually at the national level.

(b) Wholesale and consumer prices of fish and edible aquatic species are collected weekly at the national level.

SEGEPLAN:

(a) Normative basic baskets were developed once at the national level.

INSIVUMEH:

(a) Agro-climatic data are collected daily at the national level.

(b) Climate forecasts are made at the national level.

(c) Development stages of main crops are available at the national level.

(d) Adverse climatological factors to agriculture are collected daily at the regional level.

Although the list is not an exhaustive one, it is enough to describe the serious problem related to the duplication of efforts in the generation of information about the agricultural sector and the resulting existence of different sets of data intended to measure the same or related parameters.

Agricultural production costs and returns are collected by BANDESA from time to time at the regional level through its credit agents in the field and national averages are then computed. These figures are sent to the inter-institutional commission integrated by representatives of ICTA, DIGESA, INDECA AND BANDESA. The figures are then compared with the data available in these other agencies to eliminate discrepancies by follow up visits to the field when necessary. Then the data are published. In the case of BANCO DE GUATEMALA, cost data are gathered from secondary sources in the public sector and agricultural associations. Data from different sources are compared and screened to make them coherent. National figures are arrived at by means of a matrix of technical coefficients. DIGESA also collects biweekly agricultural production cost information for irrigated areas. Finally, USPADA conducted a national survey to gather cost information at the national level.

The duplication of efforts in the case just described is obvious. Four different public agencies are involved and several secondary sources are consulted. The use of different methodologies does not lead to the same results in terms of the uniformity and reliability of the information published.

A clear example which merits a suggestion is the case of the interrelationships existing between BANDESA and DIGESA. These two agencies basically need the same type of information. Perhaps a computerized system with both agencies having access to the same actualized information will solve one of the most serious problems the consultants have found during this evaluation.

Other problems relate to two important sources of information for the agricultural sector. The first one is the Agricultural Census. INE has the mandate of conducting an agricultural census every five years. However, the last three

have taken place in 1950, 1964 and 1979, or one every fifteen years. The second one concerns the sample frame by area, or marco muestral por área, and deserves special attention.

This was a major AID effort. Aerial photography, and cartographic maps when the former was not available, were used to stratify the country. The main criterion was the intensity in land use. Samples of segments (1 km2) were taken and interviews of all farmers in that segment were conducted. Data were analyzed with software developed by the U.S. Department of Agriculture before 1974, partly modified to include other parameters of interest to Guatemalan officials. The software was run in an IBM 34 minicomputer and outputs generated included, among others, agricultural production estimates, employment generation and production forecasts. The sample frame was also used in project evaluation.

Despite its value as a source of information, and the amount of resources and efforts invested, the sample frame was sub-utilized and did not receive the necessary follow up to the point of becoming obsolete. Several factors can be mentioned in this regard. According to one of its developers, USFADA did not stress the usefulness of this tool to public officials to generate their support. Institutional politics, with the corresponding "power struggles", also played a role. Ministers changed too often and some were reluctant to use the results generated by something they had not had any input in its design. Finally, the frame was not conceptualized to include policy formation.

Two different lessons can be learned from these cases. The first one is that, for whatever reasons, an important source of information such as the agricultural census is not being implemented as often as it should be and is mandated to be. The census should take place every five years and data should be processed and made available as soon as possible. The second lesson is that important efforts such as the sample frame should have the necessary follow up to keep them operational. The consultants found a unanimous consensus concerning the soundness and value of the sample frame and a sense of frustration for its loss.

The consultants have talked with individuals who share an interest in investigating the possibility of using the area sample frame again. Based on different sources of information, the following comments can be made.

The area sample frame is a good tool when used for a specific purpose which is in agreement with its design and capabilities and even better when combined with a list frame. Interviewing all farmers in an area segment, however, does not lead to reliable results when conducting a socio-economic

study because each segment is treated as if it were a single farmer. In that case, the use of a list frame would lead to more representative results for two reasons. First, vegetable farmers, for example, are not randomly distributed as basic grain farmers are and the computed "averages" are not a real representation of the population. Second, if a 5% sample is taken, both large and small farmers are included and, depending on the area, there may be over or under representation of either type of farmers.

One of the main problems with the past use of the sample frame was that the questionnaires were designed by the intermediate users of the information to be generated and not by the final users. A good example would be USPADA developing a survey to be used by the Minister of Agriculture.

We can summarize these comments by saying that both the area sample frame and the list frame are there; that they are useful tools if the final users design the survey knowing what data they really need and how to quantify them; and that there exists the computer capacity needed. Perhaps the software should be updated and transferred to microcomputers and contracting with private firms to conduct <u>specific</u> tasks should be considered.

B. <u>USPADA: Role, Structure, Need and Effectiveness</u>

Although the design and formulation of agricultural policy is the responsibility of the Minister of Agriculture, USPADA (Unidad Sectorial de Planificación Agropecuaria y de Alimentación) is the unit in charge of coordinating that process. At present, the role of this unit is not to generate information but to compile data gathered by other agencies for evaluation purposes. In that regard, USPADA is an intermediate user of information; i.e., USPADA processes information generated by others, or by themselves in some instances, but intended for final users who are going to make decisions based on that information such as Ministries and other public, and perhaps private, agencies.

In that capacity, USPADA has generated 15 documents of diagnosis of agricultural products. These documents are mainly used for consultation and not for policy formation. The unit has not been involved in the process of implementation since the planning process is not involved in decision making.

The organizational chart of USPADA is shown in Figure 1. The unit falls under the direction of the Ministry of Agriculture. There exists a relationship with COSUCO (Comité Superior de Coordinación del Sector Público Agrícola) since the General Coordinator of USPADA is the secretary of this

committee; and with Coordination of Priority Programs in which USPADA is involved. A more direct involvement exists with COPROSEC (Consejo de Programación Sectorial) which includes the directors of all agency programming units of the agricultural sector. Not shown in the chart is the interaction with SEGEPLAN (Secretaria General de Planificación), which is in charge of developing the five-year development plans and supervising all USPADA's projects.

In terms of internal organization, there is a Coordinating Committee parallel to the office of the General and Vice General Coordinators. Single units under this office include Administration, Secretarial Services, Computing Center and External Cooperation. The Sectoral Planning unit and the Budgeting and Programming unit are subdivided into three and two sub-units, respectively. The Regional Units of Agricultural Planning (URPA) operate at the regional level.

Up to now, the effectiveness of USPADA has been minimal because of its main role as an intermediate user of information. However, plans being developed at present may change that situation. USPADA is working on a plan to restructure the unit at the national and regional levels. The goals include, among others: (a) the strengthening of the Follow-up and Evaluation section with the objective of increasing the quality of information to make it more useful to the users; (b) the strengthening of the Statistics and Basic Studies section so that the documents generated can be used in decision making; (c) the generalization of the information to increase the number of users by eliminating the current lack of a control mechanism at the national level for unifying that process; (d) the development of a strong relationship with the private sector; (e) the evaluation of the agricultural representatives that will introduce what they call "participating research" (investigación participativa); and (f) the creation of the URPAs at the regional level which will become generators of information. The consultants believe that the appointments of eigth executive secretaries of COREDA (still in the process as of this writing) in the eigth regions of the country will help USPADA's efforts in the field.

Since information is the starting point in policy formation, USPADA intends to go from a merely diagnostic role to an integrated production and consumption system that will enable this unit the prediction of future scenarios and the formulation of policy. To do that, USPADA needs to develop a strong analytical section in order to determine what type of information is necessary and for what purposes. It must assist in the design and development of survey questionnaires and of policies for agencies such as MAGA and SEGEPLAN. Planning units in the GOG are functioning as programming and

budgeting units. Diagnostics, on the other hand, just defines the problem but does not get into explaining the causes of, or cures for, that problem.

An illustrative example would be a study to analyze alternative land uses that would also pinpoint the opportunity costs involved. A short questionnaire to address this issue should be developed, information collected and the analysts, with the help of the computing unit, should then compute productivity, land-man ratios and any other parameters necessary to obtain the results sought. The analysts would then show the Minister the alternative courses of action and the consequences of such actions both in terms of actual potential impacts and opportunity costs.

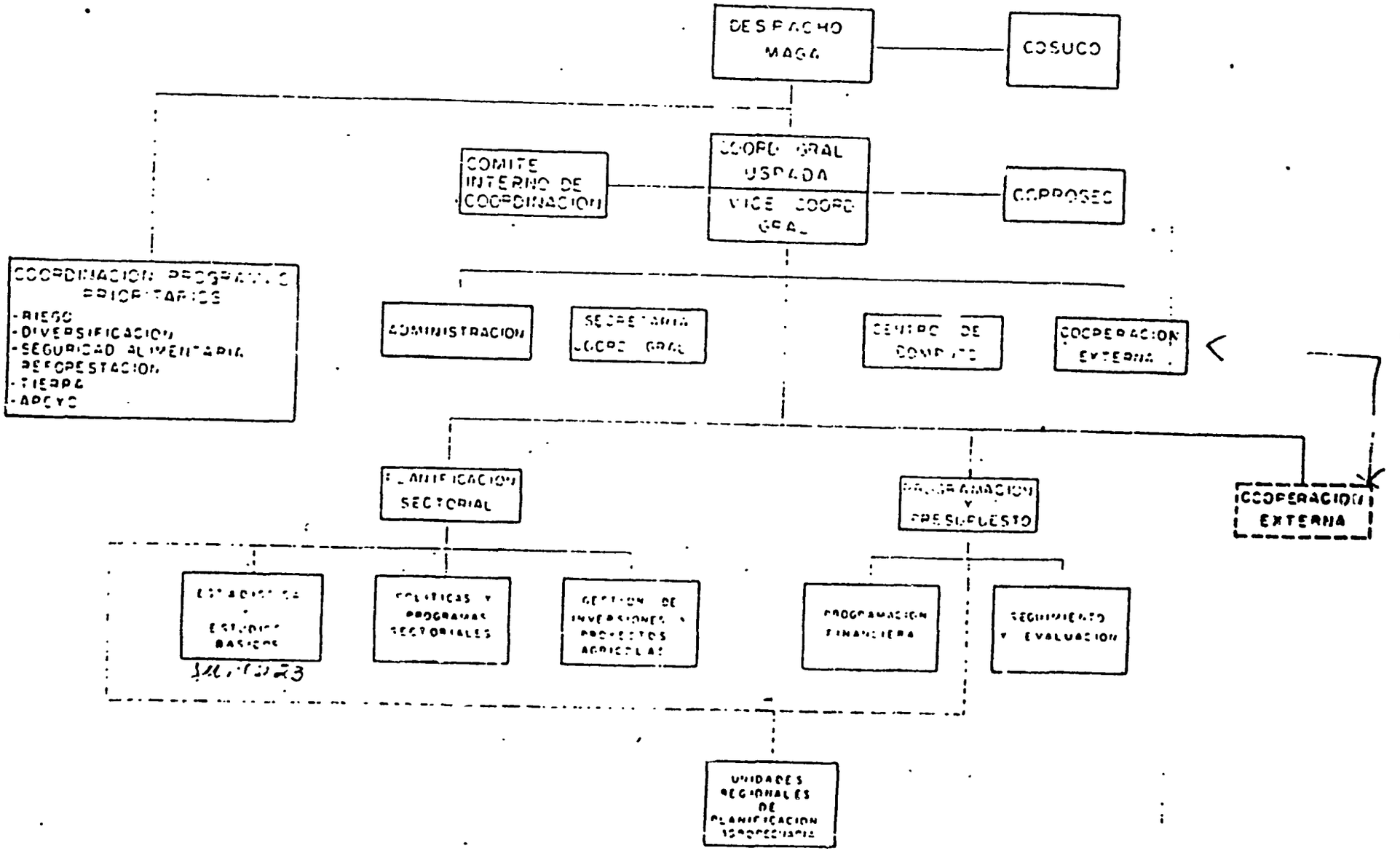
USPADA should also be integrated with macroeconomic policy. A macroeconomic model of the agricultural sector is one of the alternatives being considered at present in USPADA. This effort should begin with models at the farm level and then with regional models. This is a sine qua non for the general model to have operational relevance in projecting the alternative scenarios that they should seek to analyze. The successful experience of the ADAS unit in Honduras should be consulted through Dr. Gary Smith who has knowledge about that project. If fully operational, this model would help the Minister of Agriculture in his role as member of the Monetary Board (Junta Monetaria). The Minister will be able to inform the rest of the board members of potential impacts of monetary policies on the agricultural sector.

Since USPADA is an intermediate user, and not a developer, of information it has some relationship with other institutions in the agricultural sector. These are the providers of information such as ICTA, INDECA and INE. Of the Ministries related to the CCE project (Health, Education and Economics), USPADA interacts with the Ministry of Health in the efforts to implement the SISVAN (Sistema de Vigilancia Alimentario-Nutricional). It also began a relationship with the Ministry of Economics through the design and implementation of a new planning effort that may translate in the macroeconomic model of the agricultural sector mentioned above or in other planning tool of that type. There exists a strong relationship with SEGEPLAN since the latter supervises all USPADA's projects with the presence of one of its members in each of USPADA's projects. The complete lack of interaction between USPADA and the private sector at present may be eliminated once the planned re-organizational efforts have been completed.

USPADA has had some direct involvement with AID in the past. Project 520-233 included three U.S. advisors in the

U S P A D A

ORGANIGRAMA



areas of planning, budgeting and programming, and the sample frame. The present efforts will be financed by AID, IICA and BID. There exist high expectations among its members and the consultants believe that this is a golden opportunity for AID to make an impact on the area of information in the agricultural sector. The institutional infrastructure already in place has not been used to its fullest and duplication of efforts are very common. To overcome that situation, USPADA should be assigned a leadership role to become the main provider of information to all users. In that regard, since the current data processing capabilities of USPADA are very limited for what is being planned (a few microcomputers with some terminals and printers), contracting with private data processing firms should be considered to avoid heavy investments in hardware and software and delays caused by budget cuts.

In addition, as explained above, since the public agricultural sector lacks a technical unit to conduct quantitative analyses and potential impacts of intended policies on the agricultural sector, USPADA should be given that role. In this regard, instead of placing experts in USPADA, who are not likely to remain in the agency for a long period of time, contracting with the private sector should be considered.

The lack of qualified personnel to conduct quantitative analyses is also present in other institutions. Since this fact is sometimes related to AID projects, a few comments are in order. Some foreign assistance projects, including those of AID and other international agencies and governments, have a training component. In some cases, resources are earmarked for sending personnel abroad to obtain graduate degrees. These highly qualified individuals are sometimes assigned to administrative positions when they return to Guatemala. In other cases, although not a total loss, they get employed by the private sector. The problem is compounded when one considers the opportunity cost involved. The resources spent in training only one Ph.D. who is not working in his or her area of expertise could have been used to train many technicians for working in the field where they are so badly needed.

C. Flow of Information

The flow of information within the public agricultural sector is of extreme importance if success is to be achieved in any project implementation. This section describes some examples found.

Information can not flow when there is no information.

INDECA, for example, lacks information to quantify production by product. They conduct two annual surveys: planning intentions and harvesting predictions. Because of lack of resources, their interviewers have been reduced to five who cover all regions. Of the 500,000 farms, they only cover about 5,800. This situation is contrasted with INE's, which has a qualified group of interviewers who perform a good job but the information is published too late to be of any use to INDECA.

Discussions underway between INDECA, the Non-Traditional Agricultural Exports Guild and AID may result in a new AID project intended to provide INDECA with a computerized system for gathering data on commercialization and market news. There will be a computer terminal and a radio station in every regional office to collect information and to send it to the main office in the capital for processing and analysis.

Data available on population, health parameters, access to drinking water, etc., have wide ranges and come from different sources. The SUI (Sistema Unico de Informática) collects information in the Ministry of Health. Although known as an accurate system at the field level, the information is processed at different levels where mistakes are made. In addition, the data collected include only the users of health institutions. This information, however, does not flow between the Health sector and other institutions of the GOG. Health projects which relate to other units are accidental and there is no institutional interaction except at the community level.

The availability of information from research results is of utmost importance. Up to know, ICTA's institutional coordination has been weak due to the scarcity of joint projects with other units. The recently initiated program of generation and transferring of agricultural technology and seed production (PROGETTAPS) has allowed ICTA, through project 520-255, to joint efforts with DIGESA and DIGESEPE in what most people in the public agricultural sector and the CCE team claim to be a new successful approach. These consultants, however, did not have time to document that fact and an evaluation of this program will probably appear in other reports. ICTA, however, has no projects with INAFOR, INDECA, INTA and PROLAC. Cooperation, at the local level, exists between ICTA and INCAP, the Universities of San Carlos, del Valle and Rafael Landivar, and with some entities in the private sector and other public institutions. This cooperation, however, does not seem to translate in a systematic publication and interchange of available information other than some publications from these institutions. It has been stated that ICTA obtains

information from other sources through SIDA (Servicio de Información y Documentación Agrícola) and that, at the same time, ICTA sends its annual reports to SIDA.2 The handling of information within ICTA has been considered insufficient due to SIDA's scarce resources in terms of space, personnel and facilities for the users.3

INE has twenty-two regional offices to gather statistics. The information developed by the INE is used by SEGEPLAN, the Guatemalan Bank, the San Carlos University, the Ministry of Urban and Rural Development and, through the Sectoral Commissions, most of the remaining institutions in the public sector. This information, however, is not used for decision making at present and one of INA's objectives is to achieve that through the Sectoral Commissions, which are the coordinating mechanism within the public sector. INE interacts with USFADA through the Sectoral Commission only, although USFADA is a user of INE's information. INE would also like to join efforts with the MAGA because of MAGA's infrastructure. INE has no formal contacts with the private sector.

To avoid the current duplicity of information and make it more useful, a national statistical system, being coordinated by INE, will be created in each Ministry. INE believes that centralization efforts should be avoided because what is flowing now could be stopped, and that the current methodology is appropriate for the public sector, with each Ministry fulfilling that role according to its needs. With the implementation of the National Statistical Plan 1988-92, each Ministry will obtain the information they need because the users expressed their needs during its development.

The timing of the information is related to its flow and usefulness. For example, INE has problems with data processing. The delay in presenting results was caused by what they call improper internal procedures due to insufficient computer capacity (an IBM 36) and personnel. The basic grains survey was conducted in May of 1988 and the information was available in October of the same year although the publication came out later. Expanded computer capacity will alleviate these problems.

Although institutional coordination fits more into the institutional development area, it impacts the way information flows. The lack of adequate coordination among and within institutions severely affects information flows and is a major constraint for optimizing the decision-making process from planning to evaluation.

In general, AID has not made strong efforts on programs related to coordination of information flows. Although great

potential for improvement exists in this area, the major constraint is the "institutional and professional rivalry" factor. This in turn is a major constraint in the whole issue of economic development in Guatemala.

Looking at the complex organizational chart of MAGA, and its growth in terms of number of institutions, and its relationships with coordination and information flows, it becomes obvious that a study should be conducted to review the role, structure and effectiveness of each of the units that comprise the public agricultural sector. Each study component should include information needs, their potential sources and uses, and the design of an information system for each of the units. This is a prerequisite for improving coordination and avoid isolated efforts for problem solving.

III. THE PRIVATE SECTOR

A previous study identified over one hundred commercial, industrial and producer associations, known as gremiales, in the Guatemalan agricultural private sector.4 These associations, in turn, are members of Chambers (Cámaras) that represent specific sectors of the economy. The Chambers, in turn, are members of the Coordinating Committee of Agricultural, Commercial, Industrial and Financial Associations (CACIF). CACIF, mainly a lobbying organization, has six institutional members: The Chamber of Commerce, the Chamber of Industries, the Chamber of Financial Institutions, the Chamber of Tourism, the National Farmers Union (UNAGRO) and the Association of Sugar Producers.

The same organizations in CACIF have joined to form the Chamber of Businessmen (Cámara Empresarial - CAEM), responsible for identifying, preparing, analyzing and evaluating programs and projects to further promote private sector development.

The National Farmers Union (UNAGRO) is the coordinating mechanism of the private agricultural sector, used by the two largest producer associations: The Farmers Association (AGA), which includes individual producers or groups, and the Chamber of Agriculture, which includes only groups or associations.

The Non-Traditional Products Exporters Guild (GREMIAL) is a trade committee within the Guatemalan Chamber of Industry. Although mainly a lobbying organization, the GREMIAL serves as liaison with public and other private sector groups, gives training to its members, and has developed and strengthened its market information system.

Pesticide and fertilizer firms are organized into the

Association of Agricultural Input Suppliers (GREPARGO) with the objective of developing consistent pricing policies and restrict competition.

The National Institute of Cooperatives (INACOP), formed by ten cooperative federations, are grouped in the Confederation of Cooperatives (CONFECOP) for lobbying efforts and to provide some type of training to its members.

The National Federation of Savings and Loan Cooperatives (FENACOAC) provides savings and credit services to approximately 96,000 individuals. Although characterized by its professional management and financial strength at the time of the study, members of the CCE team found that, out of 68 cooperative members, only three are financially sound. AID is looking at 24 members, including the three mentioned above, for financing purposes. The remaining 24 are not capable of surviving.

In our opinion, CAEM, UNAGRO, the GREMIAL, GREPARGO, INACOP, CONFECOP and FENACOAC provide excellent opportunities for the public agricultural sector to interact with the private sector. These organizations may also become, once mutual trust is established, in valuable sources of information for the public sector.

The GREMIAL is a case in point. Part of AID's Agribusiness Development project (520-276), intended to strengthen its market information system, was AID's first experience with the private sector. The project has been such a success that it is considered a show case. The reasons, according to the General Manager, were: (a) the idea originated in the organization and was not imposed from above; (b) the GREMIAL played an active role in the project since the early stages of design through the implementation phases; and (c) the seniority of the personnel involved gave continuity to the project. The lessons learned from this project should be incorporated into future projects with both the public and the private sectors. The potential mistake of allowing a public sector unit (INDECA) to duplicate what the GREMIAL is doing in terms of market information should be avoided by all means.

IV. AGENCY FOR INTERNATIONAL DEVELOPMENT (AID)

A. Information Flows of Projects

AID must play an important role in the development and flow of preliminary information on every project. This, however, has not always been the case.

The mid-term evaluation of the Small Farmer Diversification Systems project (520-255) identified a serious initial mistake. Since the project was slow in getting started, field work had to be carried out without the benefit of the baseline surveys contemplated in the original design.5

The Integrated Areas Development (IADS) project (520-249) is another case in point. The statistical reviewers found that experienced technical input was too little too late; that there existed mutually inconsistent ideas about many aspects of data collection which were not resolved, and that some of the problems encountered in the project could have been avoided with proper design and scheduling.6 The end result was a lack of scientific justification for claiming that the data generated from the samples are valid representations of the populations they reputedly represent.7

Evaluators of the IADS project indicated that the IADS Information Center should have been done within the first year of project activity as a sine qua non of institutionalizing the project; and that work activities focused on the obtention of data while never dealing directly with the important matter of assuring ready access to the information generated.8

A major problem affecting the Small Farmer Development project (520-233) throughout its lifetime was the lack of baseline studies and interim evaluations which brought about the insertion of an inevitable element of subjectivity in any attempts to evaluate the project. For that reason, a series of rules of thumb had to be adopted for evaluation purposes9 --an extremely difficult approach to conduct a benefit/cost analysis.

The Pilot Land Market project (520-330) also lacked information from baseline studies.10 Even the Agribusiness Development project (520-276), so well planned and executed in terms of the Gremial's information requirements, was deficient in the cooperative section. Mid-term evaluators found that the generalized profiles prepared for the coops were not baseline studies which could be used to measure changes occurred since project initiation.11 Work conducted at La Máquina, under the Agricultural Development project (520-197) included the interviewing of one-hundred farmers. Results, however, were made available too late when the program was already underway.12

The importance and impact of baseline studies is documented in successful projects such as the Guatemalan Bilingual Education project (520-258) in which user needs were considered in a baseline study called PRONEBI (Programa

Nacional de Educacion Bilingue).

B. Monitoring and Implementation

These are two other important areas of involvement for AID. When one looks at the documents produced to implement these two tasks one has the feeling that they are fulfilled. What is missing is the necessary follow up to correct deficiencies found when monitoring, and also during the implementation phase.

The mid-term evaluation of project 520-255 found that none of the attempts to gather information was carried out to a logical, useful conclusion; that data on files had not been analyzed nor digested; and that each step in the project implementation had proceeded on the basis of "conventional wisdom" with only slight, if any, reference to the collected survey data.13 The final report confirms that attempts to correct that situation (five farm surveys) were not successful because of the three studies completed, only the credit survey was adequate for its intended purpose.14 Furthermore, monitoring and implementation were hindered by changes in leadership during its four-year life, which included five ministers, five vice-ministers, three ICTA general managers, three DIGESA general directors, three USAID mission directors, four USAID project managers and two technical assistance team leaders.7

The evaluators of project 520-249 pinpointed another important component of the monitoring and implementation phases when they stated that AID could have played a stronger role in minimizing frictions among the participating institutions, but the Mission suffered from discontinuity of management, with three project managers in three years; and that the absence of an earlier evaluation lessened the impetus to address problems head on.5

V. PROJECT IMPACT EVALUATION

Although this section does not intend to quantify or even discuss the impact of AID projects, it is necessary to point out that, while reviewing project evaluation documents, a pattern emerged in terms of the negative impact that the lack of baseline studies have had on some of the projects. A previous section discussed this issue in terms of project initiation and monitoring. This section pinpoints one example dealing with project impact evaluation. The IADS project is a case in point.

The evaluators of the IADS project (520-249) found that USPA's interest in the project was a marginal one; that ther

existed no concrete evidence that USFA was at all interested in using the IADS planning methodology in setting agricultural sector investment priorities; and that there was no direct evidence that other GOG institutions were interested in IADS.8 The statistical reviewers, however, found that the data generated by the IADS were used to some extent by staffs of both the National Economic Planning Council (CNPE) and INFOM but little interest by other agencies. They also stated that these reactions to this project outputs illuminate the need to bring potential users into the planning stage so that their needs and concerns are explicitly taken into account in the database system design.9

The importance of accurate, final user-oriented and timely information has been stressed throughout this report. The consultants would like to finish it by stating that there seems to exist, both in AID and the GOG, a lack of perception of how valuable information is and how inexpensive it is when compared to the benefits received from that investment. The existing local expertise in this area should be utilized if AID and the GOG want to eliminate the problems generated by the deficiencies of current information systems.

NOTES

1 Contreras y Cabrera, pp. 3-6.

2 Ruano y Fumagalli, p. 55.

3 Ibid., p. 16.

4 Agriculture Sector Review.

5 Office of Rural Development Report No. 19, p. 1.

6 Green, Gómez and Turner, p. 14.

7 Ibid., p. 86.

8 McKee and Riordan, p. 31.

9 Smith, Gary, p. 2.

10 Planning and Human Systems, Inc., p. 1.

11 Young, Arthur, p. 96.

12 Crisóstomo-Vergara, Carlos, p. 5.

13 Office of Rural Development Report No. 19, p. 39.

14 Office of Rural Development Report No. 29, p. 29.

15 Ibid., p. 86.

16 McKee and Riordan, p. 30.

17 Ibid., p. 17.

18 Green, Gómez and Turner, p. 13.

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LIST OF PERSONS INTERVIEWED

- Ing. Byron Contreras, Director of the Statistics and Basic Studies section of USPADA.

- Sr. Rafael Córdova, Director of the Computing Center of USPADA.

- Ing. Hugo Orellana, General Coordinator of USPADA.

- Lic. Eliseo Herrarte, General Manager of INDECA.
  Lic. Mario Herrera, Director of the Technical Division, INDECA.
  Ing. M. Portillo, Director of Programming and Studies, INDECA.

- Dr. Laurence Day, Health Specialist of the CCE team.

- Ing. Astolfo Pumagalli, Ex General Manager of ICTA.

- Lic. Alexander Serovic, Vice-Minister of Finance.

- Lic. Danilo Palma, Institution specialist of the CCE team.

- Lic. Miguel A. Herrera Saenz, Interim General Manager of INE.

- Lic. Ricardo Avila, Statistics Section, Ministry of Finance.

Mr. Gary Smith, CCE Team Leader.

USAID PARTICIPATION IN THE DEVELOPMENT PROCESS OF THE HIGHLANDS OF GUATEMALA

CROSS CUTTING EVALUATION OF THE ALTIPLANO

JANUARY-FEBRUARY 1989

GREGORIO A. TUM

INTRODUCTION

The following discussion forms part of the "cross cutting evaluation" conducted for USAID/G in January and February of 1989. It aims at evaluating the overall impact of the Mission's work in the Guatemalan highland over a forty year period. This discussion deals with the contribution of the Mission to the education of the highlands communities. Some general aspects will also be considered, such as the importance of the role of women in the development process.

The AID Mission in Guatemala has placed priority for the development of the highlands communities for the last twenty years. During these years, the highlands communities have undergone various changes that have been, for the most part, positive. In fact, in such a relatively short period of time, these communities, with their scarce resources, have proved to be active in the development process. Today there are more Mayan monolingual speaking children enrolled in the primary education system; health services have been expanded to communities that in the past did not have access to such services, and modern agricultural practices are now part of daily activities in those communities. It may be said that the communities of the highlands have improved their living conditions life to some degree. Nonetheless it is clear that services do not reach all communities in the highlands, and that they do not reach them all with the same quality of services, due to limitations or deficiencies of those services or simply because communities are far from main roads.

A BRIEF HISTORICAL BACKGROUND

In pre-columbian times, Mayan people inhabited what is now known as the Western Highlands. These people had a rather different world view than the Western understanding of life. The Mayan inhabitants developed a whole body of sophisticated and scientific knowledge that gave them the prestige that is still admired by many intellectuals even today:

> ...the development in Mesoamérica of writing and of a calendar more accurate than that employed in contemporary Europe should be mentioned... Long before the concept of the zero had become part of European mathematics, the ancient Maya were regularly using a zero glyph in their extremelly accurate calculation of astronomical events. In Mesoamérica, especially in the Valley of Mexico, equally intensive forms of agriculture were practiced, based on permanent and flood-water irrigation, terracing, fertilization and permanent field rotation. The most productive method was that of CHINAMAS, an intricate network of dredged-up fields, canals and ditches built up along the margins of Lake Texcoco.[1]

In 1524 there was an abrupt clash between the Spanish and Mayan cultures of the Americas. Since then, the Mayan people have had to deal with political and economic structures which have not favored them. The long-lasting hardships such as the high rate of illiteracy, a majority of malnourished children, and a predominant "minifundio" system are the results of the clash of cultures.

According to Jean Loup Herbert there has been manipulation of data, justifying the violent penetration of the Spanish to the Mayan lands. In fact, historians such as Cardoza y Aragón believe that the Mayan population had experienced many years of decadence at the time of the "clash of cultures".[2]

However, probably such a decadence did not exactly exist, for even today, after almost five hundred years of Spanish influence, Mayan languages still are the means of communication in the highlands. The Mayan calendar is still a means for computing time. Traditional dress, customs and practices are rooted in prehispanic culture. Of course here we do not disregard the value of the official language.

Spanish as a second language is crucial in the Guatemalan society for there are various languages of the Mayan branch that do differ greatly such as Mam with Quiché. A common means of communication is necessary: Spanish. In fact, there are some communities in the highlands that do not use their native tongue for communication, understandably in a society where little respect has been given to the Mayan languages.

Under the label of "integrating the Guatemalan society", major efforts have been made to foster the acculturation process, which in practice, is the denial of the existence of the Mayan cultures. These cultures however are rich in values and practices such as their spirit of cooperative action, respect, and hard work. In general and in realistic terms, the Mayan population has had limited opportunities to participate in the development process given its status as a minority group. In summary, the socio-economic structure of the nation state of Guatemala, has not permitted the Mayan people to fully participate in the development process although, in recent years, Mayan communities have gained some importance in the Guatemalan context.

USAID PARTICIPATION IN THE EDUCATIONAL PROCESS OF THE HIGHLAND COMMUNITIES

One of the starting points of AID participation in the educational process of the highlands communities was the creation of the Basic Village Education project (BVE), which started in 1974 and ended in 1977. Radio was the primary medium used in this project and the Maya Kiché language was the means for broadcasting. Broadcasting in the regional language was in itself a very positive innovation for a community where the great majority were indigenous people. At the beginning of the Project, some conflicts emerged. Project implementation people and the community were at times in disagreement over the process of implementing the Project, which was demonstrated in the confrontation of young people with the elders or powerholders of the town of Momostenango.[3] This Project overcame difficulties however, and modern agricultural practices were accepted by the community. This experience is summarized in the following conclusion:

> A significant amount of positive change was found in the practice score of the life of the project in Occidente.[4]

Nowadays, in the Momostenango area, as in most of the Altiplano region, there are small farmers engaged in the diversification of crops. Cabbage, cauliflower, onions and other vegetables are grown on land that, in the past, was unproductive during the dry season. To some, this business has a positive impact when there are markets and to others, probably because of quality and quantity of land they have, little profit has been obtained from the diversification of crops. These people are forced to migrate to the coast for hard cash. At a primary school in Xekemeyá, a village a few kilometers south of Momostenango, we noticed that only 50 primary age students out of a total of 200 were registered, just a week prior to the beginning of the school year. This is, as a bilingual promoter informed us, mainly a result of migration to the coast by the heads of families. Children lack the means for buying notebooks, pencils, etc., which they require for school. They are forced to wait for their fathers to return home and furnish the needed money. Yet most people migrating to the coastal areas return in December, when the school year has already ended and the school is closed.

AID placed priority on the development of the highland communities in the late sixties. This course has been followed during subsequent years.[5] In attending to the highland communities, the Mission supported the creation of an educational system which would be suitable to the needs of the monolingual Mayan children.

PROGRAMA NACIONAL DE EDUCATION BILINGUE
(PRONEBI, National Bilingual Education Program)

The Mayan population has been striving to participate in the "national life", however, it was not until 1985 when the constitution of the nation (Article 76) recognized the need of bilingual education for the indigenous population. This constitutional amendment was partially sparked by the Bilingual Education Program.

Educatio.. in Guatemala has been characterized by its orientation to the Spanish speaking community, disregarding Mayan languages, thus, from the very beginning of their education, monolingual Indian children were molded to a world view that was alien to theirs, causing them such psychological disturbances as low self esteem, lack of self confidence and seeing their mother tongues and their culture as worthless. To

relieve the situation, the BILINGUAL CASTELLANIZACION program was created in 1965. In this program bilingual promoters took an active role. By using their native tongue, bilingual promoters helped Mayan children to learn Spanish.

The CASTELLANIZACION program, however, in principle was assimilationist and transitional in that Mayan languages were used only as a tool to learn Spanish. Indigenous children thus, had a difficult time continuing to learn Spanish, especially when being promoted from CASTELLANIZACION to first grade. Here is where Mayan children meet their Spanish monolingual teacher and much of what took place in the classrooms is "cross communication". Of course, here the Mayan pupil was seen as "the problem", not the system. The result was a high rate of drop-outs in the primary school system.

From all the problems resulting from an inadequate system of primary education for the monolingual indigenous population of the rural areas, the National Bilingual Education Program (PRONEBI) emerged in 1980. PRONEBI was conceptualized in the very beginning from a bicultural setting. Sociolinguistic issues on the Mayan population were studied and Mayan professionals participated in designing the program. Thus far, PRONEBI has been a successful program. Today there are eight hundred schools in four different linguistic areas, with more than 64,000 students benefitting from the program.[6]

With a study conducted in the Mayan Q'eq'chi' area by Lic. Hector Eliú Cifuentes, PRONEBI Director, it is clear that the program has had a positive impact on the education of monolingual Mayan children:

> In regard to the promotion rate in all grades, the result is statistically significant at a level of Alpha P less than 5% in favor of the schools with the experimental groups. Again, here we infer that bilingual curriculum has had positive effect on the promotion rate.[7]

The PRONEBI school system has been studied on different occaisions, especially because it is a model which has worked and it is reaching its expected goals in the Mayan monolingual communities, as noted in the following statement:

> A longitudinal study of the Bilingual Education Project (No. 0258) was initiated in 1982. The study compares the achievement, drop-out, and promotion rates of students in

the experimental bilingual programs vs. students in comparison schools taught only in Spanish. After two years of bilingual instruction, experiment students had a promotion rate of 75% vs. a rate of 65% for students in comparison schools.

Drop-out rates were significantly lower in experimental classes while achievement in math and reading was significantly higher. These results were achieved in schools amidst conditions of significant civil unrest. It is expected that the difference will increase to 15% higher promotion and lower drop-out rates under peaceful conditions.[8]

Although PRONEBI is a successful program, there have been some factors that have hindered its full development. It should be noted here, that in the beginning the program was seen by some communities and some teachers as controversial. In view of the needs of the monolingual Mayan children, some monolingual Spanish teachers were asked to move to different schools. These teachers were given the option to choose a community where they wanted to teach.

Some of the current problems affecting PRONEBI are that the Ministry of Education has not yet hired 485 bilingual teachers, consequently leaving 20,000 Mayan pupils out the program. Disagreement from the different schools on the official alphabet for the Mayan languages is causing serious delays on the printing of text, texts that Mayan students need.[9]

The AID Mission has progressively attentded the needs of the Mayan population, thus, the Mission saw the need of the creation of a high school whose purpose was the training of bilingual primary school teachers for the rural areas, specifically, the monolingual mayan communities.

SANTA LUCIA NORMAL HIGH SCHOOL

Another major accomplishment during the early eighties aimed at developing human resources for the primary bilingual program was the creation of the Santa Lucía Normal School, which yearly graduates an average of eighty Mayan speaking teachers. Of special interest in the history of the school is

that by the end of this year (1989), 900 bilingual promoters will be given their high school diplomas, after some years of special training in their profession. The Santa Lucía Normal School has been an important center for the development of human resources which are now serving the highlands communities, although there are graduates from this school without jobs and with no opportunities to continue with higher education because of the lack of economic support.

The training of leaders for the rural areas has been of interest for the AID Mission in Guatemala, as only through the formation of a modern sector of leaders will the Mayan people have more participation in the Guatemalan society.

PROGRAMA DE DESARROLLO INTEGRAL DE LA POBLACION MAYA - PRODIPMA (ALTIPLANO HIGHER EDUCATION PROGRAM)

Mayan people have had no opportunity to participate in the higher education sytem. In the primary education system 30% are Mayan speaking people, in high school 10% and in the higher education system barely 5% are Mayan people.[10] Aware of this problem, the AID Mission and Rafael Landivar University designed THE ALTIPLANO HIGHER EDUCATION PROGRAM (PRODIPMA), which began in 1987 with the following:

> The purpose of this program is to contribute to the socio-economic objective and human development of the indigenous population of Guatemala, through the participation of human resources that, while maintaining and strengthening their proper identity and cultural rhythm can fully participate in the planning and implementation of Guatemala's future.[11]

Currently, 427 students are enrolled in PRODIPMA, 89.27% (381) of which are from the Mayan population and 10.77% (46) are Spanish speakers. This program is of crucial importance to the Mayan population, as there are very few Mayans in the higher education system. This mainly due to the lack of economic resources. This year the first professionals at the technical level will be graduating from PRODIPMA at Rafael Landivar University in Quetzaltenango. The impact of the

program will be seen after the placement of these professionals in their areas of specialization. It is expected that this program will have a positive effect on Mayan communities.

In addition to programs which have been executed in Guatemala, AID has also designed projects which is geared to training leaders in the U.S. Such programs have been positive for the development process of the highlands communities.

THE CENTRAL AMERICAN PEACE SCHOLARSHIP PROGRAM (CAPS)

In 1985 the Central American Scholarship Program was launched to develop lasting ties of friendship among Guatemala and the U.S. CAPS, with its emphasis on the development of rural areas through the training of leaders in the U.S., has now served about 4,000 people in different areas such as community leadership. Approximately 50% of the participants have been from the Mayan population and there is now an association of former scholarship recipients reaching 3,000 in number. There has been a significant number of people trained under the CAPS program who are now engaged in the development process of their communities in the highlands.

The different programs the AID Mission has designed for the highland communities have had a generally positive impact on the communities. This is especially true when Mayan people participate in the various stages of execution of the programs or projects.

CHANGES IN THE ROLE OF WOMEN

Before the arrival of the Spanish to the lands of the Mayans, women seemed to have had higher status in society. In fact, according to the Sacred Book of the Mayan Kiche`, women participated in ruling society:

> Name of the Lords of the Kajawib lineage. These were the first Lords: Aj Pop, Aj Pop Kamja, Aj Tojil, Aj Kukmatz, Nim Ch Koj Kawek (Popol Winak), Lolmet, Kenay (Popol Winak), Pojom Tzalatz (U Chuch Kam Ja)... Chuch Q`am Ja, means "The Queen of the Palace of Steps". This means that women did govern too.[12]

Nowadays, however, only men "do govern". Although it is clear that women in the highlands are taking more of an active

role in community affairs than before, women have had limited participation in traditional communities in regard to decision making. Men participate in the formal structure of power and women participate more in the informal structure of power. That is, men will be selected as mayors, officials, secretaries, "principales" (elders) and as authorities of the municipalities, villages. Women participate in decision making when considering the household economy, they sell the agricultural products. Such as in San Juan Sacatepéquez, women are in charge of selling vegetables and flowers. However this is not all, women have a decisive role relative to in decision making in the extended family. In these cases, women in some ways decide whom their sons or daughters will marry. They also, to some degree, control the future of their heirs. Participation of women in traditional communities is based on pragmatism.

Women have fewer opportunities to participate in the educational system. In some ways this is because men are seen to be the supporters of the household economy. Until the seventies, in most communities of the highlands, women did not leave their towns of origin to pursue studies. The economic condition of the household played an important role in decision making when considering the issue of education:

> The reluctance of many rural indigenous poor to invest their scarce resources in education should not be interpreted as a sign of cultural backwardness, but as an adaptive behavior based on sound economic decisions.[13]

Women's participation in education and community development is the result of opportunities being recently opened to women. They are now taking on new roles and becoming more active and a dynamic force in community development.

It is, therefore, important to continue to support the various programs which make women a part of the integral development of society, programs that understand the cultural environment of Mayan people.

SOME KEY FACTORS THAT FOSTER DEVELOPMENT

1) COMMITTEES

In virtually all communities visited we found groups of people working for the development of their communities: school construction committees, water introduction project committees, cooperative and related organizations.

The emergence of the committees in the highlands may be attributed, in part, to the training of "promotores sociales" at Rafael Landivar University under the "Rural Community Leadership and Modernization Program". The training of promoters began during the late sixties and by the end of the project, 1,222 social promoters returned to their communities to work on infrastructure and other related development tasks.[14] This was a key starting point for changes in the highland communities for years to come.

The spirit of cooperative action is a deep cultural value that dates back to prehispanic times, as is found in the Sacred Book of the Kichean People: The Pop Wuj. Consequently, the formation of committees was a success given that the community colaborates closely with leaders in development.

Commitees are in charge of legalizing their organization in the "Gobernación Departamental" (Branch of the government at the state or departament level). They raise funds from their communities which contribute to the execution of projects. In addition, they obtain manual labor and locally available material goods. A major task of the committees is to seek technical and financial support from international agencies, PVO's, embassies, local municipalities and other related grant or donor agencies. However, in most cases, committees do not find positive responses when negotiating their projects. They are sent back and forth, from one office to another.[15] We should remember that the people forming the committees usually do not have enough resources to travel to places where grant or donor agencies are located, especially if they have to travel many times.

In villages such as Chuixtoka', Totonicapán, committees are working in various projects such as communal and family vegetable gardens and small livestock farms. In these projects, women take active roles. Under "Sistemas Comunitarios", project No. 520-U-0251, which began in the

early eighties, 210 committees worked in their communities in potable water projects in the deparments of Quiché, Huehuetenango, San Marcos, Totonicapán and Sololá.

It is clear that people do assume an active role in tasks that benefit their communities and when circumstances allow them to participate. Thus, it is necessary to continue supporting committees in their tasks of community development. Committees have demonstrated their active role in the process of development.

2) WOMEN'S PARTICIPATION IN DEVELOPMENT

Women are taking active roles in the development process of the highlands, although their participation has been marginal. Men are the predominant decision makers in the household and community, although it is true that women do participate in the "informal power structure".

The majority of committees are composed of men. Even if there are some groups of women such as "Educadoras Para El Hogar" of the "Dirección General de Servicios Agropecuarios" (DIGESA), on several occasions, these groups have not received appropriate or needed support. The educational status of women may partially explain why women have had little opportunity to participate in the development process. According to the 1981 census, the illiteracy rate among women in Guatemala was 49%.

This figure was far worse when considering the case of Mayan speaking women, among whom illiteracy reached 74% during the same year. Given her educational status, there are few realistic opportunities open to Mayan speaking women to participate in the development process. Most jobs available do require some degree of literacy. This, of course, has a detrimental consequence on the health of women, especially when there is little income available to the household. When women are given opportunities, they do readily assume responsibilities and usually with success. There are studies that show that women have successfully conducted collective tasks such as that of micro-enterprises:

> In general, the conclusions were that investments in microenterprises run by women raised productivity, income and employment.[16]

In Guatemala there are a variety of artisan skills which may vary from community to community due to the great cultural diversity that exists in the country. Mayan women produce ceramics, textiles, clothing and other handicrafts.

Therefore, even if women are at a relative disadvantage which regard to "educational status", they do produce fine work and they do have a community spirit. The issue is finding markets for their products. Women are not only interested in, but see the need for participating in the household economy. This is the case of women engaged in the diversification of crops in Xekemeyá village, Momostenango. It is obvious that women need more of opportunities to participate in the development process. It is necessary to take into consideration the different ethnic groups and their artisan skills for the proper integration of woman in the development of the nation.

3) YOUNG MAYAN PROFESSIONALS PARTICIPATION

There are now some young professionals in the highlands who are taking a very decisive role in the process of development. Some have graduated from high school and a few from universities. These people are key factors for highland communities development since they share the world view of the community. They speak the local language as well as Spanish. They seek technical and financial support for their projects. Some of these professionals are officers of PVO's such as COOPERACION INDIGENA PARA EL DESARROLLO INTEGRAL (COINDI). Some of these professionals help form committees or are members of them. In addition, this group of professionals is sharing authority with community elders. Taking into account the local power structure is essential for implementation of projects.

In this sense PRODIPMA is a key program which potentially could be part of the development of the highlands communities. The Mission, with its concern for highlands development, should involve the Mayan population in the various projects being executed in the highlands and should involve Mayan speakers at different stages of projects or programs such as with PRONEBI. Women should also be hired for programs dealing with the Mayan population, in all stages of project or program planning/implementation. Active participation of Mayan people in the various projects is a key factor for the

sustainability of these programs and projects in the highlands.

4) EDUCATIONAL SUPPORT FOR THE MAYAN POPULATION

The Mayan population has proved to be supportive of innovations, especially innovations that favor them. An example is the Non Formal Education Project that introduced "modern" practices in a town where heretofore there were no such practices: Momostenango. Kichean people were open to the transfer of technology, although it took some time, as might be expected. For it meant some changes in practices that have been used over the centuries in the highlands. The use of chemical fertilizers was one such innovation in new cultivation techniques.

The Mayan population is actively participating in education programs such as PRONEBI. This program has shown that Mayan children need an appropriate cultural environment to fully participate in the educational system. In the Santa Lucía Utatlán Normal School, many Mayan applicants, male and female, are being rejected each year, due to the lack of the school's capacity to absorb them.

Hundreds of Mayans do apply each year for PRODIPMA. The Mayans know that education is important for a successful life because they have to look for new ways of earning a living; not all Mayans may be dedicated to solely cultivating the land and to traditional practices. In the highlands community there is an obvious rapid acceptance of positive innovations such as: education, modern practices of agriculture, diversification of crops. Everywhere in the highlands it is noticeable that communities have gone through rapid and positive changes during the last twenty years, which is mainly the result of educational programs and outreach. Given the aforementioned, it is critical to continue supporting the education programs directed toward people in the highlands of Guatemala. The greater the number of Mayans enrolled in the education programs, the greater the positive impact on communities.

The Altiplano is only beginning to participate in the process of development, although there are constraints that do not permit some segments of the population to participate in the development process.

SOME CONSTRAINTS TO DEVELOPMENT IN THE HIGHLANDS

1) THE MINIFUNDIO SYSTEM

In spite of the fact that there are deep rooted positive values in the highland communities such as hard work and a spirit of cooperative action there are some factors that do not contribute to their full participation in the development process. A case in point is in San Vicente Buenabaj, Momostenango, in the department of Totonicapán, where there are regions of unproductive lands, where people own little or no land, and the migration phenomena is recurrent in the life of the community. From 25% to 35% of the community migrate to the coast in search of work, looking for hard cash.[17] In communities such as San Vicente Buenabaj, even if diversification of crops is practiced, there is very limited opportunity of succeeding for there is not enough arable or available land. Here we are not arguing that the diversification of crops has not had any impact in the highlands, on the contrary, diversification has had a very positive impact in the highland communities.

The minifundio system is universal in the highlands. A way that some of the small farmers have succeeded is through the cooperative movement, such as the case of La Libertad Cooperative of Olintepeque, Quetzaltenango, where aprroximately forty families have joined to work their plots of lands communally. But this is not always possible for families in the highlands, as they are dispersed among various villages, as well as their small plots of land. It seems that the land tenure system is a major factor which hinders the development of Guatemala:

> If the land-poor Highland Indians and landless peasants are counted, their combined numbers amount to over half the population of Guatemala. These groups do not share in the wealth generated by the Guatemalan economy, and for many the situation has become one of the daily struggle of survival.[18]

Diversification of crops in the highlands must be combined with other forms of development. It is crucial to stress the education projects that are generated from the communities.

2) LACK OF CONCENSUS ON THE OFFICIAL ALPHABET FOR WRITING THE MAYAN LANGUAGES

Adrián Inés Chávez, the Kichean translator of the Sacred Book of the Kichean people once said that the lack of an alphabet to write the Mayan Languages was a factor that hindered the development of communities. Now, however, that there is an official alphabet for writing the Mayan languages, different schools defend their interests. Institutions and individuals for political or religious interests do not permit the official alphabet to be used. The result is that Mayan literature may not be developed, monolingual children are awaiting texts to be printed, as in the case of PRONEBI. This problem however, is just an example of how political, religious, institutional or personal interests, alien to those of the Mayan population, negatively affect this population. This demonstrates, once more, that the Mayan population is not totally independent in deciding crucial issues which affect its development.

CONCLUSIONS

The following are some general conclusions drawn from the cross cutting evaluation:

A) The AID Mission in Guatemala has worked in the highlands with some success; projects in the education sector have had a positive impact on the highlands communities.

B) The AID Mission is following a progressive understanding of the highlands communities. Programs executed in the highlands, in most cases, have been sensitive to cultural diversity.

C) The Mayan population has started to participate in the development process. This participation is partially the result of AID projects executed in the highlands during the last twenty years.

D) Projects executed in the highlands have followed the main roads and have not reached the most isolated villages.

E) Women are not participating with all their potential in the development process in the highlands. This is partially due to the lack of adequate programs for women's paticipation in the process of development.

RECOMENDATIONS

A) Social sustainability of programs and projects is reached only if community structure, values, customs and practices are taken into consideration in the process of designing, implementing and evaluating these projects and programs.

B) Education is essential for the development of the altiplano communities. It is, therefore, crucial to continue supporting programs and projects related to providing educational opportunity to the Mayan population.

C) Participation of Mayan professionals at all phases of projects and programs is crucial.

D) Community participation in projects is essential and leaders or local power holders should be consulted before launching a new project. Elders should be taken into account since they have a complete understanding of the community world view.

E) Women should be given more opportunities such as credit facilities to form cooperatives. Through the formation of cooperatives, women will have more access to decision making relative to available resources.

F) The most isolated villages should be target for future projects.

FIELD METHODOLOGY:

After reviewing a broad range of key documents provided by the A.I.D. Mission, relative to the education, health and agricultural sectors, the team proceeded with field visits in the western highlands of Guatemala, with the exception of some communities visited in the department of El Progreso which are in the eastern region of the country. The last three weeks of January 1989 were devoted to field work.

To have a better understanding and overview of the western highlands communities, fieldwork was conducted by sub-teams of two and three specialists. These were Doctor David Lazar, Doctor Edgar Nessmann, Doctor Baudilio López, Licenciado Danilo Palma and Gregorio Tum.

Communities visited were municipios and vilages located on the following departments:

Department of San Marcos: Tejutla

Department of Totonicapán: San Cristobal, Patzarjmaq, Chuixtoka', Momostenango, Xekemeya', San Vicente Buenabaj.

Department of Quetzaltenango: Olintepeque

Department of Sololá: Nahualá, Xepatuj, Palanquix, Patzij.

Department of Chimaltenango: Patzún, Chipiakul.

Department of Guatemala: San Juan Sacatepéquez, San Pedro Sacatepéquez and Villa Nueva.

Department of El Progreso: Guastatoya, Santa Rita and San Juan.

Project officers, Coordinators and beneficiaries of programs were interviewed such as those of PRONEBI and PRODIPMA.

Qualitative information was gathered through interviews. These interviews were informal and followed a general set of questions based on the impact of education (especially), health and agriculture sectors on the highlands communities over the past forty years.

PEOPLE INTERVIEWED

1. Licenciado Hector Eliú Cifuentes, Director of Programa Nacional de Educación Bilingüe -PRONEBI.

2. Professor Rubén Cotí Xicará, Coordinator of Programa de Desarrollo Integral de la Población Indígena Maya-PRODIPMA.

3. Professor Félix Sarazúa Patzán, Director of Desarrollo Socio-Educativo Rural.

4. Lic. Elvira Sáenz de Tejada, Central American Peace Scholarship Officer.

5. Professor Sergio Jiménez Guerra, Director of Escuela Normal Rural, Santa Lucía Utatlán.

6. Mr. Juan Francisco Guineo, Director of Radio Momostenango.

7. T.S. Victor Saloj Poz, Cooperación Indígena de Desarrollo Integral Officer.

8. Mr. Catarino Teleguario, Manager of San Bernardino Cooperative, Patzún Chimaltenango.

NOTES

1. PATTERNS OF RACE IN THE AMERICAS, MARVIN HARRIS, Columbia University, W. Norton & Company New York. London 1964; pp. 7

2. GUATEMALA: UNA INTERPRETACION HISTORICO-SOCIAL; Carlos Guzmán Bookler y Jean-Loup Herbert, 4ta edición, Siglo Veintiuno, 1964; pp. 6-7.

3. Mr. Faustino Poroj from Momostenango, a young man who worked as an assistant researcher for the BVE project, provided testimonial evidence that local power holders of the community should be consulted before launching any project in the community.

4. THE BASIC VILLAGE EDUCATION PROJECT IN GUATEMALA (1974-1977) Rich, Thomas, et. al. University of South Florida. Tampa, Florida. July 1978, pp. 35

5. THE BASIC VILLAGE EDUCATION PROJECT IN GUATEMALA (Draft), John R. Davidson. A Case study prepared for the Administrator's Development Seminar and the Development Studies Program, Manpower development Division, Agency for International Development, Washington D.C. September, 1976; pp. 1

6. USAID/GUATEMALA QUANTIFIABLE ACCOMPLISHMENTS Fiscal Years 1984-1988.

7. EDUCACION BILINGUE (OPINION DE LOS PADRES DE FAMILIA) en CULTURA DE GUATEMALA Año VI, Vol III Septiembre/ Diciembre, 1985, Universidad Rafael Landivar; pp.57. Unofficial Translation.

8. GUATEMALA PROJECT PAPER RURAL PRIMARY EDUCATION IMPROVEMENT, Project Number: 520-0282, pp. 8

9. Data submited by Lic. Hector Eliu Cifuentes, director of PROGRAMA NACIONAL DE EDUCACION BILINGUE (PRONEBI).

10. PRODIPMA "PROGRAMA DE DESARROLLO INTEGRAL DE LA POBLACION INDIGENA MAYA" URL-AID Guatemala, Centroamerica, 1986; pp. 1., Unofficial Translation.

11. POP WUJ (LIBRO DE ACONTECIMIENTOS). Traducción directa del manuscrito del Padre Jiménez. Adrián I. Chávez. Ediciones de la Casa Chata: 1979. Centro de Investigaciones Superiores del INAH. Hidalgo y Matamoros, Tlalpan; Mexico 22 DF.; pg 101a., Unofficial Translation.

13. EDUCATION SECTOR ASSESSMENT, Guatemala 1985; Vol II; pp. 6-10.

14. FINAL PROJECT APPRAISAL

15. In the communities of Solola and Totonicapan (Santa Lucia Utatlan, Momostenango) we met with committees complaining about the lack of attention that they were given by the assigned agencies, such as INDE (The National Institute for Electrification). A committee was recently sent from INDE in Quetzaltenango to INDE in Guatemala city and from here they were sent back to Quetzaltenango.

16. GUATEMALA WOMEN IN DEVELOPMENT: OPPORTUNITIES AND CONSTRAINTS. DRAFT. Michael Paolisso et al. International Center for Research on Women 1717 Massachusetts Ave. N.W. Suite 501 Washington D.C. 20036 February 4, 1988; pp. 9.

17. Estimate by rural health technitian Pantaleón Oxlaj López, a navite from San Vicente Buenabaj.

18. GUATEMALA AGRICULTURAL SECTOR REVIEW USAID/GUATEMALA March 1987; pp. 99.

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ANNEX XII

The Guatemalan Economy: An Historical Overview

Dr. Roberto Castro
USAID/ORD Guatemala-