AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D. C. 20523

BIBLIOGRAPHIC INPUT SHEET

FOR AID USE ONLY
Batch 48

1. SUBJECT CLASSIFICATION
A. PRIMARY: TEMPORARY
B. SECONDARY:

2. TITLE AND SUBTITLE
Thirty years of change in ten selected areas of rural Puerto Rico

3. AUTHOR(S)
Bourne, J.R.; Bourne, D.D.

4. DOCUMENT DATE	5. NUMBER OF PAGES	6. ARC NUMBER
1964	562p.	ARC RQ301.35.C814

7. REFERENCE ORGANIZATION NAME AND ADDRESS
Cornell

8. SUPPLEMENTARY NOTES *(Sponsoring Organization, Publishers, Availability)*

9. ABSTRACT
(SOCIAL SCIENCES R & D)

10. CONTROL NUMBER	11. PRICE OF DOCUMENT
PN-AAD-021	
12. DESCRIPTORS	13. PROJECT NUMBER
	14. CONTRACT NUMBER CSD-296 Reg.
	15. TYPE OF DOCUMENT

AID 590-1 (4-74)

PN-AAD-021
ISN-29016

THIRTY YEARS OF CHANGE IN TEN SELECTED AREAS OF RURAL PUERTO RICO

James Russell Bourne

Dorothy Dulles Bourne

Comparative Studies of Cultural Change

Department of Anthropology

Cornell University

Ithaca, N. Y.

1964

A.I.D.
Reference Center
Room 1656 NS

Dedication

To Luis Munoz Marin

In recognition of his vital role in the imaginative creation of new and realistic forms through which material development becomes the seed for the growth of the dignity and freedom of the human spirit.

(Frontispiece)

EL VELORIO

EL VELORIO painted by Oller in 1897 shows the wake for a baby in a country house of the period.

Many opinions of this picture have been written. Some see in it a thoroughly realistic picture, others find inconsistencies: the lechon asada (roast pig) would not have been eaten at that time of day; the boards of the floor are too smoothly laid; the chair on the right too sophisticated for the type of house; there would not have been so much evidence of drunkenness.
One writer says:

> A typical feudalism brings together, in El Velorio, death, religion and frivolity in an impressive synthesis hard to forget. There are in the picture studies of the people, their habits, ways of dressing, the country's crops and, with the door and windows as frames, the scenery. The early morning lights surround the whole picture... *

Certainly there is great significance in this picture. Every detail is worth observing for the information it gives but. animating it is the spirit of the occasion with the varied reactions of each individual.

* Juan Antonio Corretjer, El Mundo, July 25, 1959.

TABLE OF CONTENTS

	Page
FRONTISPIECE - El Velorio.	
PREFACE AND ACKNOWLEDGEMENTS	i
INTRODUCTION	1
Notes	12
CHAPTER I - Purpose and Method	13
Notes	20
CHAPTER II - Puerto Rico: A Changing Society.	21
Notes	30
CHAPTER III - Planning in Puerto Rico.	31
Grouping of the Municipalities of Puerto Rico for Processes of Planning.	47
Regions and Sub-Regions	52
Regional Administrative Services.	54
Suburban Planning	56
Population.	57
Notes	69
CHAPTER IV - Government Agency Programs.	73
Department of Education	74
University of Puerto Rico	86
Community Education	90
Objectives	92

TABLE OF CONTENTS (Cont'd)

Page

Criteria for the Selection of Community Leaders. 94

Training Objectives. 97

An Experience in Training 102

Commission for Improvement of Isolated Communities 116

Department of Health 118

Public Welfare 125

Child Welfare 134

Food Distribution 134

Department of Justice. 142

Family Relations. 142

Program for Minors. 142

Juvenile Probation. 142

Department of Labor. 143

Department of Agriculture. 154

Natural Vegetation and Soils. 154

Sugar 160

Coffee. 161

Tobacco 163

Pasture 164

Individual Farms Under the Social Program of the Department of Agriculture. 165

Parcelas. 165

Low Cost Housing. 166

TABLE OF CONTENTS (Cont'd)

Page

Rural Telephones. 167

Occupational Development. 167

Department of Public Works 169

Definitions 170

Ports and Airfields 172

Economic Development Administration. 173

Electrification (Water Resources Authority). 177

Direct Effects of Rural Electrification 179

Side Effects 179

Water and Sewer Authority. 184

Hydrotopography 184

Water Supply. 185

Housing and Urban Renewal (Cruv) 190

Administration for the Development of Cooperatives 195

Administration of Parks and Public Recreation. 201

Government Programs. 203

Notes. 210

CHAPTER V - Description of the Ten Communities. 227

Introduction to Community Reports. 227

Aguadilla - Barrio San Antonio - visit by Mercedes Velez de Perez. 230

Loiza - Barrio Mediania Alta 241

Juana Diaz - Barrio Collores 244

TABLE OF CONTENTS (Cont'd)

Page

Bayamon - Barrio Hato Tejas - visit by Emma Purcell de Hernandez and Zencuida B. Shephard 246

Cidra - Barrio Bayamon - visit by Isabel Laguna de Colorado 253

Adjuntas - Barrio Yahnecas. 259

Moca - Barrio Voladores 261

Juncos - Barrio El Mango - visit by Dolores Gonzales de la Cara and Angelina Sandoz de Frontera 263

Salinas - Barrio Lapa - visit by Pepita Vazquez de Garcias and Lucila C. de Palanos 270

Arecibo - Barrio Sabana Hoyos - visit by Candida Campos de Cordova. 275

CHAPTER VI - The Second Unit Schools of Puerto Rico. 281

Introduction. 281

Public Education in P. R. During the Period 1898-1925 . . . 283

Establishment of the Second Unit Rural Schools. 288

The Staff. 292

School Sites, Buildings, and Classrooms. 294

The Curriculum 294

The Social Work Program. 296

The 1932-33 Study on Standards of Living in the Rural Zone of Puerto Rico. 304

Purpose 304

Areas Selected for the Study. 305

Number and Selection of Families. 306

TABLE OF CONTENTS (Cont'd)

Page

Date of Study and Field Personnel Utilized 307

Value of the Study 309

Extension and Growth of the Second Unit School Movement during the Period 1928-1942. 311

The Difficult Years 315

New Hopes for the Future of Rural Education and the Second Unit Schools 329

Notes 341

Photographs 347

CHAPTER VII - Rural Society. 371

Notes 383

CHAPTER VIII - Socio-Economic Change 385

Mobility Statistics 401

Notes 410

CHAPTER IX - Changes in Attitudes. 411

Notes 428

CHAPTER X - Conclusion 429

Notes 434

POSTSCRIPT 435

ANNOTATED BIBLIOGRAPHY 440

UNANNOTATED BIBLIOGRAPHY 445

GLOSSARY 446

TABLE OF CONTENTS (Cont'd)

Page

GENERAL INFORMATION ON THE STUDY OF STANDARDS OF LIVING IN THE RURAL ZONE OF PUERTO RICO. 454

AVERAGE CONSUMER PRICE INDEX - ALL ITEMS. 477

QUESTIONNAIRE FOR 245 HEADS OF FAMILIES - Thirty Years Change in Ten Selected Rural Areas of Puerto Rico 478

DEPTH INTERVIEW QUESTIONNAIRE - Thirty Years of Change in Ten Selected Areas of Rural Puerto Rico. 498

SELECTED ANSWERS TO QUESTIONS FROM DEPTH INTERVIEW. 507

COMMUNITY EDUCATION PROGRAM - Selection and Training of Leaders for Community Education Program. 520

Training Objectives. 522

An Experience in Training. 525

TABLES

		Page
Table 1	- Population Increase	60
Table 2	- Civilian Non-Institutional Population, the Labor Force, Employment and Unemployment, with an assumption of zero migration, Puerto Rico 1960-1980.	61
Table 3	- Health Program 1962	122
Table 4	- Deaths and Death Rates, by Decades from 1930 to 1959, and for 1960 from all Causes and by Diarrhea and Enteritis, Tuberculosis, Malaria and Infant Mortality	124
Table 5	- Life Expectancy at Birth, In Years.	124
Table 6	- Public Assistance	134
Table 7	- Amounts budgeted for Child Welfare, Services to the Disabled, Institutions.	135
Table 8	- Persons Served by the Division of Public Welfare. .	138
Table 9	- State of Employment of Civilian Population - Exclusive of Institutions - Who Receive Assistance or Who do not receive assistance.	140
Table 10	- Division of Public Welfare Statistics, June 1964. .	141
Table 11	- Median Weekly Family Income, Type of Assistance, Urban and Rural, July 1961.	141
Table 12	- Water Service Statistics.	189
Table 13	- Statistical Data on Cooperatives: 1963.	200
Table 14	- United States Federal Government Contribution to Health Activities in Puerto Rico in 1932 and 1962 .	208

TABLES (Cont'd)

		Page
Table 15	- United States Federal Government Contribution to Educational Activities in Puerto Rico in 1932 and 1962	208
Table 16	- United States Federal Government Contribution to Agricultural Promotion in Puerto Rico in 1932 and 1962	209
Table 17	- United States Federal Government Contribution to Public Works and Unemployment Compensation in 1932 and 1962	209
Table 18	- Informant Opinions as to Social Class Determinants	375
Table 19	- Average Monthly Income - 1932 vs 1963 - By Community	388-9
Table 20	- Average Monthly Income - 1932 vs 1963.	390
Table 21	- Loiza.	392
Table 22	- Consumption of Meat and Milk, 1963	395
Table 23	- Occupation - Income Classification	396
Table 24	- Expenditures	397-8
Table 25	- Length of Residence in Barrio, 1963.	399
Table 26	- Geographical Relation of Barrios to Industrial Employment	400
Table 27	- Use of Credit Facilities	402
Table 28	- Age & Occupation of Head of Family, 1964	403
Table 29	- Satisfaction with life at present (rather than 30 years ago)	411
Table 30	- Attitudes Towards Politics & Community Action, 1963	415
Table 31	- Attitudes Towards Land Expropriation, 1962-63. . .	416

TABLES (Cont'd)

Page

Table 32 - Family Structure 422

Table 33 - Depth Interview - Question #46 - "What about the freedom women enjoy at present?" 425

Table 34 - Income By Age. 448

Table 35 - Education by Income. 449

Table 36 - Age - Education. 450

Table 37 - Information on highest income group in each community

Information on highest percentage in given income group. 451

Table 38 - Percentages Out of Labor Force or Unemployed, 1963 . 452

Table 39 - Matriculation in Ten Second Unit Schools 1963-64 . . 453

MAPS

	Page
MAP A - PLANNING REGIONS AND SUB-REGIONS AS DEFINED BY PLANNING BOARD AS OF 1962	72
PUERTO RICO: MAP OF MUNICIPALITIES AND WARDS ("BARRIOS"). .	213
BASIC HEALTH AND WELFARE DISTRICTS - 1962.	214
SAMPLE HOUSING PROJECT PLAN: SALINAS - 1963	215
ROAD AND RAILROAD MAP OF PUERTO RICO, 1930	216
PUERTO RICO: MAP OF GOVERNMENT HIGHWAYS, 1963	217
INCENTIVES FOR FACTORY LOCATION, 1963.	218
TAX EXEMPTION ZONES, 1963.	219
NUMBER OF FACTORIES LOCATED, AIDED AND TO BE ESTABLISHED, AND EMPLOYMENT BY MUNICIPALITY IN 1963.	220
SPECIAL INCENTIVE AREAS (MARCH 1962)	221
RURAL ELECTRIFICATION PROGRAM 1961-1963.	222
WATER SUPPLY AND SEWAGE DISPOSAL SYSTEMS, 1963	223

CHARTS

CHART I - DIVISION OF PUBLIC WELFARE, DEPARTMENT OF HEALTH	139
CHART II - GOVERNMENT SERVICES TO TEN RURAL AREAS.	205-6
CHART III - AVERAGE MONTHLY INCOME FOR TOTAL SAMPLES - 1932 VS 1963.	387

FIGURES

FIGURE I - PUERTO RICO PROPOSED BUDGET DOLLAR ALLOCATION 1965	68
FIGURE 2 - DEGREES AND DIPLOMAS CONFERRED BY THE UNIVERSITY OF PUERTO RICO	89

PREFACE

Many studies have been made in Puerto Rico. The unique contribution of this project lies in the fact that the directors can look back to Puerto Rico after a period of thirty years and see many changes by direct observation. Data collection, interviews, and information on government programs will be used as checks on these observations. Method will be used in Redfield's sense: "not merely the technique of observation and analysis but also the conceptions which allow us to characterize and compare."[1]

From simple observation and comparison we would state hypothetically that planned change has been good for Puerto Rico. This requires a definition of "good". Any definition of the good may be considered a value judgement but we believe that, in Einstein's words, "Every system has its special time and place values. A time or space judgement has sense only if we know the system with reference to which the judgement was made."[2]

We, therefore, will maintain that what has been accomplished in Puerto Rico in these thirty years can be considered good in terms of the response of Puerto Rican society to the demands of the present and the foreseeable future; the practical and ethical adaptation of means to ends which are recognizable and acceptable by standards of physical betterment, material gains, the self-respect and growth of individuals and their ability to function in personal and community situations as members of a democratic society. These are the concepts which will direct and limit our

conclusions, which will form the basis of our judgement of Puerto Rico as it is with reference to what it was thirty years ago. Where bias appears, as it must, it will be due to our involvement at certain points where significant changes occurred and by an empathy created by long and close contacts with Puerto Rico and Puerto Ricans. We can only hope that any disadvantages will be offset by the advantages of a unique opportunity for observation.

To make adequate acknowledgement of the help given to us in this study is an impossible task. Official liaison with government agencies given by Governor Luis Munoz Marin, old friendships of our own and new contacts have all contributed richly. Factual material was made available for our use and, beyond that, the enthusiasm, which is so characterisitc of Puerto Rican leadership, was shared with us.

The study, Standards of Living In Puerto Rico, which is the basis for our thirty year comparison, was part of a larger study, Rural Life in Puerto Rico, which included Activities of Women in Rural Puerto Rico and Activities of Girl Students in Rural Puerto Rico. The present study deals only with the Standards of Living in Rural Puerto Rico as the basis for comparison of socio-economic conditions of the present with those of 1932. But the cooperation of Luz Maria Ramos de Duncan, at that time Supervisor of Home Economics and Industrial Work in the Rural Zone, was of the greatest importance. We shared the common purpose of improving living conditions in the rural zone through our respective programs and set up many joint projects. Her interest and help continued in the present study and are gratefully acknowledged.

Our Assistant Director, Mercedes Velez de Perez, was one of the social workers who worked on the early study. Her own distinguished record in the field of social work since then, gave a background from which we benefitted greatly. More than that, her interest in the material of our project, her insight, her skills, her sympathy with its purpose and the warmth of her cooperation have been invaluable to us.

Mary Pons, our secretary during our stay in Puerto Rico, has been far more than a secretary. Her efficiency and organizing ability made possible much of what we were able to do and, as she became familiar with the project, contributed both to form and content. Her help, in ways little and big, combined to give us a well-run office which was also a place of friendship and hospitality.

Since our return to the continental United States, Mrs. Henry Wheeler has been our secretary and again we have had the benefit of intelligence and efficiency with genuine interest and personal congeniality.

Belen Serra of the faculty of the School of Social Work of the University of Puerto Rico is responsible for the compilation of all statistical material on objective interviews and her interest and good judgment were invaluable to us. Angelina C. de Roca, Research Associate of the Social Science Research Center, trained our field staff and compiled all material on the depth interviews with a combination of accuracy and enthusiasm which contributed to the spirit as well as the content of the study.

Raul Munoz, Chief Section of Planning, Evaluation and Research, Department of Health, not only gave valuable advice himself but made available to us from his staff the efficient and delightful services of Herminia Soegard de Gaztambide and Carmen Torrech in organizing research materials.

Dr. Howard Stanton, Director of the Social Science Program in the Department of Health, helped us through his experience and guidance, particularly in setting up our sampling of the ten communities. The actual sampling was most conscientiously and ably carried out by Frank Hernandez Reyes.

Nine of the ten social workers who worked on the 1932 study returned in 1962 for a day's visit to the Second Unit Schools where they had worked and gave their observations of change (see Chapter VI). They were Isabel Laguna de Colorado, University of Puerto Rico; Dolores Mercado and Josefa Vazquez de Garcia, Division of Public Welfare; Lolin Gonzalez de la Caro, Dean of Leslie College, Cambridge, Massachusetts; Emma Purcell de Hernandez, Department of Labor; Georgina Pastor, Director School of Social Work, University of Puerto Rico; Candida Campos de Cordova, Puerto Rico Association for Mentally Retarded Children; and Mercedes de Velez de Perez. We note with gratitude the collaboration of four of the Home Economics teachers who worked on the original study, three of whom also visited the schools in 1962: Ana L. Reyes de Martinez, Assistant Director of Home Economics (Department of Education), Angelina Sandoz de Frontera (Juncos), Zenaida B. Shepard (Bayamon), Lucila C. de Palacios (Lapa). Among the social workers who had also worked in Second Unit Schools, though not on the 1932 study, and other social workers of the period of the 30s we had most valuable advice and help in the preparation of questionnaires and other suggestions from: Adriana Ramu de Guzman, Dean of the College of Social Sciences; Celia Nunez de Bunker, Director Institute of Family Relations; Celestina Zalduondo, Director Puerto Rican Association for the Welfare of the Family; Rosa Cosani, former director of Social Work (Department of Education); Ana Laura C. de Delgado, former Consultant Child Welfare (Division of Public Welfare);

Petroamerica Pagan de Colon, Director Division of Employment Security (Department of Labor); Matilde Perez de Silva, Division of Migration (Department of Labor); Ana Margarita Medina, Division of Public Welfare; Israel Planmell, Undersecretary of Labor; Gloria Campos, Director of Cancer Hospital; Felicidad Catala, faculty School of Social Work; Dr. Rosa Celeste Marin, Professor and Director of Research, School of Social Work; Guillermo Jordan, Division of Vocational Rehabilitation (Department of Education).

The names of the social workers who began their careers in the 30s are grouped together, although their contributions to the project varied in nature and in quantity. But they share still the spirit that characterized those days and, perhaps, sentimentally, it makes their interest and willingness to give their time thirty years later, a matter of deep satisfaction.

We found also many others in the government, among those whom we interviewed, who had had contacts of various kinds with the PRERA (see glossary) and who through their subsequent careers formed a link with the past.

To our field staff--Elba Iris Rivera Calero, Victoriano Rivera Cepeda, Miguel J. Fernandez Bjerg, Esperanza C. de Kwitchoff, and Sonia Mejias, we owe our thanks for their conscientious work, their interest in the task of interviewing and their understanding of its essential relationship to the plan and purpose of the study.

The principals and many members of the teaching staff of the ten Second Unit Schools gave great help to us and to our field staff. We are greatly indebted for their hospitality and cooperation and innumerable kindnesses.

We want to pay tribute to the memory of Dr. Jose Padin who was Commissioner of Education when the 1932 study was made. He became a close friend to both the directors of this study. To him we turned for encouragement and counsel. His integrity, wisdom and wit never failed us. We honor him as a great man.

Rafael Cordero, former Auditor and Comptroller of Puerto Rico, and for many years Professor of Economics of the University of Puerto Rico, contributed from his wide experience as a consultant in the present study.

J. Colomban Rosario, Professor Emeritus of Sociology, University of Puerto Rico, taught rural sociology to the social workers who were beginning their training in the 30s and has shared with them and with us his knowledge of rural Puerto Rico, his ideas and his philosophy, continuing in the present study as a consultant who enriched our thinking.

The beginning of social work training was made possible through the cooperation and understanding of Dr. Jose Osuna, Dean of the College of Education, University of Puerto Rico. His high standards and his vision made possible the creation of social work training, accepted provisionally by the Association of Schools of Social Work in 1932 as graduate social work education.

Pablo Roca, who as statistician in the Department of Education, did the statistical work for the 1932 study, had resigned in 1963 as Assistant Chief, Division of Education Pan American Union, and was one of our most helpful consultants in the present study.

Our interviews with the heads of various agencies, or their representatives, at the end of other interviewing in Puerto Rico, were to us an experience of moment. Our question to them was: what is your

dream (for your agency as part of Puerto Rico's future)? The answers combined high hopes, made practical by actual programs, recognition of weaknesses and problems, an impression of personal dedication to defined purpose. For this we thank Secretary of Education Candido Oliveras; Secretary of Health Guillermo Arbona; Secretary of Labor Frank Zorilla Secretary of Agriculture Luis Rivera Santos; Rafael Pico, President of the Government Development Bank; Jaime Benitez, Chancellor of the University of Puerto Rico; Ramon Garcia Santiago, President of the Planning Board, Rafael Durand, Administrator of Economic Development; Hector Zayas Chardon, Administrator of Cooperative Development; Julio E. Monagas, Recreation Administrator; Angel G. Quintero Alfaro, Undersecretary of Education; Aida G. de Pagan, Director of the Division of Public Welfare, Department of Health; Sixto Toro Cintron, Special Assistant to the Executive Director, Corporation of Urban Renewal and Housing; Pablo B. Vazquez Calcerrada, Professor of Sociology and Cooperativism, University of Puerto Rico; Harris Bunker, Associate Professor of Education, University of Puerto Rico; Miguel Echenique, Director of the Bureau of Economic and Social Analysis, Planning Board; Luis R. Collazo Saenz, Research Assistant in Rural Sociology, Agricultural Experiment Station; Dr. Maria Socorro Lacot, Assistant Secretary, Department of Education; Frank Haszard, Director Office of Economic & Financial Studies, Treasury Department; Guillermo Perez, Sugar Division, United States Department of Agriculture; R. G. Tugwell, Consultant to Chancellor Benitez.

We owe much to our other consultants and to the many persons in government agencies who gave so freely of their time in interviews, letters, and the collecting of information for us. If space allowed, we could specify what we received but the following list represents

the range of our sources of information and to every one we give our thanks: Isabel Suliveres de Yudkins, Director Social Service, Court Administrative System; Angel (2) Silva, Director Bureau of Roads, Department of Public Works; Suriel Sanchez Villamil, Director Division of Social Reports, Planning Board; Edne R. Doble, Acting Director Social Analysis Division of Planning Board; Angel Perez, Program Division Planning Board; Herman Munoz, Public Relations Officer, Water Resources Authority; Roberto Huyke Iglesias, Director Agricultural Extension Service, University of Puerto Rico; Elisa Diaz, Director, Public Assistance Bureau, Division of Public Welfare; Efrain Charneco, Planning Board Hon. Ernesto Carrasquillo, Senator of the Humacao District; Jose G. Gracia Anselmi, Executive Director Programas Sociales; Manuel E. Siaca Martinez, Editor, Section on Publications Bureau of the Budget; Eloy Santiago, Personnel Officer, Division of Public Welfare; Sara Rodriguez Chacon, Planning Board; Jose B. Bascaran, Technical Assistant, Aqueduct & Sewer Authority; Hugh C. Barton Jr., Director Economic Studies, Legislature of Puerto Rico; Dr. Emilio Colon, Director Puerto Rican Section of the Library of the University of Puerto Rico; Dr. Lydia Roberts, Chairman Governor's Commission on Isolated Communities, Commonwealth of Puerto Rico; Dr. Thomas Matthews, Director Institute of Caribbean Studies; Amadeo I.D. Francis, Director Economic Studies Administration for Economic Development; Dr. Ismael Rodriguez Bou, Secretary Superior Educational Council University of Puerto Rico.

Dr. Jose Martinez Almodovar, Director of the Regional Office of the Department of Education in Humacao; Rafael Bonilla Colon, Assistant Director, Regional Office of Caguas; Dr. Pablo Morales Otero, Representative at large in the Legislature of the Commonwealth; Dr. Antonio Colorado, President of the Labor Relations Board; Fred Wale, Director of Community Education, and Carmen Wale; Earl P. Hanson of the De-

partment of State of Puerto Rico; Justo Pastor Rivera, President of the Chamber of Commerce; Helen V. Tooker, journalist and author, who worked on the preparation of our bibliography, combined old friendship with material help in our work.

Our gratitude for all the help we received is very deep and has strengthened and renewed the bonds of friendship and affection which have existed between us and Puerto Rico for more than thirty years.

A conference on the study was held at Ithaca, New York, on November 6th and 7th, 1964, with the following persons present: Dr. Osvaldo Bonet Fussa, Executive Director Isolated Communities Program, Commonwealth Government; Earl T. Hanson, Department of State, Commonwealth Government; Dr. A. B. Hollingshead, Chairman Department of Anthropology, Yale University; Dr. Abram J. Jaffe, Director Manpower & Population Program Bureau of Applied Social Research, Columbia University; Dr. Gordon Lewis, Professor Political Science, University of Puerto Rico; Dr. Robert A. Manners, Chairman, Department of Anthropology, Brandeis University; Dr. Thomas Matthews, Director Institute of Caribbean Studies, University of Puerto Rico; Dr. Lydia Roberts, Chairman Governor's Commission on Isolated Communities, Commonwealth of Puerto Rico; Dr. Lloyd H. Rogler, Associate Professor Department of Sociology, Yale University; Dr. Vera Rubin, Director Research Institute for the Study of Man, New York City; Hon. Ben Stephansky, Executive Secretary United States-Puerto Rico Commission on the Status of Puerto Rico; Dr. Pablo Vazquez Calcerrada, Professor Department of Sociology, University of Puerto Rico; Mercedes Velez de Perez, Assistant Director Thirty Years Later Study. Cornell staff present: Dr. Henry F. Dobyns, Coordinator Comparative Studies of Cultural Change; Dr. Kalervo Oberg, Studies of Cultural Change; Jack Brown, Research Associate, Studies of Cultural Change, J. Oscar Alers, Research Associate, Studies of Cultural

Change; Dorothy Dulles Bourne, Senior Research Associate, Studies of Cultural Change; James R. Bourne, Senior Research Associate, Studies of Cultural Change. AID staff present: David Tilson, Director Division of Technical Cooperation & Research; Dr. William A. Lybrand, Director Human & Social Development Division.

Finally, our thanks go to the Department of Anthropology of Cornell University who made this study possible by its inclusion in their Studies in Cultural Change under contract with the Agency for International Development--to Professor Allan Holmberg and Dr. Henry F. Dobyns for their interest and help and to Mrs. Kay Hanna, assistant, for her patience and kindness, and to the distinguished social scientists who attended the Cornell Conference in November, 1964.

In our work since returning to the continental United States we mention with appreciation the help of Associate Professor of Psychology Frank Oja and Instructor in Social Psychology, Stuart Levine of Bard College.

Rhinebeck, New York.
December 31st, 1964.

James R. Bourne
and
Dorothy Dulles Bourne

NOTES

1. Robert Redfield, The Little Community, University of Chicago Press, 1955, p.1.

2. Max Wertheimer, Productive Thinking, Harper Brothers, New York, 1963, p. 27. (Quote from "Imagination", by Harold Rugg).

INTRODUCTION

In 1932, a study was made in the areas served by ten Second Unit Schools of the Department of Education of the Insular Government of Puerto Rico and published by the Puerto Rican Department of Education. A comparison between the findings of this study and the present situation in these ten communities forms the basis for the present study. In 1932, when the original study was made, economic conditions in Puerto Rico were so bad that most people appeared to feel that the situation was hopeless. There was the usual pattern of a few very wealthy landowners and businessmen; a relatively small middle class of small business owners, teachers, professional men, and government employees. The vast majority of the population was desperately poor, with all the concomitants of poverty.

Wages were low for the men, and were supplemented in some sections by even lower wages paid to women for doing needlework. Cut garments were sent down from the United States to be embroidered or hemmed--they went through contractors and subcontractors and finally to the women who did the work in their homes. There were no wage controls and the women were exploited to the hilt. In some sections of the island one could also see jobless men embroidering handkerchiefs. There were a few shops in urban areas where this work was done and better wages paid, but the majority of it was rural homework.

Since sugar was by all odds the biggest agricultural activity on the island and was only a six-month operation, there

was necessarily high unemployment for half the year. Even though a tropical country, Puerto Rico's other crops--tobacco, fruit, coffee, cotton--were somewhat seasonal also.

At that time there were a few far-sighted people who thought Puerto Rico could be industrialized, but no one seemed to know where to start. There were practically no raw materials and freight rates, due to the coastwise shipping laws, were high.[1]

There was a lack of know-how and the only real asset was the large number of people willing and anxious to work--people with a high potential of skill, given proper training.

Another handicap to industrial development, except in the large cities, was the lack of roads, electricity, and water. No one wanted to encourage people to move into the cities, which were already surrounded by squatters in dreadful slums. How these handicaps were overcome and industry developed is told in another part of this study.

Much as the enlightened people in the government wanted to help, they were held back by lack of funds. There was an income tax law, but no enforced penalties, so the tax was difficult or impossible to collect. Other sources of taxes and income for the government were inadequate and the total resources were insufficient to do even the minimum that was necessary. At that time, also, relatively little federal aid was given. How Puerto Rico put its own house in order and a brighter picture emerged is a part of the background of this study.

Another serious problem for the population was health.

Sanitation in small towns and rural areas was almost non-existent, water supplies were polluted, malaria, tuberculosis, gastritis-enteritis and other diseases were endemic. The resulting mortality rate was very high and life-expectancy very low. Due to lack of roads, sick people were carried down the mountain paths on hammocks to the nearest highway, then to be taken to the municipal hospital, itself not very sanitary. Often there was no doctor available when the patient arrived, or for some time afterward. There were few latrines in the rural areas, with the result of a very high incidence of hookworm.

Overpopulation was a strong contributing cause to the health situation. Parents simply could not feed or care properly for their large numbers of children.

Malnutrition was an important factor in the death rate, not so much from starvation, as by lowering resistance to diseases. Poor and unsanitary housing was also instrumental in fostering disease and disability. Many of these troubles were due to ignorance. Even though the government spent an unusually high percentage of its income on education, less than half (46.5%) of the children had an opportunity to go to school, and for the majority this meant only third grade education. Neither could they learn the essentials of healthy living at home, since there were no social workers or welfare services until 1930, and only inadequate ones for some years more.

In 1929, Theodore Roosevelt (Jr.), then governor of Puerto Rico, brought to the island a commission of the American Child Health Association headed by Dr. Samuel J. Crumbine, a pioneeer in public health, to study health conditions and make recommendations to him. One of this group, Miss Amy Tapping, was a social

worker of experience and imagination. The Commission worked in close cooperation with the Department of Health, the School of Tropical Medicine,[2] and other government agencies. Miss Tapping learned that the Department of Education had placed social workers in its Second Unit rural vocational schools. (This was the conception of Pedro Aran, Supervisor in the Department of Education, as part of a program which was bold and creative.)

Miss Tapping set up in the 1930 summer school of the University of Puerto Rico courses designed to give some basic ideas of social work. In this she had the help of a small group of Puerto Rican women who had attended the School of Social Work of Catholic University, Washington, D.C., most of whom were working in the Department of Health of the Insular Government. In this Dorothy D. Bourne participated and, at the beginning of the school year, was asked by the Commissioner of Education, Dr. Jose Padin, to be the supervisor of social work in the Second Unit Schools.

In the year 1930-1931, the social work program in the Department of Education began to take shape. From its initiation, it was the idea of the supervisor of social work that it could not follow conventional patterns of social work, but must develop as it went along, recognizing the special needs of the situation and setting as its goal, through the adaptation of social work methods and techniques, the maximum use of existing resources, the creation of new resources within the Second Unit Schools as centers of community education and activity, the understanding of the residents of these communities and recognition of their potentialities. Where extreme poverty is the rule and not the exception, where under-nourishment and actual illness are widespread, interest in

and understanding of individuals and their circumstances must be the basis for the development of program and work. Fortunately, these goals were a part of the atmosphere of the Second Unit Schools and made possible the use of the social workers as a dynamic factor in their growth and value.

In the year 1930-31, a simple community survey of the families living within the geographic area of each school was made. Ideas flourished and with them a program was developed. During the summer school of that year, which all social workers were required to attend, the program of the 1930-31 school year was the raw material for further training, which was directed by the supervisor with the encouragement and help of Dr. Jose Osuna, Dean of the College of Education. General principles of generic social work were taught and a critical process of comparison between principles and practice resulted in an analysis of the past year's work and the creative development of a program for the ensuing year.

The training was continued in the next summer school and the community program in operation the preceding year was used as the basis for academic study and new planning for the succeeding year. Following the community survey of each locality which had been made during the first year, in the second year certain areas of the island were selected according to the chief agricultural crop in each--sugar, tobacco, coffee, fruit, minor crops--for special study. This was designed to show actual standards of living and the proportion of income for selected budget items. Existing problems, though generally known to exist, were for the first time revealed through the measurement of stark poverty and specific need.

Fifteen families were studied in each community, five at the high, five medium and five low income levels, plus three in each community--high, medium, and low--chosen for special study. The levels were determined by the social workers who had worked in the communities for two years and were familiar with all families who had children in school. Although the base of the study was economic, the resulting symptoms were the specific health problems--tuberculosis, hookworm, ascaris, and diseases resulting from malnutrition; extreme inadequacies in housing, clothing, general hygiene and cleanliness; a depressed psychological acceptance of poverty, with related family and community problems. The illustration of the relationship between certain family patterns and these problems was clear; The resources for solution were meager, but respect for the members of these communities was a key to the program. Existing forms of mutual help, elements of cooperation, appreciation of the hospitality of the people, of their self-respect and desire for education, of their work and of their gaiety and humor were the factors used to motivate change. (A number of other studies were made somewhat later which were measurements of the effect of the program and pointed to future possibilities.)

The work was designed to discover the situation of the individual school and to differentiate the program according to local needs; to evaluate and use all existing resources, through the Insular Departments of Agriculture, Health, Education, and local organizations where they existed (i.e., municipal doctors, hospitals, etc.); to interpret the educational program to the local communities on the existing level of health, economics, and recreation. No formal welfare agencies existed, poverty was universal, and health

was a primary problem in almost every home.

Even in the early days these schools produced certain effects in the community which were an augury of what would be done on a far larger scale in the future. The lack of resources meant that the effects lay largely in the sphere of social change as distinguished from economic--and in different attitudes. Little could be done to raise permanently the economic level; only a limited amount could be done to improve health, nutrition, and a way of life. What was done, however, did have great significance.

The functions of the workers were outlined in the Introduction of the 1932 study as follows:

> In such an economic situation as rural Puerto Rico presents, a social worker has two functions, we believe. The first is to make individual adjustments and to solve particular problems under existing conditions. This means an effort on the part of the social worker, to improve the standards of living which are based on the accepted norms of the community. We find individual variations in any community which show that one family lives better than another one having the same income. To understand these variations and to incorporate the higher standard into community life, it is necessary to know something of existing norms. The second function of the social worker, as we see it, is, by research and the data furnished by her community contacts and case records, to provide material that may in time help in the solution of fundamental problems. For example, we believe that certain facts in regard to income which this study shows, are a clear indication of serious faults in the economic order of rural Puerto Rico. Unless a social worker sees the importance of this second function, she is to a large extent the servant of the status quo; if she uses the present and the particular to guide her to the future and to general problems she may help to bring about valuable changes. We believe that the facts revealed by this study will be useful in pointing out the discrepancies between the present conditions and a standard of living that would be acceptable in any modern civilized community. [3]

Looking back at this 1932 study, the intangibles are difficult to trace but they contributed to the changing spirit and attitudes of people who begin to realize, however indistinctly, that their poverty and their problems were of concern to the body politic--their education, their health, their standard of living.

With new information and understanding of the present situation--change, growth, and development since 1930--it becomes clear that we were doing something unique and important at that time; that the program then instituted has had values for Puerto Rico beyond its immediate impact on the communities in which the Second Unit Schools (rural-vocational) of those days operated.

The idea for the present study grew out of a desire to see how the great changes which have come to Puerto Rico have affected the ten communities of the 1932 study; to see what had happened in thirty years of change.

In thinking of the possibility of a project in Puerto Rico as it is now, it came more and more to be seen as something which might be useful as an illustration of planned change and its effect on the general--emphasizing the rural--society, and the consideration of the applicability to other countries of the methods and program used in Puerto Rico. A study of this kind must inevitably include some examination of the political and economic changes in Puerto Rico since the 1930's and their effects on attitudes and class structure, personality types and group characteristics. Puerto Rico's Operation Bootstrap has been used as a demonstration for representatives of the Point Four Program to the island, but this study would deal with the effect of change and the meaning of such change in actual programs which might be

applied to under-developed countries, especially where rural conditions--economic, educational, political and social--prevail for a large proportion of the people. Official policies may fail to reach down to these levels and have in too many cases shown a lack of understanding of the deep effect of poverty and lack of opportunity, with their inevitable social and political consequences in outlook, social structure and initiative. Where broad governmental planning touches people where and as they live--as we believe it does in Puerto Rico--the changes, although not always subject to satisfying quantitative measurement or predictability, seem to be the essential dynamic element--hope made real, visible, specific and applicable.

That certain simple methods of training and program-making were successfully used in Puerto Rico thirty years ago is significant, as it was the means of preparation of the people in those communities for the changes that were to come, as well as providing a technique for training in similar situations where resources for help to people in need are close to non-existent and where individual initiative, resourcefulness and understanding are therefore at a premium.

As a result of this study, we would like to see selected individuals from other Latin American countries invited to Puerto Rico for a very simple project (perhaps six weeks) under the sponsorship of the Department of Education and the leadership of a few carefully selected people who have kept the original interest in the development of rural areas. We would like to see these individuals from other countries given the kind of training

for pioneer work which was done in the Second Units in the thirties, plus help from the Division of Community Education. They could then return to "backward" rural communities and see what the training offers to the needs of individual communities.

If possible the same individuals should return after a year to examine the results of their work and re-plan the program in the light of experience. In their home countries they should live in the community. They would differ from the Peace Corps, though they might well collaborate with its volunteers, in that they would not be specialized. They would differ less from the Community Education local leaders, but there would be differences. We would visualize their being attached to the educational or health organizations so that they might become a liaison between larger plans and the local communities as they reach up to meet planning at higher levels.

The beginning of change in Puerto Rico may be variously placed in time according to the age, experience and point of view of the informant. There seems to be some relationship between attitudes and the length of time a program has been in operation, e.g. the pioneer spirit inevitably diminishes as the program becomes accepted and routinized. This may be interpreted as loss or as gain but it does raise a question general to the problem of social change: can there be a dynamism in social planning which remains constant and where the on-going process of constructive change is itself the renewed motivation? If this is possible, it must include both the integration of research with government structure and the continuing renewal of the excitement and creative spirit of those who work on the programs.

The present study is designed to show (1) the organization and function of planning; (2) government programs which affect the whole island; (3) the application of these programs in each of the ten selected areas; (4) the effect of such programs on individual families, discovered through two types of questionnaires (one largely objective, the other interview in depth); (5) the comparison of standards of living in 1962 with those in 1932; and (6) the overall influence of planned changes on the way of life and the attitudes of the people living in the ten communities.

Comparison among the communities will be related to the operation of government programs in each and an evaluation of the effects, selectively and as a whole.

That there must be chosen priorities for the development of government plans is obvious, both because of financial limitations and because judgement must be exercised on which programs are most suitable for general growth. Therefore, one must expect to find an uneven application of programs in any communities which one might select for reasons other than those directed to over-all planning.

As this idea for a re-examination of the ten communities took shape, my husband and I agreed that we could work together on it. He had been the Administrator of the Puerto Rico Emergency Relief Administration and Federal Emergency Relief Administration (1933-36) and his experience in this capacity was very great and very varied. The federal funds of these organizations were used primarily on work projects, partly replacing buildings destroyed by two disastrous hurricanes but also building roads, aqueducts, sewers, and other public works projects to compensate for deficiencies caused by lack of funds of the Insular government..

There were also educational, agricultural and cultural projects. Of course, a certain amount of direct relief was given to the aged and unemployables. Among the most important projects were the studies and surveys made toward developing an industrial program which planted the seed for the later growth of Operation Bootstrap.

NOTES

1. The coastwise shipping law requires that all persons and goods moving between two United States ports be carried on U.S. flag vessels or planes. Since U.S. shipping wages are higher than those of other countries, freight costs are necessarily higher. This creates a hardship on Puerto Rico and the Insular Government has been trying, without success, to get a change in the law which will alleviate the situation.
2. Then staffed by Puerto Rican doctors under the University of Puerto Rico and doctors from the staff of the College of Physicians and Surgeons of Columbia University.
3. Luz M. Ramos and Dorothy D. Bourne. Standards of Living in Rural Puerto Rico. San Juan, Department of Education Bulletin, No.1, no date.

CHAPTER I

PURPOSE AND METHOD

Our purpose in this study is, first, to assess the changes which have come to ten rural communities in Puerto Rico, studied thirty years ago as a result of programs planned and executed(or in the process of execution) by the government of Puerto Rico. The difficulty of differentiating between these planned changes and those which, without planning, are affecting all societies is recognized. Urbanization, industrialization, new communications and greater mobility are touching more and more societies today. One can only say that to make provision for the effects of these factors should soften the shock which comes from external influences and should help in the process of adaptation. First,we make the assumption that planning is desirable and proceed first to examine the quality and quantity of general planning in Puerto Rico and then its local effects as observed in the ten communities. Second, we shall attempt to interpret changes in attitudes and values, in the communities and among individuals as reflected in their responses to the questionnaires. Our further hope is that by making these observations and conclusions available to the Agency for International Development, through the Comparative Studies of Cultural Change of Cornell University's Department of Anthropology, we can supply useful illustrations of the effects of induced social changes in a rapidly developing society, characterized by the quality and quantity of directed plans.

The method used for the collection and analysis of material and data we divide into three parts.

1. The effects of over-all plans as they touch the ten communities; the number and degree of application of government programs to each locality.

2. Changes in the ten communities recorded in (a) descriptions of the communities in 1964 with some comparisons with 1932; (b) questionnaires to 245 individual residents; (c) 67 individual interviews in depth.

3. Through analysis of material from 1 and 2, and by free observation, to determine the meaning of observed and recorded change--both material and attitudinal--and to discover whether there is a further process in operation by which observed and recorded changes are transformed into new cultural values, possibly symbolic in nature. Any conclusions of this kind will not be subject to quantitative measurement but may yield answers to questions on "world view", on community and individual demonstrations of self-respect and pride, on levels of aspiration and hope for the future.

No attempt is made in this study to compare urban with rural residents, as Tumin, et. al. have done in their study of Social Class and Social Change in Puerto Rico, but the importance of their analysis is recognized as an essential part of the background for any study which limits itself to rural communities. "Modern sociological writing is replete with the assumption that the urban environment, compared with the rural, is oriented to change." [1] Evidence of this is clear and pertinent in the quantitative growth of the new middle and lower-middle class which has taken place in the urban areas and the drawing power of such areas is important in many of its effects on rural communities. Nevertheless, the strength of history and customs of rural living in Puerto Rico has strong counteracting emotional elements. The result for the planners of the future of Puerto Rico is the need to find a viable balance

between urban and rural socio-economic factors.

Because the present study takes as its geographical communities the areas served by the Second Unit Schools, we give special attention to changes taking place in the philosophy and the program of the Department of Education in regard to rural education. In their plans the Department recognizes its dual responsibility: the education and development of the rural population and its preparation for modern agriculture and new ways of life which go with it; the educational (vocational) needs of the young people who will gravitate toward the growing industrial development--the factories in small communities as well as in urban sections.

These changes in educational direction and organization are in the building stage. We agree with Tumin that the result may affect the "self-conceptions and self-evaluations and ... the ways in which our respondents view questions of equality and inequality."[2]

The 1932 study was not undertaken as research primarily, but as a practical way of presenting a real picture of the socio-economic situation of the thirties in the ten rural communities for the development of a teaching and organizational program. True comparisons between the 1932 and 1964 studies are limited. But beyond these comparisons lies the whole area of development since the planning programs were inaugurated. The quality and quantity of change extend out beyond the 1932--64 comparisons and represent the most significant areas of new growth--a different political and social philosophy.

In the preliminary work done in 1962 (3 months in Puerto Rico with a grant from the Department of Education), one of the significant parts was the re-visit by six of the ten social workers--and

several of the Home Economics Teachers -- to the communities where, in the thirties, they had worked in the Second Unit Schools. Some material from their reports will be incorporated into this study.

When in November 1963 we returned to Puerto Rico under the auspices of the Department of Anthropology of Cornell University our plan for work on data assembling was two-fold: (1) to learn, through interviews and the collection and assembling of material, the planning, organization and financing of governmental agencies; (2) field investigation of families in the ten communities -- adjusting in three of the ten communities to population changes, increasing proportionately the 150 families of the original study. The population in Loiza, Mediania Alta; and Lapa, Salinas had doubled and in Hato Tejas, Bayamon had quadrupled. [3]

The work on interviewing and information material was done by the two co-directors and, after January 1st, the Assistant Director.

For the field work a staff of five was selected. The decision was made that they would work as a group with a leader for each community, moving from one community to another according to schedule. Three were young university graduates, two of whom had had some experience; one who had had teaching experience; one with varied experience -- in public welfare and business. The study of group interaction and inter-personal relationships in the field staff would make a study in itself. The result was good -- not only in variety of points of view but the development of group thinking.

The composition of the field staff, and the fact that only one of them had had actual experience in rural living, led to certain

naive responses to the contacts with rural life. Impressions of poverty made concrete by few rooms in the houses, scarcity of furniture, primitive sanitary arrangements, were striking to them in their contacts with the first communities visited. Although this must be to some extent discounted, it has importance because it was a true first view of poverty. It is interesting that they were, simultaneously, impressed by positive qualities in the people who lived in these conditions.

The training and pre-testing was done by a member of the staff of the Social Science Research Center at the University of Puerto Rico. Meetings were held with her and the field staff, and the co-directors and the assistant director, providing background and direction. During their work in the field, meetings with co-directors and assistant were held on the completion of work in each community.

The preparation of questionnaires began in 1962 in the preliminary study and was carried on to its final form in January, 1964. Before going to Puerto Rico, in November, 1963, a rough draft was prepared by the directors. This was submitted in November and December to a group of the 1932 social workers on the study with a few additions. Their suggestions and those of several other selected persons, whose standing in the research field in Puerto Rico was unquestionable, were incorporated into the final form.

Before the field staff went into the communities, letters were sent by the Department of Education to principals of all Second Unit Schools involved in the study, asking for their cooperation. This was followed by a visit by the directors to each community to discuss the project with the principal. The cooperation

received by both the directors and the field staff was warm, interested and most helpful. Each principal contributed from his knowledge and understanding of the community.

One member of the field staff interviewed representatives of government agencies in each community to determine the extent and degree to which programs have been applied to the particular locality.

The sampling plan was worked out with the Social Research Program of the Department of Health and carried out by a member of its staff. The description follows:

Method Used in Sampling for Studying Thirty Years of Change in Ten Selected Areas of Rural Puerto Rico (Done by Howard Stanton and Frank Hernandez, assisted by Rita Rodriguez.)

The sampling for the study was done by random selection of the cases. The procedure employed consists of the following steps:

1. The universe for each community is defined in terms of the geographical area served by the Second Unit School. The boundaries are tentatively established on the basis of the school census figures provided by the principal of the school. This information is verified with the help of the community residents when making the housing survey. There is the possibility that the school area has been enlarged with the addition of places from which they are now getting children and, likewise, there may be places which formerly used the school services but are no longer sending children to it.

2. A housing survey is made and each housing unit is shown in a community map. The term housing unit only includes inhabited houses or those which, although vacant, give evidence of having been inhabited recently. Stores, bars, and other business structures are counted as housing units if part of the building is used as a dwelling place. In such cases store clerks or other employees are asked if there is someone living in the place. When the business structure is closed the presence of domestic equipment in back of the structure, such as television sets or external dishwashing cabinets or laundry lines, will be taken as evidence that people live in the house. There may be cases in which it is specially difficult to establish this fact.

3. The universe is subdivided among the different neighborhoods or social sectors as they are known in the community. The number of cases to be studied will be distributed proportionately among these neighborhoods and sectors. Then the numbers are drawn at random and marked in the community map.

4. Each housing unit selected is then visited, identified and marked on the map. The family is advised that within a few days somebody will visit them for the purpose of the study.

From two to four cases are selected, in addition to the sample, to which all the study instruments are applied. This is done for control purposes. These cases represent extreme situations among the high and low income groups. This selection is made by the field staff following the advice of the local residents and in accordance with their own observation.

When data began to come in we were fortunate in getting the services of a member of the faculty of the School of Social Work at the University of Puerto Rico who took charge of coding, card punching, and setting up tables for each community, covering each question from the objective questionnaires and codes. Similar work was done on the depth interviews by the staff member from the Social Science Research Center.

Preliminary outlines for analysis were worked out with all persons involved in these separate tasks before the directors left Puerto Rico, at the beginning of May, 1964. Work was continued in the continental United States with the exception of the chapter on the Second Unit Schools which was written by the assistant director in Puerto Rico.

In addition to comparisons between 1932 and 1963 among our ten communities, some generalizations will be made from our data which conspicuously affect human living in any society. These are employment and satisfaction in work; health, with life expectancy, infant mortality and health facilities as indices; comfort in living,

illustrated by water, electricity, sanitation and housing; finally, the freedom of the individual -- his mobility, his education, his recreation and cultural opportunities and the effects of all the preceding categories as they contribute to the individual in his society.

NOTES

1. Melvin M. Tumin with Arnold S. Feldman, Social Class and Social Change in Puerto Rico, Princeton University Press, 1961, p.44. Henceforth: Tumin, Social Class, 1961.

2. Tumin, Social Class, 1961.

3. U.S.Census 1930 and 1960.

CHAPTER II

PUERTO RICO: A CHANGING SOCIETY

One of the phenomena of our times is that the development of nationalism and the loyalty to local or national cultural patterns is so strong in a period of history when all parts of the world are drawn together and face common problems. These problems are the result, as we know, of multiple causes: new contacts brought about by the war; growing trade and interdependence in both natural resources and in manufactures; enormous increase in technological knowledge and skills; new forms of communication; opportunities for physical mobility and recognition of consequent interdependence; the growth of industrialization and the trend toward urbanization; and by the developments in agriculture which make these tendencies logical and possible by the increase in agricultural production and the simultaneous decrease in number of farmers needed; and by the consequent availability of labor for other occupations.

The apparent contradiction between the idea of "one world" and the defense of separate nationalities and cultures can only be reconciled by a psychological interpretation analagous to the need of the individual to know himself, at least to the degree which makes possible a satisfactory and constructive adaptation to his society and his contribution to group thinking and action. Puerto Rico exhibits an essentially nationalistic position in its desire for self-government and in its pride and conscious devotion to its own cultural patterns. But, Puerto Rico is part of the United States, not only politically, not only through financial and economic ties, but also because of the impact of United States culture on the culture of Puerto Rico. This is reflected

not only in practical involvement in interests outside its own boundaries but in a complex cultural pattern. This impact is sometimes clearly recognized, accepted and internalized, sometimes felt and unconsciously accepted, sometimes rejected politically and intellectually, but always present. Because of Puerto Rico's history and its unique political status, it becomes a special case in the world situation which we now face. It has been involved for some time in the adjustment of a nationalistic society to a larger entity. Its special character makes it impossible to consider it a model for other countries; its particular development cannot be superimposed in toto on any other geographical or political entity. Nevertheless, many of the factors of change which have been purposefully directed in Puerto Rico exist in other places and the philosophy behind this direction and many of its practical applications are adaptable to the needs of other parts of the world. Each country, each locality, differs, of course, from every other, but the very fact that so many problems are shared by all, both in developed and developing countries, demands an effort to discover how successful programs in one place can be adapted and applied in other places. The culture of each country will shape the mold. Ruth Benedict quoted an old Indian as saying, "In the beginning, God gave to every people a cup and from this cup they drink their life." Old cups may be broken and new ones must be made, but we still share the water of life.

The more obvious examples of change and the creation of new patterns in Puerto Rico appear at first sight in the urban communities, where enormous housing developments, super-highways, super-markets, traffic, industrialization and commercial activities are immediately apparent. Such changes, from a predominantly rural society, with only two large cities--Ponce and San Juan, several small cities--Arecibo,

Mayaguez, Aguadilla, to a society which illustrates in such striking form present-day industrialization and urbanization--inevitably affect the rural areas through population movement from country to city, and increased communication and transportation. These new inter-relationships are important in both their direct and indirect effects on the rural parts of the island. This study will deal with the changes which have come directly to the ten rural communities through better access roads, electrification, water, health, agricultural programs and education; and those which have come indirectly with the general effects of industrialization and mechanization, actual or potential, threat or promise. These inevitably have brought greater mobility, both toward the cities and between city and country, increased knowledge of the world outside the community, changes in class structure and consequently as a cumulative result, new values and a different world view. Such a change cannot move with smooth consistency but

> Interaction between individual personality and social setting, under these common compulsions, produces a remarkable array of regularities on such apparently diverse matters as mobility, media exposure, media approval, empathy, news range, opinion range, self-confidence (personal potency) and happiness....Unhappiness is distributed in close proximity to the sense of impotency and the lack of empathy.[1]

In any evaluation of a rapidly changing society one must avoid the danger of a judgement which would identify the change itself as a social good. We must discard for philosophical as well as practical reasons the concept of an absolute good. No philosopher, from Plato to the writers of the United States Constitution, has been able to offer us absolute values for changing societies. What they have been able to

give us is the idea of their own goals, which we can always use by analogy to show the necessity of an ideal or a dream. Lewis Mumford has said that "every civilization lives within its dream." To see an ideal is essential. It gives direction, motivation and it makes judgement possible. The actual present goal is a "flying goal"--dynamic, not static--its end cannot be seen, for it moves on ahead of each accomplishment. Nevertheless, purpose must be conceptually defined, for it not only determines direction but also forms the basis for decisions on pragmatic compromise and response to pressures. Progress can be measured only as the process of change moves in the general direction of the defined purpose.

When, for example, one asks whether or not family patterns and structure have changed in Puerto Rico in the last thirty years, there must be a reason for the question and an evaluation of changes (if they have occurred) in relation to goals--a relationship to be measured periodically as progress toward a goal ideally defined. In the case of Puerto Rico there is no question that the planners have such an ideal goal. There is also no question that the need to change short-term goals is recognized and immediate attainments influence future definitions. Measurements must therefore be used to mark progress toward presently defined and articulated purposes; at the same time it must be recognized that changes may become the material for future modification of means and re-definition of ends as they can be seen at a given time. That there is an ideal concept for any society alone is unchanged. It creates the continuum of past, present, and future. Its form is always determined by the multiple causes which exist in the contemporary scene bringing often unforeseeable effects on programs; new forms are deter-

mined not only by the thinkers and planners but by conscious and unconscious reactions of individuals, groups, classes, by the power structure, by changes external to the particular society, by political actions and interaction among these factors.

When interaction loses balance, when one or more factors have dominant influence, direction may be changed. In the last analysis revolution may occur which can either reinforce or destroy the ideal. Practically, decisions affecting the socio-economic situation of Puerto Rico are constantly subject to these influences of thought, action and reaction. It is conceivable that the balance could be destroyed, as the balance of nature can be destroyed.

Munoz Marin has said, "Men of conscience who now have the technological tools to defeat extreme poverty also have a moral obligation to devise means to do so." Such a "moral obligation" is recognized in one way by the Communist-oriented societies, in another by those which relate their means to democratic principles: freedom of choice and opportunity; a government responsible to the will of the people. The moral obligation therefore requires decisions as to means which will not violate the ideal- a consistent relationship between means and ends; adaptability which guarantees creation, not destruction.

There is a distinct relationship between social structure and the development of a planned society as it exists in Puerto Rico. Questions of social philosophy become involved in which one asks whether or not a society predominantly composed of an uneducated and economically deprived lower class can be organized along democratic lines. The situation in Puerto Rico thirty years ago, when the Second Unit Schools were established, was certainly one of deprivation and of a low level of

education in the rural zone. One of the purposes of these schools was to encourage the growth of a sense of community as a step toward group action, toward a new relationship of neighbor to neighbor, based on common needs and interests. Although formal education already enjoyed a high prestige value, this was a form of education new to the rural communities of Puerto Rico. It was a step away from complete dependence on the landlord and therefore the forerunner of a genuine social change.

As we re-examine the ten communities in this study, we find that the direction of movement in all communities is from the traditional to the modern society; the distance covered varies in each and shows the irregularities of this progress with the corresponding satisfactions and discontents of a people in transition. Individual reactions condition the process and rate of adaptation. But there is no doubt that the intervention of the government through planned programs has touched all parts of the island--even those which show the least differences in measurable material gains.

The rural communities show no such striking growth of the middle class as is evident in the cities, but the tendency is there, and where such a movement as the Department of Agriculture Programas Sociales is in operation, the physical evidence is noticeable in the parcelas. These small, neat, concrete houses, close together, individually owned (special conditions of ownership are described later), are a conspicuous change from the bohios (thatched huts), or huts of wood and zinc, scattered over the mountains.

The latter are still the predominant type of housing in many areas but they stand in marked contrast to the growing number of parcelas and to the public housing developments in many towns in the rural sections.

The huts of the old order were very seldom owned by the residents and even in cases where there was individual ownership of the house but not the land, the owner could be evicted at the pleasure of the landowner.

These are important factors in change from traditional to modern society--symbols both physical and psychological. But changes in occupation and education may be even more important; they may be the most important factor in a new power structure. Tumin in discussing class says:

> ...there is, on one hand, the traditional society with its emphasis on land and property ownership, resulting in a clear-cut two-class society, the wealthy few and the many poor. In this society, men can feel worthwhile regardless of sharp material differences between themselves and others....but side by side with this traditional orientation runs another orientaton which begins to emerge in Puerto Rico with greater clarity. It is one in which land ownership is no longer the overwhelmingly dominant claim to status. Now new men come to the fore, with power given to them by new political processes, by advanced skills secured in formal educational institutions, by ownership of industrial means of production and favored positions in service industries. [2]

Implicit in such new orientations are many difficult transitions but it should be pointed out that the changes are taking place through growth rather than revolution; no violent overturn of the class structure has occurred. To a limited extent the change began in 1898, when Puerto Rico was forced to make some adaptations to the capitalistic system of the United States. New directions, new functions and the growth of resources have provided the forms for the prestige and power structure, at the same time changing the proportions of the upper and lower classes-both in numbers and in influence--through the enormous growth of the middle class.

Official policies may fail to reach down to the lower levels and have in too many cases shown a lack of understanding of the deep effect

of poverty and lack of opportunity, with their inevitable social and political consequences in outlook, social structure and initiative. But, where broad governmental planning touches people where and as they live, as we believe it does in Puerto Rico, the changes, although not subject to satisfying quantitative measurement or predictability, seem to have the essential dynamic element--hope made real, visible, specific and applicable.

Some of the questions which arise in relation to a planned economy concern the type and quality of leadership and the degree to which individual and local group participation can be initiated and stimulated as a test of the democratic quality of both the leadership and the planning programs.

In the case of Puerto Rico, political leadership is, and was, from the beginning of the recent changes (1940's with the growth of the Popular Party), of an exceptionally high order. This carries with it certain dangers as well as great advantages. The desire and ability to envision a goal and to take the necessary steps toward that goal are a temptation to do things <u>for</u> people. To educate for genuine participation is a slow and difficult process, but the organization of planning in Puerto Rico provides the machinery which can be used with increasing efficiency and understanding. Some of the evidence, showing both participation and lack of adequate participation, will appear in analysis of the data, but the connection from barrio to high level planning is there. Greater development of individual participation and local leadership must come and new forms for its exercise must be developed, especially in rural communities. It is a long way from the days of the dependence of the worker on the landlord, but the psychological effects of this change are not yet fully recognized or assimilated. Although many government services are taken for granted now, either as an accepted fact, or as a right to be attained, earning a living depends more than ever

ever before on individual initiative. In politics, primaries are no longer perfunctory; every candidate who has been in office for two years must face a contest. This is a new opportunity for individual political action and a new demand for political skills and personal motivation. The fact that over one-quarter of the total budget goes to education and that the program of the Department of Education is increasingly focused on the development of responsible citizenship and its ability to adjust to a changing economy, is evidence of concern with the growth of democracy.

It should also be pointed out that Munoz Marin, in the period when he was building up the Popular Party, first of all established a living relationship with the poor and the uneducated; his appeal to them was to use their votes for a program of socio-economic reform and his election was their endorsement of a platform. That he was also able to build up a group of able and devoted leaders, whose combined intelligence and ability made Operation Bootstrap possible, was a marked achievement. The group was comparable in spirit and action to the days of the New Deal, but exhibited more organization and unity. This was partly due to other movements which had preceded the coming to power of the Popular Party; the efforts of the United States government, of Governor Theodore Roosevelt, of the Departments of Health, and of Education, the PRERA, and the PRRA, and, in an outstanding way, of Governor Tugwell. All these efforts, in each case carried out with imagination and strong motivation, led most naturally to the concept of planning, and of planning for a democratic society. Tugwell in "The Place of Planning in Society" wrote:

> How does it comport with representative government? It is in fact, the only agency of government--or ever suggested for government--whose only purpose is to discover and implement

> the public interest. And since representative institutions are founded on the principle that sovereignty resides in the people, it is profoundly necessary for democracy. Unless democracy is to be confused with permission for some to exploit others--which actually is a denial of equality--then some implementation of the principle of public interest is necessary. [3]

Planned change characterizes present-day Puerto Rican society; political status and economic ties connect it with a larger society. Its nationalistic aspirations are strong--conscious and unconscious, sometimes with strong political overtones, sometimes satisfied by an effort to preserve and create a distinct Puerto Rican culture. How much Puerto Rico can contribute to the solution of the national-international problem of our times cannot be foreseen but the thrust of its effort cannot be ignored by those who recognize the problem and are involved in experiments seeking its resolution.

NOTES

1. Daniel Lerner, The Passing of Traditional Society.

2. Melvin M. Tumin with Arnold S. Feldman, Social Class and Social Change in Puerto Rico, Princeton University Press, 1961, p.182.

3. Rexford G. Tugwell, The Place of Planning in Society, Puerto Rico Planning Board, Technical Paper 7, San Juan, P.R., 1958, p.38.

CHAPTER III

PLANNING IN PUERTO RICO [1]

Planning is defined and described by Rafael Pico, first president of the Puerto Rican Planning Board, as follows:

> It is a rational way of projecting the future from the experience of the past and the present in order that we may know now what will serve as an orientation toward that which we propose and expect to accomplish; and it is also inversely to find in the present vision of the future, that we may project our ideas into the time to come and use this projection of what we do today so that the future will bring about the result which we foresee--Planning therefore has a creative aspect. We can say...that planning is an essential element of the human desire for improvement and reaching toward perfection.[2]

As Sr. Pico points out, planning is of ancient origin, and among the Spaniards, was copied from the Romans. A drawing exists of the plan for San Juan, dated September 12, 1519. In 1932, James R. Beverley, Governor of Puerto Rico, brought to the island the architect, Harland Bartholomew, who pointed out the need for zoning in San Juan and for a regional plan for the island. The work done by the Puerto Rico Relief Administration (PRERA), 1933-1936, which carried out thousands of projects in the island, was limited in its planning by the emergency character of its program but attempted to relate its work to basic as well as temporary needs.

In May, 1942, the first law establishing planning was passed. Its general purposes were defined as follows:

> The powers granted in this Act shall be exercised for the general purpose of guiding such a coordinated, adequate and economic development of Puerto Rico as will, in accordance with present and future needs and human, physical and financial resources, best promote the health, safety, morals, order, convenience, prosperity, defense, culture, economic soundness and general welfare of the present and future inhabitants, and such efficiency and economy in the process of development and in the distribution of population, of the uses of land and of public improvements as will tend to create conditions favorable thereto.[3/]

The act established a planning board to work toward these goals. Its powers and duties were laid out in a master plan approved May 12, 1942.

> The board shall prepare and adopt a Master Plan, which shall show, with any accompanying maps, charts and explanatory matter, its recommendations for the development of Puerto Rico and may include the general location, character and extent of the land, minerals, water, vegetation and animal life and their present and possible future utilization for mining, power, irrigation, flood control, navigation, draining, domestic and

industrial uses of water, fishing, recreation and the general welfare; and of residential, commercial, recreational, manufacturing, transportation, institutional, governmental and public utility facilities and operations by whatever desirable categories, and the possible future utilization and development for these or other purposes and for the general welfare.

The Board shall include in the Master Plan the urban, suburban and rural parts of the island, but the Master Plan of Puerto Rico need not include minor resources, uses or facilities which are of a strictly local character. The Board may adopt the Master Plan as a whole or in parts, and may amend, add to, or itemize it or any part thereof. The Board may in its discretion prepare a separate master plan for the possible and advisable development of any municipality or its urban area, which may include resources, uses or facilities not included in the Master Plan of the island.[4/]

These statements make clear the scope and purpose of planning in Puerto Rico. The Act of 1942 was made possible by the vision and wisdom of a group of men of unusual devotion and ability. The leadership of Governor Muñoz Marin, then president of the Senate, was essential to the changes that had taken place. This legislation had many roots in the past and reflected the influence of many personalities, but without this expressed ideal and its practical organization, Puerto Rico would have been largely at the mercy of haphazard

socio-economic forces.

This project is designed to show that the changes which have taken place are good, that they represent measurable progress toward the goals set up in the General Purpose and that the organization of the Planning Board, with its coordinating functions, is competent to continue this progress in the future.

Although the approach of the Planning Board and its predecessors was concerned primarily with the economic situation of the island they were, sometimes consciously, sometimes unconsciously, also dealing with the cultural and human problems of developing societies: the changes from traditional to modern ways of life and the difficulties of the transition involved.

The first work of the Planning Board included: a division of engineering, a division of finances for the preparation of the Economic Program, a division of insular industries and services, and a division of urbanization.

Much work was necessary to overcome public opposition and to make clear what the real meaning of planning is and how it protects the individual in the exercise of his rights; it was also necessary to meet objections from some of the government departments which saw in the Planning Board a threat to the development of their respective programs.

In 1950, the Planning Board was assigned to the Governor's office. The Governor would coordinate its work with that of the Office of the Budget and Personnel. The Board would also be advisory

to the Legislature and would maintain relations with the municipalities on local matters--revising and approving permanent projects in their relationship to over-all plans.

The work of the Board includes, of necessity, planning for cooperative action between the public and private sectors of the Commonwealth. This has become one of the keys to planned change in Puerto Rico. Both the incentives to private capital and the control of its development characterize the industrial and commercial planning. The establishment of government corporations, financed by the sale of bonds on the open market, demonstrates the possibility of combining patterns of capitalistic and government financing. This has made it possible to finance the initial costs of electrification, water and other programs each operating as an entity within the over-all plan and making available to communities and individuals improvement in living standards, sanitation, etc. through the sale of these commodities combined with the resources of the Puerto Rican government.

The Government Development Bank is the agency responsible for long-term intermediate and short-term financing through a central system of marketing bonds. The bank serves public corporations, such as the Water Resources Authority and the Industrial Development Company, the municipalities and the Free Associated State of Puerto Rico, represented by the Treasury Department. The largest proportion of this financing goes to the public corporations.

Recognition must also be given to the part played by the federal government and private investment from the United States in

the economy of Puerto Rico. Heilbroner has said in his book The Great Ascent, that in developing countries "the necessary germinal core of industrial capital must be obtained from abroad."[5] This can come through "trade, investment or aid." In the case of Puerto Rico, all three are involved, with the replacement of aid by federal programs applied to Puerto Rico in the form of matching appropriations and federal financial programs.

Although Puerto Rico receives far more financial advantage from its political status as part of the United States than any Latin American country through a U.S. aid program, nevertheless there is some basis for theoretical comparison. Planning in Puerto Rico has been based from its beginning on the analysis and use of all available resources. It recognized the necessity first to put its own house in order. This meant consideration of such obvious requirements as modifying the tax structure and tax collection and other revolutionary changes in land tenure and industrial development.

Economic and social planning rest fundamentally on the natural and human resources of the island. The understanding of these resources comes first, and then their use for development. The budget must represent in fiscal terms the decisions on proportions, priorities and specific allocations. This is done by the preparation of a yearly model budget and its relation to a six-year plan. (In the Department of Health, planning is done through 1975.) It becomes the blueprint for present and future organization and growth.

The original budget of the Planning Board was $100,800.00 but has grown with added responsibilities.

According to the plan, the Planning Board stimulates and coordinates the programs of the government departments. A major function is related to public works--their regulation, coordination and progress. Through the Governor, legislation is proposed and promoted. The coordinated plan for communities is the basis for decisions on electric lines, aqueducts, industries (both government-organized and private), housing projects, parks, etc. The process of carrying out public works projects must be in accord with the Economic Program. Recommendations of the Planning Board are presented to the Executive and to the legislature; they must receive legislative authorization and appropriation; the Department of Public Works receives detailed plans, consults the Planning Board, adjusts to the budget and then submits its proposals to the Planning Board for final authorization. In 1957-58 more than 1,000 projects were submitted to the Planning Board, of which 950 were approved at a cost of $46,000,000. The rejection of public works projects which do not conform to the overall plan is as important a function of the Board as approval.

Coordination with municipal government is carried out through local planning commissions made up of nine members, including the Mayor, the President of the Municipal Assembly, three others appointed by the mayor and four appointed by the President of the Planning Board. Minority parties are represented on these commissions.

A division of the Planning Board coordinates the work of the Economic and Industrial Development Company, the Departments of Agriculture, Commerce, Government Development Bank, Port Authority, Urban Renewal, Authorities for Electrification, Water, etc. One example of the value of such cooperation is given in a quotation from Sr. Candido Oliveras, when President of the Planning Board (1961):

> In 1957 there was imported $74,000,000 worth of wheat, flour, cattle, feed, grains, fertilizer, refrigerated meat, meat products, milk products, flour products and eggs. These imports were for the direct consumption of the people. Some of these, refrigerated products, milk, meat, etc. were sold direct to the consumer. Flour in some cases also went direct to the consumer. In other cases it went to the consumer by way of shops for bread and other flour products. In other areas such as that of cattle feed and fertilizer, it was used for the production of cattle and poultry. We see that these imports--$74,000,000 represent consumption of $129,000,000. We calculate that in the year 1974, we can reduce imports to $15,000,000 due to local production and can increase consumption and exports of these products to $250,000,000.[6/]

A second illustration of the coordinating function was shown when the Department of Education planned the construction of schools in a part of the island where the Planning Board schedule had a

projected hydro-electric project which would require flooding the area. The result of cooperation between Planning Board and the Department of Education led to a change in the location of the proposed schools to a place which could be used by the inhabitants of the valley when they were moved to a new site.

Roads must be constructed with a view to industrial growth and to the balance in urban-rural planning; they must also be coordinated with the program and financial aid provided by the federal government. It is clearly difficult to separate urban and rural planning because of their interdependence.

As in all modern societies, the pull of the cities is felt in Puerto Rico with the corollary that, as mechanization and the application of present-day knowledge in agricultural production becomes more effective, fewer workers in agriculture will be needed. Although in our opinion planning in and for the rural areas in Puerto Rico is rapidly catching up with urban and industrial planning qualitatively, much still remains to be done in working out a balance between urban and rural communities and their economic interdependence. The fact that the effort has been made, and is continuing, to bring industries to the rural areas, shows great foresight on the part of Puerto Rican planners. Throughout the world, as societies modernize, the trend tends to be to migrate from country to city. If, in Puerto Rico, there can be wise decisions on where the balance lies in regional planning it will be a contribution of real dimensions.

The functioning of the Planning Board combines the ideal and the practical. The need to bring ideas into conformity with the budgetary resources makes its actions realistic. The process of presentation of plans from the government agencies, the time schedule set up for preparation for legislative action (eleven months), the provision for public hearings and regard for criticism by the press, consultations with the Governor, the Secretary of State, the Secretary of the Treasury, and the Director of the Bureau of the Budget--all these are the parts of a process that is thoughtful and orderly and that follows a democratic method.

To decide priorities in planning and in the long-run for proportions in appropriations is the function of the Planning Board, and the Governor. This is recognized. For decision preliminary to the final action for the overall plans, however, the heads of government agencies have responsibility not only for practical plans for their own agencies but for value judgments in such planning. Without this the dream would be lost, the inspiration would die. That the parts must be fitted into a whole is accepted with the idea of planning, and growth must come for the organism as a whole. Thus, education cannot exist as an end in itself but must be geared to the needs of the society; some areas of agriculture must be curtailed where it is no longer profitable, no longer able to absorb the number of workers who formerly lived, however inadequately, on the land; schedules for health programs must be selective because they must

combine in the proportions which are practicable, public health and individual care; public works must be used to serve other agencies according to the general plan but must also be a source of jobs in an economy where there is unemployment.

Therefore, in passing any judgment on planning, these considerations are all parts of the whole. General Welfare is the purpose, changing as the various parts of the economy move, revised in the plans devised for the periods ahead. Not everything can be predicted, outside forces may influence rates of change.

> It is the destiny of the planning agency to accept, from those who define the general aspirations, their definition of what ought to be, to make this definition precise and practical, to show how much of it is feasible and how that much can be attained--in alternate ways if there are such--and to pass this precis on to the decision-makers with recommendations, taking it back with such modifications, wise or unwise, as the people's representatives suggest or demand and putting it together again as commanded....The planning agency is a coagulator, a putter-together, a conjoiner which brings hope into focus and promises into possibility, a protector of reason among competing imaginative conceptions, a reducer of vague expectations to measured charts, tables and maps, a filler-out of strategies with the stuff of tactical reality. It is sometimes a killjoy; but sometimes a fulfiller of dreams.[7]

to imagine, to coordinate and to make decisions on priorities--this combines creativity with order and judgment. This process lies at the heart of Puerto Rico's progress; it is a symbol of the dream becoming reality. The fact that mistakes are recognized and changes made, that balance is kept among the many parts, that no goal is regarded as static, make up the ingredients of a remarkable performance. It is, of course, easy--and perhaps sometimes right--that the interested observer finds things to criticize; no doubt one can see areas apparently neglected, individuals who do not benefit directly from the programs now in operation, questions on the priorities selected. But no one can look at the accomplishments without a recognition of the wisdom, the dedication and the effectiveness of the planners in Puerto Rico.

Looking back over the last thirty years in Puerto Rico, we find great forces at work which are responsible for both the visible and the invisible changes which have taken place.

Certain accomplishments of the planning program in relation to both short-term and long-term goals can be noted. The following show progress toward goals:

1. Increased employment at higher wages, more security and greater satisfaction in work.

2. Increased life-expectancy and health.

3. Increased comfort in living, through new facilities in electricity, water and housing.

4. New forms of economic development through cooperatives, incentives for both industry and agriculture.

5. Greater freedom for the individual through new kinds of mobility, higher income, education, recreation.

Another category could be set up illustrating programs for temporary or experimental purposes. Illustrations would be:

1. Public welfare for employables (pending the increase of employment opportunities); shoes for school children, school lunches, distribution of surplus commodities--all for the improvement of health and physical well-being.

2. The program of Fomento, with its special incentives to industries.

3. Experimental programs such as the coffee program and certain housing programs.

It was such programs as these, undertaken by Operation Bootstrap, which were concerned primarily with essential means for health and economic improvement. Muñoz Marin, using the expression "Operation Serenity," gives the new purpose for the future: "an attempt to give to economic effort and political freedom objectives that can commend themselves to the spirit of man in its function as leader of, rather that of servant to, the economic processes."[8/]

It should be noted that the optimistic view of Puerto Rico's future is not universally accepted. Gordon K. Lewis in Puerto Rico, Freedom and Power in the Caribbean, points out the growth of conflicting economic interests, the development of pressure groups--American style--and "the old cleavage, to take a final example, between the landed gentry and the city commercial interests promises to be replaced, as new class lines harden, with a new alliance between

land owners and the urban business groups....Industrial society, as Durkheim has pointed out in a well-known analysis, is unique in that it releases in its members voracious and essentially limitless appetites for material goods and satisfactions."[2/]

Perhaps this astringent criticism is a useful counteraction to any complacency about current performance and could help to give content to the idea of Operation Serenidad.

We have said little about the political changes which have been so important to the new life of Puerto Rico. This study will not take a position on the question of Puerto Rico's political status vis-a-vis the United States, which is now being studied by a committee over a two-year period before making recommendations to the Congress of the United States and the people of Puerto Rico. But the great inspiration which Commonwealth status brought about is essential to an understanding of the motivation for change. The preamble to the Constitution is here quoted:

> We, the people of Puerto Rico, in order to organize ourselves politically on a fully democratic basis, to promote the general welfare, and to secure for ourselves and our posterity the complete enjoyment of human rights, placing our trust in Almighty God, do ordain and establish this Constitution for the commonwealth which, in the exercise of our natural rights, we now create within our union with the United States of America.
>
> In so doing, we declare:
>
> The democratic system is fundamental to the life of the Puerto Rican community;
>
> We understand that the democratic system of government is one in which the will of the people is the source of public power,

the political order is subordinate to the rights of man, and the free participation of the citizen in collective decisions is assured;

We consider as determining factors in our life our citizenship of the United States of America and our aspiration continually to enrich our democratic heritage in the individual and collective enjoyment of its rights and privileges; our loyalty to the principles of the Federal Constitution; the co-existence in Puerto Rico of the two great cultures of the American Hemisphere; our fervor for education; our faith in justice; our devotion to the courageous, industrious, and peaceful way of life; our fidelity to individual human values above and beyond social position, racial differences; and economic interests; and our hope for a better world based on these principles.

The Popular Democratic Party became the chief instrument for change and continues, in its platform, to formulate new or continuing objectives as follows:

The Popular Democratic Party's Program, adopted in 1960, contains a series of commitments which require legislation of a budgetary nature. Among others, the following would be enumerated:

I. Education
Construction of 2,000 classrooms during the next four years.

II. Health
To provide 1,800 hospital beds during the period 1960 to 1964; and provide pure water to the thousands of families who are still without this service in the rural zone.

III. Housing
1. Property tax exemption up to $15,000 for owner-occupied dwellings.
2. Sale of apartments in public housing projects.
3. Face the problem of the excessive increases in land values.

IV. Labor
Introduce social measures to alleviate the problems resulting from mechanized agriculture.

V. Agriculture

1. Provide subsidies for farmers engaged in tobacco cultivation.
2. Establish credit facilities for small agricultural businesses.
3. Continuation of subsidies to the sugar cane growers.

VI. Transportation and Communication

Construction of 600 kilometers of highways and the improvement of 500 additional kilomet rs.

We try to determine in the first instance the minimum sum that would be required to maintain the level of development that has been obtained. In general terms we make this determination in the following manner:

a. Examining the situation in the immediate past year and for the current fiscal period, and including the following:

1. Funds available during each of the two respective years (those left over from previous years and new allocations).
2. Expenditures during the year (work completed or in the process of construction).
3. Estimated surplus at the close of the year.

b. Analysis of the situation for the next immediate fiscal year.

1. Expenditures required to continue completion of the work still in progress.
2. Expenditures required to initiate and complete additional work.
3. Expenditures required to initiate and continue construction of work necessary to assure that the rate of development of the program will be maintained at the same level during the coming years.
4. Total minimum quartity of funds required during the year to maintain the present rate of development of the program (1+2+3).
5. Less previous year's surplus.
6. Recommendation of minimum funds necessary for the year. 10/

GROUPING OF THE MUNICIPALITIES OF PUERTO RICO FOR PROCESSES OF PLANNING

Puerto Rico has had extraordinary success in its effort to raise the standard of living. Without doubt, this development, which has to some extent reached all municipalities on the island, has not been carried out with the same vigor and effectiveness in all, and efforts to equalize advantages is the purpose of the long-term regional plan. Certain municipalities, especially those of the metropolitan area of San Juan, have absorbed the greater part of the development, although others have also made great gains. Imbalance occurs in the net increase of income among the municipalities; opportunity for employment varies greatly; concentration of population, particularly in the San Juan area, intensifies differences in the economic level between it and smaller municipalities. The uneven development among municipalities is illustrated by the influx into Bayamon (part of the San Juan metropolitan area) which showed (1950-1960) a 341.9% increase in population. The municipality of Arroyo, on the other hand, showed 14.1% while the increase for the whole island was 129.5%. Others actually showed a decrease. Uneven employment opportunity was, of course, the chief reason--San Juan alone providing 19,203 new jobs.

It is natural that private investment should establish new industries, businesses and services in those areas where development is easiest. It is necessary for industry to share common services and therefore to establish its location with regard to facilities and the availability of labor. But the metropolitan areas face special problems because the resources for the development of good living are

not equal to the rapid increase of population. To off-set the disadvantages, the Development Company works on a principle of decentralization of industry to relieve this pressure.

The Planning Board, beginning in 1957, has been studying and formulating plans for regional development in order to orient the growth in such a way as to give to the whole island the benefits which accrue from employment and the services which the government can provide as a result of increasing prosperity. The following outline gives the points considered for development:

1. The underlying purpose of the government has been to minimize the socio-economic differences which exist among the municipalities in Puerto Rico.

2. In order to establish a pattern for the location of business, industry and services, the accessibility of the principal ports was the first consideration. This was decided for three basic reasons.

   a. The island imports a high percentage of articles for local consumption.

   b. Puerto Rico, because of the limitations of its own size, does not constitute a market adequate to absorb its industrial products, and therefore, depends on exterior markets, especially the United States.

   c. The type of industry which has been established and has the greatest potentiality of growth in Puerto Rico, imports all, or nearly all, its raw materials.

Therefore, based on these criteria, the three chief regions for the island have been established as the cities of San Juan, Ponce and Mayaguez, where the main ports are located.

The setting up of these regions represented, first, the need to formulate plans for the growth of these as urban centers--for social and economic development according to a major urban plan. Following this, came the study of possibilities for making certain municipalities in each of the regions surrounding these cities, accessible for the other municipalities within the regions--a grouping based on topography, roads, transportation and the accompanying changes from traditional to modern ways of life.

The sub-centers, though showing orientation toward the center, manifest vast differences and become important in the regional grouping as areas for development, as well as in their relation to the main center of the region. For example, one group of municipalities in the Ponce area already has a high degree of industrialization. Here are located the large oil refineries, and other commercial and industrial development, with resulting higher economic levels. The other sector of the Ponce region reaches into the most remote mountains with scattered agricultural population (one of the municipalities in this section is Adjuntas, where one of our study communities is located), and the towns of Jayuya and Adjuntas as centers. The development of two such disparate sections requires entirely different types of planning. Similarly, in the San Juan area, there are isolated muni-

cipalities--Orocovis and Baranquitas. Here, agricultural workers represent 46% of the population and the standard of living is among the lowest in the island.

Obviously, then, the plan is not based on homogeneity within these regions, but rather on the functional interaction among the several municipalities within each region and their direction toward the center. As one index of this, the movement of workers from one municipality to another was analyzed: among the residents, those who were employed elsewhere and where they worked; among the non-resident workers, the places where they were employed. The transportation facilities and use were also studied and it was found that the three regions were the logical centers from this standpoint; the most distant places were no more than ninety minutes from one of the centers and were near enough to a sub-center of the region to make each regional division practical as a plan for development.

The following factors are considered significant in the establishment of the three regions:

1. Availability of ports
2. Existing metropolitan areas
3. Political organization
4. Concentration of population
5. Distribution of industrial employment
6. Commercial sales and services per capita
7. Economic levels
8. Number of non-resident employees

Taking these factors as a point of departure, the areas of influence of each of these metropolitan areas was determined. The most important was the evaluation of the degree of dependence of the

municipalities on the center or sub-center and the accessibility of these centers for further development.

The characteristics analyzed were the following:

1. Administrative divisions used by the different government agencies and corporations. These divisions of regions and subregions of the Planning Board cross other established regional divisions of government agencies already in operation. These remain as practical administrative units. The Planning Board must, of course, take into consideration in over-all planning, the practical requirements of these agencies in carrying out their respective programs.

2. The movement of employees--i.e., the analysis of the relation between residents and place of work of the workers in each municipality in Puerto Rico.

3. The availability of transportation and the distance in time of each municipality from the center.

4. The geographic location of the municipalities with respect to the urban centers (this included analysis of physical conditions, topography and whether these limited or furthered the accessibility of each municipality).

The first requirement in the area studies was the specific possibility for maximum development of potentialities, minimizing of isolation in the distant municipalities, and the amelioration of the limitations which interfere with progress.

In setting up sub-regions, the most prosperous areas were selected on the grounds that these formed the centers within the region. Clearly, the index of prosperity can only be used in a relative sense and is not universally applicable to all municipalities within a region, but each of the sub-regions has as its center the most prosperous municipality.

One of the tests in analysis of the three centers was the number of residents from other municipalities who travel daily to work in these cities. In 1960, a total of 25,964 workers were employed in San Juan who were not residents of this municipality; and in Ponce there was a registration of 2,892 such persons; in Mayaguez-- a total of 2,712.

The comparison of the figures for the three main urban zones with statistics for the rest of the municipalities of the island, show effectively that San Juan, Ponce, and Mayaguez are the principal sources of employment in Puerto Rico.

REGIONS AND SUB-REGIONS

San Juan Region I			
	Sub Bayamon	-	Hato Lejas
	" Caguas	-	Juncos - Mango
	" Loiza	-	Rio Grande - Mediania Alta
	" Cayey	-	Cidra - Bayamon
	" Arecibo	-	Sabana Hoyos
Ponce Region II			
	Sub Adjuntas	-	Yahnecas
	" Juana Diea	-	Collores
	" Salinas	-	Lapa
Mayaguez Region III			
	Sub Moca	-	Voladores
	" Aguadilla	-	San Antonio

As an illustration of the separate jurisdictions of individual government agencies, the plans of both the Department of Health and the Department of Education may be cited. In each case, the regional plans now considered in these departments represent fresh research, re-examination of old divisions of organization and a program of decentralization. This shows that the opportunity exists, within the over-all programs of the Planning Board, for the flexibility recognized as a necessary ingredient in the best adaptation of departmental organization to special needs of the population. Decentralization would mean that the regions would become autonomous in certain respects but it would involve also--and more importantly--the coordination of services within each region. As far as the development of new methods of the democratic process within a complex society are concerned, these new forms of organization are striking examples of the ability and the confidence of Puerto Ricans to experiment, to test, and to create.[12/]

The description of the Department of Health experiment using Bayamon as the experimental region, includes too much detail for this report, but the general aim was to "assure a higher quality of health services by providing better opportunities for professional growth to medical and allied personnel and by allowing the utilization of their professional skills at the highest possible degree of efficiency." This required new forms of communication, the

integration of clinical services, physicians from (formerly) municipal hospitals becoming members of the staff of the base hospital, and chiefs of clinical services in the regional base hospital carrying consultative and supervisory responsibilities for local functioning of health centers. In certain fields of medicine, where use of laboratories and specialists are most necessary, the regional hospital, in the case of the Bayamon region, affiliated with the University of Puerto Rico medical school. The base hospital has special resources to offer but the flow of patients, of education and of services is a two-way one between local and regional centers. The full organization and administration of the regional idea includes changes in nursing services along lines of community health service, nutrition, etc.; public health, including environmental sanitation, the training of inspectors, control of communicable diseases; health education.

If this program is found good and extended to other regions, it will change completely the present form of administration which is described in the following quotation:

REGIONAL ADMINISTRATIVE SERVICES

> In the present centralized organization and administration of the Department of Health of the Commonwealth of Puerto Rico (see section on reorganization of the Department of Health) all major and important decisions are made at the central departmental office, by the Secretary himself or by division

or bureau chiefs by virtue of authority delegated to them. Personnel working on intermediate or local echelons of the organization have very little, if any, participation in program planning activities conducted at the level of the offices of the Secretary of Health. A two-way communication system is missing. Thus, the central level issues orders and the intermediate local levels follow orders.

This organizational and operational setup is responsible outside the Bayamon region, and still to some extent inside the region, for the uncoordinated, unrelated operation of health and welfare institutions throughout the island of Puerto Rico. Thus in municipalities public health units, public welfare units, and hospital units the services are geographically integrated in a health center, but professionally operate in a vacuum. Although these units serve the same clientele, the by-products of this organization set up is a situation in which there are overlappings of programs on the one hand, and gaps in programs on the other.

At the regional or district level, general hospitals operate as separate organizational units of service. Their only relationship with local health and welfare centers is along one-way avenues of communication by which service is given to patients from these centers on a referral basis. There are no professional relationships between the technical staffs of the health and

welfare centers and those of the general district hospitals.[13/]

There are five proposed regions for health services. In the Bayamon region Health and Welfare will be integrated; in the others welfare services will continue their own programs and all welfare activities will be under the direction of a Deputy Secretary of Health. The general health care program will be directed by a Deputy Secretary of Health. Both deputy directors will be responsible for the coordination of the two programs.[14/]

SUBURBAN PLANNING

A special program for planning suburban development has been started. In these plans it is recognized that closer cooperation is needed between agricultural and urban planning; in this CRUV (Urban Renewal and Housing) must be more concerned as suburban communities grow and the separation between urban and rural becomes less distinct. The Planning Board envisages a "green belt" as part of this new suburban development and sees also the changing distinctions among urban, semi-rural and suburban. It has the hope that communities may develop, or be developed, in which there will be a mixture of classes, in which public housing may be included and where there will be increased opportunity for upward mobility. From an economic standpoint, municipal services--electricity, water, sewage, etc.--can be better provided where population density is greater and adjustments to this need can be made. Those communities or areas which remain truly rural do not at present come within this category.

POPULATION

The problem of population control cannot be adequately dealt with in this study, but neither can it be completely ignored. Its bearing on economic and social improvement is no greater and no less than in other parts of the world; in other words, the danger exists that population increase can off-set the advantages of economic growth.

> The implications of the present patterns of fertility and mortality for future populations have great significance, particularly in view of the national aspirations of the less developed areas for improving levels of living. To achieve higher levels of living, income per capita must, of course, be increased. Planners must, therefore, be aware of what the prospects are for future population to be able to set desired economic goals and lay plans for their achievement. The United Nations makes population projections for the world, its various regions, and for individual nations. The projections made before the 1960 censuses were taken are already too conservative! That is, the acceleration in growth rates of the less developed areas has been so rapid that the population projections constructed in the late 1950's are already outmoded. The United Nations "high"

projections serve, however, to illustrate what the present trend would produce by the end of the century.

Should the trend continue, the population of the world as a whole would increase from about three billion in 1960 to approximately seven billion by the year 2000. World population would more than double during the remainder of this century. The effect of declining mortality in the less developed areas may be readily seen by comparing anticipated growth in the second half of this century with actual growth during the first half. Between 1900 and 1950, world population increased by less than one billion persons. Between 1950 and 2000, present trends indicate an increase of 4.4 billion persons. That is, the absolute increase in the population of the world during the second half of this century will be almost four and a half times as great as that during the first half of the century--and will be a greater increase than was achieved in all the millenia of human existence up to the present time.

By the end of the century, Latin America will have the most rapidly growing population, more than trebling to reach a total of 650 million from a level of about 200 million.[15/]

This quotation serves as preface to what must be said about the effect of population on the future of Puerto Rico. In the 30's Puerto Rico was a heavily over-populated island. The actual

increase and the rate were both among the highest in the world.

The Planning Board has prepared an elaborate Analisis de Poblacion (Informe Preliminar) 1940-1980. This analysis deals with both quantitative and qualitative factors of the population question and gives the following points of view for its report:[16/]

1. We know that population is a field of both quantitative and qualitative data. These data answer for us the when and the where of population. In this phase we are interested in the growth, in the vital statistics, in the quality, composition and distribution of the population.

2. We know that population is a dynamic field of human behaviour which requires sociological interpretation. It is in this phase that we are interested in knowing how cultural changes are affected by population and the social interaction with population trends.

3. We know that population is a field of social action and here we ask the following question: What is the significance of the data? What ought to be done and what can be done?

4. The primary purpose of planning is to provide adequate satisfaction for the physical, social, economic and cultural needs of a given population. This makes it evident that the study and understanding of the growth, distribution and composition of this same population is an indispensable element in planning.

Table 1 shows population increase and rate in three cycles--from 1775 to 1960.[17/] During the first cycle--1775 to 1881, the decrease is attributed to the high rate of infant mortality.

TABLE 1. Population Increase

	Year	Pop. in thousands	Table of Annual Increase
First Cycle	1775	70	4.61
	1800	155	3.20
	1815	221	2.34
	1832	330	2.42
	1846	448	2.17
	1860	583	1.92
	1877	732	1.32
	1887	799	0.87
Second Cycle	1899	953	1.50
	1910	1,118	1.54
	1920	1,300	1.56
	1930	1,544	1.69
	1935	1,724	1.95
	1940	1,869	1.89
Third Cycle	1950	2,210	1.69
	1960	2,349	.62

Estimates since 1960 have been affected by a marked change in the emigration predictions. It may well be that the trend of return to Puerto Rico from the continental United States will actually increase in numbers, bringing the problem of population increase to a critical point and accentuating the difficulties of housing and employment.

Table 2 illustrates the estimate of the employment situation based on a figure of zero emigration, showing a possible rise in unemployment from 13.3% in 1960 to 31% in 1980.[18/]

TABLE 2. Civilian Non-Institutional Population, the Labor Force, Employment and Unemployment, with an assumption of zero migration, Puerto Rico 1960-1980

Year	Civilian Population (non-inst.)	Labor Force	Percent of Participation	Employed	Percent of Unemployed
1960	1379.0	625.3	45.0	542.0	13.3
1962	1454.0	670.0	46.1	585.3	12.6
1970	1911.0	916.0	47.9	689.4	24.7
1975	2189.3	1082.2	49.4	752.6	30.5
1980	2526.3	1250.1	49.5	862.3	31.0

The birthrate has been decreasing and it may be hoped that this trend will continue. Raw data on reproduction projected for 1960 give a rate of 2.13 and for 1970 of 2.04.

The report of the Planning Board concludes with a series of recommendations dealing with such questions as decentralization as a means of spreading the opportunities for work and the space for living, and recognizes the general tendency toward a lower birthrate where more urban ways of living prevail, with higher levels of education and occupational opportunities.

The remedies suggested for over-population are of a socio-economic nature and there is no doubt that these are of very great importance in population control. However, the specific subject of birth-control also deserves most serious attention in Puerto Rico, as in other parts of the world. Its history in Puerto Rico has been an erratic one since its inception, as part of the program of the PRERA. For a full program to be undertaken would require a change in the position of the Catholic Church. If such a change occurs the facilities of Puerto Rico could very quickly put a program into operation due to the groundwork which is already there. The value of such a program is, we believe, of great importance in the lives of individuals as well as in its impact on the population problem.

Certain accomplishments of the planning program in relation to both short-term and long-term goals can be noted. The following show progress toward goals.

1. Increased employment at higher wages, more security and greater satisfaction in work.
2. Increased life-expectancy and health.
3. Increased comfort in living, through new facilities in electricity, water and housing.
4. New forms of economic development through cooperatives, incentives for both industry and agriculture.
5. Greater freedom for the individual through new kinds of mobility, higher income, education, recreation.

Another category could be set up illustrating programs for temporary or experimental purposes. Illustrations would be:

1. Public welfare for employables (pending the increase of employment opportunities); shoes for school children, distribution of surplus commodities -- all for the improvement of health and physical well-being.
2. The program of Fomento, with its special incentives to industries.
3. Experimental programs such as the coffee program and certain housing programs.

It was such programs as those which were undertaken by Operation Bootstrap which concerned itself with essential means for economic improvement. Munoz Marin, using the expression "Operation Serenity" gives the new purpose for the future: "an attempt to give to economic effort and political freedom objectives that can commend themselves to the spirit of man in its function as leader of, rather than of servant to, the economic processes."[19/]

It should be noted that the optimistic view of Puerto Rico's future is not universally accepted. Gordon K. Lewis in Puerto Rico, Freedom and Power in the Caribbean, points out the growth of conflicting economic interests, the development of pressure groups -- American style -- and "the old clevage, to take a final example between the landed gentry and the city commercial interests promises to be replaced, as new class lines harden, with a new alliance between land owners and the urban business groups.....Industrial

society, as Durkheim has pointed out in a well-known analysis, is unique in that it releases in its members voracious and essentially limitless appetites for material goods and satisfactions."[20]

Perhaps this astringent criticism is a useful counteraction to any complacency about current performance and could help to give content to the idea of Operation Serenidad.

We have said little about the political changes which have been so important to the new life of Puerto Rico. This study will not take a position on the question of Puerto Rico's political status vis-a-vis the United States, which is now being studied over a two-year period before making recommendations to the Congress of the United States. But the great inspiration which Commonwealth status brought about is essential to an understanding of the motivation for change. the preamble to the Constitution is here quoted:

> We, the people of Puerto Rico, in order to organize ourselves politically on a fully democratic basis, to promote the general welfare, and to secure for ourselves and our posterity the complete enjoyment of human rights, placing our trust in Almighty God, do ordain and establish this Constitution for the commonwealth which, in the exercise of our natural rights, we now create within our union with the United States of America.
>
> In so doing, we declare,
>
> The democratic system is fundamental to the life of the Puerto Rican community:

We understand that the democratic system of government is one in which the will of the people is the source of public power, the political order is subordinate to the rights of man, and the free participation of the citizen in collective decisions is assured;

We consider as determining factors in our life our citizenship of the United States of America and our aspiration continually to enrich our democratic heritage in the individual and collective enjoyment of its rights and privileges; our loyalty to the principles of the Federal Constitution; the co-existence in Puerto Rico of the two great cultures of the American Hemisphere; our fervor for education; our faith in justice; our devotion to the courageous, industrious, and peaceful way of life; our fidelity to individual human values above and beyond social position, racial differences; and economic interests; and our hope for a better world based on those principles.

The Popular Democratic Party became the chief instrument for change and continues, in its platform, to formulate new or continuing objectives as follows:

The Popular Democratic Party's Program, adopted in 1960, contains a series of commitments which required legislation of a budgetary nature. Among others, the following would be enumerated:

I. Education

Construction of 2,000 classrooms during the next four years.

II. Health

To provide 1,800 hospital beds during the period 1960 to 1964; and provide pure water to the thousands of families who are still without this service in the rural zone.

III. Housing

1. Property tax exemption up to $15,000 for owner-occupied dwellings.
2. Sale of apartments in public housing projects.
3. Face the problem of the excessive increases in land values.

IV. Labor

Introduce social measures to alleviate the problems resulting from mechanized agriculture.

V. Agriculture

1. Provide subsidies for farmers engaged in tobacco cultivation.
2. Establish credit facilities for small agricultural businesses.
3. Continuation of subsidies to the sugar cane growers.

VI. Transportation and Communication

Construction of 600 kilometers of highways and the improvement of 500 additional kilometers.

We try to determine in the first instance the minimum sum that would be required to maintain the level of development that has been obtained. In general terms we make this determination in the following manner:

a. Examining the situation in the immediate past year and for the current fiscal period, and including the following:

   1. Funds available during each of the two respective years (those left over from previous years and new allocations).

   2. Expenditures during the year (work completed or in the process of construction).

   3. Estimated surplus at the close of the year.

b. Analysis of the situation for the next immediate fiscal year.

   1. Expenditures required to continue completion of the work still in progress.

   2. Expenditures required to initiate and complete additional work.

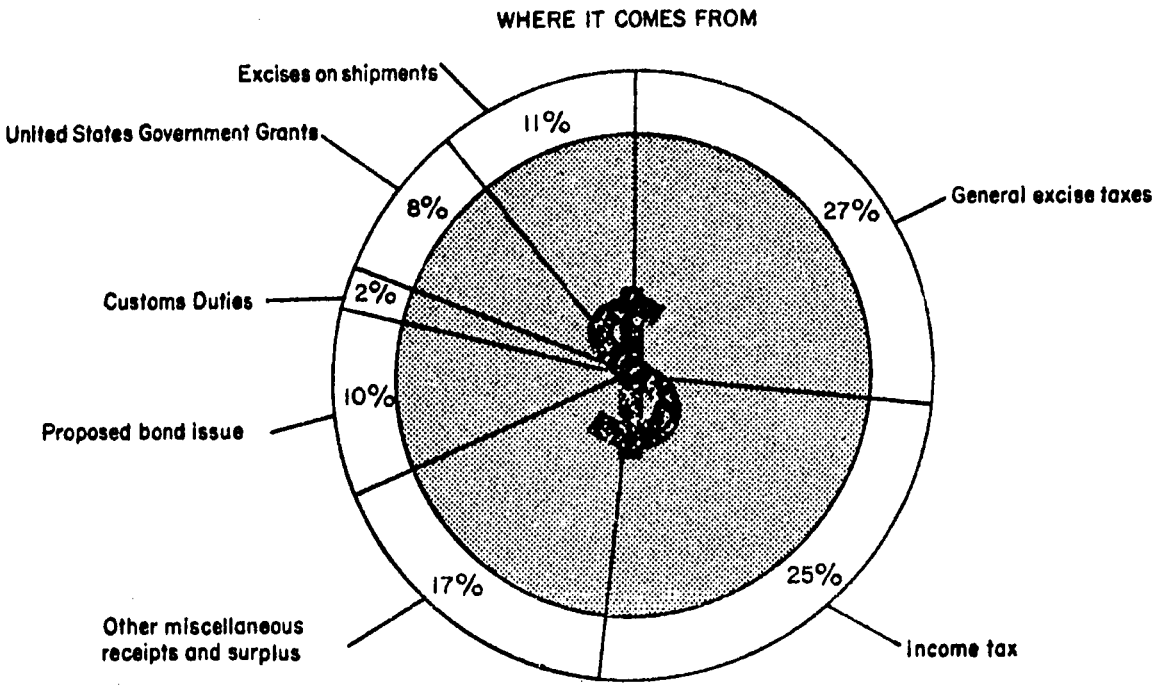
   3. Expenditures required to initiate and continue construction of work necessary to assure that the rate of development of the program will be maintained at the same level during the coming years.

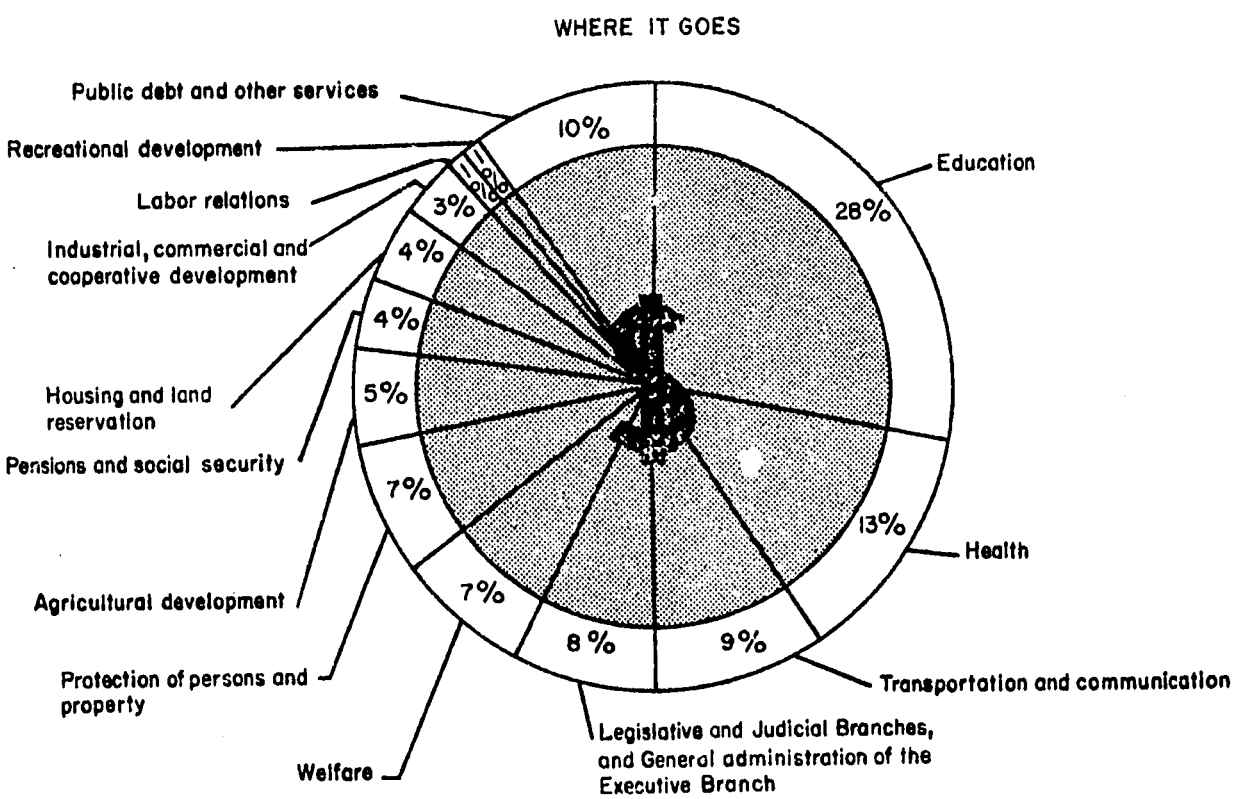
   4. Total minimum quantity of fund required during the year to maintain the present rate of development of the program (1+2+3).

   5. Less previous year's surplus.

   6. Recommendation of minimum funds necessary for the year. 21/

Figure I. Puerto Rico Proposed Budget Dollar Allocation 1965





NOTES

1. A great part of the material for this section has been taken from Rafael Pico's book. The other main source is the Economic Report to the Governor, 1963.

2. Rafael Pico. Puerto Rico: Planificación y Acción. San Juan: Banco Gobernamental de Fomento para Puerto Rico, 1962.

3. Puerto Rico Planning Board. Planning Act. Santurce: Planning Board, 1962, revised edition, Section 3, p. 2(Act No. 213 of May 12, 1942).

4. ibid., pp. 3-4.

5. Robert L. Heilbroner. The Great Ascent. New York: Harper & Row, 1963, p. 83.

6. Rafael Pico. Puerto Rico Planificación y Acción. Waverly Press, 1961. p. 26.

7. Rexford G. Tugwell, The Place of Planning in Society. San Juan: Puerto Rico Planning Board, Technical Paper 7., 1958, p. 38.

8. From remarks by the Honorable Luis Muñoz Marin, Governor of Puerto Rico, at Harvard University, June 16, 1955.

9. Gordon K. Lewis, Puerto Rico Freedom and Power in the Carribean, M.R. Press, New York City, 1963, pp. 256 - 257.

10. Commonwealth of Puerto Rico, Office of the Governor, Puerto Rico Planning Board, Eduardo Rivera Rivera, Director Bureau of Public Works, Methods and Procedures in the Preparation of the Four-Year Financial Plan, July 1963, pp. 10-11.

11. Junta de Planificación. Estudio para determinar la Agrupación de los Municipios de Puerto Rico para Propósitos de Planificación.

12. It should be inserted parenthetically that this comment comes from one of the directors of the present study as a result of her experience in the 1930's when the Department of Education was only beginning to free itself from the influence of the continental United States' methods in education. The establishment of the Second Unit Schools and various adaptations to Puerto Rican needs began then under the leadership of the Commissioner of Education, Dr. José Padin.

13. Puerto Rico Department of Health, Regionalization of Health and Welfare Services in Puerto Rico. Rio Piedras: The Commonwealth of Puerto Rico (Progress Report, July 1, 1958-December 31, 1959). p. 47.

14. ibid., p. 59

15. Philip Hauser, "Man and More Men: The Population Prospects," Bulletin of Atomic Scientists, June 1964, p. 7.

16. Translated from XIV of Analisis de Poblacion, Puerto Rico Planning Board.

17. A.J. Jaffe, People, Jobs and Economic Development, Columbia University Press, 1959.

18. Analisis de Poblacion, Office of the Governor, Planning Board, Table XXXV, p. 106.

19. From remarks by the Honorable Luis Munoz Marin, Governor of Puerto Rico, at Harvard University, June 16, 1955.

20. Gordon K. Lewis. Puerto Rico Freedom and Power in the Carribean, M.R. Press, New York City, 1963, pp. 256 - 257.

21. Commonwealth of Puerto Rico, Office of the Governor, Puerto Rico Planning Board, Eduardo Rivera Rivera, Director Bureau of Public Works, Methods and Procedures in the Preparation of the Four-Year Financial Plan, July 1963, pp. 10-11

MAP A. Planning Regions and Sub-regions as Defined by Planning Board as of 1962.

LEGEND

Region Boundary

Subregion Boundary

Municipality Boundary

CHAPTER IV

GOVERNMENT AGENCY PROGRAMS

This chapter describes the programs of government agencies which we deem to have specific pertinence to this study. The proportions given to the several programs are not to be construed as judgment on their importance. Our purpose is to give a general view of the planning and execution of programs of the Commonwealth Government which will throw light on the reasons for and effects of change in the ten communities of this study. They thus become samples of the local effects of large scale planning as described in Chapter III.

Material for this section has been drawn from interviews with heads of agencies or persons in charge of particular programs, from the official reports of the departments or other agencies, and from general observation.

Department of Education & University of Puerto Rico
Community Education
Isolated Communities
Department of Health
Public Welfare Division of Department of Health
Department of Justice
Department of Labor
Department of Agriculture
Department of Public Works
Puerto Rico Industrial Development Corporation
Electrification -- Water Resources Authority
Housing and Urban Renewal
Administration for the Development of Cooperatives
Administration of Parks and Public Recreation
Chart 2 and Tables 14, 15, 16, and 17 show the application of Puerto Rican Government Programs in the ten communities; and the proportions contributed by the United States government and the Puerto Rican government.

DEPARTMENT OF EDUCATION

This section of the report on the Department of Education is taken almost verbatim from our interview with the Secretary of Education, Candido Oliveras, on April 8, 1964, supplemented by material from an interview with Dr. Martinez Almodovar and Mr. Rafael Bonilla, of Rural Education.

> Since the advent of the American Administration in Puerto Rico, we have been making efforts to apply there the principle of universal education. During this century, or the part of the century that has already elapsed, we have been trying to provide enough teachers and schoolrooms so that no child should stay out of school because of lack of opportunity. However, in spite of all efforts, because of the rapid increase in population, the improvement of living conditions in Puerto Rico, and especially improvement of health conditions, a larger number of children (are surviving) and thus the number of clients increasing, demanding more rooms and educational opportunities. In spite of these efforts, in 1940, for example, only about 50% of the children of school age were in school. In 1952, the Governor and the Legislature of Puerto Rico established (as part of planning) for the first time attendance goals to be fulfilled during the balance of the decade.

These attendance goals were the following: 91% of school children between six and twelve years of age should be in school in 1960, 75% of the school children thirteen to fifteen years, and 41% of school children sixteen to eighteen years of age. These age brackets correspond to ages of children in elementary, intermediate and high school. By 1957, the three goals had been surpassed. At present, more than 80% of the children between six and eighteen are already attending school. In other words, we have at least been able to provide some kind of education for every child who becomes of age and is physically and mentally fit to go into school.

Wrestling with increasing numbers, trying to meet the quantity goals in some instances meant some kind of deterioration in regard to quality of instruction. For example, when there were not sufficient teachers, we had to adopt the so-called double enrollment or two-shift plan (three hours with 31% of elementary pupils in 1962, no problem of this kind in secondary and high schools), or where there were teachers and no rooms, we had to adopt the so-called interlocking system (five continuous hours of school in one room for one group of children during the morning under one teacher - 24% in 1962), and then give hours in one stretch for a second group in the same room under a different teacher in the afternoon.) (Fifty-six percent got less than six hours.)

Another factor that contributed to the weakening of instruction in Puerto Rico was the adoption of the mass promotion system, which

meant that children without the necessary skills and knowledge had to be promoted to the next grade in order to make room for the ones coming behind. It meant also putting in service teachers without the necessary training, having to use materials in insufficient quantities and of a lower quality in the schoolroom, and several other measures which had the result of weakening instruction.

In recent years, because of the high priority given to education by the Government of Puerto Rico and because of the rapid economic growth that has occurred in Puerto Rico, increasing resources have been devoted to education (28% of the total budget). These increased resources have permitted in recent years the start of more attention to the quality of instruction. We succeeded recently in eliminating double enrollment in the urban zones of Puerto Rico beyond the third grade.

In the rural zone, however, we have not been able to reduce it substantially. But we have put in use schemes that we hope will improve the quality of education. The first of these is a new program known as the Rural Education Program, which depends mainly on better supervision in the rural zones of Puerto Rico.

(Ciales, which is being developed as a model for rural education was typical of problems in 1961. The supervisor had up to fifty-eight teachers to supervise. The schools suffered from lack of equipment, etc. Now there are fifty-six itinerant teachers - 150 are needed with constant evaluation of achievement.)

We selected carefully and appointed itinerant principals, so that isolated schools will be visited once every two weeks instead of once or twice during the year as formerly. These itinerant principals are submitted to an intensive training period, so that they can better assist rural teachers to solve the day-to-day educational problems. Together with better supervision, we have been providing more and better books and better school services such as transportation, scholarships, economic assistance of other types, etc.

(There has been a change in the philosophy of rural education. An example of the need for such change is evident from a sample of 700 students where it was found that only 2% or 3% were going into agriculture, 60% went on to High School from the rural schools. The need for new programs both for agriculture and new industry is apparent. The departments of Education, Labor and Agriculture are cooperating, with the help of federal funds, on re-training in the development of a "human resources" program. An effort is made to encourage individual decision so that those who are suited to life in the rural zone can stay; those who wish to move will be able (trained with emphasis on English for those who wish to go to the continental U.S. and agree to go). Specialized local education in the rural zone is being developed, i.e., poultry in Aibonito, tractors in Bayamon, cattle in Ciales)

A second measure that we have been trying experimentally is direct instruction through television directed especially to the improvement of teaching in the rural isolated schools. We started with an English course for the first and second grades. It is difficult to get good models for the teaching of English, not only in the rural

schools, but everywhere in Puerto Rico. Through TV screens, we have been able to put in front of rural children teachers who have the right kind of pronunciation and who may constitute a reasonably good model. Also, we have been able to present before them settings and situations in which English is used as a means of communication. We started these programs with only those two courses, but at present there are twenty-two different direct instruction programs on the air. This year we have only about 300 TV sets in use, but in next year's budget Commonwealth funds have been earmarked for the purchase of 1,000 sets. In three years we hope there will be TV sets in all schools of Puerto Rico. (one set for every three or four rooms in the urban zone.)

We are now trying a new idea in a few schools of the interior of the Island. Since we will not be able to organize isolated schools under the so-called interlocking system, because children may not be able to arrive at the required early morning hours or leave at the late evening hours required under this plan, we will employ a special teacher to teach one subject (English, Social Studies, or Mathematics) to students of all elementary grades. The regular teacher would teach all other subjects, thus increasing the teaching time to four hours daily.

We are also trying to eliminate all the discriminatory practices that were in use in connection with appointments of teachers and distribution of materials to the rural schools. I look forward to the time when in all rural communities we may have complete elementary schools, instead of the present one or two room schools up to the third or fourth

grade. In the larger rural population nuclei we will continue to establish second rural units or intermediate schools, In all instances, we will provide free transportation so that rural children may be able to continue their studies in urban secondary schools.

Three years ago the budget for free transportation of children amounted to $670,000. In next year's budget, the appropriation for this purpose is $2,500.000. About 60,000 children are receiving free transportation from their places of residence to a rural school or to an urban school.

Another new measure that has been applied in our efforts to improve the quality of education is the organization of exemplary or model schools. The idea behind these schools is the following. The Department of Education wants to demonstrate in practice that it is able to organize the necessary factors to provide the kind of education that the parents may aspire to for their children; to show that we have the know-how; that we are able to perform the right kind of educational job if the necessary resources are provided.

There are more than twenty elementary and two model high schools already operating as such or in the process of being organized as such. These model schools provide a full curriculum including home economics, manual arts, music, art, physical education - subjects which are not always provided in all schools. There is a library and a librarian. These schools are organized under the single enrollment plan. Children are grouped according to their level of achievement or academic potentiality into

groups of retarded, gifted and regular children. We select in every case the best possible school principals, which is a very important factor in the effort to improve the quality of education. Emphasis is given to reasoning rather than rote or memory in the teaching-learning process. A very strong community relations program has been instituted in all model schools.

Parents seem to be satisfied with the results of these efforts. For instance, last year three out of every four students who graduated from the Juan J. Osuna High School (in Rio Piedras) passed the University entrance examination. Everyone who applied for admission to the College of Agriculture and Mechanical Arts passed the examination. These results are comparable to those of the best private schools in Puerto Rico. Of course, Juan J. Osuna School serves a neighborhood of middle income or high income families which represent the economic strata that feeds the enrollment of private schools.

Another effort to enhance the quality of instruction is the Special High School Program, being developed with the economic support of the Ford Foundation. Its main features are the following:

Subjects are taught with a higher degree of interrelationship, using either languages or social studies as the linking subject. In other words, when the unit of Early Roman History is being taught in Social Studies, in English and Spanish, students will read literature of the same period. Children are grouped to receive direct instruction or lectures from the most competent teachers in the subject. Then, they are distributed for discussion to their rooms. Discussion in the room is conducted in such

a form as to allow broader participation by all children. Emphasis, again, is on reasoning rather than on accumulation of knowledge. This high school program is being developed jointly with the University of Puerto Rico so as to provide an opportunity for the training of teachers within the same atmosphere. Education students are appointed as teacher aids within this program. They are paid a small fee of $80, so that they may devote additional time to practice during this stage instead of the one semester of practice. In this program, they have two years of practice in the schoolroom under competent master teachers.

We are already making more frequent and intense use of audio-visual aids in the schoolroom. The program has been organized so that the teachers may have films, projectors, TV sets and other media to strengthen and enrich the process of teaching at all levels.

The Vocational Education Programs are being expanded and enriched. Also, additional regular vocational schools have been planned and are being built; vocational shops are being provided in smaller towns. The program is also being expanded so that vocational training is provided to youths who do not meet regular academic requirements. More than 1,000 of these youths are already attending special courses provided for them.

These are some of the efforts that we have been making in order to improve the quality of education. There is reason to believe that there has already been noticeable progress. Of course, there are problems that cannot be solved immediately. We look

forward to the time, and we hope that it will not be a long time, when the teachers' salaries will attain a level in which we will be able to compete for the best talent in Puerto Rico. For us, teaching is one of the key professions in any society. There is no reason why a person with the necessary degree of intelligence should go into another profession because the teaching field may not afford the necessary level of compensation. Together with the improvement of salaries, we hope to be able to improve the quality of teachers' training through better selection, improvement of the curriculum of the College of Education, the elimination of the Normal Diploma - that is, raising the requirements to four years as basic for the preparation of teachers. Also, a better balance between content and methodology.

We look forward also to the future when teachers may not be subject to present fiscal and economic limitations that hamper their work. We look forward to a future when we will be able to produce teaching material that may respond better to the specific conditions and realities of Puerto Rico; material specifically prepared for use in Puerto Rico instead of the mere adaptation of material produced elsewhere.

Of course, in fields such as mathematics and science the material produced for use in other places may be as good for use in Puerto Rico, but in connection with other subjects such as arts, social studies, the situation is different. Our Printing Press and Editorial have made impressive progress towards this end.

Together with the expansion of the regular school system, we hope and look forward to the time when there will be regional colleges in most parts of Puerto Rico. Some of these regional colleges will result as an outgrowth of present high schools or technical institutes. In short, I look forward to the time when we will be able to provide in Puerto Rico a system which will afford education sufficient in quantity and adequate in quality to comply with the constitutional principles that "Every person has the right to an education which shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms."

* * * * * * * * * * * *

To this excellent description of the program of the Department of Education, we want to add the following comment.

The changes in the Department of Education from 1932 to the present are marked also by significant organizational and philosophical differences. Thirty years ago the structure of the department was highly centralized and hierarchical, although, during the incumbency of Dr. Jose Padin, modifications were beginning to appear. These were due, however, to the ability of Dr. Padin to recognize new needs and to give opportunity for the development of new ideas and new plans, rather than to a change in the structure of the department itself. Now the value of a large degree of decentralization is recognized. This is due not only to the connection with over-all planning for the island, with its programs for regionalization, but also is a recognization of the enrichment which comes from the full use of individual initiative and imagination. There is no question, in our opinion, that this change will engender a spirit of experimentation, as well as encourage the incorporation

of ideas now present but capable of great growth.

When Rafael Rico in 1945 withdrew his name as candidate for the position of Commissioner of Education he did so because of the controversial question of the teaching of English which he felt was "not a subject for political interference, but should rightfully be reserved for educators and experts on the methods of acquiring a second language." But, more importantly for the present, he went on to add:

> Puerto Rico needs a new educational policy, not only in the question of English but throughout the curriculum, so that our educational system will really serve the best interests of the community, which is engaged in a far-reaching program of social and economic reform. What I or any other self-respecting educator must insist on is freedom to develop the educational program required by our conditions, without political interference from any source, without strings attached to the position and with ample advice from experienced technicians.[1]

This freedom came only when, instead of a Commissioner appointed by the president of the United States, the Secretary of Education was appointed by the Governor and enjoyed new power in the E.L.A. in 1952. This means that such freedom has been possible only for the last eleven years--a short time to establish an education system which will "serve the best interests of the community." That there is new vision and fresh inspiration behind the recently inaugurated or revised programs is no small accomplishment for such a period.

In view of the ferment today in the whole field of education, we see in all of these changes in the Department of Education, great potentialities for a flowering of ideas and their application in Puerto Rico. We are, in view of the direction of this study, particularly interested in the attention now being given to education in the rural zone where, we believe, many latent possibilities are stored.

The special chapter on the Second Unit Schools, written by Mercedes Velez de Perez, illustrates the new view of the Department of Education on education for the rural zone. It is of central importance to this study. The history of these schools over the thirty year period illuminates the effect of other changes on the rural society: the cultural transition from traditional to modern patterns of living and the new aspirations and needs of a transitional period; the new goals which must be articulated and a corresponding balance between agriculture and industry.

UNIVERSITY OF PUERTO RICO

Chancellor Jaime Benitez said in his annual report (1964):

> (Since May 1955) we have doubled our student body, our faculty, our graduate class, our resources and our problems...during the past thirty years enrollment has doubled every ten years...unless there should be a catastrophe in the life of Puerto Rico there is no possibility of checking the rate of increase in the numbers seeking higher education.[2]

Such swelling numbers indicate the need and the demand for varied personnel in the expanding economy of the island. We believe that it also reflects the prestige which education holds in Puerto Rico and in many cases the intellectual curiosity and the love of learning which represent the highest ideals of any educational system. That the impact of such numbers, an anticipated enrollment of 45,000 to 50,000 in 1974-75, creates innumberable problems is inescapable. Of this increase it is estimated that only about 30% will be absorbed by the growth of private colleges and universities, leaving the heaviest burden on the University of Puerto Rico.

To fulfill its accepted obligation for higher education in Puerto Rico the following proposals have been made in the chancellor's report:

> 1. It (the University) should insist that the concept of regional colleges, so successfully initiated at Humacao, be extended to other sections of Puerto Rico.
> 2. It should provide for the bulk of the enrollment in the first two years in these regional colleges.
> 3. It should keep the educational offering of the regional colleges at the highest level, link it closely with both secondary and higher education, and guard against regional ambitions to convert these colleges into little universities. Similarly it should not permit their transformation into vocational schools. Terminal and short courses should be offered. But their central responsibility should be the preparation of the youth who are preparing to enter their third year of study at Rio Piedras or Mayaguez. It should

be remembered that according to the plan which has been sketched here the regional colleges will be caring for 60% of all the students of the first and second years at the University of Puerto Rico.

4. It should so evolve that both the Rio Piedras and the Mayaguez campuses become each day more vigorous centers of higher education where the dominant tone is set by professional, graduate, research and creative programs.

5. The growth of the Rio Piedras campus should take place exclusively at the level of this third year and above....

6. It is calculated that the enrollment on the Mayaguez campus should increase at a much more rapid rate than that at Rio Piedras. It should almost triple in eleven years. Furthermore its growth should be along academic and professional lines corresponding to its present development, its potentialities for future excellence and the general requirements of Puerto Rican life....

7. The cultural extension programs of Rio Piedras and Mayaguez should continue and expand. The programs of extramural instruction should be taken over by the regional colleges.

8. The expected tripling of the programs in Medicine, Dentistry, Health Sciences and Nursing can be met as soon as the necessary buildings are constructed.... [3]

The total proposed budget for 1964-1965 is $30,309,546.00.

The University of Puerto Rico gives the M.A. degree in the following fields: the Department of Spanish Studies, Public Administration, Social Work, Public Health, Public Health Education, Science; the Doctor of Philosophy in Science, Medicine, Dental Medicine; the Bachelor of Laws degree through its School of Law; and Doctor of Medicine from the School of Medicine--School of Tropical Medicine.

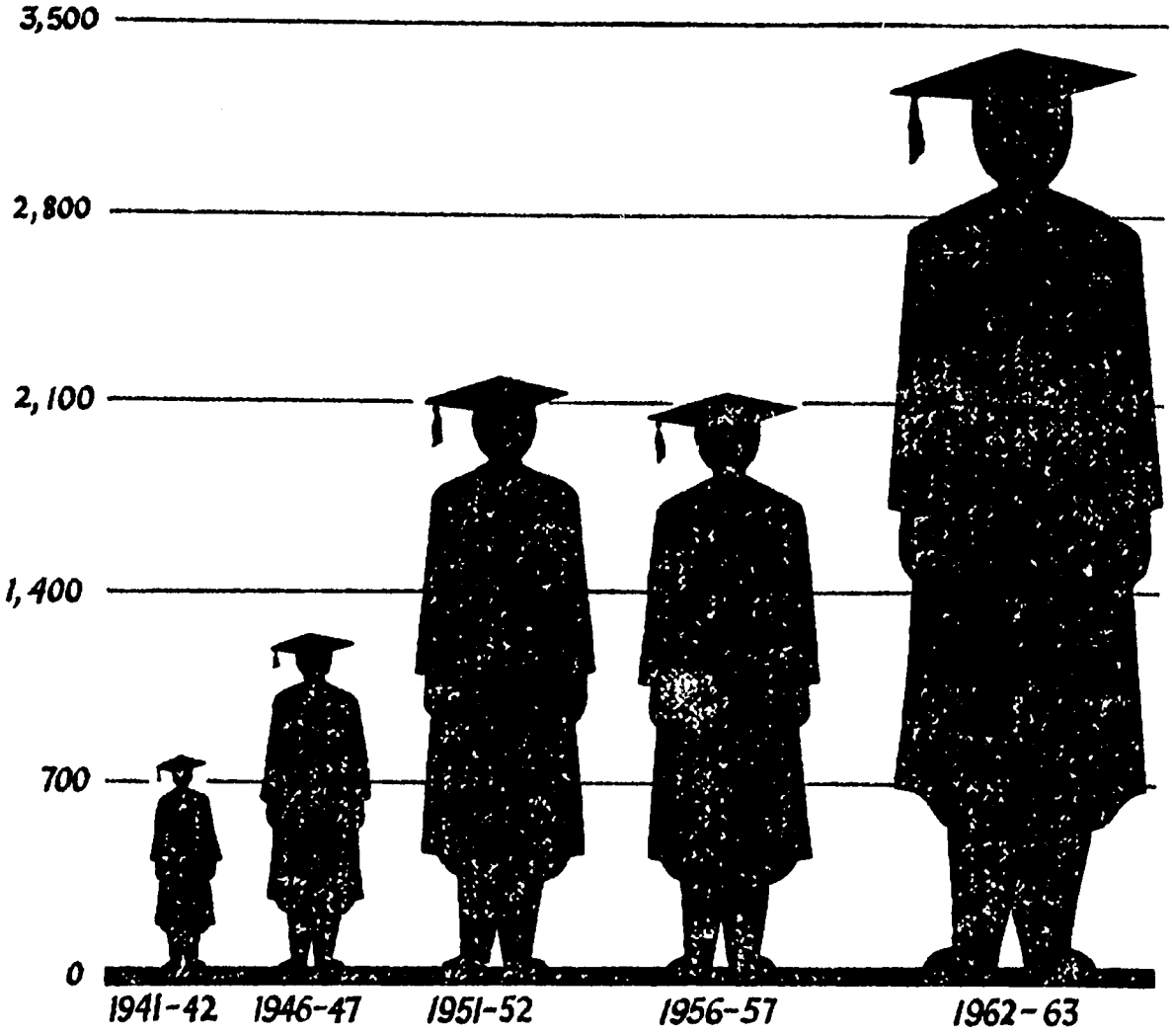
The demands on the higher education system are enormous and controversy is bound to arise as to the best way to use financial resources. What should be the proportions allocated to general liberal arts education, special training for teachers, technical training and graduate professional education? The University now offers six types of bachelor's degrees: Education, Liberal Arts, Business Administration, Engineering, Agriculture and Health Sciences--including Pharmacy.

Decisions on priorities and educational policies are among the most crucial for Puerto Rico's future. They involve not only questions of finance but of organization and emphasis. How can the quality of teacher education be geared to the changing needs of the Department of Education? What is the responsibility of the University for training to meet the growth of automation in industry? How far should the University go in providing graduate work or should its bachelors go to the continental United States or to foreign countries for further professional education?

Some of these questions are also applicable to the recruitment of faculty, which now numbers 1,932--five times its number 22 years ago. During this time, quality, in terms of preparation, has shown a marked improvement--27.7% now holding the doctorate and 50.5% the master's degree.

The scholarships offered by the government through the public schools should be mentioned because of their unique importance to a democratic system of education. It insures opportunity for able students to receive higher education, satisfies the desire of many parents for an education for their children which they are not financially able to provide and gives promise for the quality of future leadership as well as an educational level commensurate with anticipated economic and social development.

Figure 2: Degrees and Diplomas Conferred by the University of Puerto Rico
1941-1942 to 1962-1963



COMMUNITY EDUCATION

One of the most unusual contributions to Puerto Rican development has come from Community Education. This is a Division of the Department of Education but, because of its special character, functions with considerable independence. The description below is taken from the Program of Community Development carried on by this Division.[4/]

In contrast with the first four decades of the twentieth century, the people of Puerto Rico in their rural communities, their small towns and larger cities became increasingly more and more involved in their own political, cultural and economic affairs as they travelled through the fifth decade, the years 1940-1950. Nevertheless, there were clear signs before the ten years were over, that these experiences would have to reach even deeper levels of participation and analysis if the people's commitment to the democratic process was to become the foundation upon which to build the "good life." A bill passed in 1949 created the Division of Community Education within Puerto Rico's Department of Education. The preamble to the law reads as follows:

> "The goal of community education is to impart basic teaching on the nature of man, his history, his life, his way of working and of self-governing in the world and in Puerto Rico. Such teaching, addressed to the citizens meeting in rural and urban communities,

will be imparted through motion pictures, radio, books, pamphlets, posters and group discussions.

The object is to provide the good hand of our popular culture with the tool of a basic education.

In practice this will mean giving to the community the wish, the tendency and the way of making use of its own aptitudes for the solution of many of its own problems of health, education, cooperation, social life through the action of the community itself.

The community should not be civically unemployed.

The community can be constantly and usefully employed in its own service, in terms of pride and satisfaction for the members thereof."

From the start we interpreted the law that created us to mean that we were given the opportunity to help the neighbors of the rural and urban communities of Puerto Rico in their analysis of what it means to think and behave democratically and to make this the foundation upon which to "re-construct" their lives as individuals, as members of a family and as neighbors within their community. We believed that this was the way, the only way we knew, to establish and keep alive an equalitarian society.

Objectives:

1. To help the families of a community to have faith in themselves and in their neighbors and to discover with them the ways to express this faith.

2. To help the neighbors understand that it is their right and responsibility to know and to participate in all matters affecting their communal welfare and that knowing this they can find the way to create a dynamic community supported by their own efforts and contributions.

3. To help the neighbors develop the process of group discussion in meetings where democratic participation is assured and where consensus, reached by agreement based on thorough analysis, takes the place of voting.

4. To help them see that no planning and action by a community can be democratic in its nature unless it is based on scientific study.

5. To help the neighbors examine the old patterns of cultural control, the patterns of influence and power in the society they know, in order that through this examination they may find the way to enjoy fully the freedoms guaranteed to them constitutionally.

6. To help them learn through practical experience that freedom from dependence does not mean the substitution of an independence that rejects all outside contact; that, on the contrary, the opposite of the enslaved condition of

dependence is one of interdependence where all educational technical and scientific help inside and outside the community is sought and shared.

7. To help the people of a community (including their leaders) study, through a living experience, the purpose and role of democratic leadership.

8. To help them come to action, to the solution of a problem as the result of these concerns so that any physical expression of their labors shall be understood not as the end product but as a natural contribution in the democratic order of things.

9. And when the day comes for celebrating the solution of a problem, to help them see clearly that just as the planning and action was theirs, so the speech-making, the laughter and the praising must be theirs. For who can better dedicate a new road or a new school than those who with their heads, hands and hearts helped to build it? In this way, in the words of Walt Whitman, they will understand the nature of past struggles; "that it is proved in the essence of things that from any fruition of success, no matter what, shall come forth something to make a greater struggle necessary."

CRITERIA FOR THE SELECTION OF COMMUNITY LEADERS

1. Was he a man of the people? A man whose aim is to build self-confidence in the individual, must first believe in that individual. We wanted a man of quiet dignity, who spoke of his neighbors as a man like himself. We did not want a man who thought in the "we-they" pattern. We preferred him to live in the country and if he did, to do so by choice rather than by chance. However, where he lived was not as important as how he felt about himself and his fellow man.

2. Could he work in his own community? Contrary to what some might consider good personnel practice, we believed there were no advantages to be gained by uprooting a man from his environment and sending him to a strange community. If for some reason a worker possesses qualitities which make it difficult for him to relate himself to his own neighborhood, they would undoubtedly be the same ones which would make it hard for him to work elsewhere. The man we hoped to find was one who enjoyed working with his own people and would be accepted by them.

3. Was he a happy man at home? We foresaw that the demands of the job were so great that as far as his family went, the only man who could serve with security was one who, being a good husband and father, had the full support of his wife and children.

4. What concerns had he shown for the problems of his community? We wanted a man who had seen himself related to the other members of his community and had been involved in programs of planning and action. However, we were most interested in the way he had been active.

5. What were his attitudes toward authoritarian behaviour? Toward the "poor man's" right to participate? Toward the concept that more land, more education, and more influence is the accepted criteria for leadership? The candidate who showed disdain or lack of faith in the people's ability and right to think for themselves could hardly be successful at the task of stimulating all people, regardless of their station to work together for the common welfare.

6. Was he a secure person? When challenged, did he rationalize, go on the defensive, or discuss the problem with intelligence and freedom? We needed a man of stability. The depth of our interviews, the walks we took with him and the observations we made as he entered new situations gave us some evaluation of his security. However, we had to depend upon the three months of training to bring out a greater measure of this concern.

7. Did he have a set of moral values which he used on all situations and all people indiscriminately? Or was he a person capable of analyzing beyond the single act into the deeper motivations of human behavior? We believed there was no place in our program for the superficial moralist.

8. What was his attitude toward the opinions of others? Was he a man of intolerant partisan views in such areas as politics, labor, or religion? If so he would not be our man, for we were looking for one who would permit self-expression in others; a man free to work with all.

9. Was he a static personality or did he possess the capacity for growth? This was a basic concern. If he had this potential for growth and was not threatened by critical evaluation, he could reach high levels.

Training is an interrelated part of a program which puts as much importance on selection and supervision as on training. The same district supervisor and central office staff member who began the initial hunt for the man and who sat in the selection interviews, will later be present at the training session and then continue with supervision in the field.....If a man has the basic personal equipment for the job, he will find that each moment of stress is a door to new understanding.

TRAINING OBJECTIVES

1. To help the individual come to a clear understanding and acceptance of the principles of democratic life in a community. This is the paramount objective and becomes the guiding star around which other aims revolve. He will get this understanding by study and through personal experience, not by being told.

2. To examine at depth in the Puerto Rican society the cultural patterns of behaviour that have a direct relationship to democratic community life. We will help him dig into the roots of the attitudes of the people. He must come to an analytical, balanced approach to the people and their culture, at the same time keeping the warmth and understanding which make him one of them.

3. To look into himself and his own conduct with enough freedom and flexibility to be able to put a mirror to his actions, reflecting for his scrutiny everything from the way he talks to his children to the way he approaches a farm laborer as compared with the way he presents himself at the home of the land owner. Only to the degree that he is able to do this can he be objective in looking at others and thus get to a deeper sense of democratic principles--principles which otherwise would remain at an entirely theoretical level.

4. To create in him, as a reult of continuous self-examination, a positive desire for personal growth based on an honest understanding of himself, his convictions and his motivations in relation to the aims of his work.

5. To help him through his own reasoning, to understand his role as an educator. There are intensive discussions of what it means to help a person come to his own conclusions rather than to be led to conclusions pre-determined for him. The details of the process of reasoning and the process used in helping a person come to his own conclusions are thoroughly discussed. Extensive use is made of role playing. At this stage, however, we put much more emphasis on the validity of the educational process than on the methods and techniques of the educator. These he will discover as he begins to work in the community and during later in-service training. It is better that the discovery of techniques and methods is postponed, for then he will be free to examine them and accept or reject them in the light of his experience. A firm foundation of beliefs is essential to prevent a man from falling into formulas.

6. To help the group organizer understand the structure of leadership within a democratic framework, learning to recognize the elements present in his culture which can contribute positively to the development of sound leadership and to identify the forces at work against it.

Because of the nature of his past experiences in a culture where the roots of leadership are authoritarian, the trainee will need not only his initial orientation period, but years of practice and many in-service training periods before he can come at full grips with this problem. A few weeks of training with a democratic group discussion leader can easily be put aside as theoretical when confronted with the stress of on-the-job decisions. A considerable amount of role playing is undertaken, with the aim of helping him evaluate his own concepts. In this healthy learning device, he gets many new slants on himwelf.

He may discover, for example, that he is so irritated at having sinned as a do-all in his own community, that he acts now toward such a leader by ignoring him or by pounding on him hard. He may find he is so deeply moved by his new awareness of the evils of dependency that he wants to choke this knowledge down the throats of neighbors who do not seem to care.

7. <u>To help the trainee understand the meaning of group discussion.</u> Of all the subjects brought to training, this is perhaps the only one where all the members of the group become involved in a totally new endeavor. Previous experience in this area has not provided them with a background upon which to make sound conclusions.

The analysis of this subject is left purposely for the end of training. By then the group has achieved some measure of cohesion, and each man is convinced of the value of good group discussion techniques from the struggle each has experienced rather than from text-book theories. The trainees are then able to analyze the behaviour patterns they will gradually shed. They look back with new awareness at the man who has blocked the progress of the group by forcing acceptance of his ideas without discussion; at the man who, appearing to listen, is really waiting for a pause to plunge in himself; at the man who hears the truth but argues against it because it is more comfortable emotionally to misunderstand. And in these men, each sees himself. He can now laugh at his earlier compulsion to spotlight himself by a beautiful but meaningless speech. And he is amused when he remembers how angry he became when the group rejected one of his brilliant ideas.

In fact, it often happens, that by the end of training, both supervisor and group organizer have become so sensitive to democratic procedures in group discussion that during the initial field experience, his fear of acting undemocratically produces passivity when he could and should be more dynamic.

But we think it better to take this risk, for it is easier to develop conscious techniques with a man who begins with this kind of sensitivity than with one who ignores the implications of autocratic action.

8. To help the field worker organize a program of work, keep adequate records, and have a positive attitude toward supervision. This is not introduced until the end of training and is presented then in such a way as to leave the worker free to contribute to its formation. When a plan of work is finally developed it is the result of group thinking. The records the group organizer agrees to keep are those which he and his fellow workers decide are essential to the task. The supervisory relationship is evolved from many periods of discussion in which he contributes his share of the thinking. In this way, the organization of his job comes about, not arbitrarily, but in a spirit of analysis and study. The careful planning by the group organizer of each day's activity; his weekly schedule based on a three month's program of work; his well-kept, functional records, many of them reading like diaries; the high level of supervision that prevails throughout the program, all attest to the fact that this approach is the most successful one.

In spite of the fact that this program requires time because of its special forms of community education and training of leaders, it shows (at the end of 1963) technical help given for the continuation of 71 aqueducts, 62 roads, community centers and school construction. Fifteen thousand families had benefited from the program in 162 communities, 159 projects had been carried out at a cost of $2,813,000.00 of which $1,440,000.00 came from government general funds, plus 117 projects, $1,898,000.00, state cost $939,000.00. Thirty-nine projects were in process. In the budget for 1964-65, $700,000.00 is appropriated for work in 70 communities.

An Experience in Training

Let us now describe a training "vignette" in an attempt to give you some idea of how it begins and how it is developed.

One morning, at the appointed hour, a dozen newly selected group organizers arrive at our central office in San Juan, coming from different parts of the island, their suitcases in their hands. We then go together to the place where we will live for the next eight weeks. It is a camp--Camp Yukiyu--located in a quiet, rural setting in the eastern hills. The district supervisor and central office staff members who will later work with the trainees, join the group for as much time as their heavy schedule permits.

When the trainees gather for the first session, they are asked to introduce themselves to each other. Each is asked to tell a little about his life. Then they are asked to state in their own

words their idea of the aims of the program. One can see immediately a predominent assumption made by all, without exception. Each has now become a "student." Each is hoping to perform well so that he can "pass." His fellow trainee is a source of anxiety, lest he prove to be a better man. Each is striving to establish a direct relationship with the teacher.

However, they cannot quite harmonize this goal with the situation in which they find themselves. For example, the chairs are placed in a circle, with no prominent place for the teacher. The group is addressed in a friendly, relaxed way, and members are asked to come to an agreement as to what they think are the aims of the program. As each speaks, he is not able to determine whether he has said something that will "place him at the top of the class or flunk him." Furthermore, as the days go by, they come to realize it is a one-sided sort of affair. They are only asked about what <u>they</u> think. They have not been able to hear what the training officer thinks or to have her tell them what they ought to be thinking.

Some feel irritated, others desolate and others confident that the training officer will finally come through. Others decide to wait. But, as time passes and no answer seems forthcoming, there arrives a moment when the group feels at such a loss that they show their irritation openly. At this point, no matter what hour of the day, a break is called. It is the first moment in their short time of living together that they feel like a group, with a common cause--

the ineffectuality of the teacher. They talk about it together and when they return a spokesman raises the point formally and asks, "What is your definition? You are the only one who knows." But the training officer answers that she has no definition, none that she can pass on to them; that the important thing is for them to come to an agreement satisfactory to all. In some training groups this has been accepted, (sometimes with the inner conviction that they have an incompetent teacher, but one who must be appeased) and they have continued to struggle.

Not every group accepts, however, and on one occasion the turn of events became more dramatic. The group was small, only six, but up to this point all had shown a greater than usual anxiety to get the right answer from the teacher. They had allowed only two members of the group to answer most of the questions. One of these was a bright young man who kept boasting of his high academic preparation. He had become exceedingly patronizing toward the others, especially toward one man who had only a few years of schooling. This second man was older. He had been successful in his community as a political leader and he resented the younger man's effort as a valedictorian. They struggled continuously to be the first to answer a question. But, as the discussions progressed, both were confused that neither was proclaimed the better man.

When the inevitable moment came, the moment described in the paragraph above, it was the older man who had been chosen to confront

the training officer with the petition that they be told whether they were on the right path or not. He went into high praise of the learned teacher and said how much they appreciated her wisdom and judgment, but that the group was restless to hear the truth from her. The trainees then joined in and talked about their resentments and frustration. Finally, the training officer asked them, "Why do you think you have been allowed to suffer so?" The bright young man answered, "Because you wanted to get to know us better. You wanted to find out if we could really do this job." The training officer then replied, "Well, if that is so, this condition has gone on long enough. I will therefore end your suffering by giving you the definition." The two "leaders" jumped up from their chairs and shook hands in congratulation. They exclaimed that this was what they had told the group--to relax and answer questions in a way that would help the teacher see that they were intelligent and then wait for the moment when the teaching would really start.

Now they all sat, alert and expectant, notebooks in hand, ready to copy "the definition" from the blackboard. The training officer rose, took up a piece of chalk and wrote the following: "The aim of this program is to orient communities in projects where political leaders are helped to get the masses of the people to cooperate physically. The ultimate aim is to strengthen the good leaders, to identify those neighbors who do not work hard, and thus, assure the continuation forever of the present government."

Most faces fell as they read and reread what had been written. One quality we had clearly recognized in the selection of all these men was their non-sectarian view of life. Now they felt really trapped. The older man was the first to react. Did the "teacher" mean to write "masses"? Was she using the word "political" advisedly? It only took an aggrieved look to make him feel apologetic. When another man asked if by "government" the teacher meant "political party," he was sternly asked, "Are you suggesting I might be wrong? This definition is very clear. More than that, it comes from me." All hastened to assure the training officer that they understood the definition perfectly. "Well then," she said, "I hope you will all memorize it. We will continue our discussion tomorrow."

On the following morning it was obvious they had spent hours together the previous evening trying to come to terms with the paragraph. The session started by asking them if they had learned it by heart. The one member who had kept most silent from the beginning, burst out at this point with the remark that he could learn nothing he did not understand. And then, as though the dam was broken, they all talked at once. They said it was not so much the meaning of the words, but the implications, that disturbed them. Finally, the older man said quietly, "If I had known this was the aim of the program, I would never have joined it." The room was silent. "Neither would I join a program with such aims," the training officer said, just as quietly. Suddenly, the place was a bedlam.

What did she mean? Had she not stated clearly that these were the aims? How could she now criticize them? Was she perhaps playing games with them? When the room had quieted down and they were able to hear again, she said, "As long as you continue to accept the opinion of another without using your own heads; as long as you consider the act of thinking to be a suffering, then anyone can play games with you."

They were struck dumb for a minute, and then they understood. The rest of the morning was spent in a slow recounting of every step, from the first day up to that very moment. They were able to examine their actions, and remorselessly they held the mirror to their motivations. They had moments of hilarity as they reviewed their empty struggles as "good" students in competition with each other, but they had many more times of serious probing into the way they had behaved. At the end, one of them stated, "I thought I had wasted three days in getting nowhere. I have never spent my time better, even if at the moment I did not know it." The group agreed to try to reach a definition of its own. And then the discussion took on the pattern that usually takes shape in the group--the one which is now described below.

At the beginning the trainees describe their aims in the future work in terms of a dream; a dream in which they see the rural people someday enjoying the advantages of modern life through aided self-help programs. They talk of roads, aqueducts, schools, adult

evening classes, and they talk of their function as one to help the people put their backs to the task. During such a discussion they keep looking at the face of the training officer for a satisfied smile or nod, but they find only an interested, non-commital expression. They assume they are on the right path for they do not hear her disagree. The definition is then written on the blackboard: "The aim of the program is to help a community solve problems such as roads and aqueducts by working together and making the best use of the help they can get from their government." They are then asked, "Are you satisfied with this definition?" They nod in agreement, and at this stage they do not doubt that this is the "true definition." They have worked it out together. However, there is always one in the group who does not feel satisfied. He raises his hand and says timidly, "I thought our work was different." But he is blasted into silence by the irritation of the others. They feel he is slowing the progress of the discussion. He dares not pursue the point, for neither he nor his companions have yet learned what it means to be good participants in a discussion. The training officer's quiet probing into what he meant, leaves him at a point of panic lest he show himself dumber than the rest. He almost wishes he had not spoken in the first place.

The group then moves confidently to the next point; to illustrate how this aim would be accomplished by working it out through role playing. Before the role playing begins they are asked to agree

on the stage setting. A simple map of a community is drawn on the blackboard. A few lines sketch in the jeep trail, X marks are used to indicate homes along the trail. "How would you begin your work here on the first day you visit the community?" Somebody suggests to contact the leaders and the influential people since they are the ones who can get the others to cooperate. Another suggests meeting with those leaders after visiting each in their homes. Most agree and proceed to enumerate those they would consider important enough to visit and to bring together. The only disagreements come over such details as when they would call the meeting. By now they are eager to act out the home visits and the meeting and they take their roles willingly.

As before, there is always the non-conformist who bursts out in protest at what he thinks is wrong. No other neighbors will be visited in the community, he says. But again he is told by the others to relax, that those people will come later when the group organizer and the leader know what work they will be assigned. And since only a few days of training have gone by, such a man will only look at the training officer and finding no apparent support in her expression, he will prefer to keep quiet. The drama starts, with a trainee playing the role of the group organizer and the training officer playing the role of the leader being visited.

As she plays her role, the training officer shows that she has no faith in people. Her responses reveal a high degree of

authoritarianism and her manner is subtly condescending. However, she is in favor of the new venture, and promises full cooperation. Needless to say, the tramplings upon the rights of people go unheard, for the trainee who is acting as the group organizer is mainly concerned with how well he is playing his own role. Meanwhile, the rest of the group is watching and nodding with approval at the expert way he is handling to leader--smooth praises to soften her up, easy acquiescense to avoid her wrath, bright maneuvering to get her to cooperate. Finally, the two agree on the problem they think is the most urgent, but they are careful to emphasize that this is only tentative. They must consult others.

The group feels satisfied with results thus far and suggests that the role playing move on to the next step. The leader and the group organizer now join hands to visit a number of carefully selected persons of influence. Next comes the meeting of these selected neighbors. After a few speeches full of praise for each other, they get down to business and enumerate the problems of the community. A decision is taken as to the most urgent of these, and a plan is made to solve it. And soon, it is clear that these men of influence have been chosen well by the leader and the group organizer. There is among them the man who has land to give; the man who can knock on any agency door; the one who can get the mayor to lend the bulldozer and, of course, those who have money and can be persuaded to donate some of it. All, of course, have their own

constellation of followers and thus all can contribute one thing in common: the hands of the people for the work that must be done.

The next step is the "community meeting" where the people are told what the project will be and the work that they will do. They are efficiently organized and then dismissed until word goes out that calls them to their duty. At this point in the drama most members of the training group feel certain the project will be a success. They cannot see how such "scientific" planning can fail. And they smile happily at the training officer, who at this point calmly calls for a break in the discussions. She feels the need of coffee, hot and black, but they assume it is for the well deserved rest they have earned. They cannot guess that the more placid the training officer looks the more she is bursting with the challenge of helping them bring vision to eyes that see not and hearing to ears that hear not.

After the coffee break, the group is asked to move into another aspect of the situation. A question is asked with great care to make it sound casual and relaxed. Would it not be worthwhile now, to take a more detailed look at all the people who live in the blackboard-drawn community? The group returns to the map. Each trainee is asked to think hard and to answer with sincerity some simple questions. Who are the people who live along these mountain trails? Is Juanito, the barefoot illiterate living on that remote hilltop, a human being? Does he have a head of his own?

Can he think? Would it be biologically possible for Juanito to think with the head of Don Jose, the leader--or vice versa? Is Juanito part of the community? Has his barefootedness anything to do with his capacity to reason? Does he have a right to express himself? Is he a "peon" good only for fixing the road or should he participate in the thinking and planning? How does it happen that this chance has been denied him thus far?

The same questions are asked about the people whom nobody takes seriously; the young man who helps his father farm, the widow with six children, and the squatter without land enough for a garden. Slowly, sometimes painfully, the group moves toward a positive answer for each question. It is necessary, in some groups, to dwell longer on an analysis of the differences between the capacity to think and the opportunity some have had to acquire knowledge through academic preparation. This is particularly true if there is in the group a person whose security comes from collecting credits the way squirrels do nuts; someone for whom an additional year of schooling places him just one step further above those he considers unworthy.

In the end, however, the process of reasoning provides the answers for the group. And an interesting observation is that although every trainee has been absorbed in the discussion, no one has yet seen any direct connection with the previous role-playing. Finally, the training officer announces she has a tough question for

the group. She goes to the blackboard and writes the following: "If you admit that Juanito, Dona Maria, Pedro and the others have a head of their own, if you agree that they too have a right to be included, how in the name of progress, have you shown such a lack of respect for these neighbors that you have ignored them completely in your little drama and fixed everything with the leaders alone?" In some groups, at this point, you can hear a pin drop. In other groups, the place explodes in protest. But whatever the reaction, a halt is called, a good long one, for each man needs to find a quiet corner where he can curl up, lick his wounds and ruminate.

By the following day, it is time to come together again--to relive the role playing and try to understand where and why they have gone off the track. After much analysis, they are at last able to face the basic question squarely. Is it possible to think of a program that would have as its goal the development of a faith and respect so deep in each person in the community that the natural conclusion would be that every citizen would consider it his right and responsibility to safeguard with his neighbor all matters concerning the common welfare? And in the minds and hearts of people, could it be that they would consider the upholding of this faith a goal as important as the solution of any physical problem? And could that be considered the true aim of community development even if no work projects were underway?

This is the time for clear thinking. The days pass and gradually the response reaches a level of sober agreement. Little by little each trainee begins to examine his earlier years. His analysis, shared aloud with the others, helps him look into those patterns within the culture which influenced him to act the way he did. He tells of how he served the people using methods which unconsciously denied them the right to think and speak. He sees that he was so concerned with material progress that he often sacrificed the beginnings of democratic growth. When this self-study is over, he is asked another landmark question: does he feel that the basic principles and objectives of the program are so important that he can leave the old ways and dedicate himself to this work forever?

And, at this point, no one can answer for him. He must speak for himself. If his case is serious, almost he alone can find the solution. If he comes out of it at peace with himself, there is little doubt that he will ever return to old ways of thinking and acting. But if he holds back and cannot accept a world in which the Juanito's are equal participants in the democratic process; if he shares with Don Jose the belief that humanity will be saved through the intervention of the "natural"leaders, then he will prefer to think of these other concerns as "naive." Sometimes, when this happens, and he cannot be honest with himself, the doubting trainee squashes down his disagreement and thus postpones the inevitable day. Finally, however, he cannot stand the test and decides to leave, seeking

satisfaction in other ventures where he is free to think first of himself and his personal success.

Training, or a better word, "learning," never stops for anyone at any level. In fact when the iritial weeks are over and he goes to the field, the group organizer may well feel that he is just beginning. He brings his concerns to supervisory conferences, to monthly district meetings and to frequent periods of in-service-training. In an atmosphere of mutual give and take, he is helped to grow into a man conscious of everything that is happening around him, alert to analyze all of it and to deal with it as a part of his learning. Instead of turning to ready-made formulas, he draws upon his own experience and the experience of his fellow workers, submitting every thought, word and deed to a careful examination under the spotlight of his basic principles. In this way he finds the strength to meet, not only the great physical task that lies ahead of him but also the intellectual, emotional and spiritual demands which will be even greater.

COMMISSION FOR IMPROVEMENT OF ISOLATED COMMUNITIES

The work of this Commission grew out of an experiment started five years ago by Professor Lydia J. Roberts, in charge of Special Programs, Department of Home Economics, University of Puerto Rico.

A pilot project was set up in the isolated community of Dona Elena located in the mountains, eight or ten miles from the main road An examination was made of the residents of this community which revealed serious nutritional lacks. To meet the needs, of which this was evidence, a three point program was established (a) three meals a day for children, (b) education of children and parents in the essentials of nutrition, and (c) work with families to increase home production of food. Success in this experiment and the interest of the Governor led to the establishment of the Commission, consisting of seven members appointed by the Governor and including heads of the Departments of Health, Public Works, Agriculture and the Planning Board. During the first year a home economist and an agronomist were employed to live and work in each of five isolated communities. With additional appropriations there were, by 1964, twenty-one communities carrying on this program with fourteen more to be added.

The project has now become a cooperative one with the United States Army Tropical Research Medical Laboratory, under the direction of Dr. Irwin C. Plough, Colonel, U. S. Army. This has made available the necessary services of physicians, biochemists, technicians and dietitians as well as food transportation and equipment for workers.

In addition to the scientific value of the nutritional studies and of the program specifically directed toward the needs revealed,

some of the results have been the building of roads, provision of latrines, parasite control, housing improvement, better gardens and better breeds of chickens raised. All of this has created a desire for improvement in living conditions and has raised standards of living.[5/]

DEPARTMENT OF HEALTH

Probably the most striking figures showing the effects of the new programs as they apply to human life, come from the Department of Health.

Dr. Juan Pons, former Secretary of Health, in an address [6/] to the Convention for Social Orientation, May 1962, describes the "peaceful revolution" which has taken place in the field of health. Much of his address is incorporated in this report on health.

The decade of the thirties added three calamities to the existing poverty and high mortality and morbidity of the island. These were the hurricane of 1928, the world-wide depression, with its strong impact on Puerto Rico, and the hurricane of 1932. But this same decade saw the birth of a new concept of the function of a democratic government in the field of health. "Although all the civilized world showed an accelerating decrease in mortality rates, the progress of Puerto Rico in public health has no parallel in any other country." From 1930-1960, life expectancy rose from 40.65 years to 69.56; mortality rates decreased from 19.7 per 100,000 (1930-1939) to 6.7 in 1960; deaths from diarrhea and enteritis from 409.5 (1930-39) to 39.5 in 1960: tuberculosis from 212.5 to 29.3; malaria 54.1 to 0; infant mortality 88.3 to 43.7.

Before the decade of the thirties four events of significance had occurred: "the establishment of the tuberculosis

hospital at Rio Piedras, the organization of the first Public Health Unit, the creation of the School of Tropical Medicine and the institution of two small district hospitals, one in San Juan, the other in Ponce."

In 1933, with the coming of the PRERA, and federal relief funds, much was done to promote health programs. But, as Dr. Pons says, these programs were not immediately incorporated in the regular health institutions of the insular government but became a base for later expansion and coordination.

The war years, because of the difficulty in importing drugs and the slow-down in professional training, brought deleterious effects in one direction but, on the other hand, advantageous changes through the improved understanding of personal and home hygiene on the part of men returning from military service.

As Puerto Rico moved into its period of greatest change--1945 to the present--it has shown great acceleration in every aspect of the health program: organization, facilities, use of new scientific resources, number of doctors and nurses (the number of doctors has quintupled since the decade of the thirties), provision of potable water for rural areas and general improvement in living conditions.

Many problems remain. Morbidity rates and infant mortality, chronic diseases, etc., must be reduced, but the emphasis given to health needs is reflected in the annual budget appropriations. In the recommendations for 1965, 13% of the total budget is to be devoted to this use. In 1956, 19,399 persons received publi

assistance because of total or permanent incapacity. This points clearly to the relationship between health and welfare programs; it represents 88 per 100,000 of the population (New York State has a rate of 26 per 100,000). That many of these people could, by health and rehabilitation programs, be removed from the category of the unemployable is highly probable. Dr. Pons also emphasizes the relation of rapid socio-economic change to mental and psychosomatic health problems and, as everywhere the life span has increased, to the problems of old age.

Dr. Pons ends his paper by pointing out the need for more preventive work and more rehabilitation. This is certainly the greatest challenge of our age in the field of health and its aim is to give that greater vitality and well-being which frees the individual for maximum development.

This was corroborated in an interview with Dr. Guillermo Arbona, Secretary of Health, who said that the present emphasis is on rehabilitation--physical and mental. The work of the Division of Public Welfare adds, through its work with the disabled, aged, etc., to the improvement of health and the plans of this division for more rehabilitation should bring great improvement to general well-being.

It should be pointed out that services other than those under the Department of Health have made marked contributions to the health of the Puerto Rican community: nutritional services,

milk stations, school lunches, breakfasts for pre-school children, surplus food distribution. In regard to hookworm, he said that the effects are largely off-set by improved nutrition; the latrine problem is largely solved and there is an increasing number of toilets and septic tanks being installed. Infant mortality has been reduced to 40 per 1000 but should come down to 20. (It has come down from its highest index of 120 per 1000). The TB test at its highest incidence showed 86%, now it shows 3%. Better water is needed in isolated regions. Polio vaccine was given in one week-end to 96% of one-half million children under six years of age. The same was done for the second injection, using the schools.

In relation to the regions set up by the Planning Board, it has already been stated that boundaries vary according to the present needs of the various agencies. Through increasing coordination of programs they may eventually coincide. The boundaries for the Department of Health are based on practical considerations--where people travel, where they buy. There are five: East, North, West, South and Southeast. Coverage comes through District Hospitals, Health Centers, Public Health Centers and Public Welfare Units (see section on Welfare). Evening clinics are now being established for working people. This also means more efficient use of plant and personnel.

Five of the registered hospitals have nursing schools with 200 to 300 graduates a year. The training is subsidized by the

government which requires that work be given in return. This provides personnel for the rural zone.

Service is free in all the units of the Health Department. Two-thirds to three-fourths of the population receive such services. The Secretary favors a compulsory health plan (which is not approved by the Medical Association) which would make payments possible for the increasing number of persons able to pay. Only 23% of the population is covered by voluntary health plans (Blue Cross, Teachers' Assocation).

In 1948, federal funds were made available to provide enough beds for an integrated hospital system according to the standards set up by the federal government. By 1962, the insular government had appropriated 19 million dollars for this purpose, 51.7 million by the federal government, and municipal and private funds amounted to 18.5 million dollars.

Table 3. Health Program 1962

	Existing	Needed	To be Built
General Hospital beds	6171	10,782	4611
T.B. Hospital beds	1773	2,688	915
Psychiatric hospital beds	2769	11,980	7211
Chronic hospital beds	321	4,792	4471
Health Center beds	397	7,188	6791
Public Health Units	51	80	29
Diagnosis & Treatment Centers	122	240	118
Rehabilitation facilities	2	32	30

The government planned in 1963 to finish all started work, providing 740 additional beds. They also plan to start new projects for 588 more beds.

Publicity has made people conscious of their need and the possibility of using hospitals, health centers and health units. This has brought significant changes in expectations and consequent demand for health services. Eighty-two percent of all births now occur in hospitals.

Where thirty years ago, the sick were carried--often down mountain trails--all the way to the municipal hospital or the doctor, now the ambulance can be called and gives good service. Of course there are still isolated communities with poor access roads but good roads are closer to all communities and new access roads are constantly under construction. The number and quality of health services is immeasurably greater than it was in the thirties; the despair associated with illness has become hope. The ambulance, to dwellers in the rural zone has become a symbol.

TABLE 4. DEATHS AND DEATH RATES, BY DECADES FROM 1930 TO 1959, AND FOR 1960 FROM ALL CAUSES AND BY DIARRHEA AND ENTERITIS, TUBERCULOSIS MALARIA AND INFANT MORTALITY

		DEATHS				DEATH RATES			
		1930-39	1940-49	1950-59	1960	1930-39	1940-49	1950-59	1960
General Mortality	(1)	33,426	29,262	18,045	15,841	19.7	14.5	8.1	6.7
Diarrhea and Enteritis	(2)	7,034	5,552	2,059	934	409.5	226.0	92.5	39.6
Tuberculosis	(2)	4,880	4,287	1,322	692	287.6	212.5	59.3	29.3
Malaria	(2)	2,946	880	22 (1950-54)	0	145.6	54.1	1.0 (1950-54)	0.0
Infant	(3)	7,597	7,558	4,654	3,325	125.5	88.3	58.6	43.7

(1) per 1,000 population (2) per 100,000 population (3) per 1,000 live births

TABLE 5. LIFE EXPECTANCY AT BIRTH, IN YEARS

1903	1910	1920	1930	1940	1950	1960
36.66	38.17	38.46	40.65	46.01	60.85	69.56

PUBLIC WELFARE

For the people of Puerto Rico, unemployment remains the chief economic problem, depending for its solution on the further development of industry, agriculture, service and professional occupations. If the rate of economic growth, including capital investment, construction, agricultural reforms and resulting consumer demand, continues according to the planned schedule, present unemployment can become an asset--an adequate labor force, the necessary condition for future investment. At present it is a liability because loss of income results in deprivations the state is bound to relieve in some way.

> This conception of public responsibility of the whole for the part used not to be a majority one; it was therefore not official. It is rapidly getting beyond argument. There is not quite yet universal acceptance of the principle, and there are recurrent efforts to relieve government of such responsibilities; but the main trend is evident to all who are not blind. Even reactionaries hardly ever, any more, suggest the abolition of minima: they do not suggest either that the support of government may not be necessary at strategic points, for sagging sectors of the economy: and there is little objection to the principle of social services. The argument, nowadays, is mostly about their desirable extent. 7/

> Public welfare is not only committed by its very nature to the camp of democracy; it is also essential to its functioning as a social system by the recognition of common humanity and basic dignity it extends to individuals at their point of greatest vulnerability. 8/

Because the function of public welfare has not been sufficiently integrated with the planning process, there has been until recently evidence of a lack of imagination in the program. This has been, in our opinion, a failure on the part of the planners to see the constructive possibilities of a public welfare program which could do much more than take up the slack, and a failure on the part of the

Public Welfare Division to see its role as an integral part of a great economic and social movement. As in many parts of the United States, the recognition of the economic as well as social importance of rehabilitation has been slow. Reasons are many and understandable. The New Deal legislation which brought the Federal government fully into the field of welfare (and gave the label of "Welfare State" to both friends and enemies) dealt with the manifold aspects of human need which were revealed by the depression crisis. In Puerto Rico, during the days of the Puerto Rico Emergency Relief Administration, there was an effort to see the "Needy" cases, to whom relief and work were given, in the context of the whole economy. This involved the organization of constructive work projects, through the recognition of the desire of Puerto Ricans to work for what they received, the possibility--though too seldom the realization--of preventive programs and the hope for the incorporation of emergency action in plans for future development. Relating this directly to public welfare, a bill was introduced for the creation of an independent Department of Public Welfare in the (then) Insular Government. This bill was not passed and public welfare services have remained as they were before, a division within the Department of Health.

The close relationship between health and welfare is easily seen and many advantages have accrued to the welfare program from its association with the Department of Health which is remarkable for its achievements in public health and individual care, for its experiments in organization and its excellent research programs. The breadth of view may be illustrated by some quotations from the Second Annual Report, Social Science Program of the Department of Health, the grants for which have been given "for the support of research in anthropology, sociology and social psychology having planning implications in

social welfare and health..." 9/

> ...the chosen line of work of the program may be defined as the study of the determinants and consequents of given forms of social structure. Any given activity may be characterized by the channels in which its interactions are normatively concentrated. The patterning of these channels is presumed to be understandable not only in the sense that interactions along it are predictable, but also in the sense that such patterns come into existence as part of a sequence of circumstances and that once in existence they create predictable limitations on the possibility of various kinds of further change. The analysis of structure leads, in many of our studies, to an examination of social categories and self-images as substantive forms in which structure is expressed. 10/

The description of one study will illustrate the value and practical applications to be drawn from such work in developing programs for a period of rapid social change:

> 1. WM "Family Life of Working Mothers" NIMH grant M-5870 (1/1/62-12/31/64: $89,573) Director: Howard R. Stanton. Assistant Director: Elia Hidalgo. Sponsoring institution: Commonwealth Department of Health Data collection phase.
>
> A study of the effect of maternal employment in a rapidly industrializing society, based on participant observation and interviewing in a sample of twenty neighborhoods including 3,000 households. The research is designed to examine effects of maternal employment on the child's personality, the marital relationship, and the mother's self-image. We are investigating the ways in which these effects depend upon the social context--in particular, the family and neighborhood structures. Since other studies to date have found relatively little effect, we will also be looking for adaptive mechanisms which may permit the family to absorb even major changes in time--use without consequent changes in patterns of relationships. 11/

The conclusions of this study can be applied to situations new to Puerto Rican society where many women are working, for the first time, outside their homes. Such a study also has a bearing on the question of day care for children of working mothers, for aspects of the current child welfare program. It can at this point be only a path-breaker but it makes clear the value of research projects the conclusions of which

can be tested in new situations as the effect of industrialization spreads and touches more and more the family relationships and the place of the family in society.

A study such as the one briefly described would seem to have a closer connection with welfare than with health, but it shows that the Department of Health is involved by interest as well as organization in questions of welfare. The question must be raised, however, as to whether or not an independent Department of Welfare would be in a better position to establish similar and equally close ties with the Department of Labor in view of the close connection with employment; with Education through many mutual concerns such as vocational education as an important factor in rehabilitation; with CRUV because welfare and housing are closely inter-related.

> Public Welfare in Puerto Rico has achieved a degree of development which would well warrant its administration in a separate department as in virtually all parts of the United States. Not only does it involve a wholly different discipline from that of public health but its particular role in government needs to be understood in its own unique terms. Public welfare has its own place in the total range of governmental functions and needs, in my opinion, to take its place in its councils, joining its voice and its experience to those of the other branches of government service. [12]

Our present study is concerned with organization only because of its importance to planning. It is our opinion that more could have been done in the development of human resources--what has been done has opened up many possibilities.

The following is an example:

A new program (April 1964) for school subsidies to children of families receiving public welfare allowances is an illustration of the close connection between welfare and education. The program is an ad hoc plan set up to make education possible in the lowest income families;

it is a recognition that education is essential to progress toward the good society. It applies to children above kindergarten level and includes vocational education.

The primary purpose of the special program is to make it possible for children of poor families to stay in school up to the age of 18 and for those who have left school, for economic reasons, before this age, to return. It is hoped that, though the additional allowance is small, it will encourage parents to keep their children in school. It will help to provide incentive to the children and young people, themselves.

Such a plan involves complicated budgetary operations because it requires constant adjustment to relief rolls but it is an important sample of the effort of the Division of Public Welfare to provide "a series of social services which will lead to the rehabilitation of recipients of economic aid and to the prevention of dependence."

The most constructive, inclusive and exciting program of the Public Welfare Division is the proposed ten year plan which presents practical recommendations for the rehabilitation of families with annual incomes below $2,000.

Philosophically, this ten year proposal represents revolutionary thinking of a kind which is beginning to permeate the social work field everywhere. It is revolutionary because it means that public assistance may truly become public welfare; because it sees a new integration with the whole economy, the whole culture. In the continental United States, the process of change is slow, it meets with resistance from vested interests, from sentimental residuum from a past of charity and philanthropy; from the difficulties involved in the fundamental reorganization of agencies and new demands for cooperation. Puerto Rico will face

these same problems in greater or less degree, but the new proposals represent practical plans which have been worked out by a deliberate confrontation of the existing situation and attention to the points at which new approaches can be made, taking the presently possible steps in the progress toward the goal. The way in which the question arose, which led to the ten year plan, is interesting. 1 3/

In 1961 the San Juan Star published an editorial calling attention to the paradoxical situation in which 600,000 persons were receiving surplus food from the Federal government (U.S.Department of Agriculture) and, at the same time, there was an unemployment rate of 12% despite an unmet demand for agricultural laborers.

In response to this editorial, the governor asked that a study be made to throw light on this situation and to analyze the problem which it presented. The study was made by a committee on which the Department of Labor, Public Welfare Division of the Department of Health and the Planning Board were represented. The function of the Department of Labor was to gather additional information concerning families included in the statistics of both employed and unemployed, checked according to their receipt of public assistance or surplus food. The Division of Public Welfare verified this information through all Public Welfare Units in the island. The final analysis was made by the Planning Board and the Office of Statistics of Public Welfare.

Summary of the report follows:

> 1. 42,000 of the 96,000 families receiving public assistance had no members capable of working. They were women caring for young children, the disabled, or the aged.
> 2. In those families receiving public assistance, where there were persons able to work, the persons employed were, for the most part, unskilled workers whose wages were lowest in the wage scale of the island.
> 3. The percentage of unemployed among members of the families receiving public assistance was higher than that of the population as a whole. 1 4/

Some statistics regarding population figures might be appropriate here: size of families on relief is 5.7 members compared to 4.8 for the general population. Eleven percent (10,560 families) have ten members; 20,156 of the thirteen to seventeen year age group are among relief families; between the years eighteen to twenty-nine, there are 10,415 young people on relief. All could benefit from centers of work and study.

This study urges that a high priority be given in socio-economic planning to its recommendations. This would be essential if its premise were accepted: "that the program of public assistance in Puerto Rico be limited to those families which do not include employable persons." This is the desirable goal which can only be attained by a gradual process, because, to quote again from Elizabeth Wickenden:

> Economic planning in a democratic setting must take into account the total population, the total income available for its support, and the most equitable way to divide this income in order to meet the needs of all. Whether the struggling jibaro shares his pot of beans and rice with his own and his wife's aged parents, the orphaned child crying at the door, and his unemployed neighbor or whether the struggling government finds the means to finance a public assistance program the charge against the economy is still there. [157]

The proposed program includes: orientation for youth, community education and cultural activities, religious orientation, subsidies to selected institutions; legal services for the protection of minors and abandoned children, legal services to families; work with school drop-outs in connection with programs of the Department of Education; day-care for children of working parents, training programs, medical services, services to the blind through training courses, scholarships and library facilities, courses and recreation for the aged; services of care and training for the mentally retarded. Special services are also planned

for drug addicts, mentally disturbed children and delinquents.

The present services of the Division of Public Welfare and those proposed differ in purpose and emphasis rather than in actual subjects covered. The proposals would require organizational changes and, in some cases, new legislation. To make such a program effective will require a new orientation for public welfare personnel and should draw them closer to the problems of planning. This, in turn, will require greater cooperation with other departments of the government and greater understanding of economic factors. Public assistance can no longer be looked upon as the caretaker for those left behind in the socio-economic progress of Puerto Rico; it must become, in a new sense, the adjuster of those least able to adapt themselves to change, as the discoverer of new potentials among the under-privileged, as the searcher for causes of maladjustment, as the agency best able to understand the deep effects of poverty.

This brings us face to face with the most difficult problems of a planned society in a democratic framework: the protection of the rights of the individual who must find his place in a period of change and rapid industrialization, involving the transformation of traditional to modern patterns; the decision on priorities with the necessity for understanding on the part of legislators and the public. Should money be appropriated and at what point, for rehabilitation of the delinquent child in order to make him a contributing member of society or should it be spent for greater opportunities for the normal and constructive members of society? Should new factories be built as investment for increased employment opportunities or should the money be spent on raising present welfare allowances? Economics, like individuals, must make those adjustments which make existence possible.

In this plan the hope is expressed that with the inauguration and establishment of the programs recommended, only the unemployables would receive relief and its suggestions are designed to put into the labor force many who are now not only unemployed but unemployable due to disabilities of various kinds--physical incapacities, lack of training, inability to adjust to new situations, old age and the general effects of a life of poverty. It is obvious that such a plan depends on job opportunities and education and, in the long-run, on some form of population control. The connection with other programs as well as the rapid implementation of the recommendation of the Welfare Division is, in our opinion, one of the most important areas for governmental planning. It is such apparently Utopian goals which have inspired in Puerto Rico the most practical programs: to eliminate poverty, both physical and spiritual, is one of the great dreams of our age.

In Puerto Rico the estimate of families with incomes of $2,000 or less is 209,000; 23% of these (48,550) have less than $500 annual income.[16] Because many of the rural areas present problems of poverty, because many from the country move to the cities in the hope of finding employment or a fuller life, but often end up as slum creators and slum dwellers, there is an urgency to deal with these matters.

Again we see the difficulty for the planners in making decisions on priorities and the complexity of financing which is involved. Competent personnel is essential. Much will depend on the enrichment of the social work training, on collaboration between social work and the social sciences, on the effective uses of research projects carefully designed. Those competent to do the constructive work required, must have opportunity to use imagination, must relate techniques to ideas.

Under its regular program (through July, 1963) the Public Welfare Division of the Department of Health is responsible for the operation of all programs--Federal and Commonwealth--in the welfare field. This means that it meets all Federal requirements for matching funds and additional funds from the Commonwealth budget.

Table 6

Public Assistance

This is a program of direct economic assistance to families.

	Total	State	Federal
Administrative costs	$2,560,346	$2,560,346	
Direct Aid with Matching Fund	17,195,000	8,020,000	$9,175,000
Direct Aid without Matching Fund	200,000	200,000	
Emergency Aid	100,000	100,000	
Medical Services to the Aged	200,000		200,000

CHILD WELFARE - This program is designed to provide services for the development of children in their own homes, health and psychiatric services, for institutional care, for foster homes and adoption, for orientation of children who leave institutions. Underlying these activities is the fundamental purpose: Education of the community to prevent problems from arising or becoming acute, and to keep children in their own homes.

FOOD DISTRIBUTION - A program of the U.S. Department of Agriculture for the distribution of food to recipients of public assistance, to patients suffering from tuberculosis or cancer, and patients in prenatal clinics, to children recommended by Public Health Units, to institutions of public welfare and other non-profit institutions. The Commonwealth government provides funds for all costs of distribution, personnel, rent of distribution centers, transportation and vitamin enrichment. There are seventy-eight distribution centers for food, 218 milk stations. Pounds of food distributed (1963) amounted to 96,592,289 to 688,820 persons

Table 7

Amounts budgeted for Child Welfare, Services to the Disabled, Institutions

Child Welfare	Total	State	Federal
Total Administrative Costs	$871,054	$409,928	$461,126
Total services	665,685	583,362	82,323
Total Budget for Child Welfare	1,536,739	993,290	543,449
Services to the Disabled	48,999		
Total - Public Welfare Budget	$22,316,421	$12,383,515	$9,932,906
(Exclusive of Institutions)			
Institutions			
Children's Homes Total Budget	$664,948	$646,542	$18,406
Industrial School	591,574	587,700	3,874
Juvenile Homes	204,054	196,305	7,749
Treatment Centers for Boys	84,817	84,817	
Boys' Camps	63,620	63,620	
Institute for Blind Children	105,265	105,265	
Home for Blind Adults	102,336	102,336	

as well as hospitals and other institutions and 761,264 pounds of milk. This obviously supplements substantially the allowances for public assistance.

A limited staff, until recently, could not do an adequate job. The situation has been relieved by new provisions (1962-63) of the Social Security Act giving additional funds for the aged and lowering the age limit, by increased incomes of families (budget based for those truly eligible), special policies based on real needs of the family. The last of these is based on a division of the family into two parts: the nuclear family; the extended family (additional members of the household). By estimating the two groups separately, deducting contributions of earnings by those employed, and then combining, the total has been reduced by 10%. This is also a way of making accurate estimates of the total number who make up the household.

In 1958, needs estimated at $80 per month per family (5.7 members in welfare families as against P.R. average of 4.8) were divided: 45% for adults, 33% for children.

Before 1958 - example -		
Estimated need	$80	
45% of $80 =	36	
Less $20 for private income	-20	
	$16	paid
After 1958 - example		
Estimated need	$80	
Less private income	-20	
	$60	
45% of $60	$27	paid

The new formula gained $11.00. The study was repeated for the extended family. This may close 10% of the cases and allow, on the same budget appropriation, $3,000,000 for other uses.

This means that some of the restrictions in services, which had been necessary because of budget deficits, can now be taken off. The Federal government allows discretion in deducting the first $10 earned.

The new program for rehabilitation would make possible further reduction of relief costs. Labor Departments and Veterans' Administration cooperate on social insurance agreements; there will be work-shops by region and municipality with a coordinator to observe and report, and working projects under the Board of Vocational Rehabilitation cooperating with Public Welfare. Public Welfare now has liaison with Fomento and with Public Works; also programs with the Department of Education, Rehabilitation and Vocational Education for Public Welfare institutions and for children from welfare cases. The hope is also to work with adults.

Whether or not the ten year plan of the "Bienestar Publico ante el Proposito de Puerto Rico" is completely put into effect organizationally, it is a clear indication of a changed point of view. The emphasis is already on rehabilitation. This appears in many reports and documents of the Division on its various current programs. This does not mean any diminishment in the importance of the individual but rather an enhancement of his value, seen in the context of his potential contribution to the economy and to the whole material cultural and spiritual growth of Puerto Rico.

TABLE 8. PERSONS SERVED BY THE DIVISION OF PUBLIC WELFARE (from the Statistical Office).

	PUBLIC WELFARE PROGRAMS	at end of quarter Dec. 31, 1962	at end of last quarter Sept. 30, 1962	at end of same quarter last year Dec. 1, 1961
I.	Public Assistance			
	Cases	117,176	117,863	121,602
	Persons	292,887	293,000	299,565
	Adults	110,457	110,995	114,519
	Children under 18	182,430	182,005	185,046
	Average payment per case latest month	$11.47	$11.47	$11.48
	Total spent in latest month	$1,347,284.75	$1,353.658.25	$1,391,996.00
	Applications pending	2,733	3,513	3,745
II.	Child Welfare			
	Families	6,161	6,066	5,899
	Children under 21	14,455	13.029	10,195
	Community	12,645	11,229	8,501
	Foster Homes	1,235	1,218	1,149
	With "amas de llaves"	386	330	159
	In public institutions	1,557	1,523	1,466
	In private institutions	253	277	228
	Children waiting to receive services	1,520	1,540	1,528
III.	Other Services			
	Home for Blind Adults	96	93	97
	Blind receiving instruction at home	146	147	136

Statistical Office
February 19, 1963

CHART I. DIVISION OF PUBLIC WELFARE, DEPARTMENT OF HEALTH

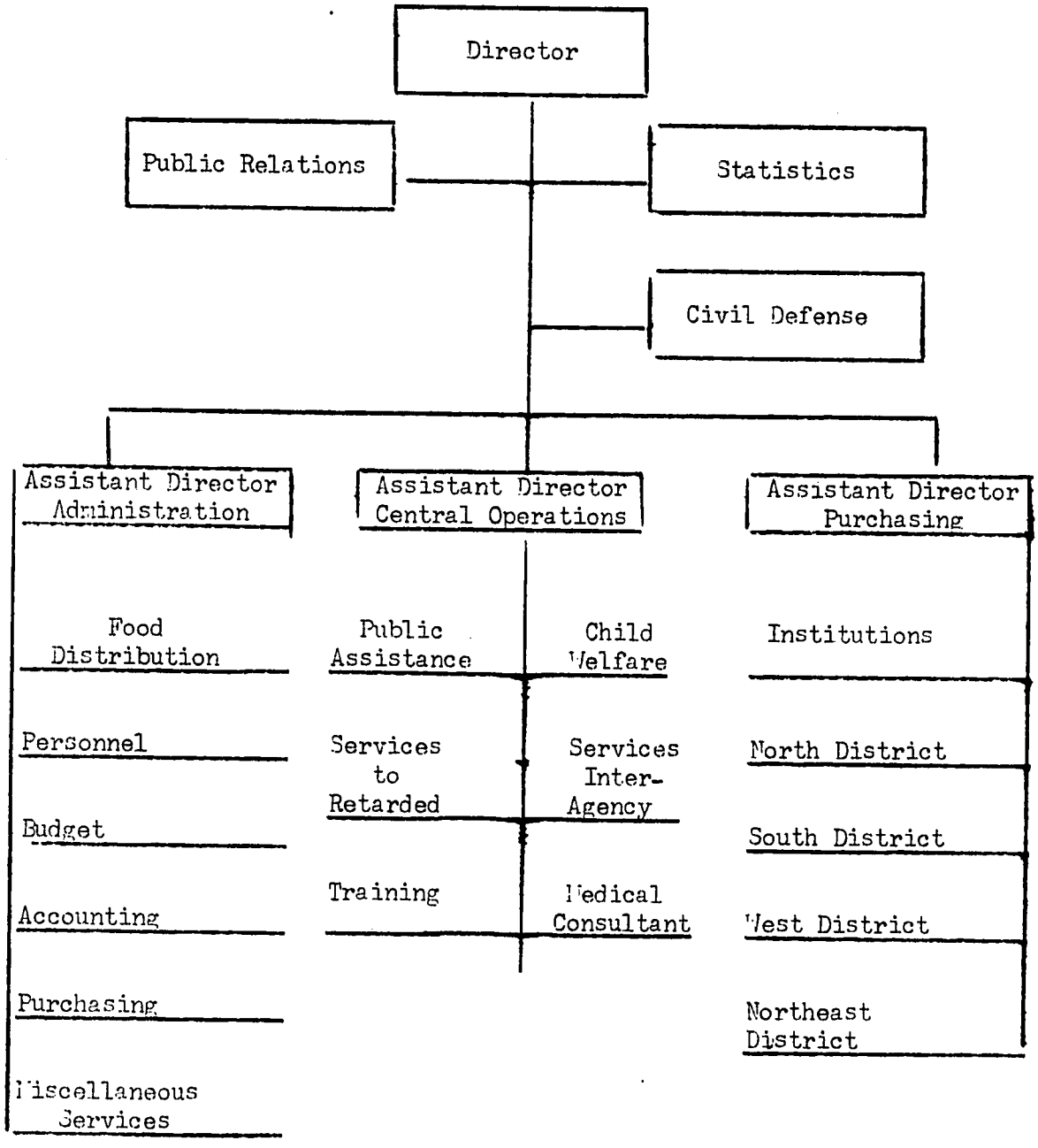


TABLE 9: STATE OF EMPLOYMENT OF CIVILIAN POPULATION - EXCLUSIVE OF INSTITUTIONS - WHO RECEIVE ASSISTANCE OR WHO DO NOT RECEIVE ASSISTANCE

	Total		Not Receiving Aid		Receiving Aid or Commodities	
	Number	%	Number	%	Number	%
FAMILIES	495,600		376,100		119,500	
PERSONS	2,392,700	100%	1,713,700	100%	678,900	100%
Civilian population 14 years or more not in Institutions	1,416,300		1,055,100		361,200	
Available workers	628,710	26.3	506,300	29.5	122,400	18.0
Employed	539,200		442,300		96,800	
Unemployed	89,500		64,000		25,600	
Outside of labor force (housewives, disabled etc.)	787,600	32.9	548,800	32.1	238,800	35.1
Less than 14 years	976,400	40.8	658,600	38.4	317,800	46.8
Percent of unemployed		14.2		12.6		20.8
Rate of Participation in Labor Force		44.0		48.0		34.0

Source: Division de Bienestar Publico, Junta de Planificación, San Juan, P.R., Study of State of Employment of families Who Receive Public Assistance or Federal Commodities in Puerto Rico, July 1961. September 1962, p. 7.

TABLE 10. DIVISION OF PUBLIC WELFARE STATISTICS, JUNE 1964

Receiving	Number of Families	Number of Recipients	Percent of Population
Public Assistance	78,557	273,273	11.6
Child Welfare Services	7,141	18,830	0.8
Federal Commodities	117,235	674,586	28.7
(Population reported, Puerto Rico, 1960 Census = 2,349,544			

TABLE II. MEDIAN WEEKLY FAMILY INCOME, TYPE OF ASSISTANCE, URBAN AND RURAL, JULY 1961

Type of Assistance	Median Weekly Family Income Total	Urban	Rural
Average of Total Population (families)	$17.99	$29.80	$11.78
Families in both programs	4.44	4.07	5.16
Families receiving public assistance	4.02	3.67	4.23
Families receiving only commodities	14.22	23.41	12.00
Families not receiving help	28.10	35.40	15.33

DEPARTMENT OF JUSTICE

Services in the Court system are of great importance. Puerto Rico faces the same problems which characterize many present-day societies and has recognized the need for services both of prevention and rehabilitation in dealing with the whole question of crime--its causes and its treatment.

The following services are offered to the Superior Court:

Family Relations: This program was established to help unify the family through counseling--cases referred by courts or other agencies and by request of individuals for services.

Five thousand, one hundred and forty-two cases were accepted during the year 1962-63.

Program for Minors: The function of this program is to provide social services to minors in collaboration with the Superior Court "to provide the orientation necessary to their welfare in harmony with the public interest." In 1962-63 this service was given to 5,719 cases.

Juvenile Probation: Over 4,161 cases received help and adjustment through probation officers.

Supplementary psychological and psychiatric services are offered and 357 psychiatric, 147 psychological, and 15 neurological evaluations were made.

DEPARTMENT OF LABOR

In an interview with Secretary of Labor, Frank Zorrilla, he defined the goal of the Department of Labor as "adequate income for everyone: the ideal: that this income should come from work in which a man or woman can take pride." This statement would be endorsed by all the countries of the world today where the need and the right to work are recognized. It has a special meaning in those countries which are facing a rapid industrialization without a long period of gradual transition and where the social effects often mean the transformation, at varying rates, of an agrarian society into an urban industrialized society.

The problem of unemployment is the core of the economic problem for Puerto Rico today. This fact appears repeatedly in this report. It is at the center of all planning; it affects all decisions on priorities; it has a special poignancy because its effects on human beings are so clearly seen.

In countries already industrialized there is a concentration on other questions: automation, the psychological effects of monotony in work, the use of leisure. In Puerto Rico it is understandable that these questions are secondary, that attention must first be given to the goal of jobs and the effect of wages on standards of living. To the laborer, the agregado, the cane worker, a factory job brings the hope of many satisfactions.

These satisfactions are actualities for thousands of workers now. The effort of Fomento to place factories throughout the island and to relate location to regional planning gives promise of a better balance between the growth of cities and the development of life in small towns and country. The departments of Education and of Health are conscious of their responsibilities to the new society in training and facilities. The Department of Agriculture, through the Programes Socialies, has been instrumental in introducing the parcelas and small farms--a way of life which already offers a transition for the agricultural workers of the past from their work as "agregados" to factory workers or new types of agriculture. This means not only a new type of community (described elsewhere) but, with new facilities for transportation, it also means an available labor supply. Puerto Rico is, through such programs, planning for the future. Increasing mechanization in the sugar industry, growing industrialization and mobility will be bringing new problems but they may be ameliorated by the foresight evident in current planning for the future. The changes which have already come have brought new freedoms to many--freedom to move from place to place, to select a job (though still limited by circumstances and financial necessity); better health, more leisure, less worry.

In 1936 the Department of Labor under Commissioner P. Rivera Martinez, published a report of over 600 pages on Social Legislation

in Puerto Rico. This book describes forms of labor in Puerto Rico from its earliest colonization through the changing and growing sense of responsibility, expressed in laws dealing with labor, up through 1936. This again points to the fact that the roots for recent growth were well established in earlier times.

Two forms of forced labor existed in colonial times:[17] one where workers were under agents, the other, African slaves. In 1503 the Spanish Crown authorized the use of Indians to work on construction, in mines and in agriculture, under Spanish overseers. The conditions of work, and the kind of work, to which the Indians were totally unaccustomed, led to rebellion on the part of the Indians, who were then declared slaves. "By the year 1542 the Indians had practically disappeared from Puerto Rico due to illness, exhaustion, death or emigration to neighboring islands."[18] The importation of Negro slaves was authorized in 1501.

In 1869 the new Spanish constitution extended to Puerto Rico freed slaves, guaranteed the right to work, the right to assemble, freedom of speech and other civil rights. Following this the Civil Code, also extended to Puerto Rico, regulated contracts, specifying protective measures for workers.

This background, with both its positive and its negative connotations, is important. The class system, growing out of slavery and a system of forced labor, represents the negative aspect, as

far as the development of democratic society is concerned, but, on the other hand, we see in the latter part of the 19th century and immediately preceding the change of sovereignty from Spain to the United States, a recognition of human rights which went far in its promise of new freedom for labor.

No single subject could illustrate more clearly than the field of labor what the change in sovereignty meant to Puerto Rico--socially, economically and politically. To follow the history of labor--legislation, union organization, the culture of the worker--carrying on the work done by Vicente Geigel Polanco, would provide new insights into the whole process and meaning of change. It is important to note that in 1936 laws on the books covered such subjects as a joint resolution to stimulate handwork and native industries; the creation of a Tobacco Institute; cooperation with the federal government in housing construction; fixing of interest rates on debts; creation of a Vocational Institute for the Blind; accident and occupational disease security; pensions for government employees; a Board of Child Welfare; Reform School, establishment of the rights of employers in case of strike; plan for the organization of the Labor Department.[19]

It is obvious that the Department of Labor has had, from its inception, a broad conception of social responsibility. The poverty of the island in the 30's, the fact that this was before

the New Deal and that therefore the federal government made no contribution, meant that many programs were extremely limited in their operation. Nevertheless, the vision was there, the needs were recognized, the legislative program was developed for Puerto Rico. This represents in practical form an example of adaptation to the introduction of modern capitalism with its accompanying problems, and a psychological and social preparation for what was to follow at the time of the governorship of Tugwell and the establishment of the Commonwealth with the leadership of Munoz Marin.

The following quotations, taken from Fernando Sierra Berdecia,[20] throw further light on the goal and organization of the Department of Labor.

> The constitutional provisions, the statutes which make of them legislative mandates for both the Executive and Judicial powers, the jurisprudence that is being established by the courts of justice; the specific program of administrative action in each area of direct governmental action; and the action of the labor unions through collective bargaining--encouraged by the government--make up in a coordinate whole the public labor policy in Puerto Rico. (p. 3)

> The public labor policy of Puerto Rico embraces two fields of action; (1) governmental initiative through legislative action, or action taken by virtue of the law, fixing and enacting protective standards for labor; and (2) the initiative and action of the organized labor movement strengthening and extending governmental standards through collective bargaining. (pp. 3,4)

The effectiveness of any public policy must be evaluated in the light of the problems which arise from its establishment and introduction. In the development of the public labor policy in Puerto Rico we are faced with one fundamental problem: that of unemployment. Workers are divided into two groups. Those who are employed and the unemployed. Unemployed workers are those who, being able and willing to work, and in search of gainful employment, cannot find it. While a worker is unemployed, he is not receiving direct benefit from the public labor policy, nor from governmental efforts, nor from collective action on the part of labor unions; and when his unemployment is permanent, due to lack of employment opportunities, his social need reduces and limits his enjoyment of his civil liberties and rights. The total absence of purchasing power in an unemployed worker affects the economy in general, and, in particular, the contractor of goods and services and the workers who for remunerative wages made the article or render the services. (p. 4)

The Government of the Commonwealth of Puerto Rico has entrusted the introduction and development of its part in the public labor policy to two agencies, namely: the Department of Labor and the Labor Relations Board, which operate separately in their respective jurisdictions. (p. 8)

The Labor Relations Act of Puerto Rico and the Board which administers this law are the instrumentalities created by the Legislative power to guarantee these collective rights to workers. Because of the fact that the National Labor Management Relations Act of 1947 (Taft-Hartley Act) has jurisdiction in Puerto Rico, the range of the Puerto Rico Labor Relations Board and the Labor Relations Act is limited to agriculture and Government instrumentalities that operate as private enterprises. In Puerto Rico the Taft-Hartley Act is being applied in the same way as in the territories and the District of Columbia, which involves interstate commerce as well as commerce within the Commonwealth. At present we are trying to clarify the so-called "no man's land"--those industries over which the National Labor Relations Board has no jurisdiction and in which our jurisdiction is doubtful. (p. 9, 10)

The New Minimum Wage Act establishes that proceedings before the Board and the Minimum Wage Committees named by the Board be of a quasi-legislative nature; and that the public hearings be conducted as public consultations, in which all interested parties and persons have the opportunity to present their information and data we well as their recommendations. The Wage

Committees, when they deem it necessary, may allow the counsellors of the parties to question witnesses for a greater clarity of the issues involved and for the benefit of the committees themselves. (p. 11)

The Minimum Wage Act provides that the Board shall revise the minimum wages of all industries, including those which produce articles for interstate commerce, at least once every two years. The U.S. Fair Labor Standards Act of 1938, as amended, establishes that the Federal Wage and Hour Division must revise the minimum wages of all industries engaged in the production of articles for interstate commerce at least once a year. This means that in one two-year period there are three wage revisions for those industries which produce articles for interstate commerce--one by the Puerto Rico Minimum Wage Board and two by the Federal Wage and Hour Division. (p. 11, 12)

The twenty-two mandatory decrees in force when the new Minimum Wage Act was approved, in June 1956, covered around 280,000 workers, and had increased their income by approximately thirty-three million dollars a year. The new Minimum Wage Act of 1956 was itself responsible for an increase in the income of around 238,000workers (in the season of greatest industrial activity) to the tune of fifteen million dollars a year. The nineteen decrees approved under the new act cover around 110,000 workers, increasing their income by nearly $12,000,000.00 yearly. (p. 13)

The Constitution fixes the regular working day as of eight hours and provides that only through extra compensation, which will never be less than 1-1/2 times the normal wage rate, as specified by law, may any work be done in excess of this daily limit. Act No. 379 of May 15, 1948 limits the working day to eight hours in any period of twenty-four consecutive hours, and the work week to forty-eight hours. (p. 14)

The functions connected with the enforcement of legislation on wages and hours and working conditions; the act providing for compensation in cases of unjust discharge from employment; the one providing for rest-periods at half pay for maternity purposes before and after childbirth for working mothers; and those which regulate the employment of women and children, are carried out by the Department through the Bureau of Labor Standards and the Bureau of Legal Affairs. (p. 14)

The program of the State Insurance Fund provides the following services:

(1) Unlimited medical aid and hospitalization.
(2) Compensation for the duration of temporary disability while the worker is under medical care.
(3) Compensation for permanent, partial or total disability
(4) Compensation to beneficiaries in cases of death.
(5) Physical rehabilitation services.
(6) Vocational rehabilitation opportunities. (p. 30)

The table of occupational diseases was increased through the inclusion of nineteen additional diseases with a provision which establishes that in addition to the occupational diseases included in said table, any other diseases contracted in the course of the work as a result of a hazard peculiar to the industry, process, occupation, or employment, and as a result of the direct exposure of the worker or employee to this hazard, if they are contracted within the twelve months prior to the date in which the first signs of disability are observed, are to be considered as occupational diseases also. (p. 31)

There are in Puerto Rico several programs of social security against industrial hazards: (1) insurance against work accidents; (2) the U.S. Old Age and Survivors Insurance; (3) insurance against illness or death of chaufferus working for pay; (4) unemployment compensation in the sugar industry; (5) the Employment Security Program, which will start benefit payments in January 1959, and which is at present collecting employers' contributions. This program will cover over 200,000 workers in manufacturing and service industries, excluding agriculture, domestic service and homework. This program, within the economic limitations of Puerto Rico, follows the same structure and philosophy of unemployment security as in the United States. It is a sister-plan to an employment service which actively negotiates employment for the unemployed. (p. 28)

The industrial expansion in Puerto Rico can be determined through the following statistical data: In 1940, compulsory work accident insurance administrated by the State Insurance Fund covered 9,000 employers with a payroll of $75,000,000. Today, this same compulsory insurance against work accidents covers 37,000 employers with an insured payroll of around $475,000,000. We must also take into consideration that the first minimum wage act was approved in 1941 and that from that date on, whether by the Puerto Rico Minimum Wage Board, or the U.S. Wage and Hour Division, these wages have been

revised very frequently. With each new wage order, and each new decree that is issued, there are new violations, as is to be expected, which are continued until the employers become more familiar with all the legal implications of these standards. Many cases arose when the eight hour legislation was put into effect, and also, that which guaranteed workers one rest-day for each six days of work. (p. 23)

Technological progress is essential to the economic development of a country in order to increase its industrial productivity, and to enable it to compete legitimately with other manufacturing areas. This increase in production is indispensable to raising the standards of living of all the citizens. The introduction of technological improvements is, therefore, necessary for the economical development and the welfare of the people....The increase in production: (1) yields greater wealth; (2) augments the necessary capital for new investments and thus creates new employment opportunities for the unemployed; (3) reduces noticeably the cost of production, thereby permitting increases in wages; and (4) makes price reductions to the consumer possible, in both goods and services. (p. 33)

Regardless of what has been said previously, it is a fact that in its initial period, technological advancements in businesses and industries already existing, produce unemployment and suffering to the displaced workers and their families. It is necessary to reduce this suffering to a minimum, until the economic expansion produces its result of direct benefit through the increase in jobs and in wages for the workers. (p. 33)

Puerto Rico presents an unusual picture of economic development. The industrialization program has created thousands of new employment opportunities. The new industries which are being established on the Island usually start out with all the technological improvements which science can provide. In the case of these new industries, technology or mechanization do not produce unemployment, since in each newly established industry each occupation which is created is an additional source of employment to those already in existence on the Island. On the other hand, the businesses which were in operation before the industrialization program was started, be they agricultural, manufacturing or service industries, have to become modernized. Only in this manner can greater production, lower production costs, higher salaries, and reasonable prices to the consumer, be attained. Besides,

in no other manner can these industries compete legitimately with similar enterprises which produce for the same market. This modernization will inevitably cause technological unemployment...

Employment security programs are necessary, and they have been created to guarantee to workers a minimum income and the continuation of their purchasing power when they become unemployed because of reasons beyond their control. (p. 34)

It is my belief that a public policy should be adopted to the effect that technological advancements be introduced in a planned system, so that they will not cause--as far as possible--abrupt changes, that may displace workers in great numbers. As far as is practical, these innovations should follow the normal rhythm of the economic expansion of the country. (p. 35)

It is my opinion that industry, organized labor, and the Government should work in mutual agreement, anticipating the introduction of these changes, so that the technological advancements, the plans for social compensation and the creation of new employment opportunities may be coordinated and developed simultaneously. (p. 35)

The government of Puerto Rico neither encourages nor discourages the migration of Puerto Rican workmen to the United States or any foreign country; but it considers it its duty to provide the proper guidance with respect to opportunities for employment and the problems of adjustment to environments which are ethnologically alien; and it is likewise its duty through such guidance of Puerto Rican workmen who migrate to the United States and other countries, to endeavor to reduce to a minimum the natural problems of adjustment arising out of any migratory movement of this nature. (p. 25)

The working conditions for migrant workers are specified before they leave the Island. After the workers leave Puerto Rico, the Migration Division's offices located in the United States keep a close watch on the progress of adjustment of the workers to their new jobs. (p. 26)

Puerto Ricans, as American citizens, enjoy complete freedom to move from one locality to another in the United States. Any Puerto Rican who wishes to leave the Island to go to the mainland, can do so whenever he wishes. Migrants who leave the Island on their own initiative are furnished information and guidance by the Employment Service as to any problem that

> may arise on their arrival, as well as to food, climate, clothing, etc. (p. 26)
>
> The Department also arranges for the workers to pay the lowest possible rates for transportation, under the guarantees of comfort and security established by the government of the United States and Puerto Rico. It advises employers on the kind of food that Puerto Rican workers prefer, to make them feel more comfortable and adjust to their environment more easily. (p. 27)
>
> Agricultural workers in the United States have never been covered by protective labor legislation, which has been limited to workers and employees in non-agricultural jobs. They have been specifically excluded from such legislation. The worker's contract which is approved in Puerto Rico contains, as I have pointed out, the basic principles of the social legislation of Puerto Rico. The wage rate certified as the prevailing one at the time the contract is signed by the workers, actually becomes the minimum wage they are to receive. (p. 28)

The Bureau of Labor Statistics of the Department of Labor is at present carrying on a study of incomes and expenditures. Some of the material may be available before the end of this study. A similar study was last done in 1953.

DEPARTMENT OF AGRICULTURE

Natural Vegetation and Soils[21]

Before the coming of the Europeans to Puerto Rico, the island was totally covered with natural vegetation. The Indians lived largely around the coastal area and their food came from Yucca and corn, crabs, mollusks and other fish. As late as the 19th Century, 75% of the island was covered with woods. With the increase of population, this percentage was reduced to 20 by 1925.

There has been a great deal of exhaustion of the soil and large areas of erosion. These changes in the vegetation of Puerto Rico have diminished the agricultural opportunities of the island.

In the early days of the Spanish occupation of Puerto Rico, the extraction of minerals from the rivers was the main occupation, but this period ended after a short time, by the middle of the 16th Century, and it became necessary for the colonists to turn to agriculture for their subsistence.

Early in the period of colonization, sugar was introduced into Puerto Rico from San Domingo. By 1815, sugar was being exported to the United States and at the end of the century the value of sugar products passed the four million pesos mark. Coffee was introduced relatively late, in 1736 from Haiti, but by the end of the Spanish period it was the principal product, reaching, in 1897, fifty million pounds with a value of more than twelve million pesos.

Tobacco is indigenous to the island. Before 1964, it was raised on small plots for the local cigar market. In 1897, the production grew to four million pounds with a value of one million pesos and became the third-ranking export from Puerto Rico.

Other than these crops, Puerto Rico raised only minor crops of fruits and vegetables native to the country. Sugar cane has remained the most important agricultural product not only in actual value but, in large measure as the determinant of land values.

Now the dairy industry equals in value the production of cane. This represents an extremely important change economically and a very real accomplishment in agricultural planning because it takes a large amount of marginal land out of sugar production.

It has required scientific study of grasses suitable for pasture, which can be raised on land which had been used, in addition to sugar, for the production of coffee and tobacco. It thus becomes one of the major factors in a better balanced and more productive agricultural program.

Although Puerto Rico has a diversity of minerals, relatively few have proved commercially profitable at this date. Among these that have been developed are manganese--deposits found in Juana Diaz (one of our ten communities). In Juana Diaz, marble is quarried also. On the southeast coast large quantities of salt are produced through evaporation of sea water and used for domestic consumption. Recent discoveries of minerals with

sufficient content of nickel warrant further exploration and probably development.

Studies made under the auspices of the Development Corporation indicate the possibility of the existence of oil. As Puerto Rico now imports very large amounts of oil (most of it refined in Puerto Rico), discovery of oil would give very great impetus to the Puerto Rican economy. Explorations, with more than a little hope of success, are being conducted near Utuado for copper.

Following is a statement from Guillermo Perez, United States Department of Agriculture, head of the sugar program, which gives an idea of what is being done in the agricultural field to stimulate both quantity and quality of cooperative production.

> The Federal Government, through the Department of Agriculture, has many services in Puerto Rico which benefit all communities. In the sugar industry, subsidies are given to the producers as a guarantee of proper minimum wages and proper payment to farmers. Under "Marketing" is the "School Lunch Program" which receives large sums of money and surplus food products. There is also distribution of the latter through Public Welfare.
>
> Another activity is the Rural Development Agency and Soil Conservation Program, which works to preserve the land from excess of erosion and other soil conservation practices. The Farmers' Home Administration subsidizes farm and land development and house building. The Bureau of Forestry cooperates with the Commonwealth Government in reforestation. The Federal Experimental Station in Mayaguez devotes its energies to the development of agricultural products and farm practices.

The Agricultural Conservation Agency, formerly the AAA, administers subsidies to the sugar industry and works in cooperation with the Commonwealth Government, which makes a larger proportional contribution to the program than does any state. Puerto Rico has become a high-cost sugar-producing country, which has caused the withdrawal from sugar production of 84,000 acres of marginal land. Also, greater efficiency in the mills has caused the closing down of possibly twelve mills in the last ten years; probably ten more will close down in the near future. Mechanization is a burning question, opposed by labor, but inevitable if the sugar industry expects to compete in the U.S. market. A great deal of experimentation is done in variety and yields, as well as in mechanization of the harvesting processes. The reduction of labor may be from 100,000 to 15,000 when these programs are completed.

The owners of 56,000 acres that have been withdrawn from cane production were questioned about their return to cane growing if prices were better, labor was available, and other advantages were provided by the government. The owners, 36,000 of the 56,000, said they would under no circumstances go back into cane. The rest of the owners of 20,000 acres said that they would or might go back if certain conditions were met. Sugar land that has been eliminated from sugar production has been distributed as follows: 60% or so in pasture or grass for dairy production; a small percentage has been used in building new roads and the remainder is either in housing developments or in the hands of owners who are holding it for price speculation. A very large majority of the land taken out of sugar is in the northern part of the island in the area between Arecibo and Fajardo.

In 1930 when sugar was by all odds the major crop and industry of Puerto Rico, land values were set on the basis of sugar property; now that has changed and the tremendous development of urbanization has influenced the value of land out of proportion to its original value as agricultural land.

In an interview with Secretary Rivera Santos, of the Department of Agriculture, he stated that the problems of the department come largely from the outside, i.e., urbanization, competition with industry, and technological developments forcing other new forms of competition. Before 1952, sugar was

profitable at $6.25 per 100 pounds. The island was able to produce its quota without difficulty until the hurricane of 1956 and the drought of 1957. Sugar is not as flexible as some other crops, and changes take more time. These figures plus an escalator clause for wages have made subsidies necessary.

The sugar cane and dairy industries are now about equal in money value and beef raising is being developed rapidly, having doubled in the last ten years. Meat consumption is rising rapidly, although beef must still be imported.

Mechanization is coming slowly to the island, the change-over having only been started fifteen years ago as against seventy years ago in the United States.

The laborers and the unions still fear the advent of mechanization and cannot forget the old days of unemployment. The government is well aware of the situation and is taking steps to see to it that mechanization does not create large scale unemployment.

One unfortunate event affecting the fruit industry was the fact that Florida publicized a story stating that Puerto Rican fruit was infected by the Mediterranean fruit fly, which caused the placing of a quarantine on the island fruit. This was not true but it ruined the grape-fruit industry and the production of grape-fruit in Puerto Rico has practically disappeared. Incentives for bringing back orange and grape-fruit are being paid primarily for the purpose of raising these fruits for juice canning and freezing.

The department is working very hard to develop the banana

and plantain industry and is experimenting on Jamaican types which are resistant to the Panama disease.

For some years the development and modernizing of agriculture was in part neglected due to the effort being put into manufacturing. This is understandable because everyone realized fully that no amount of modernization could enable Puerto Rico to be self-supporting on agriculture alone. It was estimated in 1930 that, based on the number of acres of tillable land needed to feed one person, Puerto Rico could not raise food enough for more than 600,000 persons. Sugar was so much more profitable than any other crop that it was better to raise and sell sugar and import basic foods rather then raise them. The PRERA tried an extensive pilot program of raising rice, a high consumption food on the island, and it only served to confirm the hypothesis that it was more profitable to raise sugar and buy rice.

When it was decided to put more emphasis on agricultural production in order to balance the economy and make the best use of the available land, the following steps were taken. (It is still true that, except for the tremendous increase in dairy production, agricultural efforts have been concentrated on export crops such as sugar, tobacco, coffee, etc.).

The Agricultural Credit Corporation was set up to give credit to farmers who could not get the usual commercial credit in order to carry out their work. The money is loaned at 5 percent interest fo

a period up to eight years. The corporation has two and one-half million dollars capital and $250,000.00 a year for expenses--this is a revolving fund--and up to 1963 it has made 756 loans. This is for all types of farming.

SUGAR

For the coming year, funds will be available for credit to farmers to buy sugar cane equipment and machinery and for the establishment of more machinery centers in strategic points throughout the island.

In 1962, incentive payments were established to restore land taken out of sugar, for the application of lime to correct acidities, for the purchase of new seed and for combatting pests and diseases in the newly seeded areas.

In 1962, incentives of $50 per acre up to 50 acres per farmer were paid for replacing old plantings of sugar with new plantings of higher quality and more variety. Up to 1962, 315,802 acres were renewed and new seed was supplied for 212,416 acres. During 1963 it was planned to renew 22,000 more.

In the period between 1952 and 1963, 72,000 acres were taken out of cane production. To reverse this tendency, incentives of $75 per acre up to 50 acres were paid for the redemption of these lands. During 1962, 742 farmers redeemed 5,494 acres and the outlook for 1963 is 5,300.

Incentive payments for purchase and use of lime at a rate of four dollars per ton are available to farmers. In 1962 eighty-nine farmers took advantage of this offer on 1,096 acres. In 1963 it is expected that 1,500 more acres will be treated.

In 1962, in the program that was initiated for free insecticides to be furnished the farmer, with the farmer to pay for the application, 334 farmers made use of this offer on 5,400 acres. It is estimated that 17,700 acres will be treated in 1963.

COFFEE

The coffee program has been redirected toward a maximum production of 380,000 hundred weight. To this end there have been retired from production lands which are too poor for a good yield and also the lands which are too steep to cultivate economically, and production in more fertile areas has been intensified. The whole program has been designed for high quality and quantity on a minimum number of acres which can produce the above quoted crop, which is consistent with the market demand.

The lands retired from coffee will be used for bananas, citrus fruits and improved pastures according to the quality of the soil and the steepness of the hillsides. Up to 1962, 29,000 acres of coffee land had been improved, for which the farmers received eleven million dollars in incentive payments.

The basic concepts of the coffee program are as follows:

1. Incentives for rebuilding plantations, retiring low-producing plantations and dedicating them to other uses.

2. Free distribution of seeds of bananas and other fruits and planting them on land retired from coffee but suitable for these fruits.

3. Credit through the Agricultural Credit Corporation for rebuilding plantations for coffee, for seeds for other crops, and for cattle.

4. Insurance against hurricanes for bananas, plantains, and other fruits.

5. Coordination of the staffs of various agricultural agencies to judge the potential of the farmer for the program.

6. Continue improving the marketing system for crops whose planting is promoted.

Nine hundred thousand dollars for incentives and costs of operation is promulgated for 1964.

TOBACCO

There are 13,000 tobacco growers in Puerto Rico. The crop does not lend itself to mechanization, nor does the topography of the land on which it is grown. It is still very dependent on hand labor.

The government has programs similar to the others for assisting tobacco growers, one of which is cultivating seed beds to provide high quality plants at minimum cost to growers, to improve production per acre and also the quality. This is under the general direction of the Agricultural Experiment Station and the program was started in 1956.

Up to 1963, they had distributed 94 million seedlings, enough to plant 11,500 acres, benefiting 9,800 farmers. During 1963, 1,600 farmers got more than 16 million seedlings for 2,048 acres and the plan is to continue this service at the same rate.

In the fiscal year 1959-60, a program was started to provide loans from $300 to $2,000 at no interest to build, repair and enlarge tobacco curing barns. Farmers were given from five to eight years to repay these loans. Through 1963, 1,400 loans had been made to build and repair buildings with a capacity for 18,000 hundredweight of tobacco.

The Department of Agriculture provides insurance on the curing barns against wind and fire for farmers who have loans. Fifty percent of the value is insured against hurricanes and 80% for fire.

If a loss occurs, the balance of the loan is collected and a new loan for replacement is issued. Through 1963, 819 barns were insured with no premium. This is a continuing program.

Fertilizer is also given to farmers. Six hundred pounds are allowed to farmers with a quota of 1000 pounds of tobacco and 3000 to those with a quota of 4000 pounds or more. This has benefited 11,500 farmers.

PASTURE

In 1953 a pasture improvement program was initiated to encompass 250,000 acres. Incentive payments were established for the eradication of weeds in permanent pastures, for the establishment of new pastures, for cutting or pasturing, for the application of fertilizer and the construction of fences around improved pastures.

A farmer can get incentive payments up to $1,500 for the construction of wells, silos, molasses tanks, stables, corrals for calves, and milking parlors. Up to 1963, 905 such structures were built.

Between 1953 and 1963, 175,400 acres were seeded. This was about 70% of the established goal: also accomplished was the improvement of 80,000 acres by weed eradication. About five and one-half million dollars has been spent on this--2.8 million from the United States government and 2.6 million from the government

of Puerto Rico. Plans call for 30,000 acres more in 1963 and also for provision for more dairy facilities.

INDIVIDUAL FARMS UNDER THE SOCIAL PROGRAM OF THE DEPARTMENT OF AGRICULTURE

These farms are on land which has been bought by the government and sold at auction to individual farmers, the purchase price to be paid back over a period of 40 years at an interest rate of 3%. The individual farmers can also borrow up to $500 to build a house, buy equipment, seeds, fertilizer, etc. The land mortgage and the loan are amortized together. By 1962, 1,350 of these farms had been purchased with a total acreage of 22,170 or about sixteen and one-half acres per farm. This is a continuing program.

PARCELAS

Another social program authorized is that of the parcelas. From 1942-48 the land authority handled this activity, but in 1948 it was transferred to the Social Programs division of the Department of Agriculture. Land amounting to an area of 300 square meters to three acres is given to families in perpetual use. Families can then build their own homes on the land in the mutual aid program. The sites are determined by the topography and value of the land, its actual use, accessibility to work, schools, roads and other essential public services. From 1942-62, nine million dollars was spent for 35,743 acres in this program, and 58,320 families were

resettled in 334 communities. Four thousand, nine hundred eighty-seven parcelas were reserved for public services. Previous to 1942, 12,337 families had been resettled under PRERA, PRA and Farm Security.

It is estimated that there are 32,000 families who need and want parcelas. The present plan is for 5,000 in 1963, and the remainder at the same rate, creating 241 more communities throughout the island. The purpose of creating these communities is to bring people together where services are available instead of being more or less isolated in inaccessible sites.

LOW COST HOUSING

This program, carried out by mutual aid, provides homes for the families resettled on the parcelas. These homes have been built already in 238 of the 334 communities. The government provides money for materials and forms for poured concrete houses--the loan to be paid back in ten years. The labor is provided by the neighbors--helping each other under the supervision of a competent government aide. This is a revolving fund. Up to 1955 only 959 houses had been built in five years. The rate has been stepped up to not less than 1000 houses per year, and in 1963, 3000 were built. Up to 1962, 15,934 houses all told had been constructed at an average cost to the owner of $425. The concentration of families in the parcela settlement makes it possible for the government more economically to provide water, electricity and other services. The people have the

satisfaction of owning their own homes and working for cash wages rather than being agregados and paid often in scrip or products.

A new program for constructing slightly larger houses for small farmers has been started, with 184 units completed at a cost of $550 each.

RURAL TELEPHONES

The Communications Authority of the Insular Government cooperates with the Puerto Rico Telephone Company in installing and maintaining rural pay telephones. The Puerto Rico Telephne Company does the maintenance, preservation and repairs to lines in the area of its jurisdiction and assumes cost of labor and materials up to $25 per year. The Authority reimburses the Puerto Rico Telephone Company beyond that figure. Up to June, 1962 there are 378 public telephones on 266 lines extending for 1,410 km. Requisitions have been received for 185 more, using 928 km. of lines. The establishment of telephones in the rural zone has been of great importance in bringing country communities into the communications system.

OCCUPATIONAL DEVELOPMENT

In 1960, a program was established to join idle hands and uncultivated lands. In other words, incentives were established to improve methods on the land and to teach skills to people without land. These latter techniques were taught by means of minor public works, the use and repair of machinery, the use of insecticides, etc.

During 1963, employment was given to 22,700 laborers who earned over one and one-half million dollars paid by the federal government and $463,000.00 paid by farmers. They gave training in the use, care and management of agricultural machinery in twenty towns to about 544 workers during the year, with the hope that they could eventually train 25,000 people in this manner.

DEPARTMENT OF PUBLIC WORKS

In 1932 there was a reasonably good network of main highways, paved but narrow, running between the cities and towns on the island, but access and feeder roads into the rural areas were practically non-existent. Farmers had to bring their products to the main roads on horseback or in ox-carts and it was equally difficult to get supplies from the main roads to the farms.

At that time there was a railroad running around the island along the coast which had in the past done quite a passenger business as well as freight-handling. By 1932, the passenger business was practically gone and the principal business of the railroad was handling sugar cane from the fields to the mills. This railroad is now completely gone and all of this work is handled by tremendous trailer trucks carrying up to twenty-five tons per load.

Following is the story of what has happened since 1932 in road building, which has made a very great difference in the economy of the island and the ability of the people to handle freight both into and out of the rural areas. In the transportation field also, a short statement is included showing the tremendous increase in business handled by the ports and airfields.

In 1936, the first United States government aid was offered for road construction. Seven hundred and fifty thousand dollars was appropriated, to be matched by the Puerto Rican government. Actually, for the primary and secondary roads, urban streets and bridges, the United States contributed 45% of the total cost and the Puerto Rican government 55%.

In the 1948-49 fiscal year, the regular program began, contemplating the construction of 735 kms of roads at a cost of two hundred and eight million dollars: one hundred ninety-five kms of primary roads at seventy million dollars, 470 kms of secondary roads at fifty-nine million dollars and 70 kms of urban roads at eighty million dollars. Of the total, the United States government agreed to pay eighty-six million dollars and the Puerto Rican government one hundred twenty-two million dollars.

DEFINITIONS

PRIMARY ROADS are those connecting cities and regions of major importance which will, within twenty years, have 1,200 vehicles per day.

SECONDARY ROADS are those connecting small villages and communities directly or by interconnecting with primary roads, the estimated use of which will be less than 1,200 vehicles daily.

URBAN ROADS are all the extensions of primary roads, intersections and road connections within urban centers of more than 5,000.

MUNICIPAL ROADS are all roads giv.. service of a local character to facilitate transportation of agricultu..l products and connecting rural and urban zones.

Up to June 1962, the government had completed 539 kms, had 49 under construction and 46 pending with funds partially assigned.

Besides the regular program there were in the past four other lesser roads of rather short mileages which were built by emergency funds or paid for by the United States government alone. These amounted to about 185 kms between 1941 and 1948 before starting the regular program. Altogether from 1941-1962, 725 kms of primary, secondary, and urban roads had been built at a total cost of one hundred twenty-one million dollars.

The municipal road program, the most important item for rural communities, was begun in 1943, with a projection of 2,600 kms at an estimated cost of one hundred thirty million dollars. In the period 1942-1962, there had been constructed 1,161 kms at a total cost of forty-seven million dollars. The general outline for the road program is as follows:

1. Complete roads already started and needing less than $100,000 to finish.
2. Close, or work toward closing, circuits between two or more main highways where cost is less than $100,000.
3. Establish access to population centers.
4. Establish connections with areas of great economic potential.
5. Initiate construction where nothing has been done.
6. Each stretch of road should have maximum utility for the citizenry.

PORTS AND AIRFIELDS

Thirty-three million dollars have been appropriated this year for the expansion of airfields and port facilities.

Twelve million dollars is for airfields and twenty-one million dollars for ports. In 1932 there were approximately 6,000 passengers by air per year; in 1962, 1,736,000 passengers. Port facilities in 1932 handled 1,915,000 tons of cargo. In 1962 the tonnage had risen to 14,526,320. Improvements are being made not only in San Juan, but also in Ponce, Mayaguez, Vieques, and on the island some regional airports and heliports.

A new series of docks and warehouses, freight terminals and bulk handling equipment is being built across the harbor from San Juan and will eventually be the main dock area. Tourist ships will continue to land their passengers on the San Juan side, however.

Freight handling buildings and equipment are being enlarged rapidly at the International Airport in anticipation of the increase in air express and freight service.

ECONOMIC DEVELOPMENT ADMINISTRATION

In 1932, in an agricultural economy where there was lack of land for the population, economic conditions were so bad that everyone realized the only salvation for Puerto Rico was to develop industrial activity. This was difficult because of the almost complete lack of raw materials. The only available asset for such development was the large number of workers, both men and women, and the fact that they had a demonstrated potential of skill and trainability.

Under PRERA a little was done between 1933 and 1936. But the PRERA, due to the fact that it was primarily a stop-gap organization, could not make capital investments, although it could and did make various studies as to the feasibility of different types of industries.

During the Second World War, this subject was taken up in earnest by the government and in 1942, the Puerto Rico Industrial Development Co. was organized and authorized to build plants for the manufacture of various items for use on the island. It was particularly pertinent at the time, due to the great loss of shipping between the United States and Puerto Rico, to manufacture items out of local materials for local consumption. The company had a capital of $500,000 to start this work and it was charged with "discovering and developing to the fullest possible extent the human and economic resources of the island." [22] The capital was soon increased to $20,000,000 plus the acquisition of a fully operating cement plant. The money for this development came from rum taxes which were returned to the government of Puerto Rico by the United States Treasury, Internal Revenue collections, by Act of Congress, and retained by the Government of Puerto Rico with no strings attached. The government proceeded to build cement, glass

bottle, cardboard, footwear, and sanitary ware plants until 1947. The raw materials for all of these items, with the exception of footwear were found on the island. Cardboard, for shipping containers, is made from waste paper. It was necessary for the government to do this and to operate these plants temporarily in order to get the program started, but in 1947, emphasis was put on the encouragement and growth of private industrial enterprises.

In 1950, the Economic Development Administration was set up to promote the establishment of manufacturing plants on the island and to interest mainland manufacturers in going down there. Its functions were to point out to industries the value of establishing branch plants in Puerto Rico, to accelerate training programs with management development and on-job-training, and to give technical assistance to the new owners. The Puerto Rico Industrial Development Company, now a subsidiary of the Puerto Rico Economic Development Company, still continues to build and lease plants of standard or special design, and handles the financial aspects of the program, but the government no longer operates any of the industrial enterprises. In 1953 there were thirty-three municipalities without factories. Now there are only two.

One of the prime features of the program is that no "run-away" firms were encouraged to come, and no incentives were given to firms contemplating closing out their United States operations, which would create unemployment in the United States, but tax exemption incentives are given to bona fide owners, graduated according to the location of the factories. These incentives run from twelve years' tax exemption in and around San Juan and the other big cities, up to seventeen years in the outlying areas--those areas which are less desirable from a manufacturing standpoint. These factories are not only exempt from

property taxes and municipal taxes, but the profits on their operation are exempt from Puerto Rican income tax. Dividends to local investors are also exempt from Puerto Rican income tax, but those investors in Puerto Rican industry who live in the United States or outside of the island, must pay income taxes like anyone else.

An effort is being made also to interest local capital in the manufacturing expansion program and, by 1963, one-third of the 1000 plants were owned and managed by Puerto Ricans or Continentals of long-time residence, which bodes well for the future. Ten percent of the total investment also is locally provided.

Another feature of the program is that in order to get tax exemption, the factory must produce either an article not previously produced in Puerto Rico or one of thirty-four articles designated by law. PRIDCO also makes loans to new industry, the lowest rates being for industrial zones which are under-developed.

One of the more risky investments which PRIDCO made was in the tourist business, and a larger proportion of the total investment capital than normal was provided to hotel builders and owners. This has proven very profitable and the government is underwriting a much smaller amount of the capital to be invested than it did at first.

Another development in manufacturing has been feed and feed-processing plants. In the case of rice, as well as cattle and poultry feed, grain is shipped in bulk and is milled and packaged on the island, thus saving high freight rates and at the same time making use of other products on the island which might have gone to waste. An example of this is the integration of feed mills and the tuna fish canneries. The mills import soy beans in bulk, press out the oil, using the pulp for feed. The oil is sold to the tuna fish canneries,

and tuna fish scrap is in turn sold to the feed mills for use as an ingredient in a balanced ration.

By December, 1962, incentives on 200 of the 1000 new industries had run out and the factories were paying local taxes just like any other enterprise.

This program has created 60,000 jobs in new factories, and 60,000 to 80,000 in construction, government and related services. But 150,000 marginal jobs in home needle-work, domestic service and agriculture have disappeared, leaving a net decrease in the employed labor force of 10%. Economic activity has increased 75% and the employed labor force is increasing rapidly at the present time. Since the above-mentioned marginal jobs were very poorly paid, really starvation wages, the net increase in income is much more than appears from simple figures of the numbers employed. One evidence of this is the fact that during the last two years, the net emigration from Puerto Rico to the United States has been zero. This, of course, makes it imperative for the government to increase its efforts to provide employment opportunities.

ELECTRIFICATION

(Water Resources Authority)

On Good Friday we drove to the country for the night. Darkness came after the short tropical twilight and on the mountain-sides lights appeared and above the village of Comerio a lighted cross. Thirty years ago the hillsides would have been dark and in the town the lights would have been from small lamps--picturesque but ineffectual.

So the symbolism of light appears--the dim sad beauty of the past is gradually being lost in shadow. Traditional society cannot offer to human beings the instruments for living in a new age; where it remains even the old values tend to deteriorate. Emotional disturbance may characterize much of the transition but faces are set to the future. The symbols of that future are new symbols with new emotional significance in which the spiritual must find new meanings in material change. The lighted cross may be a symbol of a new salvation. 23/

The dynamic society which characterizes Puerto Rico at present is sharply different from what it was not too long ago, for this small overpopulated Island is experiencing one of the most dramatic changes which any society in any part of the world might have undergone. Changes which generally take scores of years have occurred here in two decades. (p.116)

Perhaps the most stark-staring assertion on this Atomic Aeon is to be found in Sir James Jean's book, This Mysterious Universe. He sums up the conclusions of "Science" as

amounting to recognition of "light" as the ultimate constituent of the cosmos, and he says that the whole story of creation could be told in the opening sentence of Genesis: "And God said, 'Let there be light.'"

Since the birth of humanity light has been employed as a symbol of God. As light contains very little materiality, it was considered by ancients a befitting symbol for them to express the incorporeal, pure and holy nature of God. (p. 118)

The impact of commercial electricity upon the economy in the agricultural zones indirectly or directly affects the pattern of economic exploitation of the area. Electricity makes possible the use of electrical equipment on the farm, as for example, milking machines and refrigerated tanks. As a result the agricultural pattern may change from a seasonal (sugar cane) to a year round enterprise (dairy). This means a regular income for the family, a higher level of living. Electricity is making possible the mechanization and/or industrialization of our agriculture which is primordial in a country where land is one of the scantiest resources. (pp. 121, 122)

Rural electrification has made possible the invasion of our rural areas by industrial buildings....

The effects are numerous:

1. New and diversified jobs are created.
2. Skilled labor is developed--sometimes highly skilled.
3. Industry advantageously competes with agriculture in salaries, creating job shortages in agriculture.
4. When the factory is not erected within the limits of the community a community emerges around the factory.
5. Industrial jobs are available for mothers and other women of the household.

The consequences are many. It is not proper to appraise them in dichotomies such as positive or negative and good or bad. Nevertheless, the effects are being experienced in the structure of the family, the function of its members, and the social institutions of the community. The power relationship among rural electrification, industrialization and the people can more easily be understood if we single out for analysis some of the constituents. (p. 122)

DIRECT EFFECTS OF RURAL ELECTRIFICATION

Economic and social changes in our rural area have been the result of a chain reaction of different projects and governmental programs working together for the betterment of the people. (p. 123)

Notwithstanding, I would not exaggerate if I say that electricity has been the driving force that has put into motion the wheels of progress. (p. 123)

The impact of commercial electricity upon the rural family can be more directly determined by the presence or absence of electrical appliances: kitchen utensils, refrigerators, television sets, radios, and others. The possession of these commodities greatly affects consumption habits as well as the use of leisure time. (p. 123)

Refrigeration has made possible a wider use of perishable goods among the rural families. Meat, fresh milk, and vegetables are being included in the rural family diet. (p. 123)

Radio and television provide for a better use of leisure time. The country store, "the gossip corner," and the batey are losing their importance. Leisure time is now engaged with radio and television that provide education, information, and recreation. (p. 123)

Rural electrification has made possible the organization of night schools for adults, thus providing broader educational facilities. (p. 124)

SIDE EFFECTS

Up to this point, I have singled out various good and/or controversial concomitants of rural electrification. To my understanding it has also brought about undesirable changes in attitudes.

1. The introduction of the "juke box," or nickel record player, to the farthest rural areas--even ahead of the road--has usurped the tranquility and peace of the rural folk. The love for pleasure, the rural bar, malversation, and drinking, all come together around the "juke box." For bar owners and alcoholic beverage distributors, this might be an asset, but

from the moral and economic point of view it is a social cancer.

2. The adolescent group sometimes "hangs around" the bar, playing hookey. This creates an undesirable environment for teenagers, principally girls. In urban areas this situation is in part controlled by established institutions. This social maleficence brings a new phenomenon in the rural area which is as yet untamed by social controls.

You might conclude from the ideas just expressed in the previous section that I am putting human values in rural areas in jeopardy. I merely attempted to point out what may be called the risks of rural electrification and the necessity of making provisions in our social organization for these changes so that we can accept the new without destroying the essential social values needed for a progressive community. We should not forget that the worth of a social system is not to be measured only by the level of living reached in terms of material belongings, but by the opportunity it affords its members to employ the method of scientific knowledge and possession in the management of their lives.

Rural electrification has made it possible for light to reach the farthest corners in Puerto Rico's countryside. Let "light" be for us a symbol of economic progress working for the supreme values of our social structure. (p. 125)

Previous to 1915, there was practically no rural electricity in Puerto Rico except for a few short lines which went out from the cities of San Juan, Ponce, Mayaguez, where there were large private companies. The government entered the field of electric power in 1915, using water from dams which were built for irrigation.

Besides the three large electric companies above mentioned, there were some small municipal plants, some hydro-electric and some operated by internal combustion engines. These, however, only supplied power for light to the communities in which they were located and did not reach out into the rural areas.

In 1925 the first government agency, established in the Department of Public Works, was set up for the utilization of water resources. In 1933, and for a few years after that, considerable help from the PRERA and the PRRA was provided in the establishment of distribution lines, but no further dams were built until later.

In 1941, the Water Resources Authority was set up as an independent agency, self-liquidating, so that it could sell bonds for the development of water resources in the island, the construction of power stations and transmission and distribution lines. Not very much was done for the next five years due to the scarcity of strategic materials during the war. In 1946 and 1947, the first appropriation from the Puerto Rican government was voted in an amount of $400,000 a year to expand the system. This appropriation was continued yearly until 1952, at which time the authority borrowed from the Rural Electrification Administration of the United States $6,000,000.00 at an interest rate of 2%. Since 1952, up to the present date, the authority has borrowed $58,000,000.00 from the REA.

There are two types of consumers under the present set-up--the large consumers who use a guarante. . minimum and who in some cases pay part of the construction cost of the distribution lines. There are also many small consumers who do not use enough electricity to justify financially the construction of facilities, and in order to make possible the supply of light and power to these people, the

government pays the Authority the difference between what the facility costs and what the consumers pay. There is a uniform rate for the whole island, both rural and urban, and the government subsidy comes in where the consumption at this rate does not come up to the costs. The Authority operates on a non-profit basis throughout the island.

In 1963, it supplied electricity and power to 251,123 families averaging 5.2 persons per family in the rural areas. There are estimated to be 10,000 families who are too remote ever to get service.

The government aids the potential consumer in paying for the wiring of his house and the purchase of appliances. Wiring in the average rural house costs $30 and appliances are sold at a very low figure. The consumer repays the loan over a considerable period of time and with a minimum interest charge.

It has been found that actual use goes up rapidly after electricity is available and the people begin to realize the advantage of having this in their homes.

In starting rural distribution, the first areas covered were in fairly high concentrations of population in order to serve the largest number of consumers at a minimum cost and enable the Authority to get some return on its money, which later could be used for wider distribution. This service was given to the 58,000 families living in 344 parcela communities and to the

15,000 mutual aid houses. This is the type of priority decision which is continually met by the Planning Board in establishing projects of various kinds.

The Authority has been a pioneer in many aspects of the construction of transmission and distribution lines. They use aluminum instead of copper wire, the aluminum being cheaper and easier to handle, making possible longer spans between poles. The lines are run in a straight line over the mountains and through the valleys and the Authority has felt it effective and inexpensive to use helicopters in getting the poles to their final locations.

The Authority submits its plans for the year annually to the Planning Board for the P.B.'s final decision on the location and extent of new construction. It also gives Quarterly progress reports to the Planning Board and the whole operation is coordinated with the general larger plan of the government for the various communities.

All of this has shown the value of the government taking over a public service of this kind. The private companies never would have branched out into the rural areas as they could not have borrowed money as cheaply as the Authority did, nor would they ever find it economical to furnish electricity to widely scattered communities. The Authority is self-liquidating on the basis of the low rates which are charged and has not had to ask the government of Puerto Rico for any appropriation for construction since 1952. This program probably represents the greatest change in the standard of living of any of the government operations - the biggest spread between a primitive and a modern way of life.

WATER AND SEWER AUTHORITY

HYDROTOPOGRAPHY [24]

Because this study deals with rural communities, the question of water is of special importance. The effect that rivers have had on the development of civilization, ancient or modern, is always fascinating.

Puerto Rico has some 2,000 streams. Although none of them is navigable, most of them small, nevertheless they constitute an important factor for development in supplying potable water, in industrial use, as a source of hydroelectric power, and for irrigation.

The topography of the island explains the difference in water supply between the northern and southern parts of the island. The mountain ranges, running from east to west, are the natural water shed. In two-thirds of the island, from the highest elevation of 4,000 feet, water descends to the north coast, gradually, and rain falls more heavily than on the south coast, where the rivers descent more precipitously and have less volume. The difference is striking when one crosses the mountains from north to south; vegetation changes, the colors become those of a dry region, irrigation becomes important.

In the southwest, a government experiment, "a little TVA," has been under way since 1951. It has already restored 12,000 acres to cultivation (sugar cane land).

WATER SUPPLY

Until 1945, the supply of water in Puerto Rico was in the hands of the municipalities, which did not have sufficient funds to keep up with the population increase or provide proper maintenance and replacement of the system. Only six of seventy-five towns had twenty-four hour water service, others had twelve, eight, six, or even only four hours of service during the twenty-four. There were only fourteen towns which had filtration plants--nineteen towns had deep wells, and forty-two towns had partial treatment plants. Eighteen percent of the water supply had no treatment at all. Besides the municipal plants there were 184 small rural systems, some provided by the municipality, some by the Puerto Rican government and some by United States government agencies. They were very ineffectively operated, the rates were too low, there was no actuarial basis for the rates, and there was never enough money for proper maintenance and replacement. There were also heavy water losses due to illegal connections, leaks in the systems, and for various other reasons. There were no plans, records or statistics and the Authorities relied on the memory of the older employees to locate pipes, valves, etc. There was a frequent turnover of personnel due to politics and there was also, for the same reason, a distinct lack of competency. In 1941, it was realized that something had to be done about the water supply,

and the Legislature passed a law consolidating all of the systems, but legal objections from the government of the city of San Juan held up carrying out the provisions of the law until 1945.

At that time the insular Supreme Court ruled that the Authority could take over municipal systems without compensation. At that time, the system was called the "Utilization of Water Resources" and was in the Department of Public Works, but in 1949, the Legislature created the "Authority for Water Resources" which enabled it to sell bonds and to finance necessary construction.

For general administrative purposes, the island is divided into six districts and sixteen zones which are generally autonomous, having complete supplies of equipment and personnel.

The first thing the Authority did was to establish uniform rates for the whole island, low enough for the masses of the people, but high enough to cover costs and amortization. Within three years, the Authority was operating in the black and the deficiencies of the system had been pretty much eliminated. There were two stipulations which were of great importance. One was a meter for everyone, and the other was no free water for the government or its agents. In cases where people were too poor to have water piped into their homes, there were public faucets for which the government pays the Authority so much a year. There were 4,000 of these public faucets in 1962 and more are being installed every year.

Many other things had to be done to put the system on an efficient operating basis. Meters were purchased and now 92% of the water is metered. The only places where there are no meters is where the consumption does not justify the cost of the meter and on the public faucets. Another immediate need was to clean up the water supply--provide filtration plants and clean the pipes of sediment and metallic residues. A United States firm specializing in this type of work was hired to check leaks and illegal connections. Another United States firm also was employed to clear the pipes.

The United States Geological Survey was called in to assist in determining underground sources of water and this help from the United States continues as the need arises. All of the systems were consolidated and interconnected, thus enabling the Authority to divert water into the slack areas from flush areas.

Within three years after the consolidations of the water systems, over 350 Kilometers of pipe had been constructed and the causes of loss in the various categories had been eliminated.

The start of the construction of filtration plants began in 1950, with various capacities according to the size of the communities. There are now twenty-six of them, and more are being built. The government makes up to the Authority the cost of non-liquidating projects such as the public faucets and some other costs.

The hope of the Authority is to have all feasible rural areas served by 1967. At the present time, 100% of the urban population has clean, potable water, and more than 50% of the rural population. The following is a chart giving the pertinent figures on the supply of water and the number of sanitary centers which were in operation in 1945, and showing the percent increase in 1963.

Table 12: WATER SERVICE STATISTICS

	Jan. 1945	June 1963	Percent Increase
Communities with Continuous Service of water, 24 hours a day	6	75	1150
Filtration plants in service	11	41	273
Communities with sanitary sewers	41	72*	76
Mechanical treatment plants for impure water in use	1	39	3800
Millions of gallons of water supplied daily	49	122	148
Miles of water pipes in service	740	3,580	384
Rural sectors with potable water service	158	1,334	744
Customers for water service	72,000	326,420	353
Number of meters installed	30,000	302,581	909
People supplied with aqueduct water	671,000	1,785,000	166
Value of physical plant	$20,000,000	$172,000,000	760
Public faucets		4,000	

* The sewers for the three remaining towns were under construction in 1963.

HOUSING AND URBAN RENEWAL (CRUV)

Material for this section was taken from reports of CRUV, supplemented by an interview with Mr. Sixto Toro Cintron, Special Assistant to the Executive Director, on 2/25/64.

Housing is one of the principal activities of the Planning and Action program in Puerto Rico. This program, in cooperation with the Planning Board, is carried out by the Corporation for Urban Renewal and Housing (known as CRUV). It works with federal housing programs to "coordinate, carry out and supervise the planning and construction of housing, federal and state, finance lots for building, install services to public housing, special projects, and to provide technical help for low-cost housing developments by means of mutual aid and encouragement or through cooperative housing."

The Puerto Rico Urban Renewal and Housing Administration started in 1938 as the Puerto Rico Housing Authority for all municipalities in the island except San Juan, Ponce, Mayaguez and Arecibo, which had their own housing authorities. The authority in Arecibo disappeared after two years and the other three were merged with the Puerto Rico Housing Authority in 1957 when it became the Puerto Rico Urban Renewal and Housing Administration. The jurisdiction of the administration is urban only for the relocation of the low income families. It is financed by both Commonwealth and Federal funds.

With the federal housing programs, it aims to provide adequate urban housing, creating facilities and community centers for low

income families. This housing is mainly occupied by families moved from slum areas (70%).

This program has completed, or planned for construction soon, housing in all but three of the towns in the island. It, therefore, touches centers of population which lie in the rural parts of the island and is one of the evidences of change which strike the eye immediately. The pattern of these housing projects does not appear thoroughly suitable, either practically or aesthetically, to their surroundings in the Puerto Rican situation, but they represent a very great improvement over housing which existed before, and, because of the genuinely cooperative relationships with the federal government, changes will be allowed for future buildings which can modify the present pattern.

The hope of the administration is to eventually design buildings and individual houses which will appear like any other urbanization and will not carry the stigma of public housing by their appearance. At the present time the Administration is selling lots or providing them in usufruct. The lots are of two kinds according to income rates, the lower priced ones having a minimum of utilities and unpaved streets and the better lots for those of higher income have full utilities and paved streets. A shell house is provided at a minimum cost and finishing is done by the cooperative effort of the inhabitants. This, of course, applies to the individual home but not to the large apartment dwellings. About 1,000 individual

units have already been built and three to four thousand more are needed. The Puerto Rico Housing Bank originally financed these constructions from direct loans to prospective owners but now guarantees the loans which are made by private commercial banks. This service is only available to those families which do not have sufficient credit to satisfy commercial banks. The range of income for these families is between $2,000 and $4,000 a year.

Another activity which is being studied is rehabilitation on location. It is contemplated that this operation will be very largely expanded in the next few years. The purpose of all of this activity is "to get people out of the slums and the slums out of the people."

In work on slum problems every effort is made to improve the existing sites and the actual houses where their condition warrants it. There is a recognition of the value of the integrity of a community and of the disrupting effect of transplanting families from a familiar to an unfamiliar environment.

In both the urban and rural zones, there is considerable emphasis on concentration of housing because of the economy in provided services--sanitation, streets, etc.

Under another plan for individual home building, CRUV provides floor, supports and roof, equipment for the making of concrete blocks, technical assistance and supervision. The labor is done by the families themselves. A similar program is carried out in

rural areas by the Department of Agriculture under its Social Program. (See section on Department of Agriculture.)

This means the establishment of 300 rural communities, giving facilities and services which were lacking before and which could not have been provided for in individual houses isolated from each other.

Labor is done by the families themselves, a similar program of "mutual aid" is designed for those families whose income exceeds the minimum for public housing but who cannot afford the cost of private financing. If family members move from a slum area and sell their house, they use the proceeds to purchase building materials; CRUV (see glossary) provides technical advice and supervision in the lots provided for this program.

Another similar program offers an alternative to persons in the low-cost housing bracket. This makes possible improvements and additions to a house with basic floor area of 500 square feet.

The report on Housing under these programs shows 44,648 units completed, 6,394 under construction, 20,387 planned: total 71,429.

The administration is developing a plan for an industrial plant to build pre-cast housing components which can then be moved to the site and rapidly erected, thus saving in labor costs. One of the principal reasons for the necessity of expanding these programs is the fact that the price of private housing is materially increasing and becoming out of reach for many families.

The Administration envisions the progress of people in government housing as a ladder--first going to government-paid caserios (public housing apartments in large units) then to individual small houses and possibly later to the purchase of condominium apartments. It also feels that its jurisdiction will have to be expanded to the rural areas as well as the urban areas if people are to be persuaded to live

in the rural areas rather than in the 51 to 49 % and it is felt by the government that more should be done to in - duce people to stay in the country.

Plans have been prepared for the continuation and acceleration of present programs and for new developments, rural as well as urban, which will incorporate the ideas of the Planning Board (see section on regional development) and all those factors which take into consideration the cultural patterns of Puerto Rico and their adaptation and development in the future.

ADMINISTRATION FOR THE DEVELOPMENT OF COOPERATIVES

1873 saw the first cooperative movement in Puerto Rico with the formation of the Association for Mutual Aid and the Friends of the Public Good. Some years were very successful, some very bad. There were many apparently insuperable obstacles which threatened to kill the movement, but the idea remained alive with the hope of resolving serious social problems.

The first cooperative law was passed in 1920 to create cooperatives for producers and consumers and a further law was passed to promote agricultural cooperatives in 1925. In spite of including basic cooperative principles, these laws were inadequate, but they initiated a period of government action in favor of the cooperative movement, especially in agriculture. However, there was no adequate law until 1946.

The arrival of the Reverend J.A. McDonald from Antingonish, Nova Scotia, sparked a new interest in the development of active and militant cooperatives. A commission made up of legislators and executives was sent to Nova Scotia to study the Antingonish experiment and to see how it could be adapted to Puerto Rico. Their recommendations resulted in Law 291, passed in April, 1946, which provided an adequate legal basis for the development of cooperatives. In order to further strengthen this development Law #4 was passed in May 1957, creating the Administration of

Cooperatives Development. The government fully recognized its obligation in establishing clear democratic orientation and economic progress through the free participation of the people in programs of social benefit.

The basic objectives are "to promote a movement which will serve as an elementary regulation in the whole economic system of Puerto Rico; which will assure the best possible service to all consumers in terms of quality as well as price; which will develop between producers the attitudes and necessary organization for success in creating abundant production, efficient and socially useful; which will contribute to raising to a level of equality the living conditions of various social groups; and which can assume in the shortest time possible the responsibility of doing this and providing adequately for the continued implementation of the objectives above described." (From the INTRODUCTION to the Annual Report of the Administration of Cooperatives Development, 1960-1961)

The law further established the cooperative agency as self-sufficient, with the backing of the government, but free of government interference. The Cooperatives Development Administration is the governing body, it supervises the organization and operation of the cooperatives, education of prospective organizers, financing through the cooperative bank, and it holds work-shops for interested visiting groups. Further education in the cooperative movement is

provided through seminars at the University of Puerto Rico on the college level and on the intermediate level in the schools to educate young people in the cooperative idea.

There are two principal adjuncts of the cooperative administration. One is the Cooperative League, a central organization which coordinates and orients all other non-government organizations in their functions of developing and strengthening the cooperatives.

There are several federations of cooperatives which act to strengthen the integration of the cooperatives in Puerto Rico. They offer services through centralization which they can offer with greater efficiency than the cooperatives could realize as independent units, taking into consideration the different types of cooperatives now in existence, although they work with the Cooperative League in the execution of educational programs necessary for cooperative development and promotion.

There are three federations functioning:

1. The Puerto Rico Federation of Consumer Cooperatives
2. The Federation of Credit Cooperatives
3. The Federation of Agricultural Cooperatives

There are 382 cooperatives all told, five times what there were in 1945 when intensive development began. Credit coops number 222, ten times as many as in 1945; 91 consumer coops--twice as many; 28 agricultural coops, twice as many; 25 housing coops and 16 other various types. There are 131,000 members representing over 500,000 people, one-fifth of the total population of the island.

In 1961, there was a total volume of business of $75 million, showing a steady progress and growth but not yet reaching the figure in the total economy that is hoped for. Farmers are not using them as much as they could and altogether they are not yet as significant in their total effect on the economy as the authorities would like to see them.

Following are the goals to which the people are reaching:

1. A strong development and expansion program, serving as an example of good practice in operating the cooperatives.

2. To create a strong cooperative movement integrated in central coordinated associations and functioning in close relationship with other cooperative programs.

3. The development of a central system of credit and insurance to provide services to the entire cooperative movement.

4. Development of an extensive cooperative housing program which will reduce the cost of living and also reduce the necessity for government subsidy.

5. Gradual extension of cooperative organization to other fields, where justified by the needs of the people. Among these are medical and hospital care, industrial production, cafeterias, schools, cultural and recreational centers, book stores, drug stores, etc.

6. The integration of the whole movement in the Cooperative League.

7. Gradual transfer of development functions to the movement itself. When this is done the Administration need only retain the office of Inspector of Cooperatives to insure the best interests of the members.

The function of the Inspector of Cooperatives is to see to it that rules and regulations are carried out, that cooperatives function normally, to establish these functions, to establish or dissolve cooperatives, to examine the books and to receive statistical information.

Many foreign visitors come to Puerto Rico to study the cooperative movement and the government feels a strong obligation to instruct and help them. They consider it a vital part of the democratic process and are doing everything possible to further this relationship. To this end the Caribbean Cooperative Confederation was formed in 1957, composed of representatives of countries bordering the Caribbean Sea, with headquarters in Puerto Rico. Puerto Rico feels that it must maintain a relationship of solidarity and cooperation with cooperative movements of other peoples and welcomes this responsibility.

Table 13: STATISTICAL DATA ON COOPERATIVES: 1963

Credit Cooperatives - 222
Members - 75,900 in 63 communities
Volume of business - $27,800,000.
Capital & Surplus - $17,800,000.
Average Loan - $363.

Consumer Cooperatives - 91 in 47 communities--20 urban, 71 rural.
4 cooperative super-markets: members 11,325; (6,410 urban, 4,915 rural)
Volume of business - $11,100,000.
Sales - 15 times average inventory
Capital & Surplus - $1,500,000 ±

Agricultural Cooperatives - 28
Members - 41,820
Assets - $24,700,000.
Volume of business - $33,500,000.
Capital & Surplus - $9,900,000.

Housing cooperatives - 25
Housing - 16; Lots - 6; Remodeling - 3.
Families benefited - 2,700.
Spent - $2,200,000.
Provided - 534 lots; 386 housing; 111 in construction
Starts in process for 2,300 more families

Other types mentioned before - 16.
Assets - over $1,000,000.
Capital & Surplus - $500,000.
Volume of business - $1,035,000.
Members - 2,024

Types -		
Gas stations	4	620 members
Taxi owners Service	2	182
Graphic Arts	2	129
Industrial	1	323
Artisans	1	17
Drug Consumers	1	500
Films Arts	1	31
Life Insurance	1	222
Health	1	no information

ADMINISTRATION OF PARKS AND PUBLIC RECREATION

Thirty years ago there was practically no government interest in, or aid to, recreation. There was a baseball field in San Juan, operated by a quasi-government commission made up of interested citizens, where boxing matches were also held.

In 1941 the Administration of Parks and Public Recreation was formed to develop all kinds of public recreation opportunities. The first year budget was $3,500 and a goal was set of establishing a park in every municipality of the island within fifteen years. It was done in seven years.

There is now a completely diversified program encompassing communal and cultural recreation, athletics, both amateur and professional, public beaches, cock fighting arenas, beautification of public highways, with a budget of $526,000 of which $115,000 comes back in fees, licenses, rents and admissions.

The biggest expense is in the urban areas. The rural facilities are built with volunteer help plus a $2,000 grant from the government. There are Recreation Associations and Community Centers in the rural areas.

The low salaries now paid to professional help in the urban parks and playgrounds prevents the Park Administration from getting people as competent as they would like to have.

The Administration is planning new recreation facilities such as swimming pools and community centers in new public housing developments and also an enlarged program of public beaches with bathing facilities and cafeterias.

There are now 104 urban and 116 rural baseball parks, mostly with lights, 84 basketball courts, and 54 other facilities such as volleyball, tennis, and soccer courts, beaches, woods areas, and lunch rooms, with a 1962 attendance of 8,247,430.

Interview with Mr. Enrique Monagas - Parks and Recreation - 3/16/64

Old Athletic Commission - boxing.

Tugwell 1941 appointed Monagas for Recreation - Total budget was $3,500; his salary $75 per month.

First goal was parks - In 7 years established one in every municipality (goal had been 15 years).

Problems lie in urban areas; rural build their own centers with volunteer help ($2,000 from government). Have Recreation Associations and Community Centers; urban low salaries for professional help hold back program.

Much work being done in Llorens Torres.

Program includes drama, dance, music, lectures, etc.

New caserios being planned with community centers and swimming pools.

Plans for additional public beaches with bathing facilities, cafeterias, etc.

11/2/64

GOVERNMENT PROGRAMS

The accompanying chart shows the extent to which government programs affect our ten communities.

The application of government programs is not the same in all communities. For instance, in the case of electricity, a higher percentage of families in more concentrated areas get service than do those in more sparsely settled areas. This is also true of water supply and the reasons for this are explained in the sections on water and electricity. Rural pay telephones are being installed as rapidly as possible and are now in six of the ten communities. The four which do not have them are rather remote and necessarily the same considerations are used in providing the service.

Very little low cost housing -- government owned rental units -- have reached these rural areas, but the parcela program is being developed in nearly all of them.

There are excellent paved roads in all the communities, some naturally better than others, but all good enough to permit the use of trucks for market, ambulances, and other necessary transportation. There are more roads connecting municipalities and more feeder roads into or out of isolated areas.

While there are factories in all but three municipalities in Puerto Rico, Hato Tejas, Bayomon, is the only barrio among our ten in which there are one or more factories. However, there are factories in the nearest town to

each community and the commuting is relatively simple.

The schools vary considerably, some appearing very much as they were in 1932, others having one or more new classroom buildings. Sanitary facilities are not all they should be, especially as water is readily available. The lunchrooms are well-equipped and serve excellent, balanced meals. There is still a real shortage of classrooms, necessitating a considerable amount of doubling up. The Department of Education is constructing new classrooms as fast as possible and has set a goal of as many more rooms as now exist.

There are regular health centers in four communities and clinical services are provided in the other six. Public welfare reaches all the barrios.

There are agricultural extension agents in most of the communities but in some they cover more than one barrio or Second Unit School. Mediania Alta, Loiza, has none as the land is now destined for housing and recreational development.

The Community Education program only appears in two of the barrios and the Labor Department program is very limited.

Recreation facilities are being expanded as fast as budgetary limitations will allow and now are established in five of the ten areas. It is not unusual to see a baseball field with lights in a rural community.

The chart also shows the 1930 and 1960 populations and the percentage of change in each.

CHART 2. GOVERNMENT SERVICES TO TEN RURAL AREAS.

Sources for this information were the reports of the field staff and of the Department of Public Works of the Puerto Rican Government.

	Water	Electricity	Telephone	Low cost housing	Social Program Parcelas	Roads	Recreation	Factories	Classrooms
LOIZA Mediana Alta	Partial 50%	Partial 63%	Yes	None	Partial	Good	None	In Loiza	Good
Juncos El Mango	Partial 33%	Partial 20%	No	Partial 50%	Partial 17%	Good	None	In Gurabo & Juncos	Very Good
Cidra Bayamon	Partial 25%	Partial 33%	No	None	None	Good	None	In Cidra	Very Good
Bayamon HATO TEJAS	Almost comp. 90%	Complete	Yes	None	None	Good	Extensive	Yes	Very Good
SALINAS Lapa	Partial 50%	Partial 33%	Yes	Partial 7%	Partial 33%	Good	Good	In Salinas	Very Good
JUANA Diaz Collores	Partial 67%	Almost none	Yes	None	Partial 5%	Good	Very Good	In Juana Diaz	Very Good
ADJUNTAS Yaheuca	Partial 20%	Partial 33%	No	None	None	Good	None	In Adjuntas	Very Good
MOCA Voladores	Partial 67%	Almost comp.	No	Partial 10%	Partial 8%	Good	None	In Moca	Very Good
Aguadilla San Antonio	Almost comp. 83%	Partial 83%	Yes	None	Partial 67%	Good	Very Good	In Aguadilla	Very Good
Arecibo Sabana Hoyos	Partial 40%	Partial 50%	Yes	Partial 8%	Partial 20%	Good	Good	In Arecibo	Very Good

Chart 2 (continuation)

	School Lunch	Health Center	Public Welfare	Agri. Ext. Serv.	Community Educ.	Dept. Lab.	1932 Pop.	1962 Pop.	Households
LOIZA Mediana Alta	Yes	Ltd.	Yes	None	None	Partial	2,197	4,254 +94%	788
Juncos El Mango	Yes	Ltd.	Partial	Partial	None	Partial	1,020	930 -9%	155
CIDRA Bayamon	Yes	Yes	Yes	Yes	Partial	None	2,679	3,040 +135%	486
Bayamon HATO TEJAS	Yes	Yes	Yes	Partial	None	Partial	3,092	11,427 +371%	+371%
SALINAS Lapa	Yes	Ltd.	Yes	Yes	None	Partial	2,628	6,078 +131%	1,072
JUANA DIAZ Collores	Yes	Yes	Partial	Partial	None	None	2,717	2,340 -16%	443
ADJUNTAS Yahuecas	Yes	Ltd.	Yes	Partial	Partial	None	1,770	1,712 -3%	331
MOCA Voladores	Yes	Ltd.	Yes	Yes	None	None	1,800	2,379 +32%	449
AQUADILLA San Antonio	Yes	Yes	Yes	Partial	None	Partial	3,291	3,771 +145%	621
ARECIBO Sabana Hoyos	Yes	Ltd.	Yes	Partial	None	Partial	4,753	5,665 +19%	1,195

The four tables that follow, Tables 14, 15, 16, and 17, show what the United States federal government contributed to various activitied in Puerto Rico in 1932 and what it contributed in 1962. They also show the Puerto Rico appropriations for these activities, which in most cases is more than is received from the fededal government.

No figures are given for the cost of maintaining the various military bases and the Veterans Administration. The military bases are, of course, much larger than an independent country the size of Puerto Rico would maintain.

The different departments to which the federal government gives aid are listed with 1932 federal government, 1962 federal government, and 1962 Estado Libre Asociado appropriations below. The horizontal listings are the different divisions of each department with the amounts appropriated below them.

TABLE 14. UNITED STATES FEDERAL GOVERNMENT CONTRIBUTION TO HEALTH ACTIVITIES IN PUERTO RICO IN 1932 AND 1962

Year and Source	Hospitals	Heart Institute	T. B. Control	Mental Health
1932 Federal	0	0	0	0
1962 Federal	44,634	116,932	154,350	96,177
1962 E.L.A.*	2,700,000	200,000	3,694,700	3,239,451

Year and Source	Public Welfare	Venereal Disease Control	Community Health
1932 Federal	0	0	0
1962 Federal	10,246,519	32,538	335,622
1962 E.L.A.*	14,949,628	28,000	76,000

Year and Source	Maternal & Child Health	Crippled Children	Cancer Control
1932 Federal	0	0	0
1962 Federal	108,716	108,621	59,532
1962 E.L.A.*	619,000	528,000	143,600

*Estado Libre Asociado, or Free Associated State

TABLE 15. UNITED STATES FEDERAL GOVERNMENT CONTRIBUTION TO EDUCATIONAL ACTIVITIES IN PUERTO RICO IN 1932 AND 1962

Year and Source	College of Agriculture & Mech. Arts	Library Assist.	School Construction	Defense Education Activity
1932 Fed.	50,000			
1962 Fed.	186,807	162,226	19,701	536,669
1962 E.L.A.*	108,000	316,980	5,300,000	152,000

Year & Source	Vocational	Television
1932 Fed.	45,000	
1962 Fed.	843,307	200,000
1962 E.L.A.*	5,276,700	100,000

*Estado Libre Asociado, or Free Associated State.

TABLE 16. UNITED STATES FEDERAL GOVERNMENT CONTRIBUTION TO AGRICULTURAL PROMOTION IN PUERTO RICO IN 1932 AND 1962

Year and Source	Forestry Coopera-tion	Agricultural Experiment Stations	Cooperative Agricultural Extension	National Forests
1932 Federal	$ 2,940	0	0	64
1962 Federal	350	877,423	1,431,962	2,091
1962 E.L.A.*	20,040	3,632,820	2,956,480	4,850

Year and Source	School Lunches	Removal of Surplus Agri-cultural Comm.	Commodity Credit Corporation	Plots (Par-celas)
1932 Federal	$ 0	0	0	0
1962 Federal	4,669,992	6,835,662	10,029,135	0
1962 E.L.A.*	7,932,000	0	0	60,341+ 5,147#

*Estado Libre Asociado, or Free Associated State.
+for families
#for public use
Surplus agricultural commodities and Commodity Credit Corporation contributions are food surpluses distributed to school lunch programs and recipients of public welfare.

TABLE 17. UNITED STATES FEDERAL GOVERNMENT CONTRIBUTION TO PUBLIC WORKS AND UNEMPLOYMENT COMPENSATION IN 1932 AND 1962

Year and Source	Federal Aid to Highways+	Unemployment Compensation (Dept. of Labor)
Federal 1932	$ 0	0
Federal 1962	3,699,129	2,819,175
E.L.A. 1962*	9,948,719	7,743,000

*Estado Libre Asociado, or Free Associated State.
+Department of Public Works.

NOTES

1. Earl Parker Hanson, Transformation: The Story of Modern Puerto Rico, New York: Simon and Schuster, 1955, p. 59.
2. Jaime Benitez, Report of the Chancellor to the Superior Educational Council, July 30, 1964.
3. Ibid., pp. 15, 16, 17.
4. A Program of Community Development, The Story of The Division of Community Education, San Juan, Puerto Rico, 1963.
5. Information from: Journal of the American Dietetic Association, Vol. 44, No. 1, Jan. 1964, by Lydia J. Roberts, et al. "A Nutrition Survey of Three Rural Puerto Rican Communities," Boletin Asociacion Medica de Puerto Rico; Vol. 55, No. 12-A, Dec. 1963, by Irwin C. Plough, Nelson A. Fernandez Lopez, Charles R. Angel, and Lydia J. Roberts.
6. Juan A. Pons, Puerto Rico: Examen De Su Revolucion y Proyecciones Para El Futuro El Bienestar Social: La Salud.
7. Tugwell, op. cit., p. 70.
8. Elizabeth Wickenden, Observations on Public Welfare in Puerto Rico. MS, p. 20.
9. Social Science Program. Second Annual Report, 1962-1963. San Juan: Department of Health. Introduction.

10. Ibid., p. 3.

11. Ibid., p. 4.

12. Wickenden, op. cit., p. 22.

13. Division of Public Welfare, Bienestar Publico Ante el Proposito de Puerto Rico. Plan de Diez Anos. San Juan: Puerto Rico Department of Health, 1964.

14. Material taken from Memorandum 63-25, Department of Health, Division of Public Welfare, May 21, 1963.

15. Wickenden, op. cit., p. 12.

16. The 1960 census showed that among 35% of the heads of families in the less than $500 income group, none had been to school.

17. Historical material has been taken from Legislacion Social de P.R. 1936, compiled by Vicente Geigel Polanco, Director of Division of Economic and Social Investigation, Department of Labor.

18. Ibid., p. XIII.

19. Ibid., passim.

20. Fernando Sierra Berdecia, The Civil Rights of Labor and The Public Labor Policy of Puerto Rico, Department of Labor, San Juan, P.R., 1960. (Sec. Sierra died in 1962 and was followed by Sec. Zorilla.)

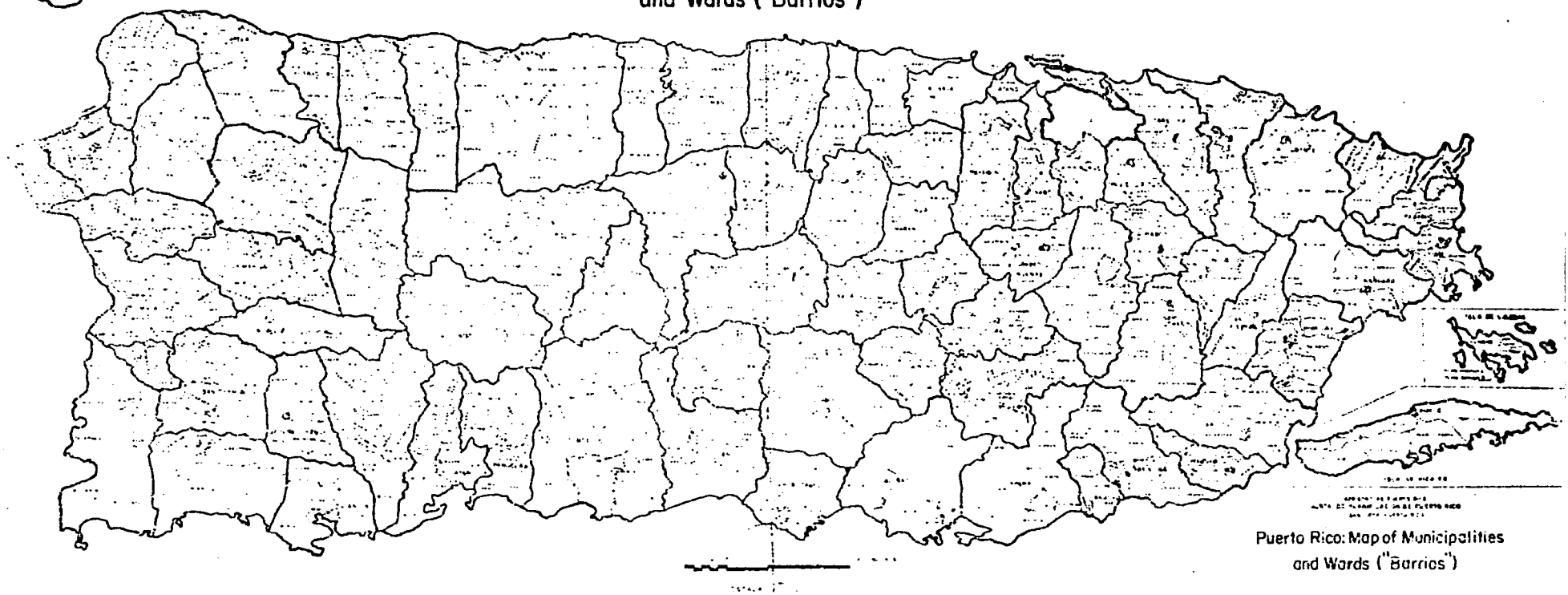
21. Drawn from Rafael Pico, Puerto Rico: Planificación y Acción, 1962. San Juan, P.R.: Banco Gubernamental de Fomento Para Puerto Rico, 1962.

22. Testimony of Rafael Durand, Administrator of the Economic Development Administration, before a special sub-committee of the Select Committee on Small Business of the U.S. Senate, April 16, 1964.

23. The quotations in this section are taken from Jose Mariano Rios (Seminar on Rural Electrification, 1959).

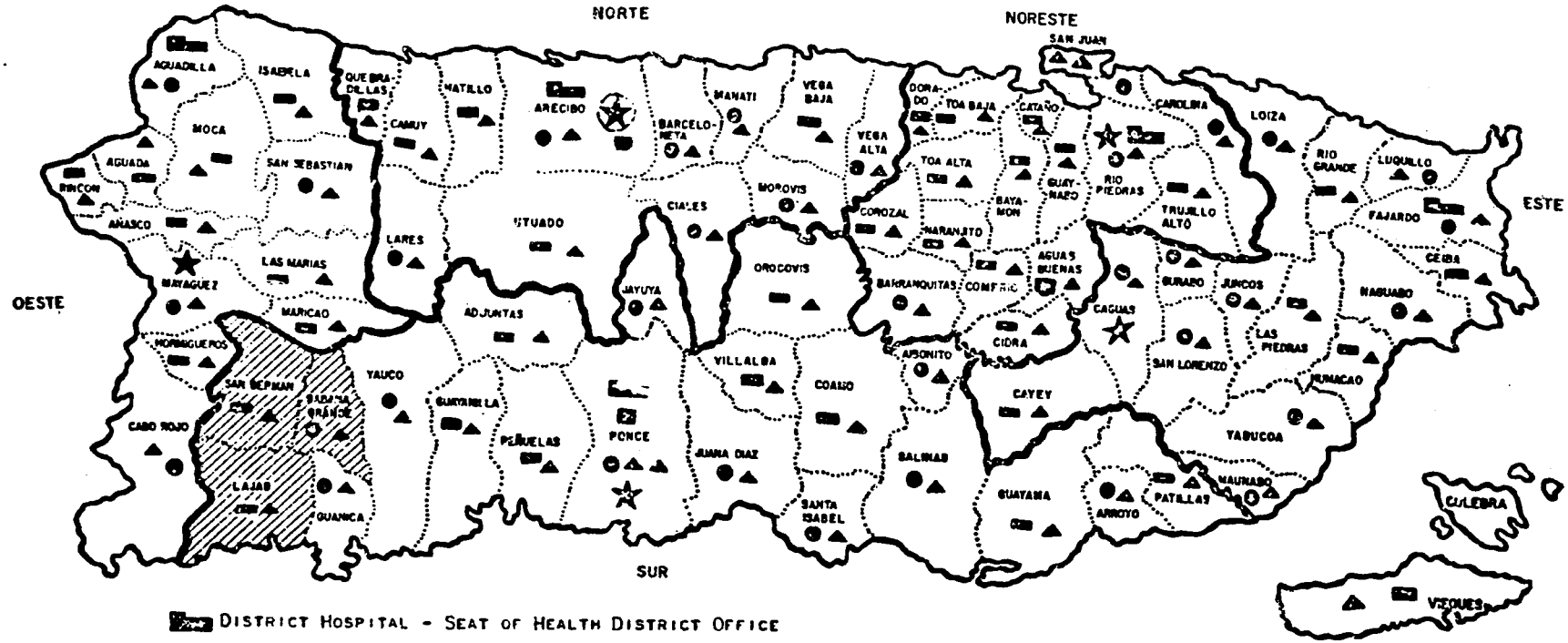
24. Pico, 1962, op.cit.

Puerto Rico: Map of Municipalities and Wards ("Barrios")



Puerto Rico: Map of Municipalities and Wards ("Barrios")

BASIC HEALTH AND WELFARE DISTRICTS



DISTRICT HOSPITAL - SEAT OF HEALTH DISTRICT OFFICE

SEAT OF WELFARE DISTRICT OFFICE

HEALTH CENTER

PUBLIC WELFARE UNIT

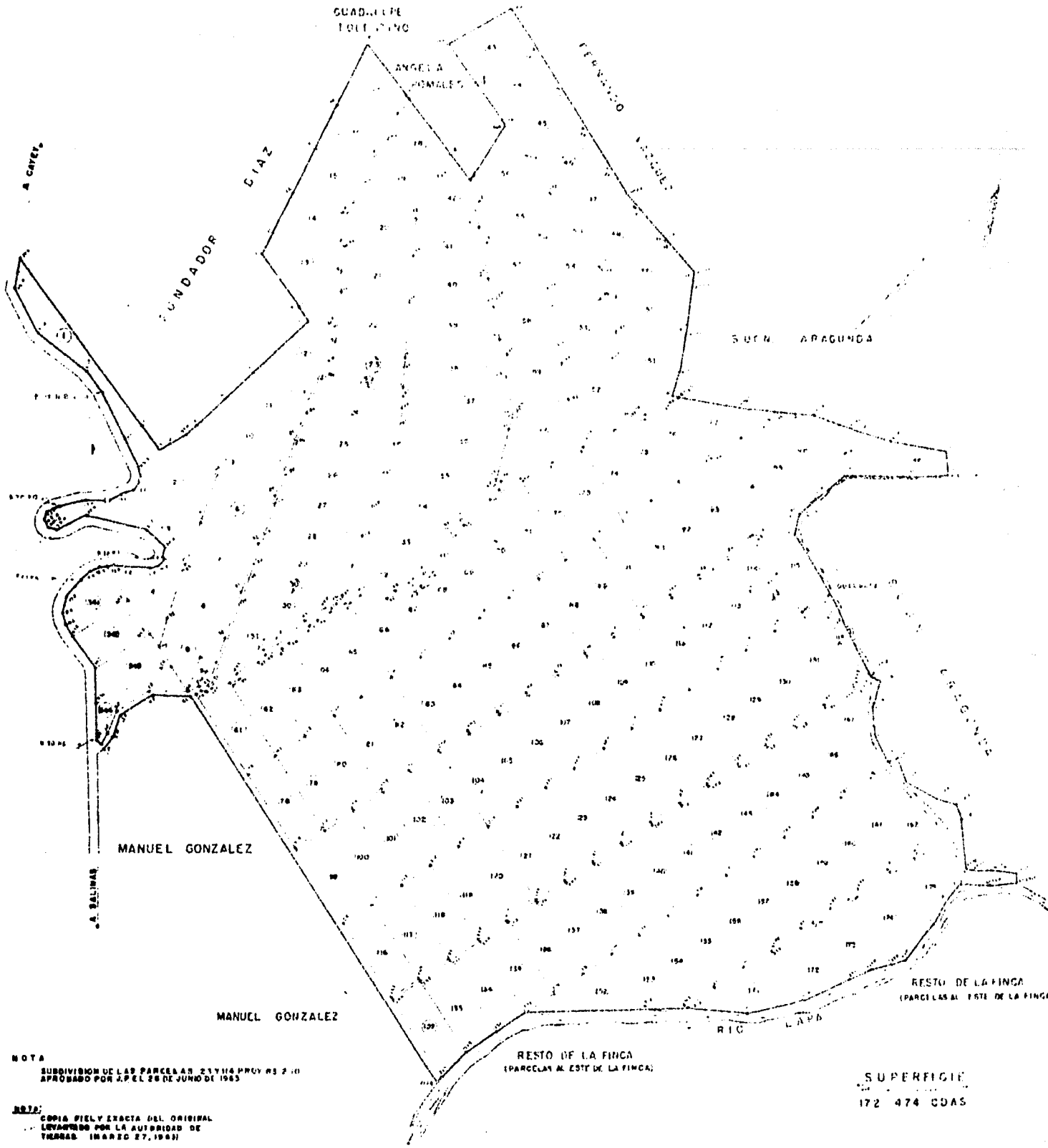
PUBLIC HEALTH UNIT

FOR WELFARE PURPOSES THESE MUNICIPALITIES ARE PART OF THE WEST DISTRICT

GENERAL HOSPITAL ADMINISTERED JOINTLY BY THE MUNICIPAL GOVERNMENT AND THE DEPT. OF HEALTH

Prepared by:
Organization and Methods Section
Drawn by:
Division of Health Education
Department of Health of Puerto Rico
June 1962

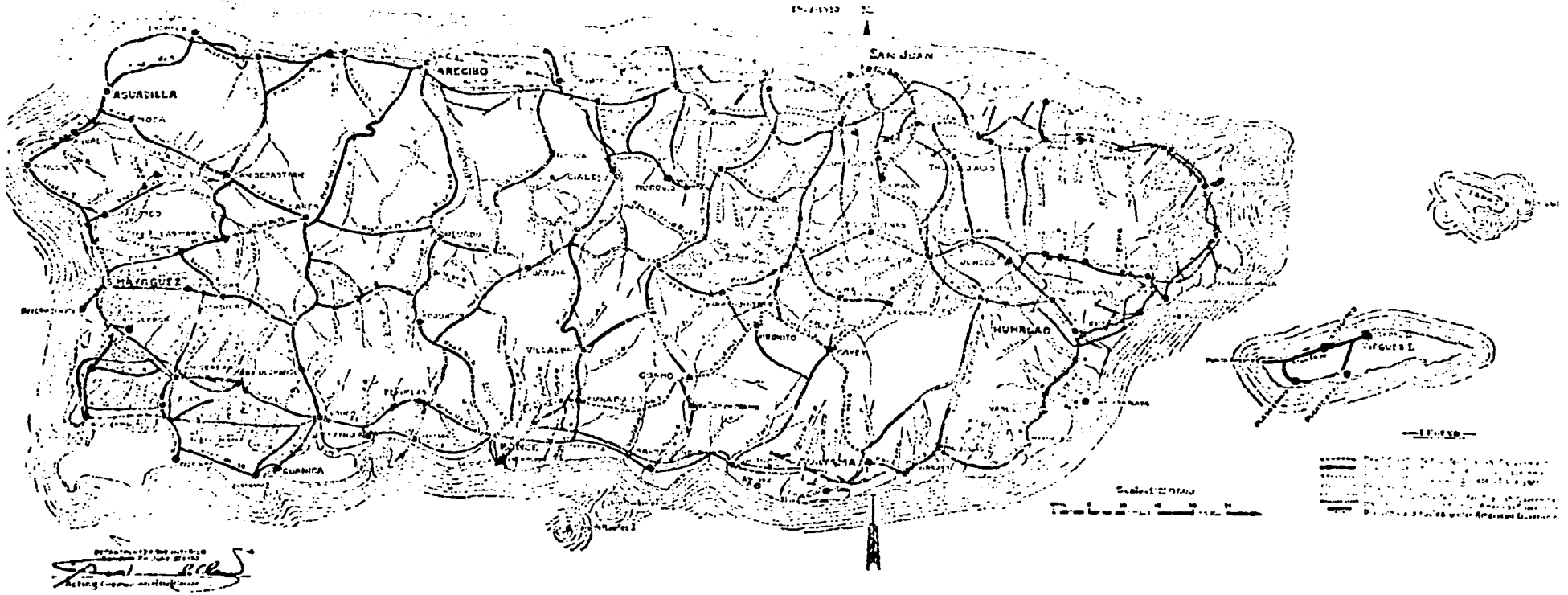
Sample Housing Project Plan: Salinas

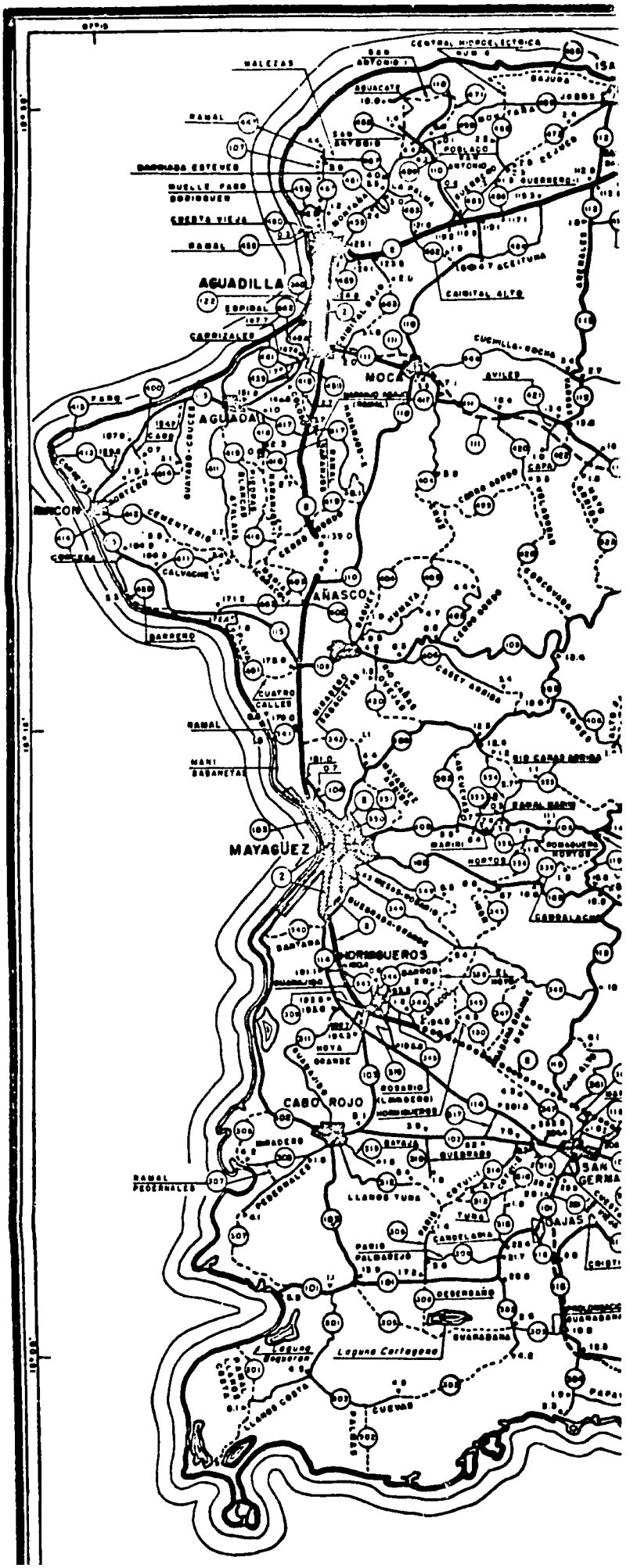


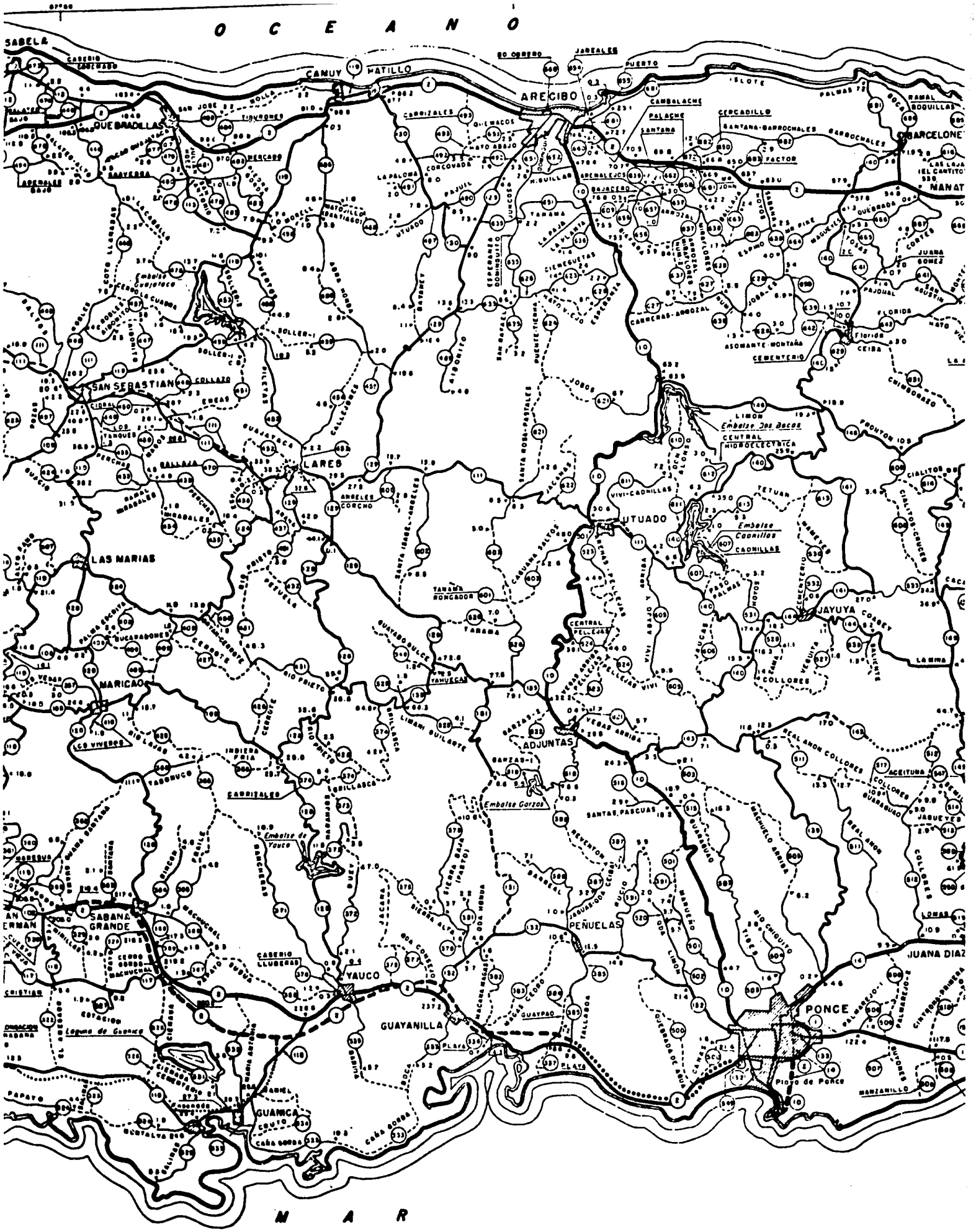
ROAD AND RAILROAD MAP

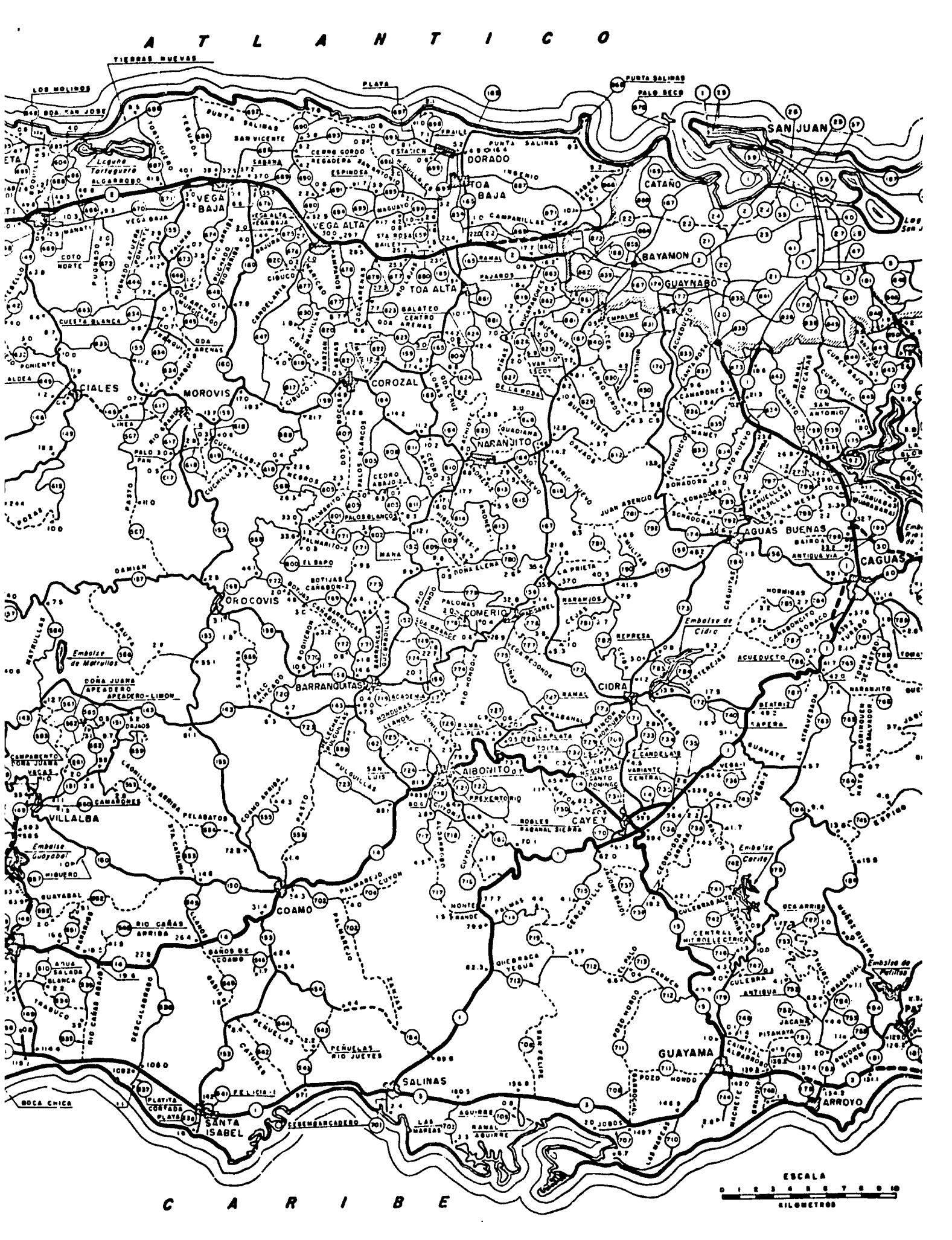
OF

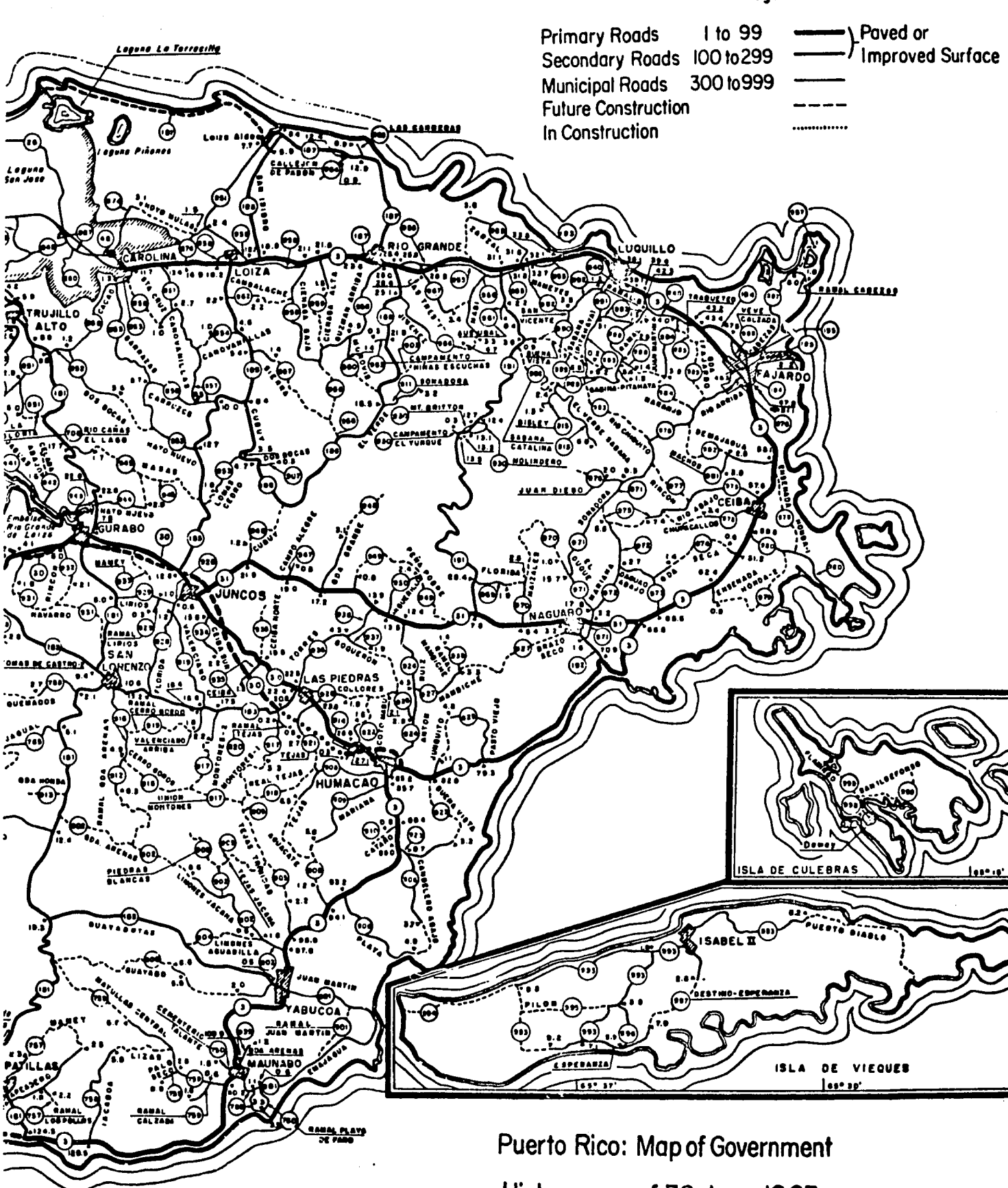
PORTO RICO




CENTRAL HIDROELECTRICA
HALEZAS
RAMAL
AGUADILLA
CAPITAL ALTO
MOCA
AÑASCO
RIBERO
CUATRO CALLES
RAMAL
MANI
BARBANCYAS
MAYAGUEZ
HORMIGUEROS
CABO ROJO
RAMAL PEDERNALES
LLANOS TUNA
TUNA
CANDELARIA
PARIS
PALMAREJO
DESECHEO
GUAYABANA
Laguna Cartagena
Laguna Boqueron
LLANOS COSTA
CUEVAS


O C E A N O
M A R
ARECIBO
CANUY
MATILLO
QUEBRADILLAS
BARCELONETA
MANATI
SAN SEBASTIAN
LARES
UTUADO
LAS MARIAS
MARICAO
JAYUYA
ADJUNTAS
PEÑUELAS
SABANA GRANDE
YAUCO
GUAYANILLA
PONCE
GUAYAMA
Embalse Dos Bocas
Embalse Caonillas
Embalse Garzas
Embalse de Yauco
Laguna de Guanica
Puerto de Ponce


ATLANTICO
TIERRAS NUEVAS
LOS MOLINOS
PUNTA SALINAS
PALO SECO
SAN JUAN
DORADO
TOA BAJA
CATAÑO
VEGA BAJA
VEGA ALTA
BAYAMON
GUAYNABO
TOA ALTA
COROZAL
CIALES
MOROVIS
NARANJITO
AGUAS BUENAS
CAGUAS
OROCOVIS
COMERIO
CIDRA
BARRANQUITAS
AIBONITO
CAYEY
VILLALBA
COAMO
SALINAS
GUAYAMA
ARROYO
SANTA ISABEL
BOCA CHICA
CARIBE
ESCALA
KILOMETROS



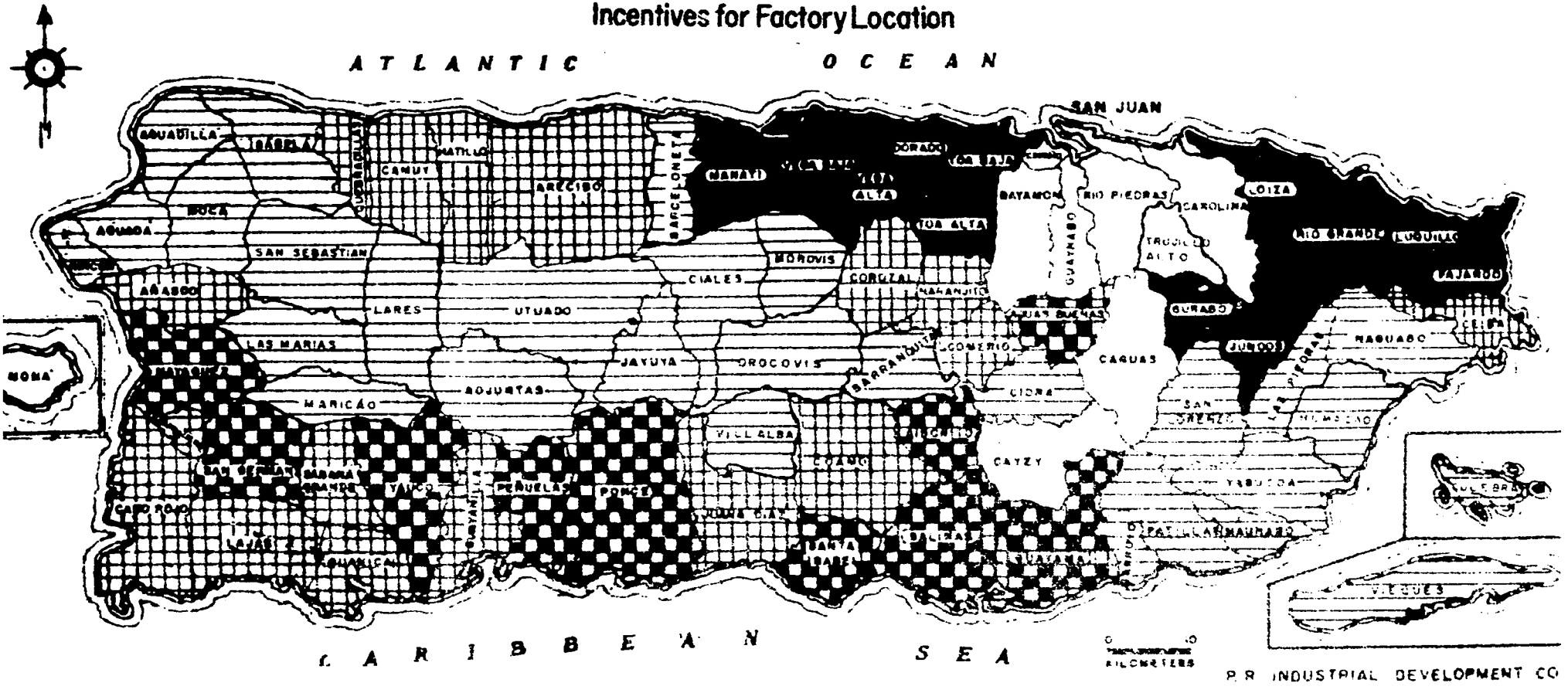
Puerto Rico: Map of Government Highways as of 30 June 1963

SOMETIDO POR: Juan L. Vives, JEFE DIVISION

RECOMENDADO POR: DIRECTOR ASESORADO

APROBADO POR: SECRETARIO DE OBRAS PUBLICAS

Incentives for Factory Location

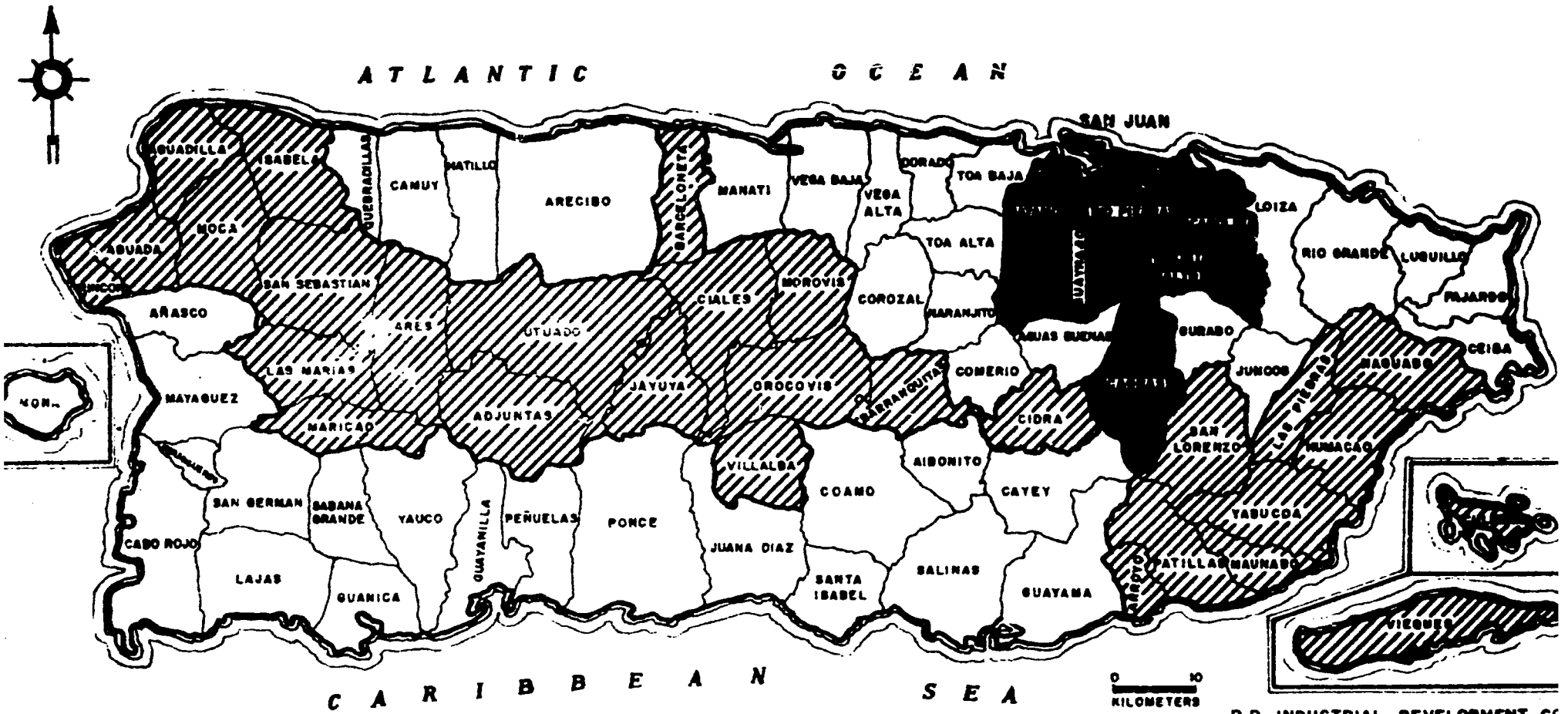


Available Incentives

Category	Basic per 30 employees	Additional per employee	Total per 100 employees	For each 100 additional
I	$ 30,000	$ 300	$ 50,000	$ 30,000
II	20,000	200	35,000	20,000
III	15,000	150	25,000	15,000
IV	5,000	75	10,000	7,500

TAX EXEMP ON ZONES

JUNE 1963

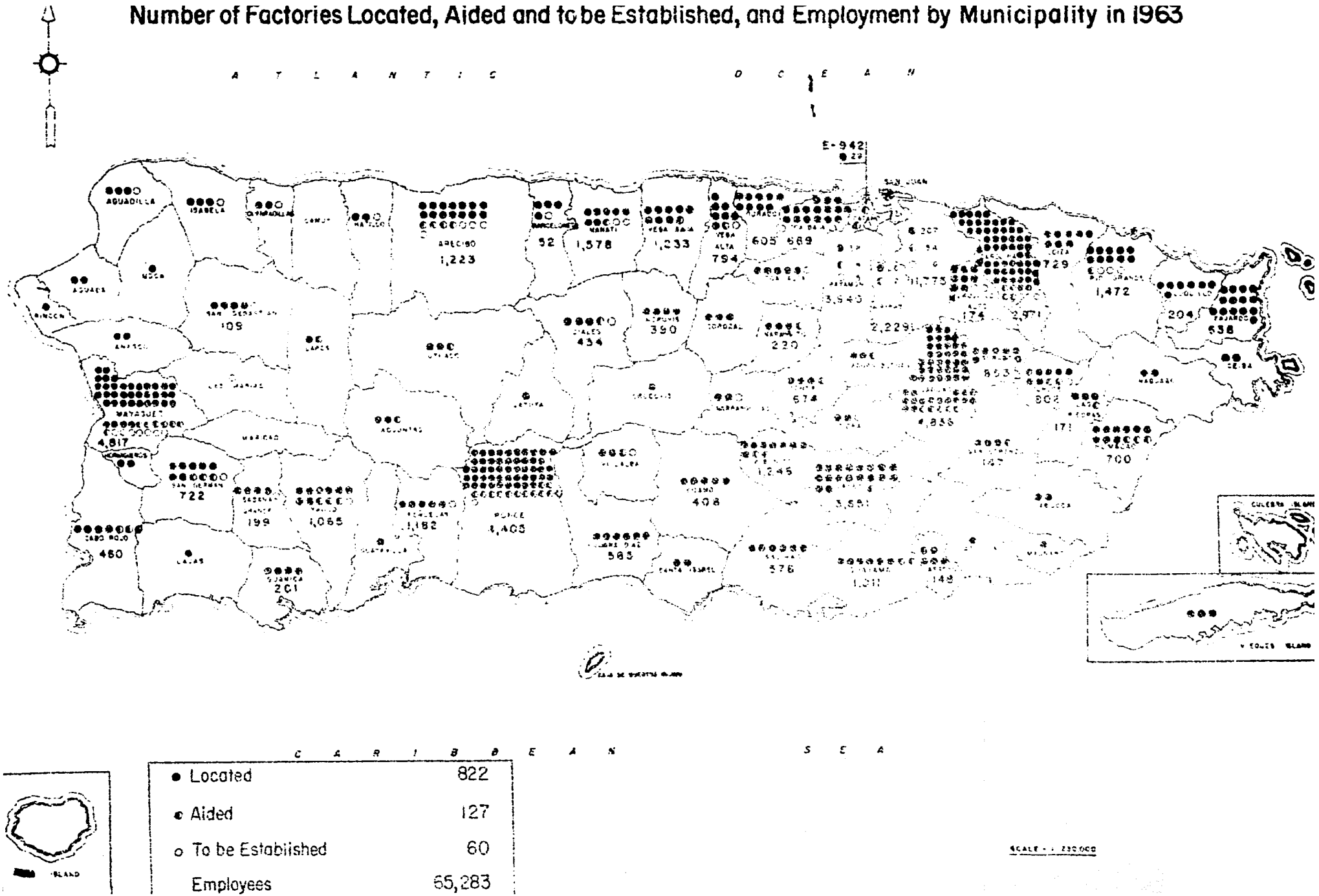


10 YEARS

12 YEARS

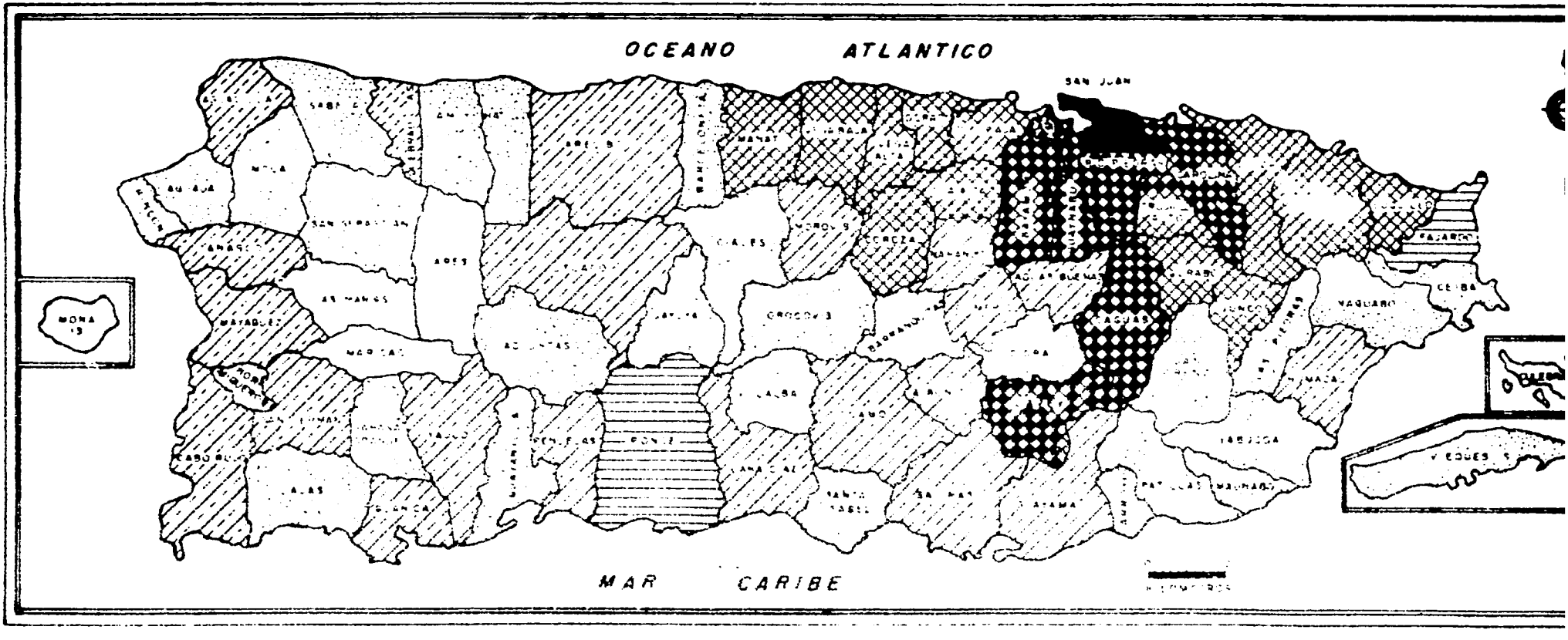
17 YEARS

Number of Factories Located, Aided and to be Established, and Employment by Municipality in 1963

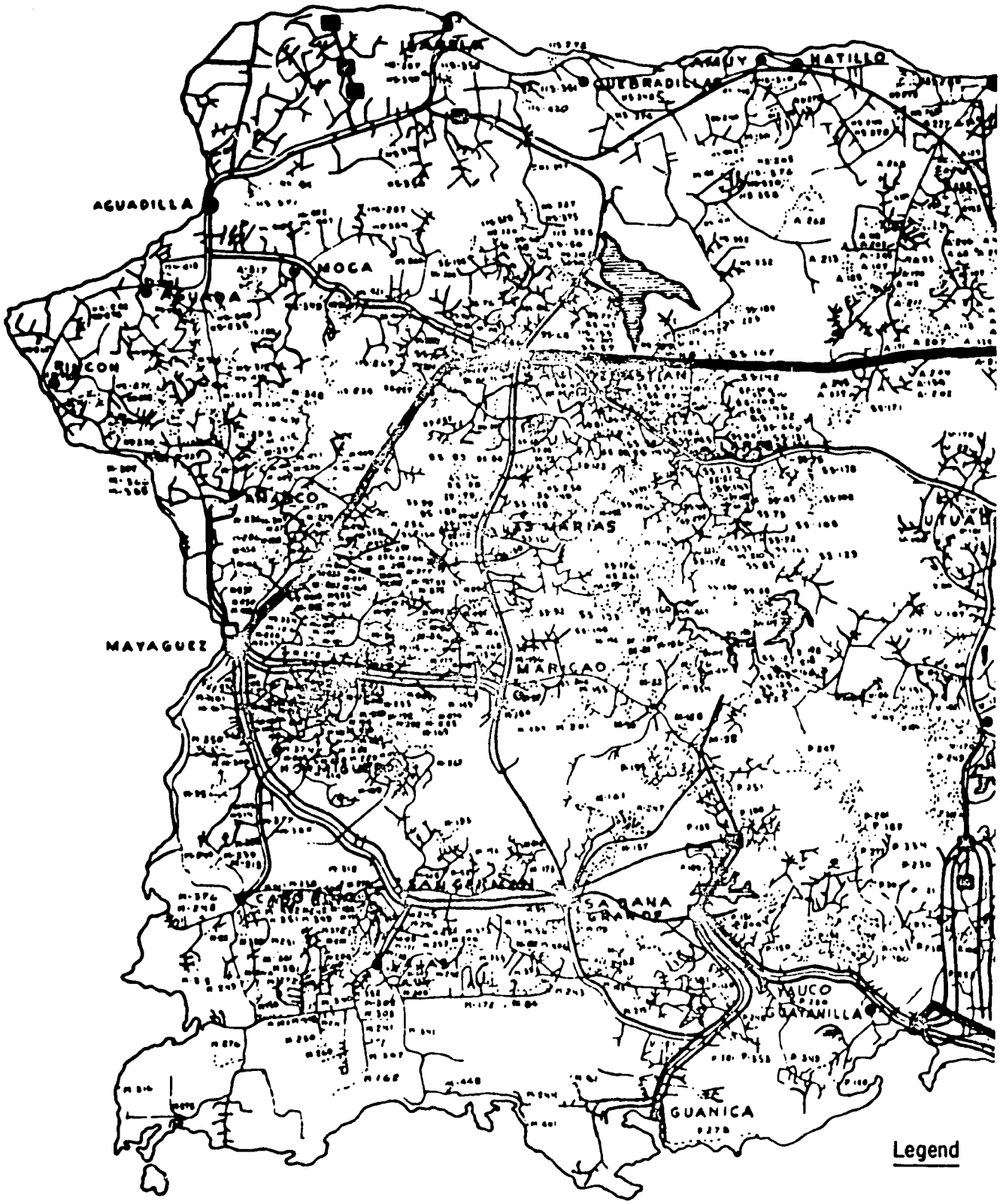


● Located	822
◐ Aided	127
○ To be Established	60
Employees	65,283

Special Incentive Areas (March 1962)



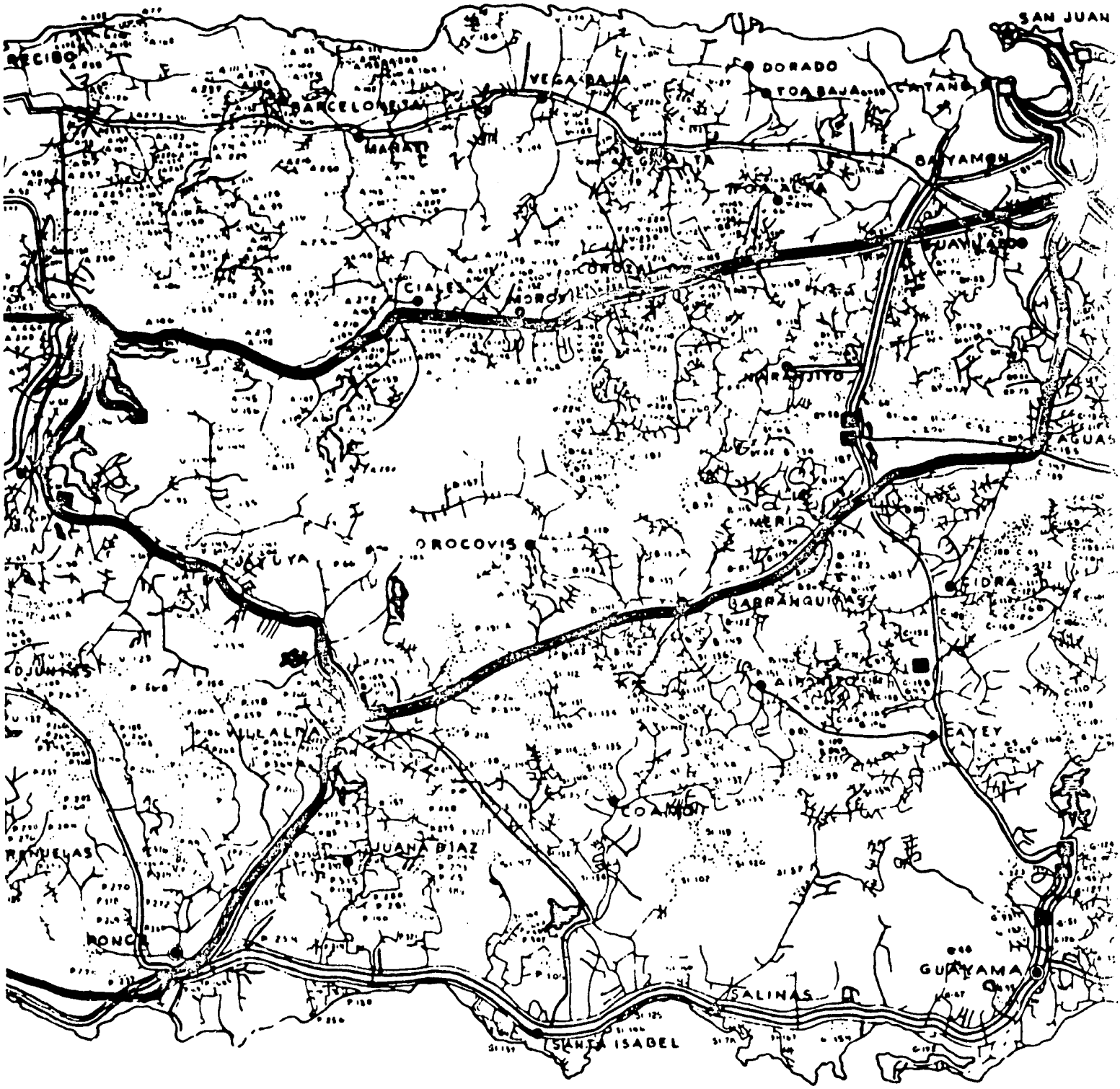
Legend		Incentives
	Area 1	Has no incentives
	Area 2	Has no incentives
	Area 3	$5,000
	Area 4	10,000
	Area 5	15,000
	Area A	$25,000
	Area B	40,000



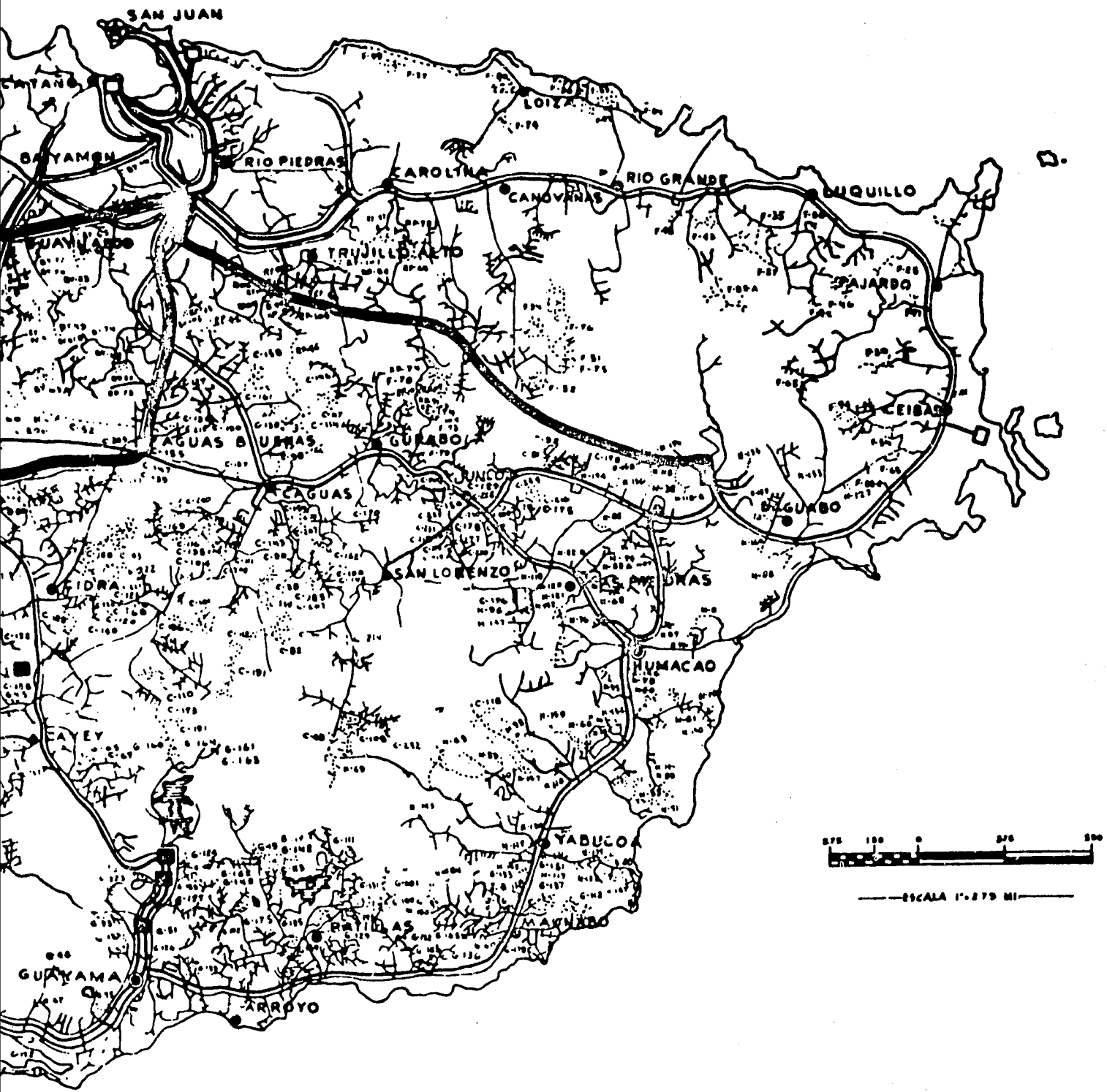
Legend

115,000 V
38,000 V
Distribution
Rural Electr
Hydroelectr
Thermal Ge

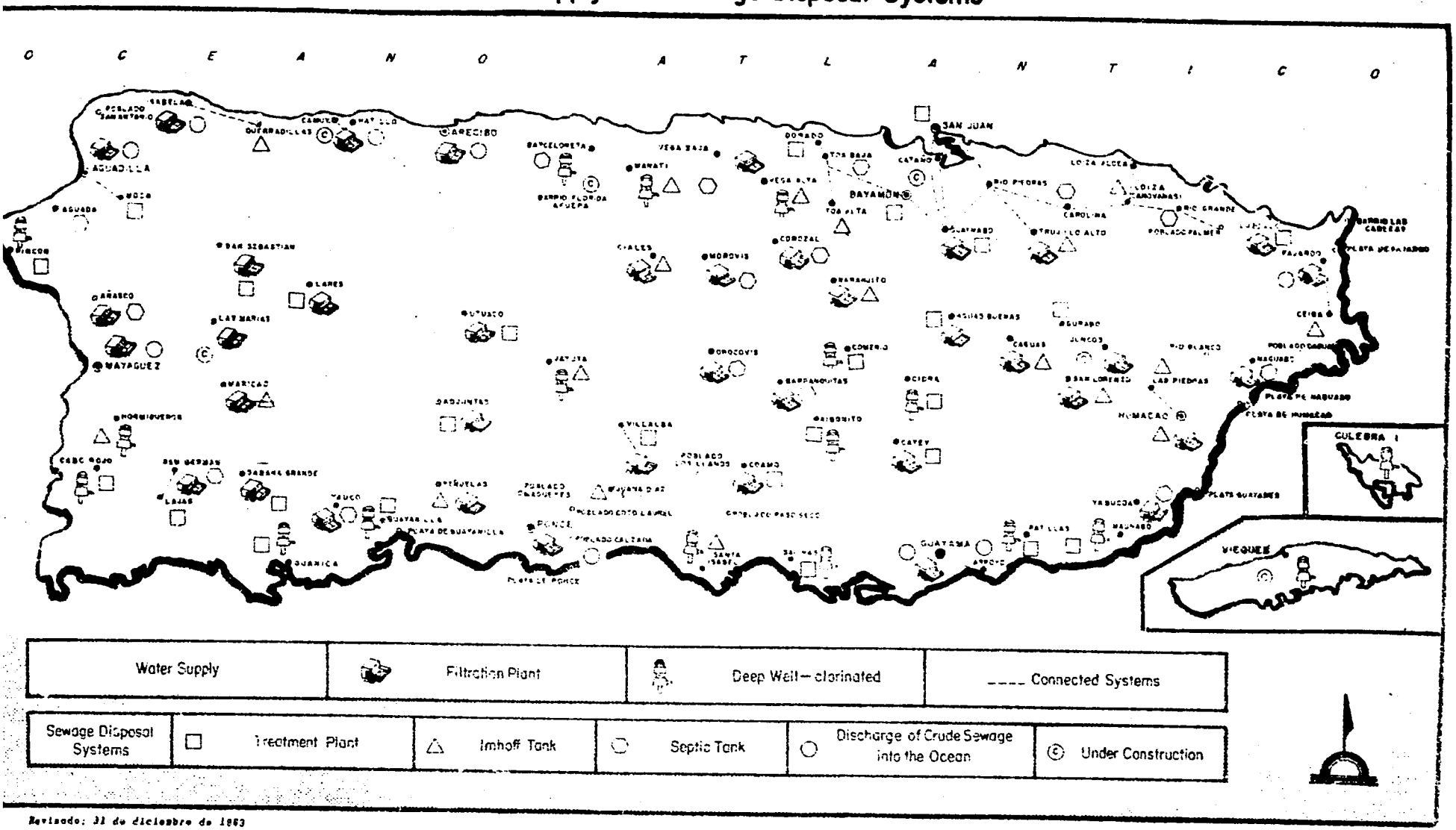
Rural Electrification Program 1961–1963



Transmission Lines
Transmission Lines
Lines
ification Projects 1961–63
ic Generators
nerators


SAN JUAN
BAYAMON
RIO PIEDRAS
LOIZA
CAROLINA
CANOVANAS
RIO GRANDE
LUQUILLO
TRUJILLO ALTO
FAJARDO
CEIBA
AGUAS BUENAS
GURABO
JUNCO
CAGUAS
NAGUABO
SAN LORENZO
LAS PIEDRAS
CIDRA
HUMACAO
CAYEY
YABUCOA
MAUNABO
GUAYAMA
ARROYO
ESCALA 1"=2.75 MI

Water Supply and Sewage Disposal Systems



Revisado: 31 de diciembre de 1963

CHAPTER V

DESCRIPTION OF THE TEN COMMUNITIES

INTRODUCTION TO COMMUNITY REPORTS

An important part of the work done in 1962, as preparation for the present project was the visits to the ten communities by six of the ten social workers who had worked in these communities on the 1932 study. Their reports reproduced in this chapter show a real and often subtle understanding of the effects of change in the communities. Because they had actually lived in these places thirty years ago for a period of two years or more; because the experience had been an important part of the lives of these social workers; because their present professional situations give them insight into the planned change at its upper levels, returning to once-familiar localities was a poignant experience. Although what they saw was factually recorded there lay behind the reports the nostalgia for things past, the impact of personal maturity looking back on youth and a parallel recognition of actual change and of the reasons for it.

In contrast to these reports stand those of the field staff of 1964. Although all were Puerto Ricans, none of the members of this staff had ever known these communities, only one had any personal experience of rural living in Puerto Rico. What they saw were the ten communities as they are now. Because poverty is still present, there was an element of shock in some situations, there was also an appreciation for the warmth and hospitality of the people interviewed; there was great interest in coming to know something of a different way of life -- what it means to live in rural Puerto Rico with its difficulties and its rewards. In some places the natural beauty and luxuriant

vegetation were a new delight, in others the comparative lack of richness in nature was striking. For all of them it was a new experience and the comparison with the past could come only from comparative data and from the experiences of the past as related to them in the interviews.

When we ourselves visited the Second Unit Schools in ten communities, in advance of the field staff, our view was necessarily superficial but some of our observations should be noted. For example, some of the schools did not appear to be very different from thirty years ago and in several places the principal or some of the teachers had been identified with the school and the barrio for many years, yet life in the community had changed. Teachers often lived in the nearest town and drove to and from their work; the occupations and interests of parents had changed -- the barrio no longer enclosed their life, even when it remained as the core of their community. Communication, transportation, available and potable water with few exceptions, often electricity had transformed or at least modified the way of life. Where the old houses remained they were usually painted - some not completely -- expressing to the eye the wish and the opportunity to bring color into their living. The appearance of the children was striking -- cleanliness, neatness, healthy color, shoes. The increase in the number of (free) school lunches meant better nutrition; the program for shoes meant a change in status as well as protection from some of the parasitical diseases. In many places there was a noticeable change or shift in the crops in the area. Some of these are a result of programs of the Department of Agriculture, but we noted also many more small plots of minor crops -- particularly plantains (see Glossary) and bananas. We know the marketing of such minor crops has not been fully worked out but

the increase was obvious. The establishment of parcelas (see Glossary) in many communities has introduced a new pattern for rural living.

Among our ten communities Hato Tejas in Bayamon can no longer be classified as a rural community; it has become a suburb of a very mixed kind. In outlying parts it retains some rural characteristics in contrast to the sections nearest to Route #2 -- one of the main highways of the island. The municipality of Bayamon to which Hato Tejas belongs is a part of the metropolitan area with its own industries, housing developments and congested traffic. Middle class growth is apparent everywhere. Hato Tejas could be studied from the standpoint of a transitional community, suffering the consequences of rapid change with the problems of the city superimposed in a brief space of time on the rural society. Its citrus fruit growers have sold their land for high prices. One or two who remain in this section are in the business of canning fruit juices; just beyond lie the acres of pineapple which provide the raw product.

AGUADILLA - BARRIO SAN ANTONIO

Pop. 1932 - 3291
Pop. 1962 - 3771
Households - 621

This is a completely unique community in that it has been bodily moved twice to make room for Ramey Air Force Base. It is now part of the barrio Montana, but keeps its own identity -- has its own post office and considers itself a separate entity.

It is about seven miles from Aguadilla down the road to Isabella and the community is bordered by Isabella, Moca and Aguada. Due to the moves, practically all the houses are comparatively new and the community gives the appearance of being well-planned and is kept very neat. The people do not accept being a part of Montana nor does Montana accept them.

The school is well-equipped and is actually closer to the people of San Antonio than it was before, because of the moves. There is no information yet as to the number of children in the school since all the figures we have available are for the whole of Montana so those of San Antonio must be estimated on a pro rata basis. Eight new classrooms have been added to the school since 1942.

The water service is excellent and nearly everyone has electricity. There is a public telephone but no telegraph office. There is no low-cost housing but there are 413 parcelas which means enough for about two-thirds of the population. The roads are good and lead to remote areas, but some of them are not connected yet to continuous municipalities. There is a good public recreation program and there are also cultural activities connected with the school. There are no factories in San Antonio but there are three in Aguadilla and the transportation to Aguadilla is adequate. Health Centers and public welfare services are in full operation, but the agricultural extension

service is only partial. The area concentrates heavily on raising sugar cane. There is no community education program and only partial services from the Labor Department.

AGUADILLA - BARRIO SAN ANTONIO

Report of visit to San Antonio, Aguadilla by Mercedes Velez de Perez, 1962 (Note: Mrs. Perez as social worker of San Antonio, Second Unit School, did the work for this community in 1931-32.)

A place is never the same when you go back to it, but if the going back takes place following a period of thirty years, the changes are very obvious. I recall San Antonio very vividly as it was in 1930. A closely-knit rural "poblado" (see Glossary), twelve kilometers away from Aguadilla. A good many of its houses were thatched-roofed and inside them the furniture was quite rustic. The only means of transportation to and from the place was an old bus which made two round trips each day at specified intervals. Malaria and tuberculosis were prevalent as well as gastro-enteritis in infants, and skin and eye infections in children of school age. Sugar-cane cutting provided almost the only source of income during half of the year, the remaining months of unemployment being referred to as the "tiempo Muerto" or the dead season. The one-time important tobacco and needlework industries for women were no longer sources of income and the straw industries were about to die out. But, in its social cohesiveness, its leaders were always busy with plans for the improvement of the community. The little public square, whose various flower gardens the ladies in the most outstanding families took good care of, the annual celebration of the "fiestas patronales" (see Glossary), and the existence of a post office station were sources of great pride among the San Antonians.

Great changes have taken place in San Antonio as you will see below. Its inhabitants have been relocated twice but their strong community feeling has remained unchanged. They will be nothing else

but the dwellers of San Antonio even when they have twice come to be a part of two different "barrios". One of its most outstanding leaders rejoiced over the fact that when the Police Headquarters Substation was established they succeeded in having it named "San Antonio" not "Montana".

One of the residents of the old San Antonio (who was in part of the 1932 Cost of Living Study) described the most visible changes in the following way: "Those were very backward times, the thirties. Imagine, we used to put brown sugar in our coffee and I felt embarrassed over having to say so in the study (referring to the Cost of Living Study). Our houses were lighted by kerosene burners, since only the school building and the richest family in the "poblado" had electric light. And as for food, we only ate meat on Saturdays, and then, only pork as beef fillet was unheard of. The only desserts we had were home-made ones like coconut candy and "dulce de ajonjoli" whereas now everybody can have cake and ice cream and other nice desserts which are easily bought in the supermarket and kept in the refrigerator. People now drink fresh milk, not then. Another big change concerns educational facilities; you hear nowadays of many poor children going to high school and even college. This was unheard of in the thirties." Speaking of health facilities this same person commented that, nowadays, no woman gave birth to a child at home. Everyone, she claims, is hospitalized at the time of delivery. (Later I heard the Nursing Supervisor in the Public Health Unit comment that although they have the necessary hospital facilities for every woman to avail themselves of them at the time of delivery, there are still a good many who will not consider giving birth to their children in a hospital. A great deal needs to be done along this line by way of

education, she explained.)

As was mentioned before, the San Antonio "poblado" has been moved twice because of the establishment of the Ramey Base. The first relocation occurred in 1939, when its inhabitants were moved to Barrio Aguacate where the little "Poblado de San Antonio" was resettled. There it remained until 1959 when again, the need to expand the facilities at the Air Base forced the dwellers of San Antonio to move to Barrio Montana, the site where they now are. They tell me that some people in San Antonio are afraid of the possibility of having to move again.

An employee of the Administration of Social Programs in the Department of Agriculture, explains that the new San Antonio has had the benefits of modern planning and zoning methods. Houses are not scattered irregularly as they used to be in the old place. They follow a well-devised relocation plan; each family has been granted a lot of from 350 to 500 meters.

Streets have been paved by the municipality and all the necessary public services have been provided, such as electricity, individual water facilities for each house, a post office and a police station, and schools up to the fourth grade after which the children move to the school in Barrio Montana. Other resources in the communitu are: a free school feeding center, a playground, two churches (one Protestant and the other Pentecostal), a moving picture house, and a commercial center which includes several supermarkets, warehouses, laundry, bakery, and clothing stores. There is also a public telephone in the neighboring community and fire extinguishing facilities in every street corner of the "poblado".

There is, furthermore, a very active citizen's committee whose

plans for the improvement of the community include the following: building a public square, establishment of a consumer's cooperative. Plans also include the building of a Catholic chapel.

Improvement in housing conditions is readily seen. Thatched roofed houses are no longer seen in San Antonio. Home surroundings are clean and orderly. Many homes have a flower garden. Modern furniture has replaced the former primitive benches and tables. Practically every house has a radio. An estimate of 12 out of each 100 homes are equipped with a television set and a refrigerator. There must be around 10 houses with laundry machines in the "poblado".

There are around thirty public automobiles and station wagons which provide relatively good transportation facilities to and from Aguadilla. There are also buses to take children to and from school in the city. The distance to be covered is now around seven miles. One of San Antonio's civic leaders considers that even with the increased facilities adults still have difficulty in getting transportation in the morning when they need to get to the Public Health Unit or to some other place in town.

There is an individual supply of water for every house in the "poblado". Water is safe. The greatest achievement in the health area has been the eradication of malaria which used to be a very serious problem in this community. Tuberculosis, according to the school social worker and the Nursing Supervisor in the Health Unit, is still a serious problem. Out of a caseload of 24, the social worker reported six tuberculosis cases. "The number of deaths on account of TB may have decreased," claims the nursing supervisor, "but there is a good number of new tuberculosis cases each year." She also commented that other health problems are now more evident than previous-

ly, or at least, there seems to be an increased awareness of the number of cripples, cancer cases and heart patients besides diabetis and, lately, hepatitis. She was very much concerned with the high incidence of tooth decay, despite improvement in the measures such as fluorinization of water, increased dental facilities, etc. She was referring, however, to the situation for the Island as a whole since she did not have data on cases from San Antonio. Sanitary conditions in the community seem to have improved considerably. Every house has its latrine in good, hygenic conditions, and a few have toilets. The residents of San Antonio still have to go to Aguadilla for the treatment of their health problems. The Health Unit and the District Hospital provide good health services.

School dental facilities have improved considerably inasmuch as they are no longer limited to extractions, but make provisions for tooth repairing.

Everyone agrees that it is in the area of education where the greatest achievements have been made. As already indicated, in San Antonio proper, there are school facilities for children up to the fourth grade. After that children attend school in the neighboring vicinity of Montana with grades up to the ninth. From then on, children avail themselves of the educational facilities in Aguadilla where they get their High School Education. Up to last year, for further academic training they had to make plans to attend either the University in Rio Piedras, or one of the Colleges in San German or Mayaguez, or the University in Ponce. Since last year, the Inter-American University of San German and the Catholic University in Ponce have established extension courses in Aguadilla. School buses take students to Aguadilla in the morning and back to San Antonio after

school is over. There are also evening classes for those who need to work during the day. Scholarship facilities, as well as transportation expenses, shoes for needy children and other educational resources are now available to help needy children obtain their education in accordance with their ability to learn. A good many of the children of San Antonio have availed themselves of these opportunities.

Sugar-cane still constitutes the main agricultural product in the region. Though less land is now available for the growing of cane because so much had to be taken for the Military Base, there is still sugar-cane growing in the region. No other agricultural products seem to be grown in this area.

We have already indicated that the tobacco, needlework and straw industries are no longer sources of income for women. Work opportunities, in addition to the ones available during part of the year in the cane industry, are those provided by the Ramey Base. This includes domestic service, janitorial jobs, gardening, store clerks, cooks, bar-tenders, work in gas stations and transportation facilities as well as in the existing grocery and clothing stores, laundry and bakery.

Everyone seems to agree that there is still a serious unemployment problem in this community in spite of the work opportunities available in Ramey Base. Some of the San Antonio civic leaders have approached the government officials about the possibility of establishing a factory in the community to alleviate the unemployment situation but movement in this direction has met with no success.

The head of the Employment Service in Aguadilla and the Work Placement Officer could not supply either employment or unemployment

figures for San Antonio as they do not keep such data on a "barrio" basis. However, they are aware of the unemployment problem in the area and estimate that around 50% of its wage earners engage in the sugar-cane cutting in the active season and are unemployed when this is over (June to December). It is then when laborers are eligible under the Compensation Plan for Unemployment in the Cane Industry. Under such a plan an unemployed laborer who has worked 60 days in the cane fields is entitled to a total amount of $31.50, payable on the basis of $3.50 per week for 9 weeks. Payments are made every two weeks. Legislation now pending aims to increase to $60.00 the total amount to be given and to 12 the number of weeks for which benefits may be received.

According to the Placement Officer a group of laborers migrates to the United States during the months of April to August in search of seasonal employment. Some of them are residents of San Antonio, both men and women, who move to and from the States in search of work.

No significant migration from San Antonio to the city of Aguadilla is noticeable. Immigration, rather than emigration, accounts for the change in population figures, according to the civic leader already referred to. He agrees with others that there is some movement of laborers to the United States during part of the "tiempo muerto" in search of work. They are sure to return, he claims.

At the moving picture house, pictures are shown every evening and at the athletic park the baseball games and other sports activities take place. School recreational activities, a Boy Scout troop, and the celebration of the "fiestas patronales" once a year around March, constitute the additional recreational activities in the area. The moving picture house is famous for the good pictures it shows

but it is said that the place is filled largely with persons coming from neighboring barrios and even from towns like Isabela and Aguagilla, rather than with residents of San Antonio most of whom cannot afford to attend the movies frequently.

There was general agreement with regard to the unemployment problem and the existence of poverty among the people of San Antonio. A visit to the Aguadilla Public Welfare Office where we interviewed the local chief revealed a total of 140 families from San Antonio who were getting public assistance because of the existence in the family of: (1) needy aged (2) needy blind (3) permanent and total disability of the breadwinner (4) dependent children. There are around 671 families in the community so the number of Public Assistance recipients seems very high. The trend is towards an increase in these figures. Three years ago the number of public assistance cases in San Antonio was only 80 and last January there were 130, the average monthly increase having been 9. There were also four cases of children who had been referred for child welfare services because of delinquent behaviour.

Further inquiry into this last area revealed that in the year 1961 and up to the present, a total of 11 youngsters had been adjudicated delinquent by the Juvenile Court in Aguadilla. Four of them had been placed in the corresponding public welfare institutions.

Several of the persons interviewed spoke of the delinquency problem, a thing unheard of in the thirties. Reference was also made by several of the persons interviewed to the problems presented by a few women whose moral conduct was thought to constitute a problem in the community. Although these were thought to be isolated cases, apparently there is some concern over the problem they present inas-

much as the community holds in high regard its reputation for good behavior among its citizens.

The civic leader of whom we spoke above, referred to the problem of gambling to which some adults in San Antonio were addicted but, considered that, in general, the San Antonio community is composed of good, law-abiding citizens. There was a great deal of pride in him when he made such a statement.

LOIZA - BARRIO MEDIANIA ALTA

Pop. 1932 - 2197
Pop. 1962 - 4254
Households 788

Mediania Alta, is a barrio of the municipality of Loiza. It can be regarded in many respects as atypical, compared to most of the rural communities in Puerto Rico, though this difference was more striking thirty years ago than it is at present, due to roads, communication and opportunities for employment in industries in Canovanas.

The barrio is situated in the northeast part of Puerto Rico, running back in a southerly direction from the coast and bounded by the municipalities of Carolina on the west, Rio Grande on the east, and Juncos on the south. It may be reached by crossing the Loiza River, by primitive ferry, from the west, or by improved road from the Sixty-fifth Infantry highway from the south.

It is characterized by an almost completely Negro population and in the past had a reputation for primitive customs, partly based on fact and partly on myth. Until recently, a large proportion of the housing was made up of thatched huts although even in the thirties there were some well-built houses of wood along the road. Coconuts and minor crops were the main commercial agricultural products and many of the huts were scattered through cocoanut groves. There was, and still is, in addition, raising of minor crops largely for home consumption.

This community has a special character and charm, which at first view appears to be primitive. There are few families with a standard of living which could be considered high, and there is a retention of old values which relates the village to a traditional past.

This is, however, in process of change, through the appearance of new occupations, increasing land values and the introduction of government services.

In this study, some preliminary work was done before the decision was made to use our sampling method. School records revealed the frequent repitition of family names and further investigation showed some social stratification by family, resulting in prestige for certain names. There is no striking difference, however, in economic level so that some interpretation and modification of classification of families had to be introduced to allow for differences not represented solely by income. The investigators were struck by the lack of adequate living space for the size of the families. Most houses have outside latrines and tin tubs for bathing. Some of the new houses have running water in kitchens but many families still must carry water from the public faucet. Kerosene is the fuel most often used; electricity is used for ironing and for lighting.

Government services include a health unit, a first aid unit, a post office, police, a public telephone, school buses, school lunchrooms, breakfast for pre-school children and milk stations for infants up to three years of age. The Second Unit School retains much of the character of a community center and families participate in social events held in the school and make use of governmental services.

One of our field workers wrote that the population of Mediania Alta is "the prototype of a conservative people, in spite of all changes and improvements -- they retain their rural characteristics and seem happier that way."

This community is made up of several sectors, differing in fac-

ilities of water, roads and electricity. The "Programas Sociales" of the Department of Agriculture has established "parcelas" (see information on this program under Department of Agriculture). No agricultural agent works in the community now because cocoanuts are no longer a commercial crop there. The reason given for this was that land is being acquired by both government and private interests for other than agricultural purposes.

It was reported that some of the residents go to the continental United States for seasonal agricultural work in the summer.

Our interviewers were impressed by the friendly atmosphere, both among neighbors and to the field staff, and were charmed by the children. There was a willingness to answer questions, but one of the interviewers found that the fathers often did not know the ages of their children and the women knew little of economic questions.

JUANA DIAZ - BARRIO COLLORES

Ter. 1932 - 2713
Ter. 1962 - 2340
Households - 443

The municipality of Juana Diaz is in the center of the south coast but the barrio of Collores is inland in a rural section classified in the 1932 study as growing mixed or minor crops. The municipality is bounded by Santa Isabel, Coama, Villalba and Ponce. To reach Collores one drives some distance west and north from the town of Juana Diaz. The Second Unit school is located close to the road which continues into the mountain area in the direction of Jayuya and the majority of houses of this community are situated along this same road. Many of the people of the barrio go to Juana Diaz or Ponce to work. Some coffee and some sugar are raised.

The field staff found the area conservative in its outlook, although they are strong supporters of the Popular Party and idolize Munoz Marin. They are not much interested in the world outside their immediate community but are anxious to get government services for their neighborhood. They already have water for 300 of the 443 households and some parts of the barrio already have electricity.

The field staff felt that, although Collores is a poor community, it has benefited greatly from the roads, electricity and schools of the government program and also has good churches.

Collores is very beautiful and was made famous by a poem by Luis Llorens Torres. One of the members of the staff asked the people whom she interviewed whether they were familiar with the poem; she found they were not and could not identify the plants and flowers mentioned in the poem.

There was great curiosity about the study and during the interviews neighbors came in to find out why a certain person was being interviewed. The people were described as religious, hospitable, communicative and receptive.

Note was also made of many marital unions outside legal marriage, but there was condemnation for a girl who became pregnant before establishing an arrangement for living with a particular man.

BAYAMON - BARRIO HATO TEJAS

Pop. 1932 - 3092
Pop. 1962 -11427
Households- 2246

Among the ten barrios of the study, the barrio of Hato Tejas presents the most striking changes. It lies on the outskirts of the city of Bayamon, a part of the San Juan metropolitan area. A large part of the area manifests urban or transitional characteristics, yet there remains one sector which is still distinctly rural. One leaves Route #2 (San Juan to Arecibo) to the south. Roads are paved although not all houses have immediate access to these roads. Some major crops are raised and there are some dairies but sugar-cane cultivation is almost gone. Many government services are in operation. There is a local dispensary for prescriptions and first aid, in charge of a licensed practical nurse and visited by a doctor three times a week. These services are much used. There is also service from the Public Health Unit in Bayamon to the adjoining barrio of Rio Plantacion which serves Hato Tejas. Full public wlefare services are in operation through the Bayamon office. The program for electricity is not complete, but service centers are provided for installation of light, radios, irons and stoves at the rate of $1.00 per month.

The school picture is complicated. The Second Unit is a part of a local complex including a new intermediate school with 655 students and 26 teachers which offers courses in home economics and industrial arts; in another sector, there is a grade school with 153 children, 3 teachers -- grades 1-3, and another, grades 1-6 with 345 pupils and 7 teachers. The Second Unit itself has 1249 students and 33 teachers, using the interlocking system to accommodate this number. Four hun-

dred forty students eat the school lunch. Industrial Arts serves the 7th, 8th, 9th grades and its program includes graphic arts, drawing, mechanics in the 7th grade, with metal working, wood working and electricity in the 8th and 9th grades. This is an illustration of the new plans of the Department of Education in preparing students for work in industry. A new vocational school is also being built. In addition, there is a big private academy run by the Dominican Order.

The Department of Public Works has let a contract for 3500 linear meters of curbs and 6050 meters of sidewalk. Housing developments are increasing and land, formerly agricultural, is being bought up. These developments contrast with existing poor housing. Even under this excellent program of Programas Sociales, one member of the staff said the good houses were as good as the best and the bad houses as bad as the worst.

There has been an influx of population from the interior of the island, looking for jobs and for improved living conditions. This has brought a variety of people to the area and has created the usual problems resulting from the need to adapt to a different way of life. These problems include dope addiction and juvenile delinquency.

Opportunities for industrial employment exist in six establishments: a paper company, a container company, manufacturers of coffee grinding machinery, frozen fruit concentrates, hard candy, and agricultural chemicals.

The reports of the field staff from their interviews reflect the rapid changes which have come to this community -- a greater sophistication than is found in the rural areas, the enjoyment of more conveniences of living, (or the prospect of acquiring them soon), high levels of aspiration of parents for their children. Incomes on the whole are

higher -- new occupations include not only employees of industrial plants, but construction workers, chauffeurs (drivers of public cars) workers in supermarkets (in Bayamon) etc.

Family life is affected by the employment situation. Often both parents are working and the younger children are left with the grandparents, neighbors, older children -- or are neglected. There was less of an easy and hospitable welcome to the field staff; more suspicion, more difficulty in establishing rapport. The staff reported many consensual or casual marital relationships -- men with a number of women, and women with a number of men, even in cases where the original marriage had been legal.

Another matter of interest was the strength of spiritualism evaluated positively by one member of the staff who felt that it solved many problems in person-to-person relationships, although other comments on religion emphasized its supervicial-conventional character.

BAYAMON - BARRIO HATO TEJAS

Visit to Second Unit Virgilio Davila Hato Tejas, Bayamon, Puerto Rico, 1962 by Emma Purcell de Hernandez, Social Worker, 1932 and Zenaida B. Shepard, Home Economics Teacher 1932.

Hato Tejas, a suburb community of Bayamon, Puerto Rico, was chosen among the other "Barrios" of the town of Bayamon in 1930, as the site in which to establish a different type of school,in those days called Second Units. This was started in Peabody Rural School. In this rural school there were only the first, second, and third grades. When the Second Unit started it was necessary to add more grades. By and by the school reached the eighth grade. It was in 1932 when the first graduation took place in Hato Tejas.

In 1930 the school enrollment was about 400 students. At present the school has two school levels, the elementary and the junior high school.

From the 1st to the 6th grades there are	1,196 students
From the 7th to the 9th grades there are	498 students
total enrollment	1,694 students

Today the school has the following organization:

A Principal

An Assistant Principal

Two Home Economics teachers

Two Industrial Arts teachers

24 Elementary teachers (from the 1st to the 6th grades)

16 Junior High School teachers

Although the school has grown in enrollment the buildings are more or less the same with the exception of a new two-room vocational building. One room is an all purpose laboratory where cooking,

sewing, child care, housing and family relationships are taught daily by two teachers in an interlocking system. The other room is for the Industrial Arts teachers. They work in coordination as the Home Economics teachers do.

In 1930 the Social Worker had a full program. Now, in 1962, the social worker works only one day during the week in the Second Unit of Hato Tejas. The other four days she works in other schools of Bayamon.

The Second Unit has a library (a small one) for the use of the students. It is opened from 8:00 a.m. to 11:00 a.m. and from 12:00 noon to 3:00 p.m. The community can not make use of this library because it closes after school hours and during the weekends.

The lunchroom is the same old one, slightly enlarged lengthwise. It provides for a total of 460 students attending in shifts according to grades and hours they are dismissed from class. The cooking is done with charcoal as in the year 1930.

Today there are a great variety of industries established in the community of Hato Tejas. Some of the industries are:

1. Miami Windows Factory
2. Iron Work Shop
3. Men's Trousers Factory
4. Patisserie or Bakery for Pastries
5. Cement Blocks Factory
6. Cannery for Juices with Fruits "La Famosa"
7. Furniture Making Shop
8. Duco Paint and Auto Body Repair Shop
9. Gasoline and Auto Parts Garage
10. Repair and Mechanic Auto Shop

The Social Worker informed us that unemployment does not exist, due to the establishment of factories in the community and in the suburbs of Bayamon. On the other hand, the agricultural aspect of the community has completely disappeared. The citrus fruits and the

flowers which made Hato Tejas famous in 1930 have gone during the years. We were informed that a son of an old continental family still living in the community has developed on his own farm a business of selling flowers and ornamental plants.

The new military road built during the last war divides Hato Tejas lengthwise into two parts from North to South. The traffic of automobiles is mostly on the new road. The buses coming from Corozal, Morovis, Toa Baja, Vega Alta and Ciales, however, always come through on the old road to give better service to the community.

The telephone service now is automatic and gives service to the whole community.

Hato Tejas has a Drive-In Theater which the local people enjoy. It is always filled to capacity. There is also a Cock Fight Center. The night clubs play an important part of recreation in Hato Tejas. There are quite a few established such as Las Tres Palmas, El Castillo and El Toronjal, etc.

Hato Tejas has a self-service super-market and many small grocery stores. It has a pharmacy and a large hardware store.

There are about five churches in the community. One is Roman Catholic and the rest belong to different Protestant sects.

In contrast to 1930, today everybody has electricity and running water. Sanitary conditions are greatly improved by the use of running water. Television provides recreation at home for the family. Electricity is used by many families for cooking and housecleaning.

In 1930, most people used water pumps and natural wells for their water supply. Now water is brought to the community by an aqueduct.

The community now has the following additional Governmental and private facilities:

Sub U. S. Post Office

Sub-Police Station

Health Dispensary

Park and Recreational Center

Three barber shops

Two restaurants

One flower shop

One funeral parlor

The progress and development of Hato Tejas is considerable; it has been the attraction for poor country people living near the town of Bayamon. These people move to Hato Tejas searching for work in the factories, but they are contributing to the development of slum areas scattered through the community.

A housing development project of about 2,500 houses has already been started on one of the largest farms. It is called Gascot Urbanization. This project should give work to hundreds of people who live in Hato Tejas and in nearby towns.

The social problems found today in Hato Tejas by the Social Worker are very different from those found in 1930. The night clubs, the factories and many other trends resulting from high living standards have completely changed the community and the problems among school age children.

The services of a full-time Social Worker are urgently needed in the community.

CIDRA - BARRIO BAYAMON

Pop. 1932 - 2679
Pop. 1962 - 3040
Households - 486

Bayamon, a barrio of the municipality of Cidra, is in the lower mountainous section in the east central part of the island. Cidra is bounded by the municipalities of Aguas Buenas, Caguas, Cayey, Aibonito and Comerio. The main roads are good and the Second Unit school of Barrio Bayamon is on the main road (primary carretera) to the town. The climate is cool and pleasant.

In the thirties the area was classified as a fruit-growing section -- pineapple and citrus. Many men left at the time of the zafra to work in sugar cane. Now, the chief crop is tobacco, with some sugar cane also grown. There are some small craft industries, making sandals, rings, etc., from native materials. One factory, making brassieres, is in operation in the town; two others have been closed. In the barrio of Bayamon, houses are widely scattered; a considerable number of the inhabitants work in the towns of Cayey and Caguas. Both these towns are tobacco centers. Much of the tobacco and sugar is raised on the lands of large owners, but small farmers still cultivate one or two acres of tobacco. The large sugar company transports workers by truck to other areas to work. In tobacco growing the small growers do not belong to the cooperatives, but are supplied with materials at a uniform price by the large growers.

Government facilities in fair measure have reached Barrio Bayamon; 123 of 486 families have water and 147 have electricity. Access roads have been built, but there are no low-cost public housing, public telephones, parcelas or public recreation facilities.

The field staff found the community poor and lacking certain facilities. Sanitary conditions, even in the school, are poor, transportation difficult, and there is no public telephone. There is a health unit in the town of Cidra. Over-crowding in homes was noted.

The Second Unit school (550 students) has some specific problems. The drop-out rate is very high (over 200 children of school age are not in attendance). An excellent study was made on this subject, giving distance from school, poverty, low educational level of parents as some of the reasons for drop-outs and suggesting remedies. Parents, however, have aspirations for better education for their children.

The shoe program is limited -- only 75 pairs had been received whereas the study showed a need for over 250. The lunch-room serves 98% of the students. The new principal of the Second Unit is very conscious of the present needs of the school and has the energy and the imagination to bring about real development, with the cooperation of the Department of Education.

Reports of the field staff agree on the warmth and hospitality of the people of the barrio, also in their feeling that, in spite of local needs, the general situation is better than it was in the past.

CIDRA - BARRIO BAYAMON

Visit to the Second Unit Rural School of Cidra-Bayamon May 13, 1962, by Isabel Laguna de Colorado, Social Worker

(1932)

The school district of Cidra used to be part of the Cayey School district. It is now a separate district. At present they have a high school. Before, the students used to go to Cayey or Caguas high schools.

The Protestant Church has a small school in Cidra. The Catholic Church is planning to set up one of their own. Previously there were no denominational schools in Cidra.

At the Second Unit, they used to have the 8-4 plan, now they have the 6-3-3.

At present the Second Unit does not teach industrial arts.

The lunch room is quite roomy and very clean. Two hundred and eighty students and six teachers have lunch there. The food served seems to be of good quality.

The registration of the Second Unit at present is 368 students in the elementary grades and 127 in the intermediate grades, a total of 495 students. Only the children of the 6th grade attend school the whole day, the rest are under the interlocking plan.

The Second Unit has the problem of drop-outs. Following are some of the reasons for this problem:

1. Families are moving to Cayey, Caguas and U.S. in search of better working opportunities.

2. An artificial lake has divided the land, and many families prefer to send their children to the schools in town.

3. The lack of jobs, and consequently low income of the families in the community.

4. A negative attitude on the part of the families. The social worker visits only one day in the week to the Second Unit. She is in charge of three schools. The result is that she becomes an emergency worker with very little time, if any, for social case work.

In Cidra there are three factories, one of which is near the Second Unit. One factory makes uniforms, the other pieces for brassieres, and the third is a tobacco factory. They employ mainly women. Before there was only one factory, the tobacco factory. (Note: only one in 1964)

As a result of the type of industry, there is considerable unemployment among men. The change from sugar-cane planting to dairy industries has brought still more unemployment for men.

Most of the land used before for growing sugar-cane, is now used for raising dairy cattle. Before, the people planted pineapple and grapefruit and there was a packing house. Both types of cultivations have disappeared. Plantains, bananas, oranges, grapefruit, and sugar-cane are now planted on a very small scale. Tobacco, however, is being planted to be processed in the above-mentioned factory.

Water and electricity are now available in most of the surrounding barrios. Only a few need it at present, and installation work is going on in some of them.

At the Second Unit the water was previously brought from a small stream behind the school. Now they have a big cement tank where the water is collected for cooking and drinking.

The Elementary School has electricity now, and the Intermediate will have it soon. The day of our visit people were working on the installation.

Latrines are still in use in the Second Unit, but they are lacking

in the Elementary School. (Only the Intermediate School has them.) The Elementary School children have to cross the road to use the latrines of the Intermediate school, which creates a dangerous situation for small children.

In general the health of adults and children is much better. There is a Health Center at the entrance to the town, where all children from the Second Unit are taken care of. In case they need hospitalization, they are taken to the Rio Piedras Hospital. There is also a Dental Clinic where teeth are extracted or cleaned.

Social Security benefits are a considerable help to some of the older people of the community. Some poor old people and some children are benefitted by the help they receive from the Public Welfare Division of the Department of Health. Although children receive shoes from the Department of Education, I saw three of them barefooted at the Second Unit School.

The roads today are much better and more numerous than in the past. There are also more bus lines. The children who cannot pay have free transportation provided by the Department of Education from their homes to school and back.

There are telegraph and telephone offices in town. In the Second Unit rural school, however, there is no telephone, nor is there any telephone booth nearby.

A big housing development has been built in the town. I did not see much improvement in the houses of the barrio, however, nor in the buildings of the Second Unit.

The town as a whole has not increased in population.

In the town there is a public playground, under Parks & Recreation.

The Second Unit proper has a small playground used by the bhildren. At present they are fixing it so they can play baseball and basketball.

I gathered the impression that the community is not using the government resources to the maximum. This aspect ought to be investigated and studied.

ADJUNTAS - BARRIO YAHNECAS

Pop. 1932 - 1770
Pop. 1962 - 1712
Households - 331

Adjuntas lies in the heart of the mountains, east of the center of the island. It is bounded by the municipalities of Penuelas, Ponce, Utuado, Lares, Yauco and Guayanilla.

The reports on Barrio Yahnecas are filled with the beauty of the place, with its luxuriant vegetation and mountain views and air. It is reached by narrow, winding mountain roads and to some of the staff seemed at first very remote. But they found that there are many contacts with the town of Adjuntas -- people working in the town and others going to the country to work during the coffee-picking season. There is a problem which appears in many places in Puerto Rico -- complaints about a lack of employment combined with a shortage of workers for such occupations as coffee-picking. This is, of course, explainable in the light of the seasonal nature of the coffee industry. Transportation was described as "bad".

Most of the houses appeared old and not comfortable, but many are well-equipped with electrical facilities and often television. Furniture was reported as adequate compared to some other communities. Schools seemed to be adequate and education is given great importance. The Second Unit school is on the road from Adjuntas. It is a little shabby -- not one which has been modernized; nevertheless, the atmosphere is good and there is loyalty to the community.

One family of artists was described -- the walls of the house were covered with paintings by various members of the family.

Interest in spiritualism is strong "as a philosophy of life"

rather than for its cures.

People were described as "smart, receptive and kind." In spite of complaints about employment, the inhabitants of this region want to live in the country. There seems to be a special atmosphere of happiness, perhaps partly due to the climate and beauty of the place and the interest and contentment of people of different classes.

MOCA - BARRIO VOLADORES

Pop. 1932 - 1800
Pop. 1962 - 2379
Households- 449

Voladores is about three miles from the town of Moca on the road to San Sebastian. It is bordered by Isabella, Aguadilla, Aguada, Anasco and San Sebastian. This is a coffee and sugar area although a good deal of the sugar land is marginal. At the time the field staff visited Moca there had been a lot of fires in the sugar-cane fields, due to disgruntled workers, people thought, or to a group of fanatical independentistas who were later caught in a cave with a large store of arms and ammunition. Their trial is still pending.

This is a self-contained community with very little outside activity. The majority of the land is owned by two families and there are many agregados. (see Glossary)

There is a good parcela program with some land for home gardens; 178 families live in these houses and 47 families are accomodated in a low-cost housing project.

Many of the women are employed in needle work either at home or in factories.

The school is a real center for community gatherings.

Three hundred eighteen out of 449 families have water available and most have electricity. In cases where water does not run to the house there is usually a public faucet within a reasonable distance. There is no public telephone.

Feeder roads are being constructed from the main road into the remote areas, but again they are not fully connected to adjoining towns.

There is no organized public recreation in Voladores.

Only partial health service is in effect but there are full public welfare and agricultural extension services.

There are no factories in Voladores but there is one in Moca. There are no Community Education or Labor Department Services.

JUNCOS - BARRIO EL MANGO

Pop. 1932 - 817
Pop. 1962 - 482
Households - 155

Juncos is situated in the eastern quarter of the island about midway between north and south coasts. The township is bounded by Loiza, Gurabo, San Lorenzo and Las Piedras. El Mango is about five miles out of Juncos on main highway #31 to Naguabo. It is not a true barrio. It is a rural community in the barrio of Gurabo Ariba. It is located in very hilly country producing sugar and minor crops. Probably cattle raising would make better use of the land than sugar.

There are not many services available, no telegraph, post office or police, but there is a letter drop and a public telephone. The Agricultural Extension Service is excellent. Transportation to Juncos is very poor and almost non-existent after 5:30 p.m. People reported that the ambulance service was good and prompt.

Job opportunities are few in the immediate area, but there are nine factories in Juncos

There was very little understanding of any class structure in Juncos. The people seemed to feel that they were all of the same class. The school is a real community center for meetings, social programs and other activities. Parents are interested in the school, but do not seem to have much hope for higher education for their children. They said it ws for the rich -- not for them. El Mango is primarily a community of laborers, some of whom go to the United States during the summer crop season when there is no cane cutting in Puerto Rico. Some of the field staff felt the people were suspicious that they were government agents and wouldn't talk. Other people in the com-

munity were cooperative and answered questions freely. All were very hospitable and friendly on a personal level.

There is a good parcela program and a good scattering of privately built concrete housing. One-half of the people have electricity in the house and one-half have running water. Others use public faucets.

Whereas in 1932 there was only one main road, several feeder roads have been built to the north of the highway but none to the south. One highway, over the mountains, connects El Mango to Canovanas.

This is a very self-contained community. People stay here with little outside communication and not much interest in what is going on in the rest of the island.

Seventy-one families live in low-cost public housing. There is a part-time health center and part-time application of public health benefits.

JUNCOS - BARRIO EL MANGO

Visited to the Second Unit Vocational School at El Mango, Juncos, P.R., by Sra. Dolores Gonzales de la Cara, social worker, 1932, and Sra. Angelina Sandoz de Frontera, Home Economics Teacher, 1932.

As we went to Caguas we both agreed in the progress of recent years indicated by the spacious road and houses built on both sides of the road. Going out from Caguas the progress seemed to have occurred at a slower pace. The road to Juncos has not changed much and one can still see many of the landmarks of 30 years ago, including a cement bench my father had given to the people of Canta Gallo, which was placed at the side of the road where a sidewalk was built, for people from this section to sit and talk. The benches had the name, business and date of the person who donated them. This bench was the only one left, and to me it was very interesting.

We went through the town of Juncos directly to El Mango, and therefore did not have a chance to see much of the town itself, except as we went through. My personal impression of the town is that it has not changed much in its physical aspects. Perhaps, as in many of our towns, changes and developments have occurred on the periphery and not much in the core of the town.

At El Mango we went straight to the office of the school principal. She was one of the richest sources of information, since she has been working in El Mango since 1950.

We visited all the school buildings and the school lunch room and talked to a great number of the teachers. The visit with a member of the community in his barrio store was also very illuminating. Then we visited the dairy owned by a prominent member of the community, who was 30 years ago, and still is, one of the richest landowners.

In summary the information obtained and our own observations are as follows:

Great physical developments in these schools--new buildings, more teachers, larger enrollment of students.

Enrollment	1950	370	children
	1962	452	elementary school 241 girls 211 boys
		312	intermediate school 160 girls 152 boys
	total	764	children

Teachers, 1950 -- 9

Teachers, 1962 -- 18; 6 males, 12 females; B.A. and Normal School

One of the present teachers was a student from that second unit school.

The Principal informed us there are no more teachers because of lack of room facilities, which is pointed out as a major problem, although they have two new concrete buildings and one durotex structure. Students attend in double shifts up to the 6th grade. In the Intermediate School they have the departmental system. Vocational training is limited to Home Economics for girls and Agriculture for boys.

Social services are provided from town one day a week. This limited service is also emphasized as a great drawback.

The children have an art teacher and a music teacher once a month. Vocational orientation also comes from the High School in town.

We observed the improvement of the school lunch. We saw what menu was being prepared, the cleanliness of the women working in the kitchen, and their methods of preparation. There are 7 cooks and

helpers in charge of food preparation and food is served in trays--cafeteria style. Around 350 children get lunch free. They no longer pay the 1¢ they used to for lunch. The storage room for foods and groceries for the lunch room is kept immaculate and in perfect order.

Many of the women working in the lunch room remembered me very well and we had a long talk about their families and about life in general in the barrio.

There still is a Parent Teacher Association which seems to be active. They meet once a month.

A Mutual Aid housing community developed in El Mango has greatly increased the number of school children. The main problem is school room accomodation.

Juncos has developed into an industrial town with a great number of light industries, many of them located close to town, but on the road going to El Mango. Many women, especially mothers, are working in these industries. A smaller number of men also work in industries, but the majority of men still work mainly in agriculture.

All the informants and our own observations indicate an <u>improvement of the standards of living:</u> children look well dressed, healthy. There are more opportunities for work.

A great portion of the land that used to be dedicated to sugarcane is now used for cattle raising. The two main landowners are still there and they have established big dairies now.

We did not have much opportunity to observe or get information in the area of sanitation and health. One thing that attracted our attention was the existence of latrines on one side of the row of school buildings. On one side they have built two sets of modern washrooms and flush toilets, one for teachers and a separate one for

students.

Houses close to the road are built of concrete or blocks. We could not see any thatched-roofed houses. There is also a cemetery in the community.

Children have free transportation offered by the Department of Education through a contract with a bus line owner known to this part of the Island in the field of bus transportation for many years. The whole community has good transportation facilities by means of publicos. (See Glossary)

Through the rural electrification program new power lines have been extended farther into the community to where the row of hills start. Up to this point, houses are wired for electricity. Most families have radios and some have television sets.

The school has a telephone which was pointed out to us as an indication of progress. They also have a loud speaker system to communicate with all the students.

There has been great improvement in water supply and people do not have to walk far to get water.

A tremendous increase in the number of churches, especially protestant churches, was pointed out as a major change in this community: Church of God, United Evangelists, Seventh Day Adventists and a few others.

The comment was made that it is relatively easy to be a minister in one of these religious sects and for the ministers to use their homes as churches.

In general, if I were to picture graphically changes in this community, my image would be as follows:

To me there are still areas in which not much change can be

noticed and some in which definite changes have occurred.

It would be very interesting and fascinating to measure with as many scientific methods as possible what has really happened in the past 30 years.

I consider that our short visit was not long enough to make adequate observations or for the collection of impressions and certain data, but it gave us a feeling of the process of change which is not, however, following an even pattern.

SALINAS - BARRIO LAPA

Pop. 1932 - 2628
Pop. 1962 - 6078
Households - 1072

Barrio Lapa is located on Highway #1 about six miles northeast of Salinas which is on the south coast. It is bordered by Guayanilla, Cayey, Aibonito, Coamo and Santa Isabel. It is one of the communities which has doubled in size since the 1932 study was made, possibly due to the proximity of a large army training center which, however, caused the displacement of many people.

Lapa has a good parcela program, again due to the necessity of moving families.

Work is rather hard to get as it is a strictly sugar cane cutting and beef pasture area. Cane Cutting lasts only from January to June and the number of people necessary for grass cutting is limited. There are no factories in Lapa although there are six in Salinas.

This is a very dry area, irrigation being necessary for successful agriculture. The small lot owners do not have access to irrigation water, therefore, home gardens are limited. Many of the people are unemployed about one-half of the year unless they come to the United States for the summer crop season.

There is an excellent school and the people show great interest in Citizen's Committees and other activities largely centered in the school.

There is a public telephone, but no telegraph. One-half the families have running water and about one-third have electricity. There are also public faucets.

Highway #1 is the chief road; a few feeder roads have been built but not as many as they need.

The company Aginare Central is the chief landowner and employer though there is, as stated before, some work in connection with beef cattle.

There is a low-cost housing project of 68 units. There is a part-time health center and full operation of public welfare and Agricultural Extension Service.

SALINAS - BARRIO LAPA

Visited to The Lapa Community of Salinas, 1962 by Pepita Vazquez de Garcias, Social Worker, 1932 and Lucila C. de Palanos, Home Econ. Teacher, 1932

Progress catches the eye as one starts on the improved road and all along with the new small but modern houses by the road side. A few of the new constructions are concrete and the people seem to have developed a taste for color and flowers. They have planted geraniums and bougainvillea of different colors. We wondered as we looked at the brilliance and gaiety of the small front yards, whether this, too, has some kind of significance in the lives of the people living in the new improved houses.

The school was our starting point. The physical plant impressed us at first sight as the same old one; but as soon as we entered the principal's office and the excitement of the moment and the greetings were over, we realized that the school has grown up considerably. There are 18 school rooms instead of the seven we had back in 1932. The school population has increased from approximately 300 to 750. Instead of an elementary school they have now a combination of elementary and intermediate grades. The students can thus complete up to the ninth grade and be ready for either vocational training at the Guayana Vocational School or for high school in town.

It was surprising to learn how many students take advantage of higher educational facilities now and how many of them have attended and completed college training and are currently working as professionals.

We found all kinds of basic improvements. For example, electricity, running water, telephone service, sanitary facilities and gas ranges at the lunch room instead of the old one.

The agricultural project, according to the information given to us, was discontinued because of the aridity of the soil. The land has been converted into a playground.

Group organizations like the Future Home Makers, 4-H Clubs, Police Athletic League and the School Patrol are functioning. There were none in 1932.

The school population is benefiting from different services we lacked before such as dental services provided by the municipal government, opthalmological services by specialists at Ponce, "part-time" vocational guidance services, a Health Technician, and physical education programs. We were surprised to know that the social workers services have been reduced to a weekly visit. Another facility that surprised us pleasantly is the transportation of students to school. Most of the students had to walk a long distance to go to school back in 1932. At the mayor's office we were informed of the plans to enlarge and improve this service.

In regard to the community in general, the bird's eye view we were allowed impressed us even at first sight with the improvement that has taken place.

The Federal Government expropriated a large portion of land for a military training camp, and a considerable number of families has been moved to the section of the community known as "Cocos". These families occupy "parcelas" that rank from a small piece of land known as a "cuadro" to extensions up to 14 acres. "The law applied is known as the Titles V and VI of the Land Law of Puerto Rico." The majority of the houses are concrete and built under the program of "mutual help." The new concrete homes we visited are very comfortable in comparison to the shacks we saw in 1932. They are nicely furnished

and have modern facilities for cooking and recreation. We saw electric ranges, refrigerators, and television sets. The pleasent surroundings and carefully tended small gardens are more easily kept because of the water facilities. We were proudly taken by our guides to the consumer's cooperative with its own concrete building, and self-service carts. Two new modern schools have been built which add 21 more school rooms to the whole community area. There is a postoffice station, a public telephone service, an emergency room with a trained nurse and a Health Clinic with a part-time doctor. There are three churches of different denominations. The athletic park is provided with lights for night games and recreation and there is a community center.

Although the means of living are basically the same in the jobs available during the sugar -cane season and agriculture in a minor scale, the town now provides a new source of work with three factories in operation. Members of the community work in those factories but we were unable to find out in what proportions during such a short time.

The Public Welfare Program provides public assistance for needy families of the community. Three families are receiving child welfare services.

We regret that the time available did not allow us to carry on a more thorough study of the community for the purpose of comparison. It was nevertheless a most fascinating experience and one of the kind that strengthens our hope in our people and in our future.

ARECIBO - BARRIO SABANA HOYOS

Pop. 1932 - 4753
Pop. 1962 - 5665
Households - 1195

The Barrio of Sabana Hoyos was classified in 1932 as a sugar and tobacco producing locality. Sugar is still important, but, in occupation and character, the barrio is affected by the growing city of Arecibo, about twelve miles away. In the thirties it was a remote rural area. It still is an entity and gives no impression of being a suburb, but there is a variety in its life which was not possible thirty years ago. Excellent roads connect it with Route #2 (San Juan to Arecibo) and also with both the cane land lying to the east and a growing section of pineapple growing to the northwest -- a section which promises a good deal of development.

The municipality of Arecibo is bounded by Barcaloneta, Utuado and Hatillo. The city of Arecibo on the coast has fourteen factories promoted by Fomento, four receiving some help from Fomento and three to be established; to these must be added the industries resulting from the growth of private industry. It is clear that this must affect Sabana Hoyos, not only in actual employment opportunities but in general orientation and in a demand for education which will prepare the young people for work in industry as well as agriculture.

Many people are engaged in transportation as drivers of public cars and trucks. Because of the increased opportunities for employment, both parents in a family often work which creates a problem of child care.

Sabana Hoyos has more of the air of a small town -- scattered but united. It has telephones, electricity and water in a large part of

the barrio and recreational facilities. School facilities are good and school buses bring the children from distant parts of the barrio.

Three health centers have been established and there are organizations for community improvement, for family life, education. New churches have been built including a "Temple de Espiritismo" (spiritualist). The school here has been a force in the general development of the community.

ARECIBO - BARRIO SABANA HOYOS

Visit to Sabana Hoyos, Arecibo, May 19, 1962 by Candida Campos de Cordova, Social Worker, 1932.

A magnificent asphalt road has taken the place of the red muddy road I had to travel from Road Number 2 to Sabana Hoyos Second Unit. On both sides of the road there are houses of better appearance than the few I used to know along this same way. On my left side I see a big letter-head "Cooperativa" and a second nice road that connects the road to Florida, Barceloneta. I later learned this Cooperative was the first Consumers Aid Credit Cooperative, established by efforts of residents of the Community in 1940. On my right I see another sign lettering written on the walls of a 12' by 10' wooden structure "Clubs 4-H". This means the girls are organized by Home Demonstration Agents of the Agricultural Extension Service and they have a place of their own to hold their meetings.

The Second Unit occupies the same location as it did in 1932, but instead of two buildings, I find six. In front of the school there is a spacious playground. The appearance of the children has improved tremendously. They look healthy and alive. All wear shoes. From an enrollment of 500 students in 1931 it has jumped to 900. There are about four elementary schools in the surroundings and children from barrio "Muertos" no longer come to the Second Unit because they have schooling in their own barrio until the 9th grade, as in the Second Unit.

The Second Unit has 25 teachers of whom only two are vocational teachers. We used to have thirteen teachers among which we had 6 non-elementary teachers; 2 teachers of agriculture, a Home Economics Teacher, a shoemaker, a manuel arts teacher and a social worker. At

present the social worker visits the Second Unit only once a week. Instead of one employee in the school lunchroom, there are six at present.

The community has provided about twelve teachers, five of whom are working in the neighborhood; one works at the University and another has become an expert in Cooperativism who has visited Latin America to help in the establishment of cooperatives.

I found electricity and water facilities besides the good paved roads that children take from their homes to school. All of their houses have sanitary facilities and they use electricity or kerosene stoves instead of the "fogones" of 1930. Most houses have radios or television sets.

Agriculture is still the principal occupation, but there are no longer rich landlords. There are many two or three acre farms and a Cooperative runs the Arecibo Sugar Mill. There is a big pineapple plantation owned by the government's Land Authority where many womrn work. Coffee growers from Utuado come to pick up workers for their coffee plantations. They provide transportation.

The teacher of agriculture reports that sugar-cane is still the principal crop but minor crops and vegetables have disappeared because of high costs of production and unsuitable marketing facilities. There are no governmental incentives for minor crops and farmers earn more in other agricultural or industrial projects. There are several hog and poultry projects and a well equipped dairy.

The diet of the people seems to have improved. They eat more meat and eggs and drink more milk. Pasteurized milk is distributed every day in the community. The diet rarely includes vegetables or minor crops, however.

The income per family is about $24 a week. The cost of living

seems to be higher since they now have to pay for light and water and fuel, but they seem to enjoy life more, have more recreation and make better use of government resources.

From poor laborers on $1 a day wages, most of them have become landowners or laborers on $5 a day wages. Women are helping the family income by working on the pineapple plantations, or in nearby factories or picking coffee in Utuado.

There are health dispensaries in Asomante, Arrozal and Candelaria. The Cooperative has a public telephone and there is a post-office in front of the school.

Children come to school in buses paid for by the municipal government, if they have some distance to travel.

Montana was a very distant barrio with a very poor road leading to it. Now it has a well-paved, broad road and a community center.

Although there are no factories in this area, residents of the community work at factories in Arecibo. An inquiry among students of the Sabana Hoyos Second Unit revealed the following adult members of the family working in factories:

Among seventh grade students (about 30), 3 mothers, 3 fathers, two brothers, two aunts who live with the family.

8th grade (about 25); two fathers, two sisters, one mother.

9th grade - 5 mothers, 3 fathers, 4 brothers or sisters.

4th grade - 3 mothers, 3 aunts and 3 sisters

5th grade - 3 mothers

6th grade - 3 mothers; 5 aunts (married) 1 Uncle (married)
1 cousin (married)

1st grade - 2 fathers; one mother

Most of the persons working in factories are married; there seems

to be a majority of women (mothers).

Sabana Hoyos appears to be a very progressive community; the teacher of agriculture commented that there still was poverty because of rising cost of living, but there is no doubt that fathers and mothers have greater work opportunities; a larger income, and many more of life's commodities. Means of transportation and communication have been very much improved and individuals are receiving the benefits of government agencies and their programs. The health of all members of the family seems to have improved as well.

The tendency of women to work for a living may have affected the unity of family life; as in other places emigration to the United States has caused several broken homes and a scarcity of laborers for the sugar-cane industry, but in general Sabana Hoyos is dynamically moving along with progress and economic conditions are remarkably better.

CHAPTER VI

The Second Unit Schools of Puerto Rico*

Introduction[1]

Puerto Rico has traditionally upheld education as one of its most cherished social values. This is equally true of its urban and rural inhabitants, of its rich and poor people. Among those of less economic means one will hear very often this remark: "I do not mind not being able to leave money or other material possessions to my children but I certainly want to give them a good education."

The members of the governing classes have likewise shown great faith in education as evidenced by the very liberal budgetary allocations they have always made for the educational program.

In 1898 when Puerto Rico became part of the United States it had "but the bare rudiments of a system of public education". It is estimated that illiteracy rated as high as 85% of the population. But in 1925, when the first educational survey was carried out by a commission of educators from the University of Columbia, the island had an organized establishment for public instruction comprehending the principal types of institutions from the elementary school to the professional schools of the university. By then the estimated illiteracy rate was forty-five percent.[2]

The distinguished surveyors from Columbia University were greatly impressed with the Island's gigantic efforts to extend the public school system during the period 1898-1925. In reference to these efforts this is what they said:

---

*Note: This chapter repeats some information from the Introduction but is given here as a unit--the full story of the Second Unit Schools as written by Mercedes Velez de Perez.

"And the people of Porto Rico have paid the cost. The per capita wealth of the island is only one sixth that of continental United States. It is less than one half that of the least prosperous state. But out of their slender resources the people of Porto Rico have built this monumental establishment from the ground up. They have erected the schools and have paid for them. They have created agencies for professional preparation and have trained hundreds of their best young men and women as teachers. They have developed an intricate administrative organization and have manned it chiefly with their own citizens. And all this has happened within the short space of twenty-five years. The accomplishment has been possible only because the people of Porto Rico have been willing to spend an unprecedented proportion of their annual revenues for this purpose. The current educational budget represents 33.6 percent of all insular and local disbursements. And the public outlay is only the gross index of the individual sacrifice that has been the portion of even the humblest homes."[3/]

In comparing the job done in the educational field in Puerto Rico with achievements in other parts of the United States, the surveyors concluded that:

"The history of education in continental United States shows no parallel achievement. The American nation sets great store by popular education. It takes pride in the public and private sacrifices that from the beginning of the Colonial period have been made in this cause. But both in self-denying devotion to

the cause of education and in the speed with which the instrumentalities of training have been created, the continent has been surpassed by this youngest American Commonwealth."[4/]

PUBLIC EDUCATION IN P. R. DURING THE PERIOD 1898-1925

The public school system established in Puerto Rico was patterned after that of continental United States. The Commissioner of Education himself was until 1948[5/] appointed by the President of the U.S. and received directives from Washington. Until 1930, the main objectives of education in the Island seemed to be: Americanization, extension of the school system and the teaching of English.[6/] In 1925 the educational surveyors referred to above found out that the school curriculum in Puerto Rico was wholly formal, over-emphasizing linguistic and arithmetical skills to the exclusion of certain fundamental materials. In the eyes of the professors from Columbia University, the guiding principles of the educational system had been "the reduction of illiteracy and the attainment of a higher standard of citizenship."[7/]

It might be safely said of the curriculum offered by both the elementary and the high schools prior to 1928 that it did not answer the Island's needs. With the exception of the commercial courses offered in the high schools of the largest cities, the schools only prepared children for further academic training. The whole idea was for students to continue schooling, to push them on and on till they reached the

university which would turn out finished products in the form of teachers, lawyers, chemists, engineers, pharmacists, etc. By 1928 everyone realized that the Island had too many professionals and that it did not need to prepare many more. What it really needed was intelligent farmers, efficient carpenters, good housekeepers, industrial workers.[8/]

Such a school system stimulated the desire on the part of the students to continue studying professional careers regardless of their financial circumstances or lack of vocational aptitude. The tragic part of it was that having obtained an eighth grade or high school diploma the student was in no way better prepared to earn his living than before. Even if he was lucky enough to finish a professional career the chances that he could get a job were small as competition among professionals for the few jobs available was very great.

As was to be expected, the school's holding power was very low. This was especially true of the rural school most of whose children dropped out after the second or third grades despite the existing child labor and compulsory school attendance laws. It was imperative for the country child to help his father support the family at an early age. Furthermore, even if the child was very intelligent and ambitious, his father saw no logical reason why he should make sacrifices to keep his offspring in school when so many eigth-grade graduates were compelled to work in the sugar cane plantations for thirty cents a day. Was it not better that the child start earlier to earn his living - thought his father - as it would be more difficult

for him to go back to sugar can cutting having had the advantages of an eighth-grade education?[8/]

The need for a new orientation of the Island's educational activities was very evident. A new philosophy of education more in harmony with the Island's situation, problems and needs had to be formulated. The new generation had to be helped to follow a training course parallel to the vocational interests and aptitudes of its members as well as in harmony with the needs of the community. The dignity of labor had to be stressed. The need to prepare children to serve Puerto Rico in the manner in which it needed them most had also to be given thoughtful consideration.

This was most important in view of the very serious social and economic problems Puerto Rico was facing in 1928. In this very densely populated island a highly literate and academic school (such as the one available) could not cope with the following conditions and problems: 85% of the people lived in the country and depended on agriculture for their support; the number of landowners was rapidly decreasing; the wealth of the island was in the hands of a few; malaria, hookworm, tuberculosis, malnutrition and gastro-enteritis were rampant among the inhabitants but very specially among the rural residents.[9/]

Life in rural Puerto Rico was very hard and dull. Unemployment was a serious problem, wages were low, health and recreational facilities almost nonexistent. Educational opportunities were insufficient and inadequate. So people started moving to the towns and cities hoping to improve their lot. Life in the city was also very difficult for the

rural immigrant however, because work opportunities, if any, were very few and employment of irregular duration. There were no industries or factories. Overcrowding, poor housing conditions, slums, spread of contagious diseases, delinquency and dependency among children, and other similar problems ensued as a result of the exodus of the rural inhabitants to the city.

As already indicated, the school's holding power was very low. This was specially true of the rural school where a very small proportion of the children of compulsory school age (eight - fourteen) stayed in school beyond the fourth grade; where thousands of students dropped school with only two or three years of instruction. Two out of every three rural students attended school half a day each day, this being the system in operation for the first three grades in four-fifths of the rural schools. Most of the estimated 90,000 - 100,000 children of school age who were not in school came from the rural areas. And those who attended school in the country were very likely to have a teacher with much less academic training and experience than her urban colleague. 10/

In view of the conditions surrounding the rural school system prior to 1925 it is surprising to learn from the General Superintendent of Rural Education at the time that wherever consolidated schools 11/ had been established, the upper grades were soon filled.

The situation prevalent in Puerto Rico at the time of this first educational survey led the surveyors to conclude that the rural school was one of the largest, if not the largest educational problem the

people of the Island had to meet. Some of their recommendations with regard to the rural school system were:

1. That the Department of Education work on a new curriculum for the rural schools, to be organized as a unit. This was to contain the materials most significant for life in Puerto Rico. The curriculum should cover four years of instruction on the assumption that it would provide all the schooling available to rural children most of whom dropped school after two or three years of school work. The plan would be, however, to continue increasing the number of school years up to a six-year elementary course which was to be the minimum amount of schooling readily accessible to all children in the rural areas. (At the time of the survey there were three hundred consolidated schools a good many of which offered instruction up to the eighth grade. Most of the rural areas had, however, only the one-room school offering up to the third grade.)

2. The curriculum for this new rural school should offer health instruction from the earliest grades and the following other subjects: nutrition, practical farming, homemaking, native industries, and courses dealing with economic, political and social conditions.

3. The teaching of agriculture which up to the time had been largely confined to vegetable growing, was to concentrate on the important farming enterprises in Puerto Rico (sugar-cane, tobacco, coffee and citrus fruits) and be extended to include work in poultry and rabbit raising, bean growing, root crops and pig raising in some places.

In the face of the Island's economic and social problems and because it was a largely rural society with an agricultural economy, the educators from the University of Columbia concluded that some of the obligations of the rural school at the time were:

> "to inform the people more fully of the opportunities in agriculture, the advantages of rural life, and the new problems which town life would present; to help them to keep possession of their land; to make the cultivation of that land more profitable; to teach them the value of a diversified diet and how gardens might contribute to this; to emphasize the importance of raising their own foodstuffs; to induce the larger landholders to assign garden plots to their tenants and to train the tenants in the use of such plots; to show them the opportunities of improving their present conditions through training in agricultural skills and the acquisition of practical agricultural knowledge."[12/]

Establishment of the Second Unit Rural Schools

As indicated above, the one-room rural school offering the first three grades of instruction was the rule in the country prior to 1925. In some rural communities, however, there were consolidated schools with grades one through eight. Consolidation of rural schools had started in 1915 under Commissioner of Education Paul G. Miller who believed that the country school should also serve as a social and cultural center for the community.[13/]

The educational surveyors referred to above had advised officially in their report that the best educational statesmanship should be given to the solution of the rural school problem during the decade following that first survey.

"It is true that the Island does not have the financial resources necessary for the immediate solution of these questions. The Survey Commission believes, however, that these problems can be more adequately met than is the case at present. The lowered vitality of thousands of rural people, due to disease, improper diet and unsanitary living conditions, imposes a heavy tax on Porto Rico each year. This loss is undoubtedly much greater than would be the cost of maintaining schools in the rural communities now neglected. With the cooperation of the public health agencies of the island, adequate rural schools would, in a few years, undoubtedly very greatly increase the productive capacity of the rural people by increasing their knowledge and bodily vigor. It would also put them in a position to bear more intelligently their share of the political problems of the island. The extension of the elementary school facilities to all its people is a goal that Porto Ricans should endeavor to attain in the near future."[14/]

The Insular Department of Education gave the Survey recommendations very careful consideration and in the year 1926 established a Division of Rural Education charged with responsibility for all matters concerning the rural school system.[15/] That same year Mr. Pedro P. Arán

was appointed General Superintendent of Rural Education. Mr. Arán was very much aware that if the rural school was to answer the needs and problems of the country people a good knowledge of such needs and problems was indispensable. With this in mind a study of 300 eighth-grade graduates from rural consolidated schools was carried out through home visits in which a questionnaire with pertinent information was duly filled out. It was learned from the study that very few students had enrolled in high school. The weaknesses and deficiencies of the prevailing rural school system were also shown by the study.[16/]

There was no doubt whatsoever but that a new rural school had to be created and, in an effort to learn from the experience of other countries, inquiries were made concerning the rural schools of Mexico, Belgium, Uruguay, Argentine, Chile and of some areas in the United States which seemed to be trying to cope with problems similar to those of rural Puerto Rico.[17/]

Following these inquiries the new type of rural school was established in 1928. Since it was to accept students who had completed the the first school unit it was called the second unit school. Mr. Arán visualized it as a social and community center where children, youth and adults could benefit from both academic and vocational training. The second unit was to project its activities into the community in an effort to better standards of living, improve housing conditions, promote personal and community health measures, and teach people how to make adequate use of their leisure time. It was to instill in the children a love for the land in which they grew and from which they got

their subsistence. They would be taught how to increase its productivity and how to make rural life attractive and happy.[18/]

In addition to the academic program the Second Unit School was to offer children from the fifth grade up vocational training in agriculture, home economics, industrial arts, carpentry, native industries, and several other trades with a view to preparing the students to earn their living and improve conditions in their home and community.

The new school was also meant to give youths and adults the opportunity to get training in modern farming techniques, home-making and the improvement of housing conditions. It would also offer them the opportunity to share school activities aimed at improving the health, recreational and cultural standards of the community.

To what extent educators in Puerto Rico had placed their hopes for the solution of some of the rural problems of the island in the second unit schools may be gathered from a report submitted in 1930 by Mr. Francisco Vizcarrondo, then Deputy Commissioner of Education, at the Columbia Convention of the National Education Association. In his introductory statement he stated:

> "One of the greatest tasks that the Department of Education has had since its organization has been the solution of the rural problem; a solution which will make rural life and rural conditions so attractive that the present exodus to the cities might soon be stopped. With this end in view a reorganization was made during the year 1928-29 of that part of the rural school system where there were consolidated schools....."[19/]

In this same report Mr. Vizcarrondo described the objectives of the second unit schools in the following terms:

"To be brief, these schools tend to:

1. Elevate the standards of living in the rural communities.
2. Increase the productive capacity of the Island.
3. Put into operation a program of social and sanitary betterment, such program to take into account the most urgent needs of the people living in the rural sections.
4. Organize and put into operation a program of vocational education.[20/]

Great care was taken in the selection of the communities where the first five second unit schools were established as it was desired to have a good representation of the different topographical regions, agricultural enterprises and socio-economic structures. The communities selected were:[21/]

1. San Antón, Carolina, because of its proximity to San Juan, a region representing miscellaneous activities: grazing, poultry, electricity, agriculture, automechanics, etc.
2. Sabana Hoyos, Arecibo. A sugar-cane region of the absentee ownership type.
3. San Antonio, Aguadilla, - a sugar-cane region of small landowners.
4. Lares, Lares. A coffee region.
5. Angeles, Utuado. A coffee region.

The Staff

The second units were conceived, planned and administerd by and from the central office of the Insular Department of Education. The vocational and other special teachers were selected and appointed

by the central office which also was responsible for their promotions and transfers. Their salaries were paid from Insular funds.

The academic staff was supervised by the school principal and other local supervisory personnel but the vocational and other special staff received technical orientation from the main office.

Great care was exercised in the selection of both the academic and the special vocational teachers. The former were expected to have the same academic training as the urban elementary teachers. This in itself was an improvement over the traditional method of selection of rural teachers. Their salary was likewise equivalent to that of elementary urban teachers.

The vocational staff was also selected with great care. These teachers were expected to have good professional training in their respective specialized fields. Both the academic and the vocational staff were supposed to be firm believers in the philosophy of the new school and to be very much aware that the second units had been designed as community centers through which rural life and conditions were to be improved.

The staff of the second units was composed of the following personnel: The school principal or teacher-in-charge, teachers of academic subjects, teachers of agriculture, home economics, industrial arts, native handicrafts (industrial work), shoe-making (in some second units), barbering (in some second units), and a social worker and a janitor.[22/]

School Sites, Buildings, and Classrooms

Since the new school was to be both a vocational school and a community center, special provisions had to be made in terms of space, land, vocational shops and equipment. Each second unit had at least five acres of land in which to carry out its agricultural program and other academic and vocational activities.[23/] In addition to the regular schoolrooms necessary for academic instruction, space and equipment had to be provided for the home economics laboratories and the manual arts shop as well as the shops for the other trades to be taught.

An assembly room was an indispensable requisite since the program of work of the second unit included frequent meetings with parents, young people and other community members. In the absence of an assembly room two adjoining schoolrooms separated by a folding door were used whenever large meetings had to be held.

Space had also to be provided for the playground of children and for the offices of the principal and the social worker as well as for the school lunch room. The latter was an indispensable facility inasmuch as a good many students had to travel long distances and were required to attend school on a full-day basis. So a hot lunch had to be provided for them as well as for other children who, although living near, were eligible for this service because of their difficult financial situation.

The Curriculum

In the traditional rural school teachers had to follow strictly courses of study prepared by the supervisory staff in the central office

or by committees of teachers under the supervision of the latter. Contrary to that established practice the staff of the second units was authorized to adapt the courses of study to the current needs, conditions and problems of the school community with which they were expected to be very well acquainted.[24/]

The school day consisted of a morning and an afternoon session and the time available, 360 minutes, was equally divided between the academic and the vocational subjects. The former included: English, Spanish, health, physical education, arithmetic and social and elementary science.[25/]

The vocational courses offered were at least the following: practical farming, which included animal raising, home economics, manual arts and native industries. Other trades like automechanics, toy making and repairing, shoe making, and metal work, were offered in some schools in accordance with the needs and conditions of the community and the availability of adequately prepared teaching staff.

The work in agriculture and home economics presupposed that the students would carry out home projects. These aimed at having them practice at home what they learned in school and at adapting the training offered to their home needs and personal circumstances. Both the agriculture and home economics teachers were expected to visit and supervise these home projects. This brought them in closer contact with the parents and community in general. They were also expected to organize classes for groups of young boys and girls as well as for adults in the community in accordance with their special interests and needs.

In describing the objectives for the course on Industrial Arts this is what Mr. Francisco Vizcarrondo said in his report to the NEA in the year 1930:

"The need to develop industries in Puerto Rico as a means of supplementing the Island's income from agriculture has been pointed out again and again by economists and by students of the Island's social and economic problems. The second-unit school has tried to direct its educational activities following these recommendations. So it offers the so-called industrial course which aims to develop in children skill and intelligence in making and marketing industrial products. Teaching projects are organized according to the community needs. Utilizing native raw materials such articles as rugs, baskets, hats, brooms, cushions, lace, etc. are made by the girls attending these classes. Some of these articles are kept by the boys and girls and utilized to improve their home conditions while the rest are sold in the local and federal markets, the profits being distributed among the children.[26/]

The Social Work Program

Because the second unit school was to be a social and educational center for the community's activities there had to be a member of the staff whose main efforts were to be channeled towards bringing the home and the school together. So a special teacher was assigned to this job. Under the administrative title of "social welfare teacher" she was expected to perform the following duties:

1. To help make the second units attractive and valuable social centers.
2. To help improve the social, moral and sanitary conditions of the neighboring homes.
3. To organize and direct the work of the Parents' Association.
4. To organize and direct the athletic activities of the girls.
5. To organize and direct the clubs that were to work for the improvement of the community's health. 27/

The purpose of the social worker's visits to the families were mainly educational. In accordance with Circular Letter No. 35 of the year 1930, issued by the Insular Department of Education, home visits by the social worker had the following objectives:

1. To prevent the raising of hogs in places too near the homes.
2. To prevent the use of water from rivers or brooks without boiling it.
3. To foster the cultivation of minor crops.
4. To stimulate the establishment of home gardens.
5. To educate families with regard to the nourishing value of vegetables and their place in the diet.
6. To instruct them as to the practical values in the prevention of diseases.
7. To instruct families on the means of preventing communicable diseases such as (a) typhoid fever; (b) hookworm; (c) tuberculosis.

The annual report of the Insular Department of Education for the year 1929-30 described the work of the school social worker thus: "An important feature of the Second Unit is the social worker who visits the rural homes and gives parents and pupils advice on health, social and education matters. She[28/] is the liaison officer between the school and the community. She reports to the municipal director on the needs of the rural communities, to the health officers on medical matters."

Up to the school year 1930-31 the social workers were selected by the Director of Rural Schools in the Department of Education who was also responsible for the technical orientation of the work to be carried out by them. In 1930 a trained social worker from the Mainland who was then living in Puerto Rico was appointed Special Supervisor of Social Work in the Department of Education.[29/] Important changes and new developments in the social work program of the second units followed this appointment. Special plans were immediately made for the recruitment and training of a group of thirty young women in preparation for the appointment as second unit social workers of those who proved to be well qualified for such position.

Great care was taken in the selection of this group of workers and in the plans made for their four-summer session training plan. The Supervisor of Social Work was determined to develop a training program which would fit the Puerto Rican situation and to offer courses rich in subject matter related to the Island's needs, problems and resources. Developing a Puerto Rican technique and not just copying courses given in other countries was the leading idea back of the plan.[30/]

The main purposes of the first summer session were:

1. To give the students an idea of the general principles and techniques of social work.
2. To study the most outstanding health problems in Puerto Rico.
3. To study the social and economic problems of the Island, especially those affecting the rural zone.[31/]

Upon completion of this first summer course twenty-seven workers were assigned to second unit schools and one to a private plantation where, under the auspices of the School of Tropical Medicine, she was charged with responsibility for a research and demonstration project related to the eradication of uncinariasis.

The new group of social workers was full of enthusiasm and zest. What they lacked in formal social work education[32/] they more than made up with their great desire to do a good job, their enthusiasm and devotion to the cause of rural development, their imagination, resourcefulness and creativity. The workers were free to create, experiment, learn about rural needs and problems, and start new projects to answer the varying social needs and maladies in their respective communities. Their supervisor was a constant source of inspiration.

Realizing that a good knowledge of the community was the basis for a sound program of work she instructed them to make a survey of fifty families selected from the different geographic sections and income groups from among the families having children in the second unit.[33/]

A sampling plan showing types of land holding, agricultural products, housing conditions, etc. was submitted to the Supervisor of Social Work before the final selection of the families was made.

The schedule utilized to get the facts consisted of several cards, each of a different color. The main card recorded information on family composition and personal and social data of its members. Another card asked for information related to the health of the family, the diseases suffered and the treatment received, as well as home sanitation and surroundings. A third card dealt with the economic conditions of the families and past and present occupations of its members, wages earned, family expenses and other related data. A fourth card called for information on social and recreational activities of the family, the use of leisure time and the amount of money spent for recreation.[34]

At the end of the year the facts collected through the survey, together with the knowledge obtained through other community contacts, were embodied in a community study report which formed the basis for the program of activities to be carried out.

Broadly speaking, the study revealed how serious the health problems were in the rural communities due to the poor financial circumstances, low wages, irregular employment, poor housing, lack of health facilities, as well as because of the ignorance of the country people. It also pointed to the great need to provide wholesome recreation facilities for the "jíbaros"[35] whose life was completely lacking in opportunities for wholesome relaxation; ~~relation~~, and healthy use of their leisure time.

Having found what the main problems were and realizing that there was an almost complete lack of local resources (rural schools and a few rural churches were the only ones available), the social workers started to orient their activities along lines which would ameliorate, if not eradicate, existing health, economic, recreational, and other social problems.

Great imagination and resourcefulness was shown by this group of young women in the performance of their responsibilities. They were requested to live in the communities in which they worked and this facilitated their task not only in terms of the additional knowledge they got on how people lived but also because they were able to carry out activities in the evenings and this made it easier for young people and adults to participate in them. They were able to a surprising degree, to identify themselves with the communities and with the people.

The result of it all was a very creative piece of work in every community where a social worker was assigned. No two programs were identical as the activities carried out had their origin in the conditions, needs and problems, and interests of the particular communities as well as in the existing resources and the personality of the social workers themselves.

As was to be expected, health and nutrition received primary attention in view of the very serious problems of uncinariasis, malaria, tuberculosis and malnutrition. Health clinics were established with the cooperation of municipal or public health physicians and nurses. Health campaigns mostly aimed at the eradication of uncinariasis and malaria were carried out. Stimulating family and community interest in the building and use of latrines (there were communities where 76% of the families had no latrines), talks to parents and other adults by doctors and nurses, educational programs using films and posters, and similar activities were carried out with the help of local, municipal and insular resources.[36/]

Infant-feeding stations were established not only to help improve the daily diet of babies and young children but also on an experimental demonstration basis. They provided a good opportunity to educate mothers and to show the relation between hygienic measures and health. This was very important since deaths caused by diahrrea and enteritis were as high as 246.9 per 100,000.

In some communities model houses were established with the help of the home economics teacher. A typical home was selected for this purpose and, through the utilization of native materials for the construction of household furniture and equipment, and the acquisition of better health and hygienic habits, a good example on how to improve housing conditions was set for the rest of the neighbors in the hope of stimulating in them the desire to improve their own homes.[37/]

The organization of the community for cultural and recreational purposes was another important phase of the program of the social worker. This included work with the P.T.A.s, the establishment of Ladies' Clubs, young people's groups as well as athletic clubs. The Ladies' Clubs were generally organized for cultural and welfare purposes. The conduct of educational conferences, the organization of the "Ropero" and the "Zapato Escolar", and the creation of an emergency fund to help needy cases of school children and families in the community were some of the activities of the ladies' clubs.

Young peoples' clubs and athletic groups were organized to help provide opportunities for a healthy use of their leisure time. Social dances, moonlight singing parties, picnics, May festivals, musical contests,

coffee parties and athletic activities were all part of the program of such groups.[38]

Besides her work with groups, the social worker organized and carried out activities aiming to provide for the special needs of individual children and families. Because of the total lack of social welfare or relief agencies in Puerto Rico this phase of the social workers' job called for great imagination and resourcefulness to make good use of whatever few facilities were available and to develop resources where none existed. The local Red Cross Committee, the health facilities and a few private and religious groups in some of the towns and cities were about the only resources available at the time.[39]

The social worker also spent a good proportion of her time in work directly connected with the school such as money-raising activities to help improve the school building or grounds, activities aimed at beautifying school gardens and participation in athletic and other activities of the school children. In addition to these school projects a few social workers taught one or two classes at the beginning. This practice was discontinued during the 1931-32 school year.

The social work program in the second units continued developing along the lines described above which combined the three methods of social work - case work, group work and community organization - always trying to have activities conform to existing needs and problems in the rural areas.

The dominant idea behind the work of the second unit school, let us repeat, was the improvement of living conditions in the rural

communities where they had been established. Determining what the local conditions, needs and problems of such communities were constituted a very important aspect of the social workers' program. Consequently research and demonstration were very important tools in the performance of their work.

In the year 1932-33 four research projects were carried out by different groups of social workers under the supervision of the Central Office. These were as follows: (1) a study on Standards of Living in Rural Communities, (2) a study of the curriculum of the second units in relation to the program of the social worker, (3) a reanalysis of the health features of the social work program, and (4) a study of a limited number of maladjusted children in eight schools.[40/]

The 1932-33 Study on Standards of Living in the Rural Zone of Puerto Rico

Purpose

This study was undertaken in the hope of getting pertinent data as to the way in which country people of different socio-economic levels lived. This information was needed by both the social workers and the home economics teachers of the second unit schools to gear their work around conditions, problems, needs and interests of the residents of the rural areas.

The social worker needed to be well informed on what constituted the accepted community norms as well as on the individual variations in standards of living which existed among families living on the same income. "To understand these variations and to incorporate the higher standard into community life..."[41/] was one of the social worker's goals.

She was also looking for the type of information which might in time help in the solution of the fundamental problems of her clientele. The social worker was hopeful that, through the findings of this study, she could be useful in pointing out the discrepancies between the existing conditions in the rural areas and a standard of living acceptable in modern civilized societies.[42/]

Areas Selected for the Study

Ten rural areas were selected for the study after due consideration was given to the following factors:

1. Representative crop regions: sugar, tobacco, coffee, fruit, minor crops.
2. Different geographical regions: mountain, coastal plain, irrigated sections, etc.
3. Different systems of land ownership: large company, small company, large individual farms, small individual farms.
4. Local industries.

Sugar cane regions were given the largest representation among areas selected because cane was the most important agricultural product. Tobacco was not considered important because at the time of the study (1933) there was very little planting of it. The areas selected were the following:

A. Sugar and tobacco sections.

Aguadilla (San Antonio)
Arecibo (Sabana Hoyos)
Juncos (Mangó)
Salinas (Lapa)

B. Coffee regions.

Adjuntas (Yahuecas)
Moca (Voladoras)

C. Fruit Areas.

Bayamón (Hato Tejas)
Cidra (Bayamón)

D. Mixed or minor crops.

Juana Díaz (Collores)
Loíza (Medianía Alta)

Number and Selection of Families

In each community fifteen families were selected by the social worker, five from each of three socio-economic levels: high, medium and low. Families were grouped into these levels on the basis of the social worker's own knowledge of accepted standards of living in the locality. "Theoretically it would have been more accurate to set limits for each income group. This could have been done by finding the incomes of a large scattered selection of families and determining from these data three levels in each community."[43/] However, it seemed better at the time to rely on the social worker's knowledge of the families and community since what was high in one locality might have been medium in another.

In the selection of the families the social workers were instructed to see that they met the following criteria:

A. Families were to be selected from among the fifty included in the survey of the year 1930-31 where this was available.

B. They were to be families with whom the social worker had been in intimate contact, whenever possible, for a period of two or three years.

C. Only families willing and able to cooperate with the social worker and the home economics teacher by providing reliable information could be selected.

D. The wage earner of the families should be working and residing in the communities to be studied.[44/]

The social workers also selected one family from each income level (three per community) for special studies to be made by the home economics teacher with regard to an inventory of the household furniture and equipment, the kinds of food consumed, and the daily expenses of the families.

Thus a total of 150 families were selected for the study, fifty from each income level. Thirty families from among the 150 were selected for the three special studies to be made by the home economics teachers in the ten areas.

Date of Study and Field Personnel Utilized

The study covered a period of eight weeks, during the months of March and April, 1933. Those were "zafra" months, the time of the greatest earnings in the sugar cane regions, but on the other hand, the period of lowest income in the coffee areas.

The social workers visited their fifteen families in each of the areas selected for the study and filled in special forms with which

they were supplied containing data such as:

General information (number of members in the family, ages, civil status, etc.)

Economic Conditions (income and expenditures)

Housing (number of rooms, floor space, sanitary arrangements, building materials, etc.)

Health (diseases, treatment, sanitation and water supply)

The home economics teacher visited her three families (thirty for the ten areas) for a period of eight weeks to check on the accounts of the family as they had been written down by a responsible member and to enter the items in the corresponding forms provided for this purpose.

The expenses of the families were grouped as follows:

Food (groceries, dairy and garden products, meat, fish, etc.)

Rent (payments for use of house or land, taxes, interest on mortgages, insurance and major repairs)

Health (medicines, doctor's fees, transportation to clinics and hospitals, etc.)

Clothing (dresses, underwear, shoes, suits, etc.)

Recreation ("fiestas", "velorios", "rosarios", dances, movies and transportation for such purposes).

Operating expenses (lighting, fuel, soaps, equipment repairs, etc.).

Miscellaneous (charity, gifts, education, periodicals, books tobacco, etc.)

The home economics teachers also made an inventory of the household furniture and equipment and gathered information on the foods consumed by the family, including those utilized as flavoring.

Value of the Study

As will be seen in the next chapter the study revealed data relative to conditions under which most of the Puerto Rican rural families lived in the 30's. The findings can be summarized thus: large families; very low incomes, if any; deficient diet; overcrowded living arrangements; hardly any household furniture or equipment; unhealthy water supply; inadequate or nonexistent sanitary facilities and no provision whatsoever for wholesome recreation or cultural development.

By describing the conditions under which rural residents lived the study also pointed towards necessary action to help raise their standards of living. It suggested possible fields of professional endeavour for both the social worker and the home economics teacher. There was, undoubtedly, plenty that could be done to help the Puerto Rican "jibaro" attain a higher level of aspiration and regain confidence in his ability to help himself even under prevailing conditions.

In fact, many of the activities included in the work program of both the social worker and the home economics teacher in the years which followed the completion of the study were inspired by the findings of the latter.

The study provided convincing new data to support the second unit's efforts to help rural inhabitants improve their living conditions. It validated the philosophy behind the establishment at this special type of school and proved how right its staff, both academic and vocational,

was in carrying out activities which would show the country people how to improve their health, increase their earnings, have more attractive and livable houses, make good use of their free time. Vegetable growing, rabbit raising, the growing of home gardens by students, the construction and use of adequate latrines, the need to boil drinking water and to store it in adequately covered and protected containers, the increasing use of the school lunchroom as an educational laboratory, the making of home furniture and equipment out of native materials at very little or no cost, the enrichment of the courses on health, nutrition and care of the sick, with materials stemming from local conditions and needs - and many other measures were adequately integrated in the second-unit curriculum.

As the liaison officer between the school and the home, the social worker was the transmitter to the rural people of the new knowledge obtained from the study as well as from the research related to tropical diseases and nutritional value of Puerto Rican foods which was being carried by the Puerto Rico School of Tropical Medicine, attached to the University of Columbia. The findings of the study related to the foods consumed by the Puerto Rican country people were shared with this medical research institution which, in turn, continued to cooperate in the training of social workers with whom they shared the latest knowledge then available on disease and nutrition in tropical Puerto Rico.

Extension and Growth of the Second Unit School Movement during the Period 1928-1942

Under the dynamic leadership of Mr. Pedro P. Arán and Mr. Oscar Porrata Doria the second unit schools continued to grow in numbers and importance during the period 1928-1942. With combined Insular and Federal funds, the program had been established in 95 schools with a total of 15,782 children by the end of that period.[45/]

The second unit had been successful in retaining the children in school so that in the year 1937-38 grade nine was was added to the school curriculum and by 1945 there were 130 second units functioning as intermediate schools.[46/]

The following expressions will give an idea of what the second-unit stood for and of its well earned prestige:

In 1931, Dr. José Padín, then Commissioner of Education, while addressing the Caribbean Seminary expressed his idea of the role of the second unit when he said:

> "Since I took office about a year ago I have devoted most of my time to the promotion of rural education. Our peasants constitute about 80 percent of the entire population. For hundreds of years they have lived scattered over the mountain-sides, neglected, forgotten, out of touch and out of step with the rest of the Island. The "jibaro" as we call the mountaineer, seems to belong to another world, to a lower cultural level. The future of Puerto Rico depends appreciably on our ability to bridge the gap that separates the retarded "jibaro" from his more fortunate brothers.

"The conventional one-room rural school was not doing much to get the peasants out of the doldrums. Of every 100 pupils who enrolled in the first grade eighty-four dropped out before they reached the fourth grade. This was due to economic pressure which the academic character of the instruction given did not relieve.

"We are providing a remedy through the second units....But we cannot cure social evils by preaching. You have to raise your people to such a level of intelligence that they can see by themselves what is wrong with them and work out their own salvation."[47/]

Mr. José C. Rosario, for many years professor of sociology at the University of Puerto Rico, believes that the second unit has achieved the following functions:

1. "It has served as a nucleus for the establishment of small country villages in which appear certain characteristics of progress unknown before, such as the rural medical centers, churches, and in some instances post offices.

2. The work carried out by some teachers of the second unit reaches beneficially to many rural families. I am referring to the social worker, special teachers of agriculture, home economics, carpentry and industrial work. When this work is carried out with wholehearted enthusiasm as in the case of the Padilla Second Unit in Corozal, these schools can be considered as a civilizing influence for the community.

3. The second units realize the function of being community centers, realizing in this way a very favorable social work."[48/]

Miss Blanca Arroyo Herrero, who in 1942 was a social worker in a second unit school expressed with enthusiasm:

"The second unit at Sabana Seca is the center of all the activities of the community. The second unit sees to it that new avenues are opened to the life of the people in the neighborhood, that medical services are obtained for the neediest, that advice is given when needed about all kinds of matters; when this is done, a social worker becomes really useful.

The first and chief problem that we have met in the country is to teach the "jíbaro" how to make use of available resources to improve his way of living. Here the "jíbaro" has a deep faith in the school. He has been taught to improve his methods of farming; to follow the advice of the social worker in the treatment of his ailments; to plant crops, and raise domestic animals. He tries to prepare well-balanced meals. The girl students learn in the domestic science classes how to improve their homes."[49/]

Rafael Hernández, a 1935 graduate of a second unit school, said in 1940:

"I am a farmer now. You cannot imagine how long a time I have been hoping for this. I have three milk cows, a yoke of oxen, a pedigreed sow, six little pigs, thirty-five hens, two bullocks, and a horse. We have had good luck since I left school"[50/]

Around this same time a sixty-one year old "jíbaro" living in the neighborhood of a second unit school expressed his experience thus:

"We were in great despair when the second unit was established. I borrowed 100 banana seeds from the school. In a short time I had over two thousand. I returned those I borrowed and planted the rest. I believe not less than 700 acres of banana have been planted here abouts. There was none five years ago."[51]

And Dr. Rexford Guy Tugwell, then Governor of Puerto Rico, in his message to the 1942 Legislative Session, explained:

"There are certain appropriations recommended on the budget bill to extend educational services. These would increase the number of teachers of certain types, particularly of industrial arts, and would provide educational personnel for extending the scope of the organization of the second units, which have been admired by educators everywhere. They are Puerto Rico's best contribution, so far, to the art of education. They deserve better support."[52]

In a very comprehensive article in which he traces the development of the second unit school, Mr. Rafael Bonilla Colón, General Supervisor of the Insular Department of Education, summarizes what he considers the outstanding contribution of the second unit schools in the following terms:

1. It is the first school in Puerto Rico which provides an education adapted to the special needs of the rural zone.

2. It has served as a center for the demonstration of an educational philosophy which has been extended to the whole educational system in Puerto Rico.

3. It has succeeded in increasing the holding power of the rural schools of the Island.

4. It constitutes the center around which villages and communities have been built with services such as churches, medical centers, electricity, post offices, medical centers, aqueducts, telephone, etc.

5. It has performed the role of community centers.

6. It has succeeded in improving home conditions in the community.

7. It has fostered the financial improvement of the country people.[53/]

The Difficult Years

The year 1942-43 brought an important change in the educational system of the Island: the adoption of the so-called 6-3-3 plan in lieu of the traditional eight-year elementary and four-year high school system. As a result of this change, the second unit which had been functioning as a well-integrated administrative unit, was broken into two: grades 4-6 constituted the elementary level and grades 7-9 the intermediate school level. Different time schedules were established for each level. Vocational training started in the 7th grade whereas before it had been offered beginning with the fifth grade. This change was possible in view

of the increasing holding power of the second unit school.[54/]

Supervisory services from the central office were likewise divided into the two levels, there being supervisors in charge of the elementary school and those exclusively assigned to help the teaching staff of the intermediate grades. This change affected negatively the work and orientation of the second units which were hence deprived of the dynamic and imaginative leadership which had contributed so much to its creative development and tremendous growth. This was revealed in a marked decrease in the emphasis given to that part of the second unit program which concentrated efforts on the work with the community.[55/]

Moreover, the Island had been undergoing great changes since 1940 which marked the beginning of Puerto Rico's great efforts at industrialization. As was to be expected, this had its impact on the rural communities and in their school program. Interest in agriculture began to lag. Many students complained that at the second unit they were forced to devote a good deal of their school time to agriculture even when their families owned no land and they themselves were not interested in farming. This, they claimed, was done at the expense of other subject matters which would render them better qualified for admission to the urban high schools. Many of the second unit graduates aspired to continue high school education, academic or vocational. The new factories looked like a promise of employment if they gained industrial skills which they did not think they were getting at the second unit schools.

The transfer of the second unit social worker to the urban schools was also a great loss to the program of these rural schools. This, too, came as a result of changing conditions. New social service programs had developed in other government departments as well as in federal agencies whose programs had been extended to Puerto Rico (FERA, PRERA, WPA, etc.) The Department of Education itself had initiated an urban social work program in the year 1936-37 by transferring several of its rural social workers to schools in the largest cities. Salaries and working conditions were more attractive in the urban setting in the other agencies. So the second unit schools began to be drained of their social workers and in 1954 the Department officially transferred the few remaining ones to the urban schools with headquarters in the office of the School Superintendent. This deprived the second unit schools of their main contact officer with their communities. The remaining staff, which had its hands full with academic and vocational duties, had hardly any time left for home visitation and other meaningful community contacts.

These were the prevailing conditions in the year 1948-49 when a curriculum study was made by the Institute of Field Studies of Teachers College, Columbia University, following the request made by the Commissioner of Education of Puerto Rico. With respect to the situation of the second unit school population and the program

it was then offering, this is what the survey report says:

> The decreasing enrollment in the junior high school years of the second unit schools deserves serious attention. Enrollment figures for 1947-48 furnished by the Department of Education indicated that almost twelve thousand (11,948) rural youth were attending urban junior high schools. At the same time only 15,735 were enrolled in the junior high schools. Student-teacher ratios in the rural junior high schools, as already noted, are low in comparison with those in other schools of the Island, and were lower than they should be for good learning situations.
>
> The problem appears to have at least two facets: the required agricultural courses in the second unit program probably prevented some from attending these rural schools, and the conception that the offering of the second unit schools does not "prepare" students as well for the senior high school as does the offering of the urban junior high schools causes many rural youth to attend the urban schools."[56/]

To remedy the problem of school mortality in the rural second unit the Surveyors recommended that the vocational courses in agriculture, industrial arts, home economics and native handicrafts be brought together "into an articulated offering for all students in the early junior high school years." They also advised that in the later junior high school years, when some students elected agriculture

and home economics, other students might be offered additional vocational courses. General business or junior business training was recommended as another possibility and appropriate elective courses in art, music or science were recommended for students not wishing a definite vocational offering.

In the opinion of these surveyors "some excellent work was being done in the second unit schools with respect to preparing students for senior high school." They referred specifically to the training offered in community problems, agriculture and home economics on which courses they claimed that the students were generally having "good educational experiences." The survey staff considered that if the offering of the second unit was broadened "to care better for individual differences in interests and goals, the rural junior high schools could offer excellent opportunities." They saw "no reason why the work in the second unit schools should not be very acceptable for entrance to senior high schools."

It is evident from the above, that the second unit school was departing more and more from its role as a vocational training and community center and turning into the traditional type of school. It was also apparent that the second unit school had been gradually losing its vantage position in rural community development which had made so many educators from the island and from abroad consider it "Puerto Rico's special contribution to the art of education."

The 1948-49 surveyors from Columbia University must have been thinking only in terms of the school curriculum and not of the

second unit school as a rural development center when they concluded that:

> The small second unit schools are extremely uneconomical, with their investment in school farms and attempt to offer agriculture, industrial arts, home economics and native handicrafts. The fact that they are now said to be uneconomical does not imply any lack of support for their very promising educational program.[57]

It is evident from the report that the financial element was very present in the minds of the educational surveyors when they tried to evaluate the work of the second unit schools. This is understandable as the island was still struggling with great numbers of children of school age for whom no school facilities could be offered. This must have been the reason why the Department of Education authorities started to be lenient with school promotions. One still hears the phrase, "the era of mass promotions," as officials could not afford to have students occupy a seat in the same grade for more than a year. Room had to be made for those who were waiting outside. The quality of educational services must have suffered because of the tremendous job to be done and the great limitations under which educational authorities were trying to discharge their responsibilities. The public was very outspoken in its criticism of the public school and the quality of the education it offered.

Some of the officers in the Department of Education had a strong conviction that another reason for the state of affairs within the public school system was the fact that the school was trying to do more than its share of services to the community, that it was performing work which belonged to other agencies, and that the teachers had their hands too full with numerous tasks which they carried out by way of cooperation with other public agencies and with private organizations.

There was a growing feeling that the school should channel all its efforts and devote all its time to its real and true function--teaching--and that it should strip itself of those other tasks which it had been performing out of a desire to better answer the needs and problems of the same community which was so critical of its work. Thus, around the middle of the 1950's official instructions were given in this direction. Everyone spoke of el "rigor de la ensenanza" and the need to turn all efforts towards improving the quality of teaching.[58/] Great care was to be taken to insure that teachers were not involved in too many extracurricular activities of the kind that would divert them from their main function.

The great stress under which the Department of Education officers were laboring must have had its impact on the work and development of the rural second unit schools. There must have been an awareness of the fact that the second unit was losing ground and that something had to be done to help it regain its place of prominence as a leader in community development. This led some of these

officers[59] to initiate in 1958 a very interesting project within the second-unit school setting the purpose of which was twofold: (1) the acquisition, on the part of students, of knowledge skills, attitudes and habits of social value: and (2) the improvement of community conditions through direct social action.

The activities to be carried out were geared towards:

1. The improvement of health.
2. The acquisition of skill in communication and problem-solving.
3. The cultivation of creative and aesthetic ways of life.
4. The promotion of economic proficiency.
5. The enrichment and dignification of rural life.
6. The formulation and acquisition of aesthetic and spiritual values.[60]

The new program for the second unit schools was carried out with the help of a Council composed of the school director and representatives of the teaching staff, the students and adult citizens of the community.

There were also several committees, each composed of representatives of the school staff, children and parents, and each in charge of a different aspect of the school program.

The Council and committees were held responsible for carrying out a dynamic and very comprehensive program which embodied both the academic and the vocational work as well as the activities that had to be carried out to improve community conditions and enrich rural life.

The committee in charge of the academic program was asked to suggest the necessary changes in the school curriculum to have it answer the student's needs and to adequately meet local problems and conditions.

This committee decided that the academic program of the second unit should be fundamentally the same as that of the elementary urban school, with pertinent adaptation to local needs, in order to render the students eligible for admission into urban high schools inasmuch as the majority of the second unit students wanted to enter high school upon completion of the ninth grade.[61/]

The committees which dealt with vocational subjects and other aspects of the second unit work were likewise responsible for submitting recommendations for the revision of the content of courses and to recommend the development of activities which would answer community needs.

This demonstration project was very successful wherever it was put into operation as illustrated by the following examples:[62/]

(a) In one community where uncinariasis was a serious problem a large and very successful educational and treatment campaign was carried out.

(b) In another place, an alumnae group approached its need for employment in a gainful activity by renting a thirty-eight acre farm which made it possible for them to engage in a very fruitful farming and animal-raising project.

(c) A community recreation center was established in a third area, utilizing one of the schoolrooms which was supplied with books, periodicals and parlor games of various sorts.

It is to be regretted that this very successful project was not extended to all the second unit schools as it gave ample evidence of the feasibility of training young people and adults to participate, in a democratic way, in the joint work which the school and community must carry out to develop the rural leadership indispensable for rural development.

Instead of continuing along the lines suggested by this experiment, however, the Department once more turned to the previous plan of dividing the second unit into two levels for supervisory purposes. Again this resulted in a weakening of the second unit program of social action and community improvement.[63/]

Dissatisfaction with the conditions in which the training of agriculture was offered in the second units led to its reorganization in the year 1958-59. In accordance with the revised program the teaching of agriculture was limited to the eighth and ninth grade students and the classes were given in the morning. This new arrangement made it possible for the teacher of agriculture to have the afternoon free for (1) the supervision of the student's home projects; and (2) the teaching of classes in modern farming techniques and animal husbandry to young adults and farmers of the community.[64/]

Following the request of the Legislature of the Commonwealth of Puerto Rico, a third study of the educational system of the Island was made in 1958-59 under the direction of the Superior Council of Education. Mr. Jose A. Perez, a supervisor in the Department of Education, carried out a study of the second unit schools as part of the general study. Thirty second units were carefully selected as the sample for this study which revealed that 76% of the 1958 graduates of those schools had registered in high schools. Three times as many entered academic high schools as compared with the ones who started vocational high school training. The fact that there were, and still are, many more academic than vocational high schools may be one of the reasons for this.[65/]

In his study, Mr. Perez had sought to answer two questions: (1) what was the status of the second unit at the time of the study; and (2) how was this type of school helping to improve community life?

The data collected by him showed, among other things, the following:

1. The number of second units had increased from 5 in 1928 to 131 in 1958.

2. The second unit school had gone through an evolutionary process during that period: from a school which took care of students from the fourth through the eighth grade, offering vocational courses starting at the fifth grade, it had developed into a whole school nucleus which offered education from the first through the ninth grade, with vocational training starting in the seventh grade.[66/]

3. The Department of Education did not have a division in charge of second unit schools.

4. Over 56% of the teachers in the thirty schools studied were not qualified for their job.

5. In the coffee regions, the problem of student absences was very serious at the time of the harvest.

6. Except for the teaching of agriculture in junior high, the rural second unit offered a curriculum identical to that of the urban elementary and junior high schools.

7. Great emphasis was placed in the teaching of health habits, safety education, nutrition and recreation.

8. Vocational classes were giving practical help in the improvement of family living.

9. Vocational offerings were very limited. Training in agriculture would be more effective if an adequate selection of students were made.

10. The second unit schools were far from being community centered schools in spite of the fact that activities involving members of the community had been developed in all of the second units studied.[67/]

Other findings of the study carried out by Mr. Pérez revealed serious problems which the second unit school was facing, among others, poor physical plants, inadequate equipment, great turnover among the teaching staff, pupil absenteeism and lack of interest of the community in the program of the second unit school.

Despite the problems indicated above, the second unit school's holding power was considered good by the educators who engaged in the 1959 study of the educational system of Puerto Rico. Because of the large number of second unit students who entered urban high schools the Study Report contains the following recommendations:[68/]

(1) That in those second units where agricultural training is offered this be a required subject for the seventh and eighth grade pupils and that it be only offered to those ninth graders who wish to get further training in agriculture.

(2) That elective courses in science, art or music be offered to ninth graders who do not wish to enroll in the agriculture course.

(3) That other elective courses be offered to the above students in accordance with the available facilities.

The idea behind these recommendations was to strengthen the academic aspect of the second unit program and thus to reduce the disadvantages with which rural students had to cope in getting admission and adjusting to urban high schools.

The report of the 1958-59 educational study also contains a recommendation to the effect that the study made by Mr. Perez be extended to cover the graduates of all the second units, to determine: (1) how many of the second unit students enter academic high schools for lack of vocational training schools; (2) what type of vocational courses would these students prefer to take; (3) the number and

location of the academic high schools and vocational training schools needed; and (4) whether the organization and practices of rural intermediate schools are actually answering the real needs of the rural population.

"It is an undeniable fact", the Report concludes, "that the rural second unit school has made a significant contribution to education in Puerto Rico, to the extent that the limitations under which they work, have made this possible." The members of the Study Commission considered that "The provision of the resources needed for an efficient functioning of the second unit school would serve as a stimulus to those particular elements of this school which have been instrumental in bringing about positive changes in our rural population."[69/]

In his article tracing the development of the second unit schools Mr. Rafael Bonilla Colón refers to a socio-economic study made by Dr. Cecilia G. Dávila, of the University of Puerto Rico, and quotes from her study the following findings which are in accord with Mr. Pérez' assertion with respect to the diminishing role of the second unit as a community-centered school:

1. The teachers of the communities studied limited their work to teaching in the school-room. Activities reaching towards the community are not carried out.
2. A large number of families do not visit the school or know the teachers of their children.

3. There is a marked duplication of services on the part of the different agencies and an evident lack of coordination and integration among them.
4. The existing resources for the development in these communities of an integrated plan based on cooperative action are not being utilized.

New Hopes for the Future of Rural Education and the Second Unit Schools

The Department of Education of the Commonwealth of Puerto Rico is now taking a new look at the whole problem of rural education in the Island. Dr. Angel G. Quintero Alfaro, Deputy Secretary of Education, considers "the education of children and of other persons living in the rural zone in Puerto Rico one of the greatest responsibilities of the Island's educational system."[70/]

Of the total school population of the Island in the year 1961-62 (567,162 students), 45.6 percent was attending rural schools.[71/] Most of these rural students attended the traditional one or two-room school. In fact, 85% of the rural schools in Puerto Rico in the year referred to belonged to this type of educational establishment. The remaining 15% were either intermediate or second unit schools.[72/]

Rural students in 1961 were receiving a type of education which compared unfavorably with that which was being offered in the urban communities because: (1) the rural teacher had less training and experience; (2) in the rural school there was a larger student case load due to the double enrollment plan; (3) supervision of rural

teachers was less intensive; (4) rural school facilities were inadequate; (5) there were fewer educational resources in the rural areas; and (6) working conditions of rural teachers, in most cases, meant less comfort, greater difficulties, long distances and transportation costs.[73]

All of this has been the subject of serious discussions on the part of the Department of Education officers who, in 1961, initiated a special rural education project in Ciales, a typical rural community. As officialy stated, the project was to be carried out in the hope of providing the rural inhabitant with the knowledge, skills, attitudes and abilities which would enable him to work intelligently towards the solution of his own problems as well as those of his country.[74]

This new plan to improve rural education in the Island stemmed from the following concepts:

1. The Constitutional mandate to offer every person an education focused towards the full development of his personality and the strengthening of human rights.
2. The nature of rural population which tends to diminish and to intermingle with the urban community.
3. The joint efforts of the urban and rural zones to adapt education to conditions in our society which has undergone important changes affecting its socio-economic structure as well as the content and method of learning.[75]

In accordance with these guiding principles the image of the rural school envisioned for Puerto Rico was described thus:

1. A school the curriculum of which is geared around the vital problems of the community, laying special emphasis on preparing the student to master the technique of communication.
2. A school which, in its multiple relations, is an example of a good way of living, respect to individuals, ideas of responsible citizenship, industriousness, collaboration and other attributes of democratic living.
3. A school with a physical environment offering desirable conditions of security, hygiene, health and comfort, as well as facilities for study and recreation.
4. A school, the teaching staff of which, besides fulfilling the prescribed academic requisites for the position, possesses ideals of social cooperation, is well acquainted with the community it serves, has the capacity to understand the customs and idiosyncrasy of the country people, understands the nature of children and utilizes this knowledge to teach them effectively.
5. A school that offers opportunity for participation and social exchange on the part of parents, teachers and students as a means of developing the latent leadership of the rural communities and utilizing it for the improvement of living conditions in them.[76]

The rural education improvement plan included the revision of the second unit school program and curriculum in accordance with the socio-economic changes which the Island has undergone, to adapt the educational offerings to prevailing conditions. Three sectional meetings were carried out in October, 1962 at which school directors, superintendents of schools and their assistants, and general supervisors from the central office of the Department of Education analyzed the conditions that were affecting the second unit school and described them as follows:[77]

1. The Island's economy has changed from a purely agricultural to a largely industrial one.
2. There is an evergrowing tendency, on the part of women in Puerto Rico, to assume other responsibilities besides housekeeping. This is evident in the rural zone, especially in communities in or near which the new industries have been established.
3. The increase in transportation facilities and in the opportunities for employment have brought a greater population mobility.
4. The reallocation of previously isolated rural families in the newly established rural communities calls for a special adjustment to this different type of communal living arrangement.

5. The raise in the standards of living and the extension and improvement of educational opportunities has likewise raised the level of aspirations of the Puerto Rican society.
6. Life and resources in rural Puerto Rico do not offer, in the majority of the cases, the opportunity to earn an income large enough to provide for a full and abundant life.
7. An ever-decreasing number of persons will continue to live in the country and engage in the production of agricultural and dairy products for the rest of the population. These rural dwellers are entitled to an adequate education that will enable them to fulfill their responsibilities efficiently.

In accord with these conditions and with the changes affecting rural life and the expectations of the rural dwellers, the Department of Education is trying to channel educational efforts in a way which will equip children to live and adjust well in a changing society. Officers in that government department believe in giving students the knowledge and skills that will help them to function well in the farm, home, workshop, factory or wherever they decide to make a living and work. It is acknowledged by educators in the Island that the original emphasis of the second unit schools in preparing students for farming and country life was justified at the time of their creation. At this point, however, the trend is to eliminate the teaching of agriculture in the second unit schools

and to transfer it to the high school level. It is estimated that only around thirty second unit schools will continue to teach agriculture because they are located in highly agricultural areas. At present only eighty-seven out of the 157 second unit schools in operation are teaching agriculture.

The following are the reasons for this change: (1) the largest number of second unit graduates registers in urban academic high schools;[78/] (2) the number of second unit students who are fourteen years old or over and, therefore, qualified for admission to vocational agricultural classes, keeps diminishing because of the increase in the educational facilities which have thus permitted early admission of students; (3) several second unit school communities have lost their agricultural character; (4) relatively few rural students belong to land-owning families; (5) the increase in the level of educational aspiration among the rural families, and the desire of parents to have their children enter the professional fields or get training for white-collar jobs.

Itinerant teachers of agriculture will continue to offer instruction and advice on modern farming techniques to youths and adults in those communities where agriculture will no longer be taught in school. Agricultural laborers will also continue to benefit from short courses with specified objectives as part of the accelerated agricultural program.[79/]

The Puerto Rican educators engaged in the revision of the second unit school plan of work are in agreement that this school

should, for organizational and operational purposes, be considered a single administrative unit, covering from the first to the ninth grade. Such a plan will be conducive to a better utilization of plant, personnel, equipment, materials and other school resources. Because of the "peculiar characteristics" of this type of school, however, the following general purposes have been formulated for it within the general Program for Rural Education:

1. To give the student of the Second Unit School the knowledge, skills, attitudes, ability and values that will facilitate his adjustment to a changing society such as the one he lives in.

2. To prepare the student for responsible and efficient citizenship by arousing his interest in the social and economic problems of his community and by instilling in him ideals of cooperation, service, and responsibility towards school, home and community.

3. To stimulate the community towards organizing itself that it may study its problems, and, in a cooperative and democratic way, find a solution for them.[80/]

Officers in the Department of Education of Puerto Rico believe that the curriculum of a school, so conceived, should include subjects selected in accordance with the needs of the community where the school is located. Pre-vocational and vocational courses should admit boys as well as girls to better answer the needs in a society in which women are joining industrial plans in increasing numbers.

In second unit schools located in communities which are no longer agrarian in character, courses in science, mathematics, music, language, history of Puerto Rico and other similar subjects should form part of the curriculum in lieu of the vocational offerings. 81/

The Department of Education is likewise convinced of the need to make a study of the community to be served by the second unit school prior to the formulation of the curriculum to be offered. Such a study will throw light on the selection, adoption and coordination of the educational experiences to be offered to the student body which should be composed of both children and adults.

Other features of the proposed revision of the second unit school plan are the organization of juvenile groups of various kinds, to enrich the knowledge and experience of children, and the extension of the educational opportunities, both academic and vocational, and that they be made available to young people and adults in the community.

With respect to that aspect of the work which deals with the community-school relations, the following recommendations were made by the persons who revised the second unit school program:

1. To develop a program of social, recreational and cultural activities aimed at promoting a better understanding of the school and the community.

2. To see that the school, the parents and other agencies and institutions organize themselves for the development of activities aimed at the improvement of living conditions in the community.

3. To study the problem of school drop-outs in a group of second units where the problem is more acute in order to develop a pattern for an action plan that could be offered as a model to other schools.[82/]

Other recommendations made for the strengthening of the second unit schools include the assignment of a person capable of carrying out both social work and vocational counseling responsibilities. They also include the provision of adequate equipment and materials for the teaching of science and the special preparation of teachers in this particular respect.

There is good evidence already of the interest of the Department of Education in reviving the spirit and achievements of the original second unit schools. The adaptation of vocational offerings to local conditions has been put into effect in several schools. Examples are: one school where children are presently engaged in a poultry project, another school where students are raising cattle to help increase the meat supply, and a third school which is giving training in the repair of agricultural equipment.

The way the Departments of Education, Labor, and Agriculture are joining forces to help train youths and adults, in answer to the agricultural and industrial demands made by the different communities, is also a very promising feature of the school work.

Several special services are now being offered to help fulfill the level of educational aspirations of our rural students. Among these are: transportation facilities to help children reach the

rural intermediate or second unit school or the urban high school; educational scholarships to needy eligible candidates: and economic help in the form of the sale of shoes at reduced prices.

To help improve the quality of education in the rural areas, the most important step taken has been the appointment of itinerant supervisors through which adequate professional help to teachers is being offered. The provision of audio-visual aids such as TV sets, radios, tape-recorders, and film projectors to some rural schools and second units is still another effort to improve the quality of the educational experiences offered. This is a long-range program which will eventually provide each second unit school with these basic educational tools.

In the field of community-school relationships, the designation of a central office supervisor to help the teaching staff develop a constructive relationship between the school and the community is a very promising step. Officers in the Department of Education are convinced of the need to have the rural community make the maximum possible use of the school's facilities. They believe that special staff should be assigned to the second units for work with the community after the regular school hours and on Saturdays and Sundays.

It is too early to know to what extent the measures taken so far and the plans outlined for the strengthening of the second unit schools will succeed in having these schools regain the great leadership role they used to have in the communities they served. In connection with the program to improve community-school relations it is most important to determine the nature of the goal to be

achieved: is the relationship between the school and the community to be geared towards the enrichment of the school program, the bettering of the school plant, the participation of parents in terms of achieving the educational goals, or is it to be channelled towards the improvement of the community, the solution of its problems, the raising of its standards of living as far as the health, recreational, cultural and moral aspects of rural community life are concerned? In our opinion the way in which this question is answered if of tremendous importance in terms of the future development of the second unit school whose greatest contribution has rested in the ways in which it has been able to reach towards the community and influence its residents to improve their lot.

For the Second Unit to regain its leadership role in the community and to be reconverted into a true community-centered school, three things are indispensable: a community-centered curriculum, but one which will relate the community to the world beyond its boundaries; an organizational structure conducive to an active and continuous parent and citizen participation; and a staff which believes heartily in the philosophy that a school should not have intellectual and spiritual walls but must radiate its influence in the direction of the community it serves.

Efforts made by the Department of Education to provide working conditions for the rural teachers that will attract and hold them in continued service would be most profitable. Provision should also be made for adequate living quarters, within the rural

community, for the school director and the special staff in charge of direct work with the community and its leaders. This, and the fulltime appointment of social workers as part of the second unit staff, are indispensable measures that must be taken if the second unit school is to make again the kind of contribution to rural life and development which promoted famous educators from Puerto Rico and from abroad to remark in the past that it was Puerto Rico's special contribution to the field of education.

The Second Unit Schools of Puerto Rico

NOTES

1. This report has been prepared by the author while working for the Comparative Studies of Cultural Change, Department of Anthropology, Cornell University, under contract AID/csd-296 with the Office of Technical Cooperation and Research of the Agency for International Development.
2. A Survey of the Public Educational System of Porto Rico, Studies of the International Institute of Teachers College, Columbia University, 1926, p. 1.
3. ibid., pp. 1-2
4. ibid., p. 2
5. U.S. Public Law No 362 of 1947 enabled the Governor of Puerto Rico to appoint the Commissioner of Education, now Secretary of Education.
6. Juan José Osuna. A History of Education in Puerto Rico. San Juan: Editorial de la Universidad de Puerto Rico, 1949, p. 282.
7. A Survey of the Public Educational System in Porto Rico, op. cit., p. 19.
8. Mercedes Vélez Herrera. The Development of the Social Work Program in the Public Schools of Puerto Rico. MS, University of Chicago, 1943.
9. A Survey... op. cit., p. 39.

10. ibid., pp. 199-201.

11. ibid., p. 220.

12. ibid., p. 39

13. Rafael Bonilla Colón. Reseña Histórica de la Segunda Unidad y su desarrollo desde 1929 hasta el 1962. MS.

14. A Survey..., op. cit., p. 200.

15. Division de Investigación Pedagogica, Consejo Superior de Enseñanza, Universidad de Puerto Rico. Estudio del Sistema Educativo de Puerto Rico. Rio Piedras: Publicación de la Cámara Representante de Puerto Rico, 1961, Vol. 2, p. 1204.

16. Bonilla Colón, op. cit.,

17. ibid.,

18. Vélez Herrera, op. cit., p. 31.

19. Francisco Vizcarrondo. The Second Unit Rural Schools of Puerto Rico, Pre-Vocational Schools for Pupils of Intermediate Grades. San Juan: Puerto Rico Department of Education Publication, 1930.

20. ibid., p. 3.

21. Antonio Rodríguez, Jr. The Second Unit and the Rural School Problem of Puerto Rico. San Juan:_____ pp. 59, 61. (Indiana University Doctoral Dissertation, 1943).

22. ibid., pp. 78-79.

23. ibid., p. 84

24. ibid., p. 51-52

25. ibid., pp. 79-81

26. Vizcarrondo, op. cit., p. 5.

27. ibid., p. 7.

28. Only women were selected for this type of work as educational officers at that time since it was thought that women were better fitted for such work.

29. Mrs. Dorothy D. Bourne, who had had graduate training at the New York School of Social Work where she obtained a certificate in social work in 1917.

30. Vélez Herrera, op. cit., p. 52.

31. American Association of Social Workers, Puerto Rico Chapter. Professional Education for Social Workers. Memorandum to the Commission on the Establishment of a Pan-American University of Puerto Rico. San Juan, 1939, p. 5.

32. They all had at least a Normal School Diploma (two-year college education) but a good many were college graduates.

33. Puerto Rico Department of Education. Handbook for Social Work. Report on Social Work in the Department of Education, 1930-31. San Juan: Department of Education (1932) p. A-2 (1).

34. Vélez Herrera, op. cit., pp. 78-79.

35. The term by which peasants are designated in Puerto Rico.

36. Puerto Rico Department of Education, Annual Report 1930-31. Doc. No. 6-M. San Juan, Bureau of Publications, Department of Education, 1931, p. 65.

37. Puerto Rico Department of Education, Handbook, op. cit. p. A-2 (1).

38. ibid., p. A-2 (6).

39. Vélez Herrera, op. cit., p. 74.

40. Puerto Rico Department of Education. Report: 1931-1934. San Juan, _____, pp. 75-76.

41. Luz M. Ramos and Dorothy D. Bourne, et al. Rural Life in Puerto Rico. San Juan, Department of Education Bulletin No. 1, Research Series, c.a. 1934, p. 5.

42. ibid.

43. ibid., p. 15.

44. ibid.

45. Bonilla Colón. op. cit., p. 4.

46. ibid., p. 6.

47. Rodríguez, op. cit., p. 64.

48. ibid., pp. 65-66.

49. ibid., pp. 67-68.

50. ibid., p. 68.

51. ibid., p. 69

52. ibid., p. 69

53. Bonilla Colón, op. cit., pp. 8-9

54. ibid., p. 6.

55. ibid., p. 6

56. Institute of Field Studies. Public Education and the Future of Puerto Rico, A Curriculum Survey. New York: Teachers' College, Columbia University, 1950, pp. 385-386.

57. ibid., pp. 377-378.

58. Information supplied by Mr. José Martinez Almodovar, high officer of the Department of Education, now head of one of the regional offices of education.

59. Dr. Juan Silva, Mr. Erasto Rivera Tosado, and Mr. Rafael Ramirez.

60. Programa de la Segunda Unidad Rural. San Juan: Editorial del Departamento de Instrucción Pública, 1958, p. 5.

61. ibid., p. 17.

62. ibid., pp. 24-30.

63. Bonilla Colón, op. cit., p. 7.

64. Memorandum No. 94 of the Secretary of Education, re the Reorganization of the Program of Agricultural Education, December, 1958.

65. Division de Investigaciones Pedagógicas, op. cit., II:1206.

66. One of the original second unit schools offers a complete secondary school course.

67. José A. Póroz Ortiz. A Study of the Rural Second Unit School in Puerto Rico (part of survey of the Puerto Rico school system in 1958-1959).

68. Division de Investigaciones Pedagógicas, op. cit., II:1206

69. Ibid., p. 1207

70. Angel G. Quintero Alfaro. Notas Sobre la Educación Rural. MS, Departamento de Instrucción Pública, Puerto Rico, September, 1962.

71. Programa de la Sección de Educación Rural, División de Escuela Elemental, Departamento de Instrucción Publica, 1962, p. 4.

72. ibid., p. 8.

73. Quintero Alfaro, op. cit., p. 2.

74. Departamento de Instrucción, Puerto Rico, Proyecto de Educación Rural de Ciales, Informe de Progreso al Terminar el Año 1961-62, (196_) p. 1.

75. Quintero Alfaro, op. cit., p. 1.

76 Programa de la Sección de Educación Rural, op. cit., pp. 2-4.

77. Recomendaciones en Torno a la Reorientacion de las Segundas Unidades Rurales. Hato Rey: Departamento de Instrucción Pública, Estado Libre Asociado de Puerto Rico, 1962-3, pp. 1-2.

78. Out of 1,200 Second Unit school graduates in 1963-64, 800 registered in urban academic high schools, as reported to the writers by Mr. Fernando Roca, Assistant Director of the Division of Vocational Education, Department of Education of Puerto Rico.

79. Plan para la Revisión del Programa de Educación Agrícola Vocacional. Hato Rey: Departamento de Instrucción Pública, Estado Libre Asociado de Puerto Rico, Marzo, 1964.

80. Recomendaciones en Torno..., op. cit., pp. 1-3.

81. ibid., pp. 3-4.

82. ibid., pp. 7-8.

PHOTOGRAPHS

Rural Puerto Rico in the 1930's

1. Mountain terrain - isolated houses: boundary line between Utuado and Jayuya. - Photo by Division of Community Education, Department of Education, Commonwealth of Puerto Rico.

2. Housing: unimproved
   a) Trujillo Alto - rural housing
   b) Dwelling in a San Juan city slum area
   c) Junos' family and its shelter
   d) Housing in Utuado

3. Cooking in the Country - Photographs by Agricultural Extension Service, University of Puerto Rico
   a) Cooking with firewood
   b) Cooking with charcoal
   c) Kerosene ranges have replaced the old fogones

4. Agricultural Methods of the 1930's - Photographs by Agricultural Extension Service, University of Puerto Rico
   a) Poultry raising
   b) Plowing with metal ox-drawn plow
   c) Old method of loading sugar cane

Beginnings of Change 1934-1936: PRERA

5. Water and Sanitation
   a) Extension of water works - Coama
   b) Sewer system - San Lorenzo

6. Construction of Barrio Roads

   a) Construction - January 3, 1936 - Palomas

   b) Construction - January 23, 1936 - Lajas

7. Houses

   a) Frame

   b) Reinforced concrete

   c) Standard rural latrine

8. Schools

   a) Standard rural school - Isabela

   b) One room rural school - Barrio Galateo

9. Gardening

   a) Home gardens - Carolina

   b) Onion seed beds - Arecibo

Rural Puerto Rico in the 1960's

10. Parcelas - The New Rural Communities - Housing Under "Programas Sociales" of the Department of Agriculture Home constructed with aid from Farmers' Home Administration, relatives and neighbors - Photograph Agricultural Extension Service of University of Puerto Rico

11. Agricultural Methods of the 1960's

   a) Loading sugar cane with modern equipment

   b) Plowing with a tractor

   c) Poultry project

12. Children going to school (on a barrio road; note shoes and clothing)

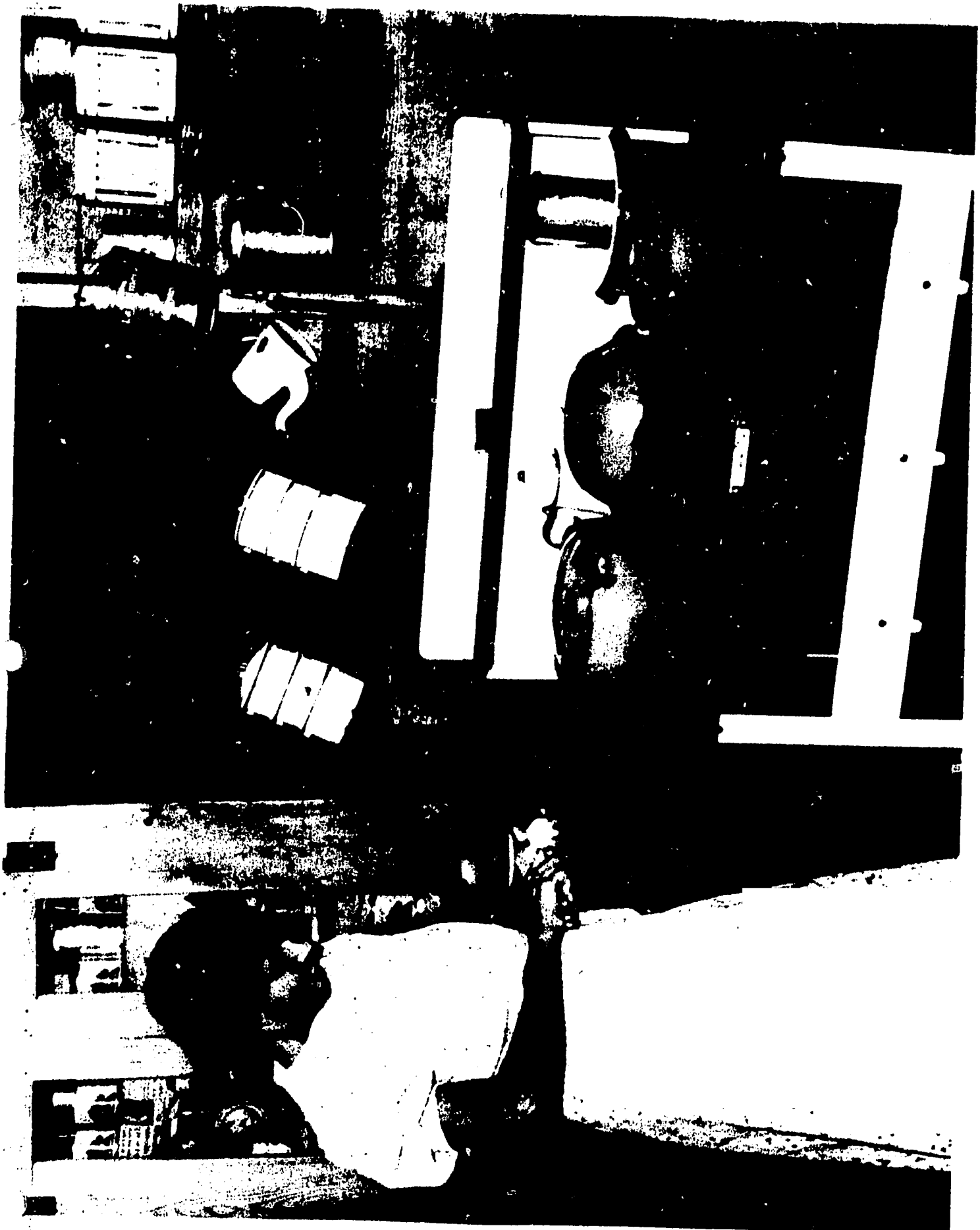
2a

2b

2c

2d

3b



3c

4b.

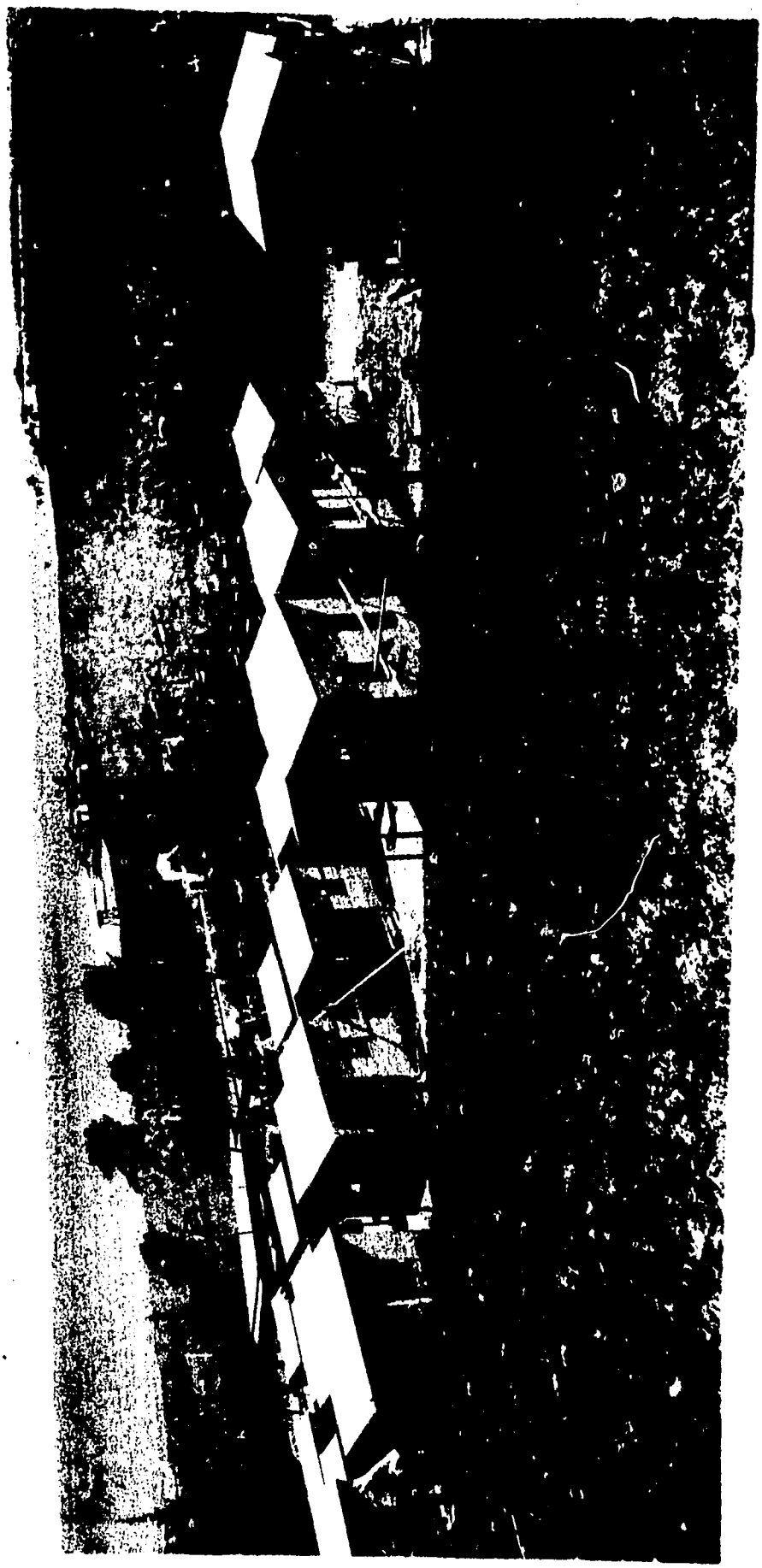
4c

5a

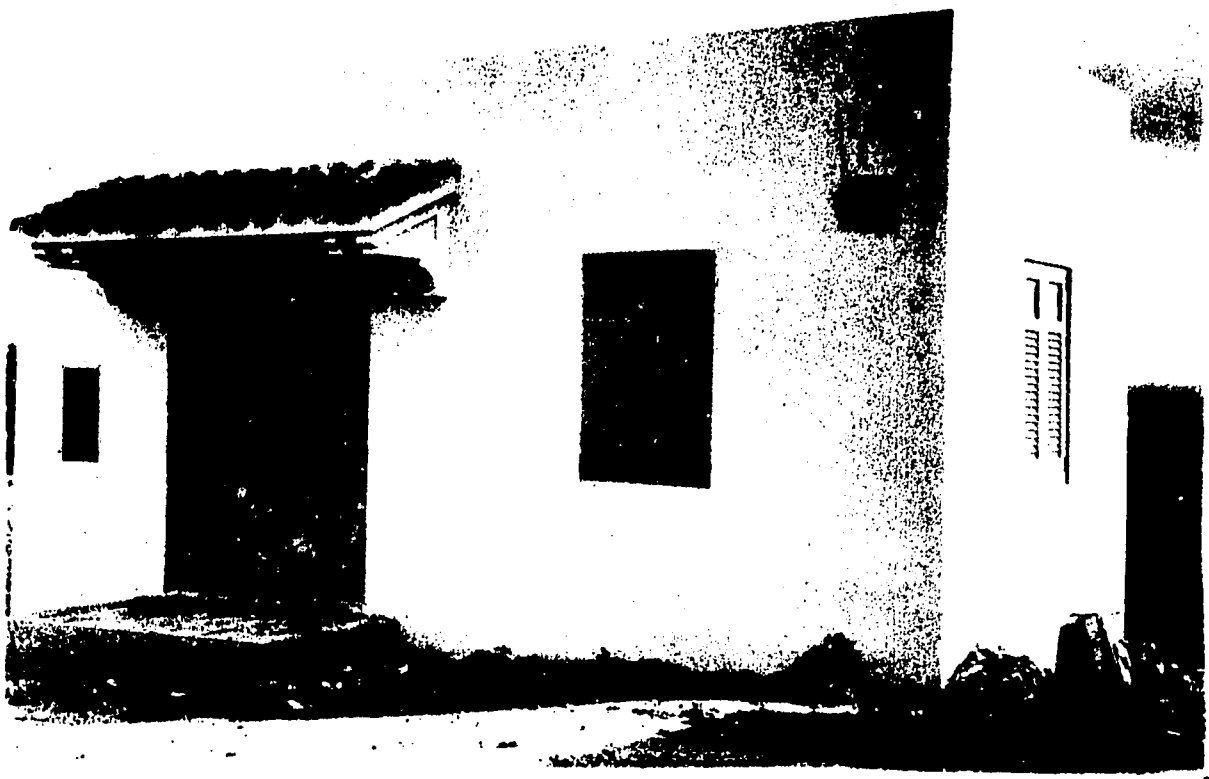
5b

6a

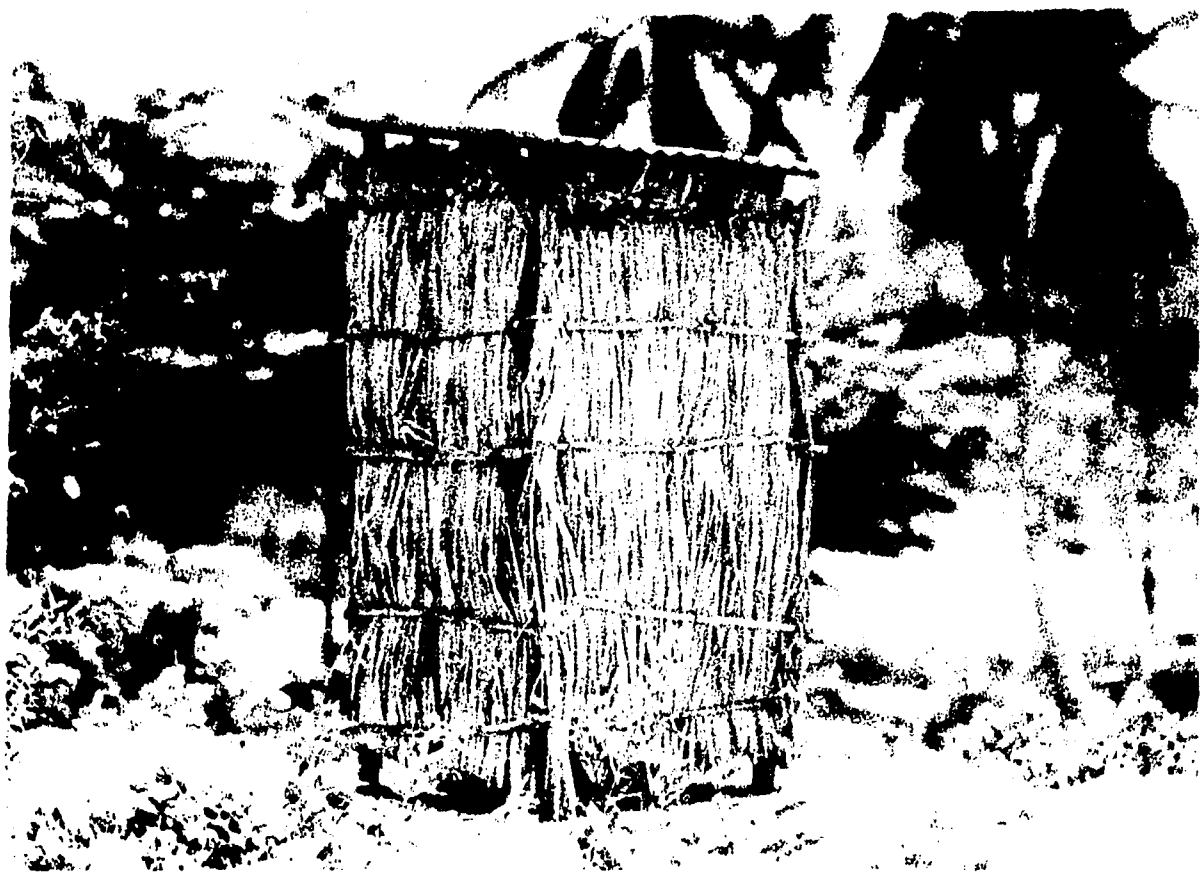
6b



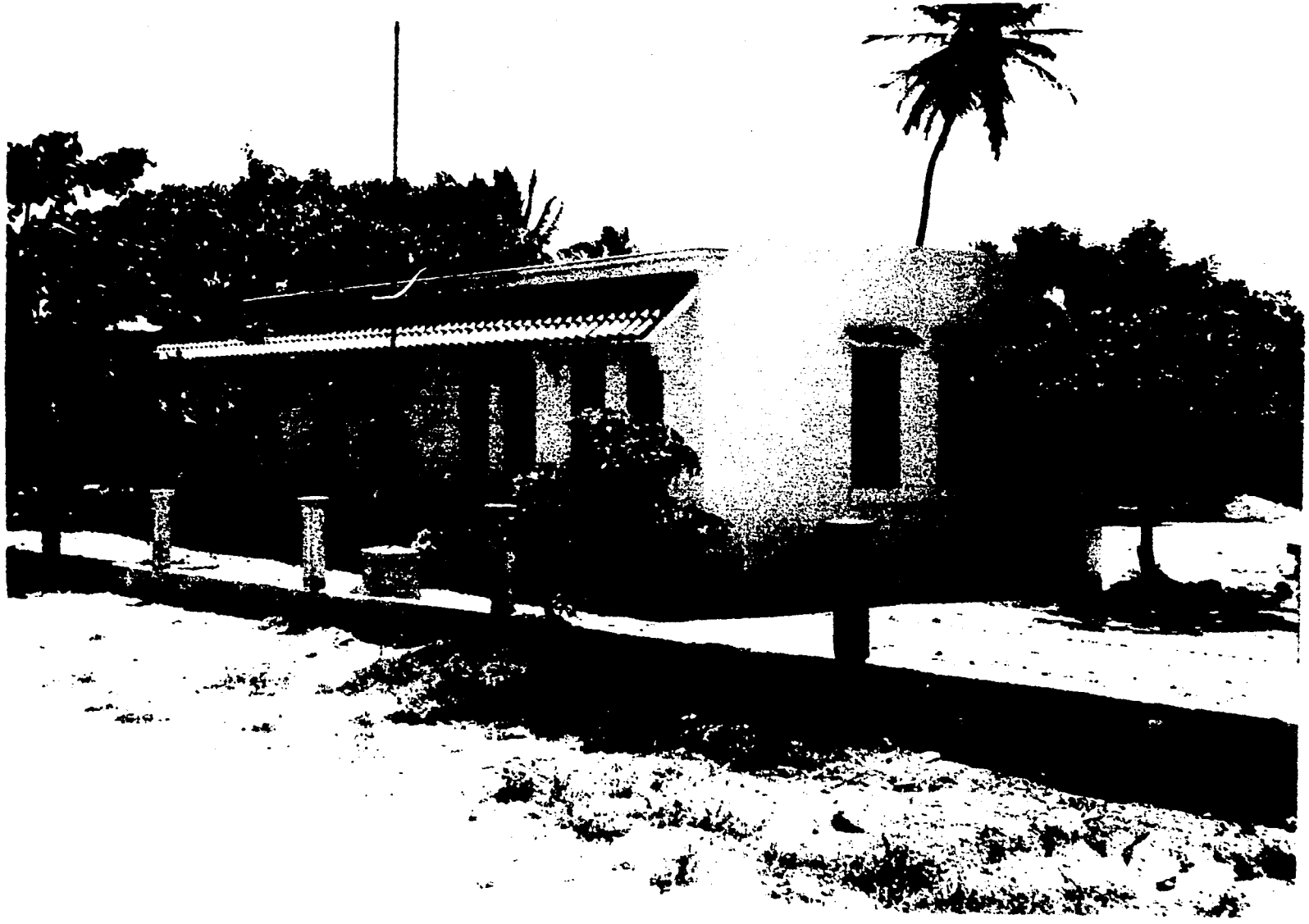
7a



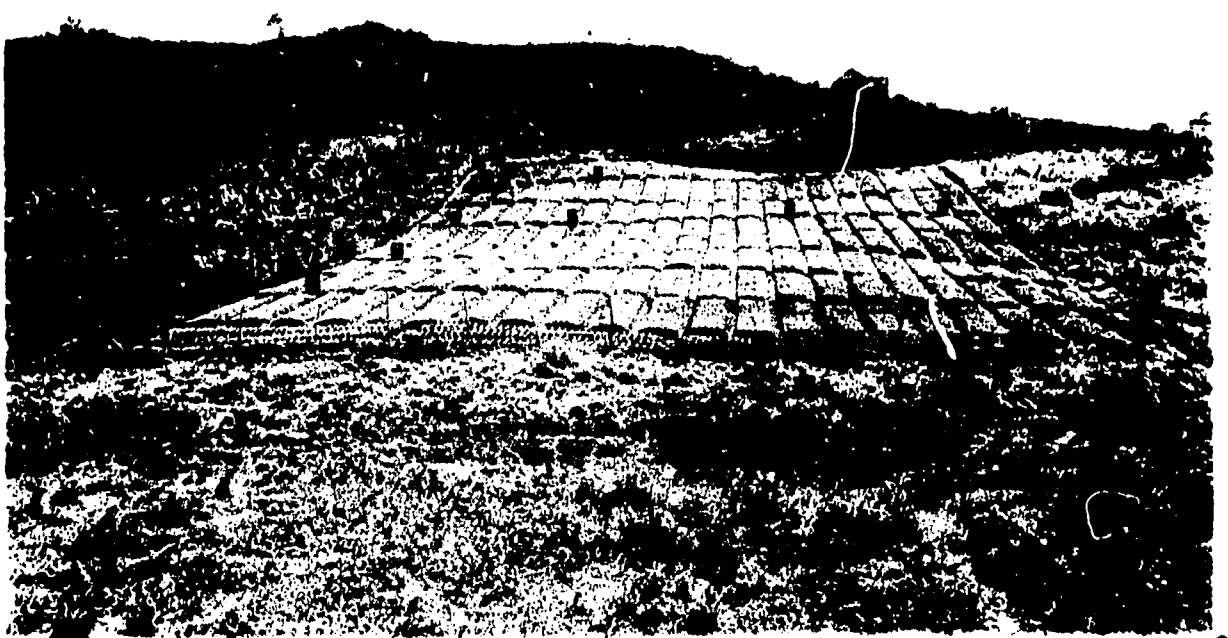
7b



7c

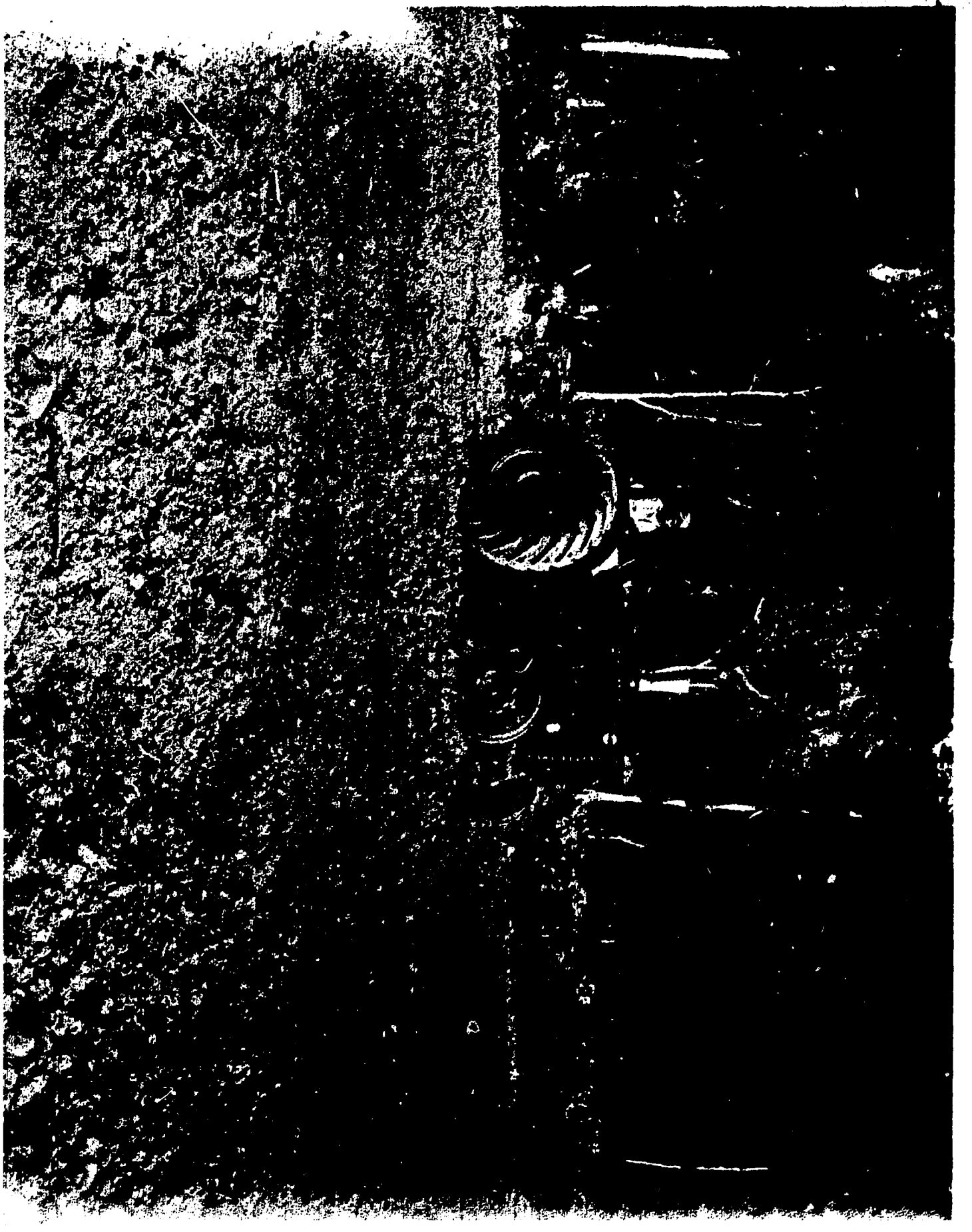


9



9b

11a



11c

K 2
H 3

CHAPTER VII

RURAL SOCIETY

Consideration must be given in any discussion of the rural zone to the stereotype of the "jibaro" (see glossary) in Puerto Rico. Even when the "agregado" (see glossary) was economically exploited by the landowner, there was an idealized picture of the "jibaro" as a man of personal dignity. This concept has had a permanent effect both on the public image and the self-image of the jibaro, who cannot be identified with the character of the peasant as popularly conceived in many other countries. The fact that certain economic and social patterns are common in all countries where there is an exploited peasantry must be separated from those special characteristics which in Puerto Rico have their psychological effects on adjustment and adaptation to change.

Visitors to rural areas today cannot fail to be impressed and possibly influenced by the courtesy and hospitality of the jibaro. These are symbols of that "dignidad" which carries such a high value in Puerto Rican culture. Even if it is a myth, that myth has a reality which may be a vital factor in reaction to new situations. It is important to form some tentative judgment, based on observed and recorded attitudinal responses, which will indicate whether the jibaro image weighs more heavily on the plus or minus sides of social progress

We are not attempting to prove that the jibaro was, or is, necessarily a man of consummate virtue. Problems of sex, of marriage and family relations inherent in the way of life in the country thirty years ago occupied much of the attention of social workers in the situations with which they then dealt. These problems have not disappeared.

Our main contention is that it is not necessary to create a wholly new character for the country dweller; that character has been established by the society of which he is a part. It remains to be seen to what degree it is an asset--a link between past and present--or a liability because it is a tie to the past which cannot be kept.

That the jibaro will find himself more and more a part of the transitional group is unquestionable. This will be due to the process of urbanization with its accompanying mobility--and to changes in the forms and techniques of agriculture. Both of these mean different ways of life with their consequent effects on values. It becomes important to estimate whether dignidad, typified by the jibaro, can be preserved as a value--a quality of the individual which may animate the growth of the life of the spirit in the new forms required by new conditions. In discussing this Tumin says:[1]

> However romantic and quixotic this may seem to some economists, this concern for the life of the spirit is an important factor in much of the Puerto Rican resistance to new proposals for economic development. At the moment, the struggle is more to maintain than to augment those elements of spiritual tradition that still remain...it offers evidence of an actual conflict between material enrichment and the felt threat of spiritual impoverishment.

We would raise the question as to whether or not this must continue to be seen as conflict. Is it not rather part of the universal problem of the present: a new interpretation of old values, literally a reincarnation in which new symbols are created from new material forms?

The whole question of class mobility and changing class structure in Puerto Rico is involved in this question. On this the following quotation is pertinent:[2]

> "...positive orientation toward the norms of a non-membership group is precipitated by a passage between membership groups, either in fact or fantasy, and the functional or dysfunctional consequences evidently depend upon the relatively open or closed character of the social structure in which this occurs" (pp.88-89). This formulation helps considerably in succinctly systematizing some of the major factors in the abilities of low-ranked Puerto Ricans to define the overall system as fair and responsive to their needs....This statement is followed, in the Merton and Kitt article, by some observations to the effect that this form of anticipatory socialization (that is, referring oneself to standards observed in groups of which one is not yet a member) may be functional for the individual in an open system but dysfunctional for the solidarity of his group or stratum....The anticipatory socialization into non-lower-class group life appears to function to invigorate individual morale and energy in the various strata....But the curious and unexpected thing in the Puerto Rican case is that the issue is not between competing membership groups: it is between solidarity with a membership subgroup of the society--and hence some hostility toward other membership subgroups--and a reciprocally supporting pair of memberships, one within one's subgroup or stratum and the other within the membership group

> defined by the total society...some intransigent version of any class identification and that kind of class identification which can coexist with and reciprocally support identification with the total society. In the Puerto Rican case, it seems eminently possible for a person to maintain on some counts an identification with a particular stratum and, at the same time, to have an equally strong and nonconflicting identification with the total society. It is suggested that this is perhaps a very good index of an open class system. Mobility is desired and approved, without any necessary implication that this involves changing one's class identity, or that this prevents or impedes the same kind and amount of mobility for everyone else in every other stratum.

The emphasis should perhaps be taken off the jibaro as the society changes and as he inevitably becomes a more integrated part of the larger movements by which the whole low-rank stratum rises. How this group adapts itself in the years immediately ahead will be a matter of great interest. As the level rises economically, will its members be able to carry with them the characteristics which have been given such high value--whether fully justified or not - in the jibaro? The answer will depend on the society as a whole. Will it find a place for the preservation of the romanticized jibaro character or will this picture become only a treasured bit of history? The answer will be decided by the movement of Puerto Rico toward its designated goals and the degree to which it can amalgamate economic growth with the idealism expressed in the goals of Operacion Serenidad.

That the "solidarity with a membership sub-group" will disappear seems highly probable to us, but the fact that Puerto Ricans have in the past been able to maintain an "identification with the total society" even when the economic situation, isolation and resulting ways of life tended to a separation of the sub-stratum from the whole gives promise that it will be possible to preserve the values which have a long history of survival.

It seems to us that this will not be done by the preservation of a class identity but will depend on the vitality of the qualities themselves and their potential for incorporation in the value system of the society.

Among the 67 heads of families questioned in our depth interviews, the following opinions as to what determines the social class of a family were given:

Table 18: Informant Opinions as to Social Class Determinants

Number		First place Frequency	Second Place Frequency	Third place Frequency	Fouth place Frequency
46	Income	31	8	5	2
27	Education	19	7	1	0
23	Occupation	2	10	10	1
25	Family Name	8	1	--	16
4	Morals	3	--	1	--
4	No inform.				

The number giving income first place is significant compared with thirty years ago in that it represents new opportunity and presumably different values. The only comment then might have been given through some correlation with occupation, i.e. the single "mayordomo" who appears in the occupational groups as distinguished from the laborer, who made up the great majority of the occupations listed, would

have had higher status as well as larger income. We can assume that education was rated high in the past but that the aspiration in terms of grade to be completed was not very high. Now, 42 out of the sample 67 depth interviews would like their children to have a university education or more, and 43 of the heads of families say that they have been handicapped by insufficient education.

The low percentage rating for occupation indicates that, in itself, occupation does not carry high prestige, but when combined with education it shows 34.8% of the sample saying that it is now easier to rise in the social scale because of better education, with an identical percentage saying it is easier to rise because of better jobs and higher income.

That family name still stands first for 8 of the 67, and third for one, has some significance. As the elite group is rare in our whole sample (both the 245 families of the objective interview and the 67 of the depth interview) this may only reflect the recognition that an elite still exists in the society as a whole though not as a practical factor in our sample. A different kind of sample would place it higher because it remains an important factor in upper class consciousness even if its importance is probably diluted by new combinations with the prestige of profession and income.

We have made an attempt to find the number of "agregados" in the 1930's. No accurate figures could be found, but for 1940, estimates were given which varied from 25,000 to 100,000 (it should be remembered that these figures mean heads of families or single persons, not the total population dependent for a living on the wages of agregados).

A quotation from "Porto Rico and Its Problems" gives the following information on home ownership and home tenure in the rural zones in 1930:[3]

> "No complete survey of home ownership among the Porto Rican peasantry has ever been made. In 1924-25, however, the Insular Department of Agriculture and Labor made an investigation that covered by sample 628 rural wards in ten municipalities representing all sections of the country, in which it secured data from 3,622 landowners and 9,455 families of resident laborers, or "agregados", as they are called locally. Of the latter group, 82.2 percent lived in dwellings belonging to landowners for which they paid no rent; 17.6 percent owned their dwellings (but not the sites); and a fraction of one percent resided in rented houses. In most cases, therefore, the agricultural laborer has no rent to pay. He also has no rights of occupancy except at the will of the landlord, and is ever faced with the possibility of forced removal.
>
> The agricultural laborer who owns his house is in a slightly better condition. It is doubtful, however, whether ownership of the hut alone really gives any greater right to occupancy. Although no land rental is exacted, obligation to work on the plantation in times of need ordinarily is stipulated, just as with the "jibaro" who occupies a shack which he does not own. If the landlord wishes to do so, he can eject a resident laborer who owns his own hut. In that case the laborer has the alternatives of dismantling the hut and carting the materials away, of selling out to the owner, or

> of abandoning his property. The actual practice in cases of forced removal varies with the conditions under which the ejection occurs. Charges have been made that landowners have permitted their workers to construct their huts in order that they may acquire them later on terms favorable to themselves. (Note: The Homestead Act was enacted later to remedy this situation.)

The Brookings Institution report describes the home and life of the jibaro.

> Most of the dwellings hug the mountain sides and are raised on poles, not only to keep them off the ground but also to give them balance and an even foundation. They can only be reached on foot, over narrow paths. There the jibaro, with his family, lives apart. He rarely goes to town. His social contacts are with the landlord, with the local store--frequently owned by the landowner--and with the school. The school is in many ways the only, certainly the chief, source of social contact with the world about him and with his neighbors. This general description is less true of the living quarters in the sugar cane region, where more "labor colonies" are to be found, but even there the little isolated hut, set on some ridge above the cane, is not uncommon.
>
> An attack upon the problems of the rural community should include an attack upon this mode of residence. And that raises many prolems of land ownership and overpopulation.

> It is becoming increasingly difficult for the jibaro to find a place to live. He is not wanted unless absolutely needed. One large landowner remarked, "the little landowner has many relatives." The resident laborer, or agregado, may be a burden. And where labor is plentiful and to be had at will, there is no inducement for the landowner to provide him with a place for residence. Any real improvement of the very grave condition of the rural community will ultimately involve grouping the rural population in some sort of village communities--each with a school in the center, with some means of social organization, some prospect of permanence--something in the nature of a home in a group of neighbors instead of a hut at another man's will on an isolated mountain side. Until that is done, neither the rural schools nor the governmental medical and sanitary campaigns will have their full effect or, perhaps, be able to achieve the ends which they are meant to serve (p. 36)

It is interesting to note the developments which followed in the Second Unit Schools in the '30s and in the plans for parcelas in the '40s, both continuing and adapting their programs to more recent changes.

That individual life had a lower value thirty years ago than at present seems to us unquestionable. One striking example which constantly came to our attention then was the sight of a man or boy walking along a road with a baby's coffin on his head--going alone to bury it in the cemetery. (Note: we find this mentioned in "Porto Rico and Its Problems").

Behind this lay a fatalistic view of life and death, the lack of medical facilities and of adequate nutrition as part of the low economic standards which accounted for the high infant mortality, the failure of the church to give comfort and support in time of sorrow to people who could not pay. (This applied also to the marriage ceremony and accounted, together with isolation, for a large number of the consensual marriages.)

A striking contrast appears now in the rural areas, where ambulance service is available wherever roads make it possible. Mention of this is made in responses to questionnaires with enough frequency and emphasis to make it appear as a symbol of the new importance of life and health.

To examine further the characteristics of rural life, we must look at the communities where in the '30s the jibaro was thoroughly typical not only of the country dweller who worked for a large landowner and lived mainly in the mountain regions, but also of the man who lived on cane land in the coastal regions and was economically in a similar situation--perhaps worse. He did not own his own land; it belonged to the company, and if he had a house of his own, it was a hut to which he had no legal title. Often he was not allowed even to have a little patch of "yautia" or sweet potatoes. And his work was seasonal--only in the "zafra" (cane-cutting season).

The cane worker presents a somewhat different picture from that of the jibaro. He has a long history which could be followed through the story of the sugar industry. This has been told many times and from many points of view. Sugar was well-established before Puerto Rico became part of the United States. Its importance to the island has been so great, the investment so large and so profitable, and the laborers needed so numerous, that it has for many years dominated the economy. The story has much in common with

other sugar islands, but it has been complicated by political involvements--the U.S. tariff, the 500 acre law, which theoretically limited the amount of land owned by one corporation or individual, but for many years was honored in the breach and only became effective since the days of the PRRA. Unions first came into the industry when Santiago Iglesias in 1900 appealed for and received aid from the American Federation of Labor. There is no single union for sugar workers, however, to this day, although some of the unions are strong, in some cases due to connections with individual politicians who identify themselves constructively with a union and with the labor movement. The cane worker gains dignity as well as financial advantage from his participation in the union.

There is special unemployment insurance for cane workers. This is of great importance because of the seasonal nature of the work. But, in spite of special attention given to the problems of the laborers, the number of cane workers has fallen from 124,000 in 1934 to 49,000 in 1962. The ratio is greater than the actual figures indicate, because of population increase. Mechanization within the industry and competition from other industrial developments account for much of this, resulting, however, in a shortage of cane workers at present--despite the general unemployment figures. The hard conditions of work in the cane fields is an important factor in the competition with industries which offer better working conditions. For technical reasons and because of soil conditions mechanization will be slow compared to Florida, Louisiana or Hawaii. This will allow time for adjustment, but it cannot now help the individual worker greatly, and there is little incentive to younger workers to

take up this occupation. According to Senator Carrasquillo, who is active in the largest cane-cutters' union, the average age of cane-cutters is 59 years. When conditions improve, a different type of worker may respond to the demand.

Education must be the key to the transition from traditional to modern society and citizenship--the growing ability of the individual to participate effectively in a democratic society as well as to gain the background, the knowledge and the skills which will free him from his traditional occupational and social roles. To mention background is to raise the question of what should be incorporated from the past; of what will give continuity to life experience and world view; of what will preserve or give self-respect through an understanding of a present rooted in the past.

There must be some recognition that this is an organic experience; it must be growth--not shock. Difficulties are increased if new experience is simply superimposed on old or if the new is accepted and then the attempt is made to re-institute old values artificially. To anyone looking back over the last thirty years we find the most striking manifestation of a new attitude in the now prevalent idea of rights. These rights are now increasingly expected, often demanded, of the government. Thirty years ago, only requests might be made--usually to the landlord or other employer, or to the commissioner of the barrio.

It will be seen that this new attitude appears in the answers to questions on employer-employee relationships, on politics and on individual and group initiative within the barrio. Traditional forms often remain in which petitions for

improvements--roads, water, electricity--are made but in many cases group or individual action takes place, meetings are held to plan the requests, work and money may be contributed. Expectations are different because the channels for effective action exist, where the emphasis is on what the community must do for itself--as in the Community Education program--or where requests go directly to the mayor, the president of the barrio or to the legislature. As we point out elsewhere, there are gaps in the application of general programs and there are communities where the old inertia remains in varying degrees. The change does not constitute a neat continuum; it is part of a growing process, a transformation in ways of thought proceeding irregularly but in a clear direction.

Whether we are looking at the jibaro in the mountains, raising coffee or tobacco, or the cane-worker on the coastal plain we see in each the problems of a rural society in transition.

NOTES

1. Tumin, Social Class and Social Change

2. Robert K. Merton and Alice S. Kitt, Contributions to the Theory of Reference Group Behavior, quoted in Melvin M. Tumin with Arnold S. Feldman, Social Class and Social Change in Puerto Rico, Princeton University Press, Princeton, New Jersey, 1961, p. 197.

3. Victor A. Clark and Associates, Porto Rico and Its Problems, The Brookings Institution, Washington, D.C., 1930, pp. 14,15.

CHAPTER VIII

SOCIO-ECONOMIC CHANGE [1]

The descriptions of the ten communities (Chapter V) show that they differ from each other in many respects. Although they do not cover, in physical characteristics, occupations or ways of life, all the varieties which Puerto Rico presents, they do differ sufficiently to show that the effects of general socio-economic changes in the island are not uniform. They illustrate first of all the fact that not all government programs are in operation in all communities; that there is, therefore, a wide range in physical changes among the ten--roads, electricity, water, housing, schools, shopping facilities, churches, recreation. Availability of employment is unequal with resulting differences in the number of unemployed and in incomes. Inter-related with all these factors is the special spirit and attitude of each community growing out of its own local history, its geographical character, its traditions, its occupations and its patterns of living. All these affect the position of each community on the path from a traditional to a modern society. Those most closely touched by new ways of life carry their own past with them in recognizable forms and none is wholly untouched by what has happened in the last thirty years.

In the 1932 communities four were classified as sugar and tobacco sections (Aguadilla, Arecibo, Juncos and Salinas); two were coffee regions (Adjuntas and Moca); two were fruit (Bayamon and Cidra); two were mixed or minor crops (Juana Diaz and Loiza). None of these has completely changed, but new policies of the Department of Agriculture and the introduction of industry has greatly altered the emphases and often the life of the community. It should be noted that data for the

1932 study were collected in March and April, during the zafra. This influenced favorably the income figures in the sugar regions. The 1963-64 figures, showing income in October, November, December, 1963, represent a period of low income intake in the agricultural regions. That the ten communities in 1932 were all rural and that they were chosen on the basis of crops raised in each area makes changes in agriculture and in occupation of great importance, and these will be reflected in the incomes of the families.

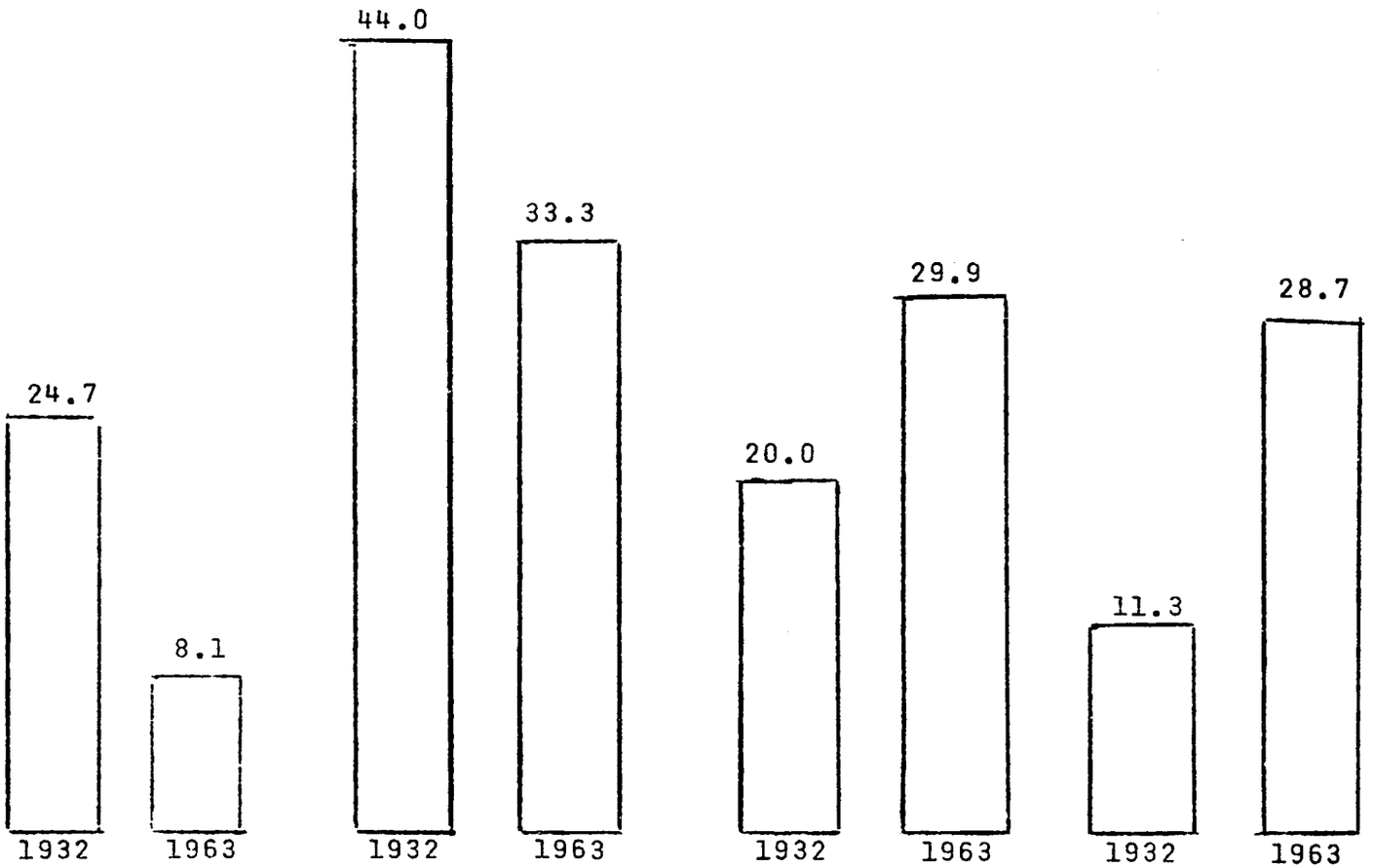
Because the 1932 study was primarily concerned with the standards of living, income and expenditure, we shall take this as the first illustration of change. This will lead to further analysis which necessarily goes beyond the considerations of the 1932 study.

In 1932, 24.5% of the sample were in the income group of $25.00 or less, in monthly income; now 8.1%. In the income group of $25-$99 per month there was a drop from 44% to 33.3% in 1963. In the higher income groups there was a rise; in the $100-$199 incomes the percentage rose from 20% to 29.9% and in the $200 or more, there was a rise from 11.3% to 28.7%. (See Chart 3).

These overall figures show the kind of progress we may expect toward higher income levels. There are, however, striking exceptions in our ten communities to this general picture. We find in Loiza Mediania Alta a decrease of 2.4% in monthly income and in Adjuntas-Yahuecas an increase of 329.5%. But in 1932, Mediania Alta was one of the three communities showing the highest average monthly income of $102.46; in 1963 eight out of sixteen families had incomes of over $100.00 per month. Loiza in 1932 had 8 families in the $100.00 or less category and 7 with incomes over $100.00; in 1963, from a total of 29 families reporting on income, 18 had less than $100.00 per month;

Chart 3

Average Monthly Income for Total Samples - 1932[a] vs. 1963



	Less than $25		$25 - 99		$100 - 199		$200 or More		
N	37	19	66	78	30	70	17	67	150 234

a 1932 income corrected according to Consumer Price Index, Base C

Table 19

Average Monthly Income - 1932 vs 1963 - By Community

			Midpoints: Less than 25 (12.50)	25-99 (50.00)	100-199 (150.00)	200 + (250.00)	Total	=N	xAverage
Loiza	1932	N	3	5	5	2	$1537	15	102.46
		%	20.0	33.3	33.3	13.3			
	1963	N	4	14	6	5	$2900	29	100.00
		%	13.8	48.3	20.7	17.2			
Juncos	1932	N	5	7	1	2	$1062	15	70.80
		%	33.3	46.7	6.7	13.3			
	1963	N	2	6	5	2	$1575	15	105.00
		%	13.3	40.0	33.3	13.3			
Cidra	1932	N	5	5	5	0	$1062	15	70.80
		%	33.3	33.3	33.3	--			
	1963	N	0	5	4	8	$2850	17	167.65
		%	--	29.4	23.5	47.1			
Bayamon	1932	N	4	6	5	0	$1100	15	73.33
		%	26.7	40.0	33.3	--			
	1963	N	1	13	20	28	$10662	62	171.96
		%	1.6	21.0	32.3	45.1			
Juana Diaz	1932	N	2	7	4	2	$1475	15	98.33
		%	13.3	46.7	26.7	13.3			
	1963	N	2	4	9	2	$2075	17	122.06
		%	11.8	23.5	52.9	11.8			

Table 19:

		Midpoints:	12.50 Less than 25	50.00 25-99	150.00 100-199	250.00 200 +	Total	= N	x Average
Adjuntas	1932	N	8	7	0	0	450	15	30.00
		%	53.3	46.7	--	--			
	1963	N	1	7	3	5	2062	16	128.87
		%	6.3	43.8	18.8	31.2			
Moca	1932	N	2	6	3	4	1775	15	118.33
		%	13.3	40.0	20.0	26.7			
	1963	N	1	5	5	5	2262	16	125.67
		%	6.3	31.2	31.2	31.2	(None + 2)		
Aguadilla	1932	N	5	6	3	1	1062	15	70.80
		%	33.3	40.0	20.0	6.7			
	1963	N	2	5	6	2	1675	15	111.67
		%	13.3	33.3	40.0	13.3			
Salinas	1932	N	1	9	2	3	1512	15	100.80
		%	6.7	60.0	13.3	20.0			
	1963	N	6	13	6	7	3375	32	105.47
		%	18.8	40.6	18.8	21.8			
Arecibo	1932	N	2	8	2	3	1475	15	98.33
		%	13.3	53.3	13.3	20.0			
	1963	N	0	6	6	3	1950	15	130.00
		%	--	40.0	40.0	20.0			

Table 20

Average Monthly Income - 1932 vs 1963

Community	Number of families 1932	1963	Average Monthly Income 1932	1963	Highest percent Change
Adjuntas	15	16	$30.00	$128.87	329.5
Cidra	15	17	70.80	167.65	136.8
Bayamon	15	62	73.33	171.96	134.5
Aguadilla	15	15	70.80	111.67	57.7
Juncos	15	15	70.80	105.00	48.3
Arecibo	15	15	98.33	130.00	32.2
Juana Diaz	15	17	98.33	122.06	24.1
Moca	15	18	118.33	125.67	6.2
Salinas	15	32	100.80	105.47	4.6
Loiza	15	29	102.46	100.00	-2.4
TOTAL:	150	236	$83.41	$132.99	59.4

11 over $100.00. It also had the highest percentage of low per capita income-- 37.5% had less than $10 per month, as against 19.6% for the total sample in the ten communities.

The occupations in the highest income level recorded in Adjuntas in 1932, showed a mayordomo with wages of $3.50 a week; the highest in Loiza, a merchant with $9.94 weekly income; the medium level in Adjuntas was a laborer earning $1.75 a week and in Loiza a farmer with weekly income of $2.24; the low level showed a laborer getting $1.75 in Adjuntas and $2.85 in Loiza.

As pointed out in the description of Mediania Alta (Chapter V) it was, in 1932, a section of cocoanut groves, sugar, and family gardens. It has retained many of its characteristics but changes are imminent. Work in new industry[2] is increasingly available in the towns of Canovanas and Rio Grande. (Ford Motors will soon open a $15,000,000.00 precision ball-bearing factory in Canovanas, Loiza--initial employment 300, eventual--800.)

For the municipality of Loiza, as a whole, the census gives 33% working elsewhere. Nevertheless, Mediania Alta shows 34.3% of unemployed and relief cases in our 1963 sample, and 12.5% in traditional occupations and only 3.1%--modern artisans--which includes factory and construction workers. (See Table 21.)

It seems reasonable to conclude that Mediania Alta, in greater degree than Loiza as a whole, retains many characteristics of the traditional society, a conclusion that is reinforced by the proportion of extended families among our sample--50.8% (including mixed patterns where grandchildren live with grandparents or combinations of blood relations live together) as against 43.7% nuclear families. It is also significant that the highest percentage (12.5%) of the total

Table 21

LOIZA

Occupation, Education, & Income

Income Group Mid-Point	N.	Occupation	Education (grade)	Monthly Income
0-25	7	Public welfare	0-8 (28 of 30 less than 4th)	7.00 - 52.50 Midpoint 29.75
	4	Unemployed (Soc.Sec., V.Pension, and from Family	0-12	35.00-63.30 Midpoint 49.15
25-99	2	Traditional rural farm	4-6	50.00-75.00 Midpoint 62.50
	2	Traditional non-farm (unskilled, fishermen etc.)	4-6	78.00-106.30 Midpoint 92.15
	3	Modern farm - migrant workers	1-8	50.00-101.00 Midpoint 75.50
100 - 199	5	Traditional artisans (Operators and foremen)	2-12	70.50-158.00 Midpoint 110.13
	1	Modern artisans (Operators and foremen)	7	160.
	4	Service workers (Laundry, hotel employee, etc.)	6-10	87.50-325.00 Midpoint 206.25
	2	Shopkeepers, own business, own farm	0-8	130.00-200.00 Midpoint 165.00
200+		Prof.	12-16	336.00-500.00 Midpoint 418.00
	30			

sample who express dissatisfaction with the present ways of living is in Mediania Alta. There are many conservative elements. Family names are repeated with great frequency among the residents; there is a tendency to perpetuate old values; some farms have been divided among children with continued interdependence between generations.

In Adjuntas, where the sample is 17, we find that 29.4% are traditi al farm workers--the main agricultural crop is coffee--with family income of $40-$120 per month; 17.6% are modern artisans (this includes the workers in industry) with incomes of $115-$200 per month and shopkeepers 11.7% (2 individuals) with incomes of $158-$579 per month.

We believe that Loiza, though closer to the metropolitan area, and undoubtedly in order for a period of change, represents at present an adherence to past customs which is reflected in income as well as in attitude. For 25 years or more, 62.4% have lived in this community...

Because our present sample is taken from the areas served by Second Unit Schools and because in the 1932 study no landowners who would represent an economic elite, were included, only seven of very high income level appear in our total sample.

We believe that our highest income level, $200-$350+, is a realistic representation of the high average economic status in the ten communities. There is in Hato Tejas, Bayamon, a wealthy canner who happens to live in the geographic limits of the barrio, but whose pattern of living is distinct from that of the community as a whole. In the same way, a land-owner representing the old type of wealth in one or two of the other communities, might have been found. But as the latter group--the landowners--was not included in the 1932 sample, there would have been no comparability for the thirty year period. We also found that income levels in the ten communities for the high group ($200-$350+) vary in 1963 from a percentage of 11.8% families

in Juncos to 47.2% in Cidra. See Tables -- average monthly income and average monthly income with percentages (19 & 20).In all our considerations of income figures those communities most dependent on seasonal agricultural crops are least reliable because of our decision to take the three months, October, November, December of 1963, as our period for income data. This was done in order to get as much reliability as possible from the memory of respondents. The study now being made by the Department of Labor will undoubtedly supply more accurate figures, less dependent on local conditions and seasonal factors. There are, of course, always factors other than those of memory which affect the accuracy of income figures--hesitation to disclose exact amounts for fear that the purpose is related to tax increase and general reluctance to reveal personal financial situations.

The most significant material index of socio-economic change is the source of income. In Table 21 we have included recipients of public assistance and unemployed, who may be receiving pensions, social security payments or help from relatives, as well as those classified by source of wages, salary or income from their own business. Seventy-two and seven-tenths percent (72.7%) of our sample received no financial assistance. Fifty percent of all heads of families are farm laborers or foremen, operatives or housewives (31 women). Income figures are highest among shop-keepers and professionals--with the exception of the seven elite--a total of 25 persons--then the modern artisans, traditional artisans and foremen, and service workers, totalling 98 persons.

The differences in the amount, character and variety of expenditures shows changes of the kind one would expect with increased incom Because these rural families still fall into the low income level, the proportion spent on food remains high. In 1932 the average amount spent on food by the 150 families of the study was $48.43; in 1963 the average for the 245 families was $85.23. As noted elsewhere, the family size in the two samples has, during the thirty year period, decreased from 7.2 in the 1932 sample to 5.5 in 1963, operating not only numerically as an increase of per capita income but in other aspects--such as living-space--to increase comfort, to raise the standard of living. Eighty-two percent (82%) of the 1963 sample report eating better and this is substantiated by the increased use of meat and milk in the diet, 42% reporting that they eat meat three times a week, 18% from four to six times, and 10% more than six. Milk shows an equally important increase.

Table 22: Consumption of Meat and Milk, 1963

1963	3 times	4-6 times	More than 6	3 liters	2 liters	1 liter	None
Eat Meat Weekly	42%	18%	10%				
Drink Milk Daily				13%	31.5%	26%	2.5%

Buying on credit has become an important factor in budget analysis. Fifty-seven and five-tenths percent (57.5%) buy furniture and appliances on credit. Only 4.1% use credit to buy a house or car. (The low percentage of loans for building may be due to the development of parcelas and mutual aid programs with their special financing arrangements.)

Table 23: Occupation - Income Classification

(Mid-point used for income)

No.	Occupation	Less than $25	25-49	50-99	100-149	150-199	200-249	250-299	300-349	350+	Highest
29	Public welfare		29.75								
38	Soc. Sec., Vet Family aid				137.50						
34	Traditional rural farm lab. and foreman			87.50							
2	Traditional non-farm			92.15							
12	Modern farm				119.00						
21	Trad. Artisan incl. foremen						220.75				
59	Modern Artisan						229.50				
18	Service workers						201.00				
17	Shop-keepers (own business)								317.00		
8	Professionals									386.00	
7	Elite										1471.25
245	TOTAL										

Average monthly income $182.02
Midpoint 178.63
Median 169.25

Table 24: Expenditures

1963

	Food	Trans.	Rec.	Med.	Cloth.	Light	Water
No. Rep. Expend.	242	176	32	111	216	208	154
% of Total sample	98.8	71.8	13.1	45.3	88.2	84.9	62.8
No. Rep. None	2	64	211	127	18	32	89
No. No Info.	1	5	2	7	11	5	2
Est. Total Month. Expend.	20,625.85	3,272.36	616.28	3,634.75	3,208.33	1,274.50	613.00
Est. Av. Month. Expend./n	85.23/242	18.59/176	19.25/32	32.75/111	14.85/216	6.13/208	3.98/154
% of Total Month Expend.	.5112	.0811	.0150	.0901	.0795	.0315	.0151

1963 continued

	Debts	Other	Rent
No. Rep. Expend.	146	66	36
% of Total sample	59.6	26.9	14.7
No. Rep. None	71	82	21/187*
No. No Info.	28	97	1
Est. Total Month. Expend.	5,464.50	1,247.50	390.00
Est. Av. Month. Expend./n	37.43/146	18.90/66	10.83/36
% of Total Month. Expend.	.1354	.0309	.0096

Table continued next pag

Table 24 Expenditures, continued

1932

	Food	Rec.	Med.	Cloth.	Oper. Exp.	Other	Rent
No. Rep. Expend.	150	87	120	132	126	105	44
% Total sample	100.0	58.0	80.0	88.0	84.0	70.0	29.3
No. Rep. None	-	63	30	18	24	45	106
Total Month. Expend.	7264.98	521.06	640.41	1331.04	778.89	707.47	476.06
Av. Month. Expend./n	48.43/150	5.99/87	5.34/120	10.08/132	6.18/126	6.74/105	10.82/44
% Total Month. Expend.	.6198	.0444	.0546	.1135	.0664	.0603	.0406

* 21 people reported no expenditures for rent, 187 people were reported as owning their homes.

1. The 1963 estimated total monthly expenditures was derived in the same manner as the 1932 totals except that the midpoint of the intervals reported in the tables was used as the best estimate of actual expenditures.

2. The 1932 total monthly expenditures were taken directly from expenditure tables by combining the totals of the three groups.

3. The average monthly expenditures was obtained by dividing by the actual number of people reporting expenditures in each category. This n is shown with the averages.

4. All figures are corrected for price index by multiplying 1932 figures by 2.23.

Table 25: Length of Residence in Barrio, 1963

Time in Barrio		Less than 1 yr.	1 - 9 yrs.	10 - 24 yrs.	25 yrs. or more (not WL)	Whole Life
LOIZA	N	1	5	6	9	11
	%	3.1	15.7	18.8	28.1	34.3
JUNCOS	N	1	2	5	1	8
	%	5.9	11.7	29.4	5.9	47.1
CIDRA	N	0	3	5	2	6
	%	0	17.7	29.4	11.7	35.3
BAYAMON	N	1	23	18	9	14
	%	1.5	35.2	27.6	13.8	21.9
SALINAS	N	1	5	15	3	8
	%	3.1	15.7	46.8	9.4	25.0
JUANA DIAZ	N	0	3	3	2	9
	%	0	17.7	17.7	11.7	52.9
ADJUNTAS	N	1	3	4	5	4
	%	5.9	11.7	23.5	29.4	23.5
MOCA	N	0	6	5	1	5
	%	0	33.3	27.8	5.6	27.8
AGUADILLA	N	1	6	4	0	4
	%	6.7	39.9	26.7	0	26.7
ARECIBO	N	2	3	3	3	4
	%	13.3	20.1	20.1	19.9	26.6
Total Nos.		8	59	68	35	73
%		4.0	21.9	26.8	13.6	32.1

Geographical Relation of Barrios to Industrial Employment

Table 26:

	Type of Road	Nearest Factory	Distance (miles)	Employment
LOIZA	2	Canovanas 8	10	729
JUNCOS	1	Juncos 9	5 1/2	802
CIDRA	2	Cidra 2	4	?
BAYAMON	3	Bayamon 62	3	3940
SALINAS	1	Salinas 6	16	576
JUANA DIAZ	3	Juana Diaz 6	7	585
ADJUNTAS	3	Adjuntas 3	15	?
MOCA	2	Moca 1	4	?
AGUADILLA	3	Aguadilla 3	6	?
ARECIBO	3	Arecibo 18	12	1223

N.B. In some cases, as from Cidra to Cayey, workers go further than the nearest town to find employment. They also commute to the sugar areas by bus.

Legend - 1. Primary roads
2. Secondary roads
3. Municipal roads
All paved.

Mobility Statistics

31.4% Work in the same barrio where they live.
9.4% Work in the town nearest barrio.
13.1% Work elsewhere.
26.1% Have visited the United States.
5.3% Have visited the U.S. and other countries.
61.2% No merber of family has traveled outside United States.
23.3% One trip by one member, or same trip by two or more.

17.1% Of those traveling went to work.
6.5% To visit relatives.
6.5% Military Service.

Table 27: Use of Credit Facilities

Use of Credit Facilities	To buy Furniture & appliances	To buy House or car	Other Purposes	Do Not Use	Monthly Payments on Debts & loans	Nothing Monthly	Easy to buy on credit but hard to get loans
	57.6%	4.1%	6.2%	30.6%	59.6%	29%	21.2%

No items appear under expenditures in 1932 for light or water. Items, such as candles or fuel for light (kerosene lamps), were included in operating expenses. Electricity and water now appear as normal expenditures.

Under transportation, 8% of total income was spent or an average of $18.59 per month in 1963. In 1932 no item was included for transportation. Life was centered in the local community and there was no opportunity to work outside the neighborhood--poor roads or no roads--except in those cases where cane workers left home for the period of the zafra.

Amounts spent on recreation were in 1932, $5 per month--in 1963, $19.20. Present responses on recreation are unsatisfactory. They do not show use of radio and TV as recreation; although we find in 1963 that 43.3% of the families have radio and television; 42% have radio only; 2.5% television only. It is difficult to separate traditional from modern forms of recreation; younger people among respondents have no basis for comparison with the past. Such an item as "going to dances" meant something quite different in the traditional society from the present. Only such occasions asvelorios are easily identifiable.

We have no reliable information on clothing items--in terms of actual garments purchased--to explain an increase from $8.86 per month for each family in 1932 to $13.10 per family in 1963.

Among our 245 families we find that the head of the family is male in 211 cases (or 86.1% of the sample, 13.9 female). Among those reporting, 73% of the heads of families were between 20 and 60 years of age. Forty-two percent were between 40 and 59. The size of the family is 5.5 as compared with 7.2 in 1932 (high income level 8.1, medium 7.7, low 5.9) and with a present island-wide average of 4.8. We have no facts on the composition of the families in 1932. The larger number in each household may be assumed to have represented the extended family which was without doubt the common pattern in the thirties. Among the families studied in 1964 the nuclear family represents 50% of the sample; the extended 23%.

Table 28: Age & Occupation of Head of Family, 1964

		Number	Percent
	Age of Head		
Largest Age Group	40 -- 49	53	21.6
Next	50 -- 59	49	20.0
	30 -- 39	48	19.6
	60 -- 69	43	17.6
	20 -- 29	29	11.8
	70+	20	8.2
	Under 20	1	.4
	X	2	.8
	Sex of Head of Family		
Men		211	86.1%
Women		34	13.9%
	Occupation		
Farm laborer & foremen		48	19.6
Operatives, etc.		45	18.4
Housewives		31	12.5
Artisans, foremen		22	9.0
Salesmen, owners business		18	7.4

In the age group of 40 to 59 years, 25 had completed the fourth grade, 18 the sixth. The educational levels of our sample show that the largest number (54) had 3rd-4th grade education and in age ranged from 20-69 years; next came those with no education (44). There was no one in this group under 30 years of age; the largest number with no education lay in the age groups 60 and above (33). Only 25 (10.2%) of the total sample had had any vocational education.

Among the sample families 38.8% now read periodicals and books, 19.2% read periodicals only and 3.3% read books only. It is doubtful whether there was any reading at home in 1932, except for schoolwork for children.

Knowledge of English is rated as follows by the interview report: 14.7% "good" down to 4.5% "very poor". Sixty and four-tenths percent (60.4%) has no knowledge.

People appear to have much more knowledge of what is going on around them, both on and off the island. They give as reasons that it is due to radio, T.V., relatives in the United States, more social visiting and gossiping, better communications and transportation, more education.

Use of the post office is indicated by 72.7%; telephone or telegraph--new facilities since 1932--are used by this percentage also. In any study of a change from traditional to modern society, communication has more importance than its convenience or, as in the case of radio or television, its recreational aspect.

As in 1932 there were no large landowners included among those interviewed the term "farmer" is ambiguous. The situation in 1963 is materially different. Sixty-six percent (66%) of the respondents own from a "cuadro" to fifty or more cuerdas. (See glossary.) Nearly half of these own less than four cuerdas. The same great change is

observed in home ownership. Formerly, even if an occupant had built his house, it was on the landlord's property and he could be evicted at will. Now, 213 of the 245 families interviewed reported that they owned their homes, 169 of them having built them themselves, either individually or by mutual aid.

The most common rural dwellings in the thirties were huts, most of them with thatched roofs, but some with galvanized iron roofs. A tin roof in 1930 was somewhat of a status symbol. It was cleaner than a thatched roof, which harbored rats, but it was also much hotter. There were some wooden houses with tin roofs, but in general the housing was very poor, inadequate, and unsanitary. In 1963, there were 75 concrete houses, 123 wood and zinc, but of a much better quality, and usually painted, and a scattering of others made of both concrete and wood.

Most of the huts in 1932 had a living room and one or two bedrooms and outside kitchens, whereas now the majority--80% --have from three to seven rooms. Unmarried male and female members of the household sleep in separate rooms in 50% of the families studied. In 60% of the families the married couple has a room of its own and 23% do not. In 17% of the cases there is no married couple.

Sixty-six percent (66%) now have running water in the house and 18.5% use public faucets. The remainder have a variety of water sources--deep wells, relatives, the river, etc. Half of the families have a latrine, but no shower or toilet. Only 11 have no sanitary facilities. This is a marked difference from 1932.

Eighty-six percent (86%) have electricity, about half with hanging ceiling lamp, the other half--no lamp. Eleven percent (11%) still use kerosene or candles. As outlined in another chapter there are still

families, and probably always will be, too remote to get electricity.

A quotation from the 1932 study "Rural Life in Puerto Rico" illustrates the difference in regard to cooking facilities, water supply, latrine and sleeping arrangements.

> All of the houses have some sort of kitchen. In the great majority it is just an open shack attached to the main house. Cooking generally takes place in the open air. A built-in sand table with three stones for cooking with wood or a portable anafre (see glossary) for charcoal are the common types of stoves. The brick or concrete fogon (see glossary) found in the better houses is built-in, and those, like the sand table, are not listed as part of the furniture because they are part of the house.
> The effect of such housing conditions on specific health problems is obvious and not a mere matter of speculation. Correlations of certain facts are significant; 63-1/3% of the 150 families obtain water from surface wells, brooks, rivers, and ditches, and the death rate from diarrhea and enteritis in 1932 was 246.9 per 100,000 as against 26 per 100,000 as the highest rate in continental United States.
> In the 150 families an average of four persons slept in one room. And the death rate from tuberculosis was 297.3 per 100,000 as against 127.8 as the highest in the States, (no other being higher than 88.6). Infestation from hookworm is over 90% in many rural sections, and among the 150 families only 54% have latrines of the approved type, and 28% latrines of the unapproved types; one has a toilet, 18% have no latrines, and information was lacking on the remainder.[3]

In 1964 the largest number of families interviewed--46%--use kerosene for cooking. The next largest number--37%--use bottled gas.. Wood, charcoal and electricity are the other fuels used, in about equal numbers of families. As for ironing, 204 or 83% use electricity 13.5% use charcoal in a goose (see glossary), and the rest, firewood.

One hundred fifty (61%)have no oven, 59 (24%) have ovens and use them for meats, vegetables, cakes, etc. Bread is not made at home. Twenty-six have ovens but do not use them.

In obtaining information on household equipment no questions were asked about the number who owned refrigerators. This was an oversight,

but from observations of the field staff, many of the houses had them. They were not always used to the full, however; one refrigerator was observed with no food in it, but there was one bottle of Coca-cola. The old habit of going to the store every day still persists and many of the people evidently do not yet realize that food can be preserved as well as cooled in a refrigerator.

Fifty-seven and seven-tenths percent (57.7%) report no long-term illnesses in the family. Illnesses reported cover a wide range. As these are based on the diagnosis of the respondent we do not place great reliability on the percentages. Cardio-vascular, heart, strokes "and others" comprise the highest percentage--8.8%. Ninety-two and seven-tenths percent (92.7%) report no mental disease. Fifty-seven and one-tenth percent (57.1%) report no one in the family hospitalized during the year. In the families studied, 69 lost one or two children before the age of five. Although the 1932 study had no reports on illnesses, it is made abundantly clear by the changes in mortality and morbidity figures over the thirty year period and by the emphasis on health problems in the 1932 program of the social workers and Second Unit School program, that the change in health and sanitary conditions is most striking. The fact that illnesses reported now are different is also of great interest and would warrant further study.

In considering mobility it is to be noted that the largest percentage (32.1) of people listed is in the category of residence for entire life. (See Table 25.) Taken with the category 25 years or more, 13.6%, it constitutes nearly one-half the population of the total sample. One would expect that the nature of the community or the employment opportunities would affect mobility, but there does not seem to be any clear pattern. Barrio Hato Tejas, in Bayamon, shows the lowest percentage (21.9) of those living there all their lives, which

is understandable because it is a fast-growing suburban community and has many newcomers and short-term residents. On the other hand, San Antonio, Aguadilla, shows the highest percentage (39.9) in the 1-9 year residence, but San Antonio is not typical because the people of the community have been physically moved twice to make room for Ramey Air Force Base. It is quite possible that some of the people interviewed stated how long they had lived in that physical community whereas they might have lived in the three San Antonios all their lives.

Table 2.5 shows the distribution of those interviewed in the ten barrios in five duration-of-residence periods.

Table 26 shows the nearest location of factories as well as the type of road on which the barrio is located. Bus and public car transportation are available in all ten communities, facilitating access to jobs and tending to hold people in their communities rather than moving into San Juan and other big cities. This transportation is also available for longer distances when there is seasonal work in sugar or other crops.

These factors have also been important in reducing emigration to the United States to the point where the net outgo is zero and more and more people are coming back now that the opportunities are better. This, of course, puts more responsibility on the government to stimulate and attract new industry and business to provide the necessary jobs. The government accepts this responsibility and is making excellent progress.

One hundred five (43%) were born in the barrio in which they now live and 46 (19%) were born in the same municipality, but in a different barrio. Fifty-nine (24%) were born in some other municipio. The remainder were born in various places--urban areas or rural--but they could not remember exactly where.

In answer to where they lived before, the greatest number, 72 (29.5%), said they had lived there all their lives. This may mean the same house as, in the previous question, 105 said they had lived in the barrio always. Others replied that they had lived in other barrios, other municipios and the United States mainland.

Evidently the people are happy about where they live, 71% reporting that they would like to continue living there while 29% said they would like to move. One hundred twenty-five have never moved and the rest have moved for various reasons--to be nearer their work, to get a better house, to buy their own home, to be nearer friends and family.

One hundred eighty have never lived in the city, the remainder having had some experience in urban living. Two hundred thirty (94%) of the 245 like living in the country, the other 15 (6%) preferring the city, but giving no reason for the preference.

In response to the question of where they worked, 77 (31.4) said they worked in the barrio where they lived. Fifty-five (22.5%) said they worked either in town or in some other barrio. One hundred three (42%) reported they did not work. Since the period considered was October, November, December of 1963, when agricultural work, especially cane cutting, is slack, this is not surprising. This is undoubtedly the reason for the higher unemployment rate than the island average throughout our findings.

NOTES

1. All figures on income and expenditures are based on 1932-1963 corrected price index.

2. Changes are imminent. According to reports, land is being purchased for several types of development.

3. Rural Life in Puerto Rico, published by Department of Education, San Juan, Bulletin #1, pp. 37 & 38.

4. For additional tables on Socio-Economic Change see Appendix.

CHAPTER IX

CHANGES IN ATTITUDES

The expression of satisfaction or dissatisfaction with life at present has great importance as a commitment on the part of respondents. From the data on attitudes it is apparent that replies to specific questions, such as family relations, are not always consistent with this commitment.

Sixty-seven percent of the people said they were happier now, giving reasons of better health, education, working conditions, housing. Sixteen percent were undecided and fifteen percent said they were happier before. Here again, nostalgia may come into the picture. Ninety-four percent said life was easier now, giving the above reasons for happiness and adding water supply, electricity, roads, hospital facilities, telephone, freedom of speech, better wages, more food, better credit facilities.

Table 29:
Satisfaction with life at present (rather than 30 years ago)

Better now (none lower than 70.5% - Cidra)	Total 81.6
Our lives worse now. . . .	Total 7.4%
Our lives the same	Total 4.5%
Our lives the same but some things worse than 30 years ago	Total 4.5%

This opinion prevails even in those communities where incomes remain low and where not all government facilities are offered. In commenting on this general opinion we look back to the Second Unit Schools of thirty

years ago where we saw on a smaller scale the results of the interest and expectations engendered by a government program and the effect on attitudes toward life. Now they feel that the government cares. This is not without paternalistic overtones and a certain amount of transference from dependence on the landlord to dependence on the state. Some question certainly arises as to overdependence on government, although, as we have seen, there is no doubt that planning in Puerto Rico is organized in a democratic framework and that provision is made for local action, down to the barrio level, allowing for planning by the municipalities and cooperation between them and the Planning Board. But one must look back to the past dependence of the majority of country citizens on the landlord and the resulting weakness of individual and local group initiative. An evidence of the intention to encourage the development of local action appears in the change from "commisario" to "president" of the barrio, a change from a party-appointed to a local party-elected official.

When asked whether change should come quickly or slowly, 90% said that it should come little by little through education and training, government programs, petitions from the people.

An answer to a question in the depth interviews (Question #11) on future change is interesting. It gives the responses to the possibility of revolutionary vs slower changes. Thirty-two and eight-tenths percent said "by training and education" and an additional 10.4% said "by the people, by petitions, etc.". Only 4.5% mentioned rapid change through the government and its agencies. Although we recognize that the view of the interviewer may be transferred to the interviewee in many subtle forms and that the interviewer is not unaffected in his recording by the general attitude of his respondent, this seems to us to represent

a long step from the replies which would have been made thirty years ago--an unconscious venture from traditional to modern thinking and a recorded mark on the path to democratic action.

That the people take a more active part in the affairs of the barrio than they did thirty years ago is apparent. In regard to specific local action--the solving of problems of the barrio--47.8% mention "the traditional way": petitions, complaints to the mayor, meetings. These traditional forms are, however, forms and can have new and different meaning and content stemming from their past significance. But that, in addition to the percentages quoted, 20.9% participate actively in the solution of local problems, through election of local committees formation of clubs and groups to discuss the needs of the barrio, is indeed a change of real import. Meetings are held and petitions and protests are handled by the president through the proper authorities--69% said this was the modus operandi now while 31% either said they left everything to the government or they didn't know how such matters were handled; 43 of the 67 people questioned in the depth interview said they took an active part in barrio affairs.

Landy in his book, Tropical Childhood, gives a strong picture of the power of the Popular Democratic Party in the community he studied.

> Don Pablo is titular head of PPD and runs the municipio with almost unquestioned control....Almost no action involving government or law is taken up by anyone in Valle Cana without the prior consent of the party through Don Pablo or his lieutenant. [1]

When he quotes the Vallecanoses saying: "He (Don Pablo) is like a father to us" we see the party representative taking the place of the good landowner of the traditional society. The vote cannot be an expression of new individual freedom in such a case nor can the community feel the necessity for group action. The other political parties have little or no influence. To change this attitude involves more than the wish to do so, even assuming that the desired methods of the Popular Party are not paternalistic. In a small, poor community such as the one studied by Landy, there is still the lack of initiative, the dependence which long-continued poverty brings. Perhaps the excellent programs for Isolated Communities and Community Education will in time reach all such communities; or, perhaps, a new leader, who has had experience or education outside the limits of the little community or whose own vitality and ambition give him the courage to rebel, will alter the leadership pattern. Whether or not the changes that may come will also alter the political complexion is not the essential factor. As long as the Popular Party has a program geared to meeting continuing needs it may well remain the majority party. That more attention must be given to the development of democratic methods and to local responsibility is indispensable if the society as a whole is to move toward a truly representative democracy.

We must, however, recognize again the transitional character which these responses represent--a developing conception of a democratic society and the rights and responsibilities in it.

Some communities in the island may retain the traditional character, even though they may be taking the first steps toward the connection of voting rights with their needs and desires as citizens.

Daniel Lerner has said in <u>The Passing of Traditional Society</u>,

> Whereas the isolate community of a traditional society functioned well on the basis of a highly constructive personality, the interdependent sectors of modern society require wide-spread participation. This, in turn, requires an expansive and adaptive self-system, ready to incorporate new roles and to identify personal values with public issues.[2]

Such communities as the one studied by Landy are, so far, almost wholly unconscious of the need for "widespread participation." But our ten communities in the history of the last thirty years show, in varying degrees, their awareness of the world around them and of their potential sharing in decisions which effect their lives.

To further substantiate our assumption that there is also greater participation in the processes of government and more initiative in bringing about local improvements, we turn to the answers on questions of politics and community action in the questionnaire..

Table 30: Attitudes Towards Politics & Community Action, 1963

Political leaders - good (more concerned)	4.5%
No more fights at elections; (before, people were killed; politics are cleaner).	33.9%
The poor get better consideration; (before you had to vote for the rich); more freedom in voting, more equality in voting; more is done for the general welfare.	14.3%
More help is given: foods, schools, housing etc.	5.8%
Smaller numbers of replies give such reasons as: promises are kept, general improvement under the present government.	5.3%

Eighty-four persons or 34.28% gave no opinion or thought there had been no improvement, showing indifference or disapproval. The replies are perhaps more significant in quality than in quantity. Satisfaction seems to be found, among individuals replying, in respect for

the voter and his right to express his opinion, in the orderliness and fairness of elections. Many people in the past actually dreaded elections because of the violence which accompanied them. One woman described her fear, as a child, of the organized fights that went on. Votes were bought, voters often voted several times. The minimum improvement lies in order and freedom to cast one's ballot; the maximum is implicit in the necessity to make decisions, to find reasons for such decisions and to do this free of economic dependence on "the rich" who made the decisions for "the poor."

The replies to the question of expropriation of land is pertinent to this new identification with public issues. When, in the depth interviews, they were asked how they would feel if the government expropriated their land to make possible a rural resettlement community and thus improve the living conditions of many families, the replies were as follows:

Table 31: Attitudes Towards Land Expropriation, 1962-63

	Frequency	%
Would accept without hesitation	3	4.5
Would accept; added comments on civic duty and desire to help others.	30	44.8
Would accept--conditioned on payment and another place to live.	9	13.4
Would not accept, like, or permit it.	14	20.9
Would not accept willingly but to fight against the government is impossible.	11	16.4

Attitudes toward social change are reflected in replies to questions, in both objective and depth interviews, which deal with

personal relations: the relation to neighbors, of husband and wife, of parents and children. Replies in these areas of experience give a more ambiguous result than the simpler responses concerning a comparison of present with past. Few would care to go back to the conditions of thirty years ago but many, as shown in the attitudinal replies, are very conscious of the problems which change has brought and with the difficulty they face in establishing a satisfying value system in the situation of the present and the goals for the future. Some of the same problems are faced in societies over the world; others are either peculiar to, or accentuated by, Puerto Rico's own cultural background--shared in many respects with other Latin cultures--plus the influence of the United States over the last 66 years.

On the question (72) concerning neighbors--"better or worse"--the highest percentage (32.3) from all communities agree they are "better"; 20% find them the same; 15% find them "worse". When they give their reasons for finding them better, more education, skills and "civilization" comes first (14.3%); other reasons show scattered percentages. Those who find them "worse" say that people were more friendly before, helped each other (11.8%), respected each other.

In asking the respondents about their feelings concerning hospitality and humanitarianism, we find an evenly divided opinion, approximately half thinking it was better and the other half disagreeing. Various reasons were given such as that 30 years ago neighbors shared food, visited more often, helped more in time of sickness--while now they think more of money and their own concerns. Apparently those who think there is more hospitality today are relying on their feelings as very few reasons are given.

The depth interview shows 98.5% who find people more anxious now to improve their lot, as a result of better education, less poverty, pride in occupation (do not want to be laborers)--in other words a generally higher level of aspiration. Formerly they were fatalistic, accepting their status as inevitable, but now they are prouder, more ambitious, eager for learning and hoping for a better life for their children than they have had themselves.

The reasons given are: improvement in income, 34.2%; educational facilities, 27.8%; housing, 13.9%. Other replies are distributed among health facilities, communication and transportation, general environment, water and light and social services of the government. Life is worse now than thirty years ago said 13.5%.

Among the persons over 40 years old, only 12.3% would like to live as they did thirty years ago; among those under 40, almost the same percentage, 12.4%. We had expected to find a different correlation based on the assumption that in the older age groups nostalgia for the past would be an important factor. Of our total sample 79.2% would not like to live as they lived thirty years ago; 12% would like to live as they lived thirty years ago; 5.7% answered "yes and no"; 2.9% were undetermined. Among the reasons given were: more facilities, more progress--roads, schools, etc.-- more opportunity to study, more work, more money, more liberty--"before everyone was bossed"; does not like to regress--likes to discover new things, enjoys more things--"before, we walked barefoot." The highest percentages (47.0 and 31.8 respectively) in reasons given, lie in the categories of more facilities and more comfort, more work.

That this attitude prevails to this extent is more striking because unemployment among our sample is 17.1%--higher by 4% than the island

average of 13%. To understand the satisfaction with the present, one must compare it with the past. What was begun in rural areas many years ago in Second Unit Schools, by the FRERA, the FERRA, and other agencies, and the great acceleration of all programs in the last twenty years cannot be measured entirely by the standards of increased prosperity, marked as this is. In the replies to all attitudinal questions, optimism is reflected in concrete hopes for the future and in a consciousness of rights. This we believe has replaced fatalism in a large majority of our respondents.

In general most of the people interviewed were satisfied with their pay and working conditions, but many said they would change jobs for better pay, easier work, or more prestige. Others said they would have liked to change but that now it was too late.

Sixty-four percent said they had been handicapped because of insufficient education. They could have been leaders or mayordomos or have earned more, or have had more prestige. Their aspirations for their children are a college degree in 63% of the cases, but all want more than they had. By the same token they want better jobs for their children--professional positions, teaching, government employment. Very few want a trade or agriculture. The white collar job is still the aspiration as it was in 1932, but to a much greater degree and with more hope of attainment. Some more realistic and discerning view of education in modern society is obviously needed.

In the depth interview, 52 said that employment possibilities are better now, whereas 10 said there was no change, 4 that they were worse and one did not know. The same proportion in favor gave as reasons the government, labor legislation, education, modernism, new factories and the same number saw no change.

Forty-eight of the 67 respondents in the depth interview said they would like to have their children work in agriculture. "It gives satisfaction, it is a good life, it is profitable" are among the reasons given. Fifteen did not want that life for their children and four gave no answer. This is hard to reconcile with the answers in the previous paragraph, and may reflect a love of the land and country which they would like to pass on to their children. The fact that agriculture, until recently, has been unprofitable, may account for the expression of a desire for other occupations than agriculture.

When it comes to home life, 28.6% find parents and children "better"; 23% find both "worse"; 13% the same as before and 13.1%, better parents, worse children.

A list of reasons given for the situation between parents and children shows the variety, and hence the conflict, which exists in this period between traditional and modern, between sacred and secular societies. Among the percentages in these responses 10.6%, the highest, speak only of the lack of discipline. Among those who replied to the questions other percentages run from 2.8% to 5.3%. The list of reasons given follows:

> Better now: more democracy in the home; before the father was the boss and used physical punishment. Parents assume their responsibility better; care more for their children; have to support them by law; educate their children better for the future.
>
> Worse now: fulfilled parental responsibility better in the past. Did not leave children alone while parents went to work. Parents do not respect even their own daughters--assault them. Disciplined their children; now they do not--or very little. Do not educate them now.

Looking at the children themselves, the parents' responses show that the highest percentage (27.4%) find more disrespect and disobedience now, delinquency and unwillingness to help parents. Those who find children better gave the following reasons: more education; better behavior; children help and cooperate with their parents; "they deal with each other like brothers and sisters"; more religious; more helpful and kind.

In the depth interview, 89.8% believe delinquency is increasing due to lack of morals, laws forbidding punishment, general upbringing; opportunities offered by "bad places"; too much liberty; and the influence of American culture. In the relationship of husbands and wives the highest percentage again is among those who find it worse--25.8%. Eighteen and two-tenths percent (18.2) find it the same; 10.3% find it better; 37.6% "not determined". The reasons are significant: among those who find things better now these reasons are given: before they (husbands) were away drinking; now men and women work and fulfill their responsibilities; there is more harmony within the family; now they marry--before they ran away; they are more religious.

The reasons of those who find the situation worse are: before, they used to take their wives out and have fun together; today they have fun alone; more divorce (see Table 32). and desertion; they were more considerate before; did not hit them; too much liberty and temptation now.

From the depth interviews further light is thrown on these responses. The question of the effect on marital relations from women's work outside the home was asked and 73.1% found it detrimental--"husbands feel uneasy"--for the following reasons: children are neglected-"woman's place is in the home"; love of family diminishes--they hardly

Table 32: Family Structure

Type	Number	Percent
Nuclear	124	50.6
Extended	55	23.0
Size		
4 or less persons	101	41.2
5 - 8	102	41.6
9 - 12 or more	42	17.2

Average family = 5.5 persons. This is closer to average size of family on relief (5.7) than to average for island (4.8).

Year	Marriages	Divorces
1937	13,964	rate 2.2%
1947	16,779	3.4%
1957	19,044	4.4%
1962	22,769	5.2%

Type of Marriages

	Number	Percent
In church	110	44.9
Civil	38	15.5
Widower	23	9.5
Consensual - 5 yr.	18	7.4
Consensual - not spec.	19	7.8
Sep. (divorce)	9	3.7
Single	8	3.3
Living less than 5 yrs. together	7	2.9
Married ch. or c. unspec.	7	2.9
Divorced	5	2.0

see each other; the woman may make undesirable connections--fall in love with someone else; the wife feels independent--that she has the same rights as the husband; accepts (unwillingly) the situation as inevitable.

Those who approve (20.9%) say: they like the financial help from the wife; the wife is happier and they "have an agreement"; they are satisfied.

Replies to questions in the depth interview on responsibility for the up-bringing of children show that 28.4% believe that the child belongs to both parents; they are equally needed and "for discipline there must be marital accord." Others say that the mothers are responsible for the girls, the fathers for the boys. Only 6% say that the father is the head and authority; 31.4% think that the mother has more time, is closer to the children and has more ability to handle them.

"If a girl has a boy friend of whom the parents disapprove, who should be the one to discuss it with the girl?" Thirty-two and nine-tenths percent (32.9%)answer the father because he is the head, is respected and better informed; 20.9% say the mother because she is closer to her daughter; 41.7% say both parents and add "the daughter should also be heard."

The percentages on all these answers give a mixed and confusing result from the standpoint of measurement, but the interest lies in the very differences they show; the clinging to old values and the recognition of the new; in some cases an idealizing of the past; many replies look upon the old days as better, for example, in matters of sexual relations--which may have been different but it would be difficult to prove that they were in any sense "better." (This could be shown from actual case material in the past--the 30s.)

Table 33 throws further light on attitudes toward women's independence and gives at least lip-service to old customs.

In the question in the depth interview concerning peoples' attitude about the rights of others, 41 stated that there is less respect for them, 22 said there is the same or more, and 4 gave no information. As a contrast to the custom of word-of-mouth agreements in 1932, all but one of the respondents said it is safer and better to have signed documents in a business transaction. Whether the verbal agreement was violated too often, or whether it is a sign of changing habits everywhere, is not determined; probably some of both. As in some other categories it is difficult to find any correlation in the replies, especially in the depth interview, with age of the respondents. Those showing a personal experience with situations in the thirties must be presumed to be in the older groups. The younger groups either got their information from parents or other relatives or they have no information on the subject, even though they may have opinions.

Of the sample, 92.5% said that the attitude of employers and treatment of employees thirty years ago was much worse than it is today. Now the employer has more respect for the employee and his family, (78.8% of 245 replies stated "more respect now"), does not force him to vote his way, pays reasonably good wages, does not exploit him at the store and the hours of work are shorter.

Eighty-three percent like labor unions and believe they have helped tremendously in guaranteeing a square deal for the workman as well as providing education, insurance, medical services. Seventy-two percent saw no advantages or some positive disadvantages as well as real advantages, but the large majority favored them.

Table 33:
Depth Interview
Question #46
"What about the freedom women enjoy at present?"

		Multiple Count		
		* Freq.	%	+% based on 67 cases
1	General answer: Bad: no examples	5	7.0	7.5
2	General answer: Bad: women try to manage husbands; do not mind their husbands, etc.	4	5.6	6.0
3				
4	Specific answers and reasons: Bad: woman loses feminine qualities, neglects home. (Example given--wearing slacks etc.)	12	16.9	17.9
5	Bad: They drink and smoke too much; keep late hours; night spots; etc.	3	4.2	4.5
6	Bad: Girls go out unchaperoned; come in late at night.	7	9.9	10.4
7	Bad: Get corrupted; lose honor and respect for self and others; undesirable friends, etc.	4	5.6	6.0
8	Bad: Other examples like getting in trouble with police, jail.	4	5.6	6.0
9	Neutral: Examples are pro and con.	9	12.7	13.4
10	Good: Women should enjoy these liberties; this is a democratic country; women have same rights as men; etc.	18	25.4	26.9
X	Does not know -- no information	2	2.8	3.0
Y	Both negative and positive answers	3	4.2	4.5
	* Multiple count -- % based on total answers + percent based on 67 cases.	*71	100.0	+

When asked for their opinion on the development plans of the government (objective questionnaires) 91.3 said that these programs had improved the community, 4.9% that they had not, 2.5% that it had brought improvement in some ways and not others, 1.6% did not know. No one community shows any striking difference in opinion from others.

From the depth interview there is almost unanimous opinion that Government programs have helped the community, made life better and raised the standard of living. The reasons given run the gamut of government services, the chief one being better schools and more of them, water, electricity, roads, parcelas. Thirteen items are listed, with no negative opinions. Factories with their accompanying job opportunities play a major role in these answers. (See Map)

Eighty-two percent said they had benefited from government programs in one way or another. In all these answers on government help, they do not distinguish between the Federal and Insular Governments. They have no idea which government supplies which part of the benefits, whether it be Social Security, roads, or health centers.

Forty-seven said that the government listens to their requests and gives them fair treatment and 11 said the government acts independently and their opinions are not considered. A more detailed and precise analysis of these data would be of the greatest interest. To look for correlations between age, education and socio-economic status in these replies and to examine and compare the ten communities of this study might disclose patterns related to the character of the several communities through a cross-analysis of the variables indicated above. Unfortunately, this is at present outside the scope of this study.

The information on religion has implications that go beyond the data. Further investigation might well relate the factual material to changing attitudes especially the material from the depth interview,

given below.

Of our respondents 79.2% were Catholic, .8% reported no religion and .4% gave no information. Between these extremes lie the Protestant denominations--Baptist, Evangelical, Defenders of the Faith, Disciples of Christ, Pentacostal, Jehovah's Witnesses, Methodist, Presbyterian and others--a total of 19.6%.

Spiritualism was considered separately and in some detail. Of the sample 30.2% were interested and had attended meetings, 16% were not interested which usually carried with the lack of interest a definite disapproval. No comparison with 1932 is possible except based on experience and, from the memory of this, one could reasonably say that this was an increase.

Interest in Spiritualism has increased at all levels since 1932--from gross forms of superstition to intellectual investigation of extra-sensory perception. No examples of the latter can be identified in our sample. Statistics referring to the 30.2% who were in varying degrees interested cannot be relied upon because of attitudes of the community toward spiritualism which probably affects replies. Whether those who are interested but did not attend meetings, those who go to meetings, and are interested, who do not say whether they are interest whether all the degrees of interest express reliable information is very doubtful. The connection with "cures" should be further examined, as well as the connection with religion and the point at which these come together and mutually affect psychological dependence. Because of the interest in this subject and because of its relationship to spiritual and physical needs, the tables on this subject are reproduced.

It is our impression that interest in all forms of religion is greater than in the past. The whole subject warrants further study, both qualitative and quantitative. What meets the eye, even in communities distant from urban centers, is the increase in number of churches and chapels and renovation of old churches in the plazas. The depth interview gives the following information: 46.5% believe that people are more religious; 49.2% find that they are less religious--that there is less faith, that people go to church "to socialize" and 9% link this lack of religion to delinquency and crime. In answer to questions on belief in the power of prayer, masses, novenas, God's power, 38% felt these were greater now; 61.2% less; yet when asked questions on the value of religion 98.9% expressed a positive opinion. This may be a conventional response but they included a variety of reasons, spiritual, love of God, character formation, social control and justice.

NOTES

1. David Landy, Tropical Childhood, University of North Carolina Press, 1959.

2. David Lerner, The Passing of Traditional Society.

Dec. 1964
Revised

CHAPTER X

CONCLUSION

In this study our hypothesis is that planned change is good: it has brought about a desirable development. The test lies in a comparison of the past with the attainments at a given point which is on the path toward stated goals. We believe that to make a conscious connection between human needs and a responsible government is better than to leave the process of change to undirected forces; that man's intelligence must itself be the initiating and activating factor in the evolutionary process of our day. We find that where prverty has been the most important element in a traditional society material changes must come first and that decision on priorities in the development of new resources is the greatest challenge to intelligence. In this process material satisfactions may be transmuted into new attitudes. To have one's children live and eat and grow is the natural desire of parents. To find opportunity and freedom in work brings its own contentment. To have access to knowledge is an incentive to individual growth and development. Along such lines our data clearly indicate progress.

When Operation Bootstrap became a strong political and social movement the decision of the planners on what programs were both most immediately useful and also seminal were of crucial importance. The encouragement and growth of industry was considered essential to any improvement in employment and wages: the amount of arable land had not for many years been enough to support the population, much less a rapidly increasing population; emigration could be a palliative but not a cure for economic ills; the movement from country to city

was in most cases an indication of the frustration of life in the country. The conditions necessary for industrial development must come first, supplemented by relief for immediate human needs. The degree to which Puerto Rican development is an outcome of planning accentuates the need to face and to off-set its possible adverse effects if the democratic process is accepted--as we believe it is--as the essential element in the growth of freedom and individual responsibility.

> Planning, then,is, like any other attempt to control community life, a kind of conflict...we are asked whether or not freedom is possible under planning....Planning, like all other forms of conflict, bears the ever-present threat of coercion.1/

We find few cases which give evidence of clear definition of conflict but this cannot be construed as meaning that no conflict exists. In a study of an American comm[illegible], Vidich and Bensman found that:

> Instead of facing the issues, they make compromises and modify their behavior in some cases and reaffirm their traditional patterns in other cases. They do this, however, without any overt conscious recognition of the basic problems.2/

More sophisticated societies than those represented in our sample show great fear of the effect of planning on individual freedom, especially, as in the continental United States, where the history of local autonomous action and individual freedom of expression is strong. As we have already noted, conflict for Puerto Ricans has, since the beginning of the American regime, existed because of the difficulty of bringing the two cultures into a satisfactory adjustment.

Superimposed on this difficult acculturation, planning adds to the complexity of the problem. The rural communities--less subject to American influences than urban areas--may be fortunate, in an estimate of the degree of conflict, because their adjustment has not yet felt the full force of the double problem: it is still, primarily, for the

rural population, adjustment between traditional and modern values and ways of living. That the influence of the United States has been the most important single factor in the rapid movement from traditional to modern is not generally recognized in rural communities, but it is present and adds its complications to the transition itself.

The Brookings Institution report points out that 3/ aspects of American culture influence local political units. Historically in the political life of the community they have been forced to combine two concepts of local government: the English, continued in the United States, of "wide dispersion authority" with the centralized administration developed in Europe from the Roman Empire.

How much the dispersed form is essential to democratic government is a subject for the political scientists but we can at least note the difficulties which Puerto Rico still faces in making an adjustment between two such different concepts and in finding a practical resolution. At present one can see that the two views still exist, especially in rural areas where the psychological effects of the centralized administration of the past still are strong. Citizens whose life has been in the small rural communities tend to transfer the historical dependence on the landowner or the mayor to whatever image they have of present governmental authority.

The attitudes we find are clear and cogent illustrations of the gap which exists between Operation Bootstrap and Operation Serenidad, to enjoy the convenience of running water, to have health and vitality, to see the possibility of better jobs, to have a road to the nearest town--all these for most people are easy to accept. To understand that these very things bring with them problems of modern life, the discovery that values of the past are often inapplicable to the

present, is a painful difficulty for adults, a problem for the social psychologist as well as the sociologist and anthropologist. For the young people who face the situation of the present without the perspective which memory of the past brings may seem a more simple matter, but it is in fact more complex. The past is theirs too, in history, tradition and in their relationship to their parents; they must live in the present and for the future; because they cannot go back, even in memory; they must somehow deal with things as they are; they must assimilate the meaning of the past from which the present comes.

Democracy by its own nature cannot be coerced. What can be done is to provide machinery, techniques and organization which are both practical and consistent with the principles and purposes which they are designed to implement. One part of the educational process must be to interpret their application to situations and problems which the citizen faces. On education--and here we use educatiion in its broadest sense--lies the burden of interpretation, the painful responsibility of bringing to all Puerto Ricans an understanding of the problems they face and, if Operation Serenidad is to become a reality, the conscious facing of those problems. Conflict must be brought into the open and must move toward some new consensus.

We are very conscious of the possibility that adaptation to the new forms in a rapidly changing society could mean impoverishment rather than enrichment of the culture. Something is always lost in the process of social change--some charming custom, some spontaneous expression of human warmth may be gone. On the other hand some of the self-protecting hostilities may also disappear. If Operation Bootstrap cannot become Operation Serenidad the increased freedom of the human spirit will not be guaranteed. But if there can be a syn-

thesis of material benefits and psychic satisfaction of the effects due to external causes with a new, or altered, view of life's meaning, a value system can be created which will embody the past while directing itself to the future. New symbols must be found for this synthesis.

Earlier in this study, we mentioned the ambulance as such a symbol. That the ambulance is a technical improvement over the "hamaca" (hammock) of thirty years ago is not merely an argument for technological improvement. The hamaca was the best means at that time for attaining the necessary end; help for the sick. The emotional reaction to suffering, the frustration involved in distance from doctor or hospital, were the reactions associated with the physical symbol. The ambulance today is surrouunded by the same emotional aura but with the added connotation of increased comfort and hope. The connotative meaning is thus expanded to include these emotions.

We believe that new symbols of this kind will be created through man's ability to adapt himself to the demands of his environment. Interpretation through a sense of history, through demonstration of meaning, can give a broader horizon--a new world view. Such interpretation must include the aesthetic and the spiritual--the connection of the artifact of the past with its mechanical counterpart in the present; the work of art--whether from the past or modern--which is "a significant form" for life today. It cannot be reproduction or imitation. It must embody meaning which stimulates the creativity which lies in man's nature and which must not be stultified by static reference.

This could be the new planning for Puerto Rico. It must include greater knowledge of the world outside the immediate community, of Puerto Rico's place in the world--including its political status, of

the relation of means to ends in the development of agriculture and rural life, of industry, of communication, employment, health and recreation, and, most of all, of education. It must be the new search for meaning in the contemporary world as it has always been man's highest search in the past.

NOTES

1. Jessie Bernard, American Community Behavior, The Dryden Press, 1949, p. 617

2, Arthur J. Vidich and Joseph Benaman, Small Town in Mass Society, Princeton University Press, 1958, p. 314.

3. Victor A. Clark and Associates, Porto Rico and Its Problems, The Brookings Institution, Washington, D. C., 1930, p. 114.

POSTSCRIPT

We believe that this project has value to the fundamental purpose of AID: to bring to developing countries help which will enable them to take their places among the more developed democratic societies. We assume that this means, first, the knowledge and understanding of other cultures and, second, the use of this knowledge and understanding in adapting modern techniques and economics to the needs of these societies. This is a creative process involving the transformation of old values and the identification of meaning in new forms. Through the growth of new knowledge and experience the vision of freedom and democracy will be enlarged by the creation of new roles for individuals.

This project has a real, though limited application to this great program. Its findings cannot be applied in toto to other societies; it can only show what planned change has done and has not done in Puerto Rico. It can show what has happened during a thirty year period in ten rural communities--the slow beginning and the more recent acceleration through governmental planning. It must be left to experts on other societies to discover what information and evidence is applicable to other situations, many of which may manifest characteristics of our ten communities thirty years ago.

We are conscious of the fact that Puerto Rico is in many respects unique, that there has already been an inter-cultural adjustment bringing both positive and negative results. But this can be regarded as a living sample of what happens, in different forms, when any two cultures are brought into juxtaposition--an illustration of a worldwide condition which has been, in many cases, precipitated by various

forms of foreign aid. Puerto Rico's unique political relationship to the United States--past, present and future--can be regarded as one example of the universal effect of political status on economic and cultural patterns which can, in no case, be ignored. Research and the intellectual curiosity which stimulates it, can look for the adaptations which will make one experiment, which we find largely successful and important, useful, in concrete forms, to other situations.

One of the specific questions that has been brought up during the course of this study is whether government programs in Puerto Rico can be compared to or used as an example in other countries because of the large contributions of the United States Government to Puerto Rican programs. The chart shows that, while the United States contribution has been large, the Puerto Rican Government, except for surplus food commodities, has more than matched the United States Government contributions. Military aid to the Latin-American countries probably offsets to a considerable degree United States expenditures for military purposes in Puerto Rico which, of course, are not solely for the protection of Puerto Rico.

The money provided by the United States has certainly been vital to the whole Puerto Rican program. The amount provided in 1932 was negligible compared to today and it was only after Puerto Rico revised its tax structure and in other ways established itself as a stable financial entity that the Federal Government began to appropriate matching funds to further the reforms and new undertakings of the Puerto Rican Government. Our study whows that a relatively small amount of money per capita--about $33, the present contribution of the Federal Government, can go a long way in improving the economy of a country and the health and happiness of a people when its use is

properly planned and properly applied. The Puerto Rican Government budgeted for the 1963-64 fiscal year $449,319 or about $180 per capita. This evidences the real facts of Operation Bootstrap and that Puerto Rico is not sitting idly by waiting for hand-outs. (We are not in a position in this study to compare these figures with Federal grants to states.)

Essential to this program was the type of leadership in the Puerto Rican Government which could guarantee this stability. This high quality of leadership undoubtedly exists in other countries and, if discovered, could be entrusted to use AID funds to the best advantage of the country.

Following are some specific government programs which, if interpreted properly and adapted to special conditions in various countries, could be of significant help in furthering the plans of AID and at relatively low overall cost. They are more fully described in the text of the study.

This interpretation and adaptation might best be done by sending qualified people to Puerto Rico for short periods of observation and study to give them first-hand experience from which to plan and operate their own programs. This could apply both to members of the various AID missions and also to officials of the countries concerned. This would have a somewhat different emphasis from the Point Four program.

Puerto Rico's use of rum taxes, as described in the section on Puerto Rico Industrial Development Corporation, to establish industrial development, with intelligent planning, demonstrates an objective and realistic point of view toward the correction of the ills of the economy.

When the Puerto Rican Government first "went into bueiness" it

was accused of being socialistic and in unfair competition with private industry, but it had to do this in order to demonstrate to private industry that investment in Puerto Rico could be profitable. It stopped as soon as it could--as soon as private industry was convinced-and since then has been stimulating, with tax exemptions, incentive payments, and paying for in-service training, the interest of private firms in establishing branches in Puerto Rico. This development has been going on at a rate commensurate with the ability of the Puerto Rican people to make good use of the new capital, and, with a few exceptions, has been an unqualified success. In a country with more raw materials, basic rather than assembly-type industries could be established, thus giving more work to men. One unfortunate aspect of the Puerto Rican situation is the over-balance of work for women.

The parcela program is one which has been a great step forward in the Puerto Rican scene. It has brought people together in attractive communities, given them good houses to live in, with convenient utilities and services, recreation areas, nearby churches and stores and has done a great deal to raise their morale and attitude toward life. It has also brought them nearer to their work, to schools for the children, and to community activities. They own something of their own and enjoy an economic freedom unknown to them before. This is a self-liquidating program at a remarkably low cost to the government. Whether unique or not, an important factor is the policy of mutual aid in building the houses. It not only reduces the cost, and the resulting indebtedness, but it brings people together in a common effort.

The Co-operative movement is another self-liquidating government program which has brought great economic benefits to thousands of people. It is growing steadily, having proved its worth, and already

encompasses a large section of the population. These programs free the people from the domination of the big landowners and middlemen and give them an economic security they have never had before.

The whole story of the Second Unit Schools has significance. The idea of the thirties was new--an experiment in education functioning as the chief factor in change in rural communities. Recent programs show a revival not only of interest but of creative planning related to new conditions. The iterant teachers (principals) has much to commend it as an instrument for bringing rural schools into contact with educational thinking and its application. Other developments in the "new" Second Units, described in the chapter "The Second Unit Schools of Puerto Rico," are focussed on the present situation and offer practical suggestions for a realistic use of a limited budget to almost limitless needs.

We still find in the early training of social workers for work in Second Unit Schools, partially described in the Introduction, a method and a spirit which could be adopted or adapted for use in other places. It engendered a spirit of devotion to a community combined with a sound application of principles of work with groups and individuals which led to the development, through testing, of a practical program. Through imagination, meager resources were expanded, new forces found within the community itself and a contribution made to the concept of the school as a center in isolated communities.

We believe the programs of Community Education and Isolated Communities are unique and could form a frame of reference for activities of a similar nature in other lands. They have fully demonstrated their value and have highly qualified personnel who could teach visitors the modus operandi of the programs and discuss with them their virtues and faults.

ANNOTATED BIBLIOGRAPHY *

Brameld, Thomas. The Remaking of a Culture: Life and Education in Puerto Rico. New York: Harper, 1959. 478 pp.

This book is an analysis and appraisal of Puerto Rican culture today. It is addressed to Puerto Ricans and to people in other countries concerned with how a frontier culture seeks to remake itself, especially with how it wishes to enlist education in that remaking.

Edel, Matthew. Land Reform in Puerto Rico. 1940-1959. In "Caribbean Studies," Oct., 1962 and Jan., 1963.

Article gives in narrative style the story of land reform.

Fernandez Mendez, Eugenio, ed. Portrait of a Society. Mimeographed book of readings of Puerto Rican Sociology. Rio Piedras, P. R. 1956. (Puerto Rican Collection, Univ. of P. R.).

Includes following articles: Kathleen L. Wolf, Growing Up and Its Price in Three Puerto Rican Subcultures. (Taken from "Psychiatry," Nov., 1952.) Article presents contrasting ways in which children grow up in three different class groups: small rural coffee and tobacco farmers, sugar workers and middle class of small rural town. Patterns of adult behavior and training of children; S. L. Descartes. Historical Account of Recent Land Reform in Puerto Rico. (Taken from "Caribbean Land Tenure Symposium," Caribbean Commission, Washington, D.C., 1947); John P. Angelli. San Lorenzo: A Case Study of Recent Migrations in Interior Puerto Rico. (Taken from "The American Journal of Economics and Sociology,: January, 1952.) Analysis of instability as reflected in population shift of one small segment of interior Puerto Rico as people abandon rural areas on account of decline of coffee and tobacco crops.

Hansen, Millard, and Wells, Henry, editors. Puerto Rico: A Study in Democratic Development. "The Annals of the American Academy of Political and Social Sciences," Vol. 285, Jan. 1953. 166 pp.

Includes articles on: Political Development by Luis Munoz Marin and others; Harvey S. Perloff, Transforming the Economy; J. Mayone Stycos and Reuben Hill, The Prospects of Birth Control in Puerto Rico; J. J. Galbraith and Carolyn Shaw Solo, Puerto Rican Lessons in Economic Development; Teodore Moscoso, Industrial Development in Puerto Rico; Rafael Pico, The Role of Planning in Puerto Rico; Simon Rottenburg, Labor's Role in Industrialization; Julian H. Steward, Culture Patterns of Puerto Rico;

* Note: This bibliography has not been compiled as a complete list of Puerto Rican studies but has been selected for purposes of this project.

Francisco Ayala, The Transformation of the Spanish Heritage; Kingsley Davis, Puerto Rico: A Crowded Island; R. G. Tugwell, What Next for Puerto Rico? Also text of constitution of the Commonwealth of Puerto Rico. The purpose of this collection is to describe in some detail what happened in Puerto Rico between 1941 and 1953 and explain its significance.

Hanson, Earl Parker. Transformation - The Story of Modern Puerto Rico. New York, Simon & Shuster, 1955. 416 pp.

The story of Puerto Rican development with emphasis on the role played by its leaders, particularly Munoz Marin and from Introduction by Chester Bowles, "We are neither radical nor conservative" say Munoz Marin, "we are merely realistic . . ."

Hill, Reuben; Stycos, J. Mayone; Back, Kurt W. The Family and Population Control: A Puerto Rican Experiment in Social Change. Chapel Hill: Univ. of North Carolina Press, 1959. 481 pp. (A cooperative study of the Social Science Research Center, Univ. of Puerto Rico, and the Institute for Research in Social Science, Univ. of North Carolina.)

Population is still increasing in Puerto Rico, one of the world's most densely populated areas. This study concentrates on 633 families of the lowest income group in an effort to determine why families act as they do re fertility and how they might be induced to change.

"Journal of Social Issues," Vol. IX, No. 2, Sept. 15, 1953. Community Change: An Action Program in Puerto Rico. Articles by Stuart Chase, Redesigning an Economy; Fred G. Wale, The Division of Community Education; Carmen Isales and Fred G. Wales The Field Program; Raul Munoz, Belen M. Serra, Angelina de Poca, Research and Evaluation in a Program of Community Education; F. Cannell and Stephen B. Withey, Concluding Comments. Discusses this unusual education program in rural Puerto Rico, which is concerned not with personal development of individuals but with people living together in communities and tries to stimulate them to use their own aptitudes for solution of community problems. Includes results of survey on present socio-economic conditions in rural communities, as well as social and community activity.

Koenig, Nathan. A Comprehensive Agricultural Program for Puerto Rico. Washington, D. C.: U. S. Government Printing Office, 1953. 299 pp, tables graphs, illus.

This two-year cooperative study by U. S. Department of Agriculture and Commonwealth of Puerto Rico deals with problems of agriculture in Puerto Rico against the background of the people and their land. Gives description and statistics of progress in rural life and makes recommendations.

Landy, David. Tropical Childhood: Cultural Transmission and Learning in a Rural Puerto Rican Village. Chapel Hill: Univ. of North Carolina Press, 1959. 291 pp. illus.

Studies 18 families as representative of the lower-class population dependent upon sugar-cane and discusses composition of the family, living conditions, health and disease, religion, income, family economics, formal education (including rural second units), traditional attitudes toward sex, courtship and childbearing.

Lewis, Gordon K. Puerto Rico: A Case Study of Change in an Underdeveloped Area. In "Journal of Politics," Vol. 17, 1955. pp. 614-650.

The thesis is that American occupation and control have left a real colonial psychology in the Puerto Rican people. Though material transformation since 1898 has been remarkable and planned progress in health, education, agricultural reform, public works, industrialization, etc., has been great, Puerto Rico is still a society subordinate in law and fact to the American sovereign.

Mills, C. Wright; Senior, Clarence; Goldsen, Rose Kohn. The Puerto Rican Journey: New York's Newest Migrants. New York: Harper and Brothers, 1950, 238 pp.

A report on Puerto Rican migration to New York City, based on interviews with a member of 1113 families, covering some 5,000 persons. Compares migrants' new environment in New York with former Puerto Rican environment.

Mintz, Sidney W. Worker in the Cane: A Puerto Rican Life History. New Haven: Yale University Press, 1960, 288 pp. illus.

Based on taperecorded interviews with a cane cutter of a small village of Santa Isobel, the book tells his life story, partly in his own words, with background material by author.

Morales Otero, P. et al. Health and Socio-Economic Studies in the Tobacco, Coffee, and Fruit Regions.
In "The Puerto Rico Journal of Public Health and Tropical Medicine," March, 1939. Columbia Univ. Press.

Study conducted with 2,567 rural families in tobacco regions, 2,488 families in coffee regions, and 688 families in fruit regions. Data on living conditions, health, social conditions, economic conditions.

Perloff, Harvey S. Puerto Rico's Economic Future: A Study in Planned Development. Chicago: Univ. of Chicago Press, 1950. 434 pp. illus. Also London, England: Cambridge Univ. Press, and Toronto, Canada: W. J. Gage & Co., Limited.

Based largely on a study sponsored by the Social Science Research Center of the Univ. of Puerto Rico, the book gives historical background, political and economic developments since 1898 and appraises the island's industrialization program in terms of modern social science. The program has developed considerably in the sixteen years since the book was published.

Petrullo, Vincenzo. Puerto Rican Paradox. Philadelphia: Univ. of Pennsylvania Press, 1947. 173 pp.

This book is more or less a popular approach intended to give an overall picture of Puerto Rico and its people. It is chiefly concerned with what happens to a people when denied self-government, and examines the future.

Roberts, Lydia J. and Stefani, Rosa Luisa. Patterns of Living in Puerto Rican Families. Rio Piedras: University of Puerto Rico, 1949.

Presents a picture of living conditions in Puerto Rican families, based on an island-wide study of a representative sample of about 1,044 families (601 in rural areas) in 25 municipalities. Findings in 230 tables are for latter part of 1946, and include sections on housing, home conditions, health, diets, educational and cultural advantages and implications of the findings.

Rodríguez, A. Jr. The Second Unit and the Rural School Problem of Puerto Rico. San Juan, P. R. Imprenta Venezuela, 1945. 238 pp.

This study was accepted as part of requirements for Doctor of Education degree, School of Education, Indiana Univ. It traces development of the Second Unit Rural Schools from their establishment in 1928 as community schools and consolidated rural schools of a vocational character. Their objectives included improving living conditions in rural communities through vocational guidance, raising productive capacity of the people and providing a program of social and health instruction based on needs of country people.

Rosario, Jose C., and Carrión, Justina. Rebusca Sociológica. Río Piedras, P. R.: Summer School Review, Univ. of P. R., July 6, 1937, August 2, 1937.

The first article gives data from a study of social and economic conditions of 105 families in a small typical rural community of the coffee region. The second deals with the same type of data for 105 families in the sugar-cane region. Both articles include excerpts from statements made by the people in colloquial Spanish, showing attitudes re family, marriage, women, religion, etc.

School of Public Health & Administrative Medicine, Columbia Univ., and Department of Health of Puerto Rico. Medical and Hospital Care in Puerto Rico. 1962. 425 pp. graphs, tables.

This repor' , submitted to the Governor and the Legislature of Puerto Rico, is the result of a three-year cooperative study of patterns of hospital and medical care of 2,951 families throughout the island and an island-wide survey of facilities. It discusses old unsolved problems and new problems just emerging and concludes that, though much progress has been made, there is still a serious problem of substandard conditions and care. Recommends a comprehensive long-range plan.

Steward, Julian et al. The People of Puerto Rico: A Study in Social Anthropology. Urbana: Univ. of Illinois Press. 1956. 540 pp.

A cultural historical study of behavior patterns of certain of the Puerto Rican people with emphasis on modification of cultural form, function and pattern of modern Puerto Rico. Concerned especially with features which distinguish people engaged in major forms of agricultural production. It presents its analysis in the form of hypotheses applicable to other world areas. Intensive analysis of selected communities and subcultures: Tabara, a tobacco and mixed crops municipality; San José, a traditional coffee municipality; Nocora, government-owned sugar plantation; Canamelar, a rural sugar plantation.

Stycos, J. Mayone. Family and Fertility in Puerto Rico: A Study of the Lower Income Group. New York: Columbia Univ. Press. 1955. 332 pp.

This book discusses the influence of prevailing sexual norms, family structure, ideologies and other aspects of social structure. It represents the first stage of a three-stage project on human fertility in Puerto Rico. It provides a picture of lower-class family, including child-rearing, courtship and marriage.

Tumin, Melvin, with Feldman, Arnold. Social Class and Social Change in Puerto Rico. Princeton, N. J.: Princeton Univ. Press. 1961. 549 pp.

A study of the Social Science Research Center, College of Social Sciences, Univ. of Puerto Rico. Based on 999 interviews with family heads who form a roughly representative sample of the Puerto Rican population. This study analyzes the class structure and concludes that the single most effective reducer of past inequalities has been free public education. The study asks what men are as a result of their relative positions and what they become when they change position.

UNANNOTATED BIBLIOGRAPHY

A Summary in Fact and Figures: 1. Progress in Puerto Rico. 2. Puerto Rico Migration. New York: Migration Division, Department of Labor, Commonwealth of Puerto Rico. Jan. 1959. 21 pp.

Collazo-Collazo, Jenaro, et al. Development of a Level-Of-Living Scale for Puerto Rican Rural Families. Rio Piedras, P.R. Agricultural Experiment Station, Univ. of Puerto Rico. Bulletin 156. October 1960. 27 pp.

Diffie, Bailey K. and Diffie, Justine Whitfield. Porto Rico: A Broken Pledge. New York: The Vanguard Press, 1931. 252 pp.

Extension of Social Security to Puerto Rico and the Virgin Islands. Report to the Committee on Ways and Means, Washington, D.C. : U.S. Government Printing Office. Feb. 6, 1950.

Garver, Earl S. and Fincher, Ernest B. Puerto Rico: Unsolved Problem. Elgin, Ill.: Elgin Press, 1945. 110 pp. Illus, maps.

Hanson, Alice C. and Perez, Manuel A. Incomes and Expenditures of Wage Earners in Puerto Rico. Government of Puerto Rico, Department of Labor, in cooperation with U.S. Bureau of Labor Statistics, Bulletin No. 1. May 1, 1947. 152 pp. Illus.

Helsinger, Justus G. Serving Rural Puerto Rico: A History of Eight Years of Service by the Mennonite Church. Scottdale, Pa., Mennonite Publishing House. 1952. 232 pp. Illus.

Howell, Brandon. Patterns of Rural Settlement in Puerto Rico. Rio Piedras. Univ. of Puerto Rico. In a mimeographed collection of papers for an Economic Planning Seminar, 1945.

Lewis, Gordon K. Puerto Rico: Freedom and Power in the Caribbean. New York: MR Press, 1963. 626 pp.

Mellado, Ramon A. Culture and Education in Puerto Rico. Bureau of Publications, Puerto Rico Teachers Association. Educational monograph No. 1, 1948.

Packard, Walter E. The Land Authority and Democratic Processes in Puerto Rico. In "Inter-American Affairs," Vol. II, No. 1, Summer, 1948. pp. 49-101.

Tugwell, Rexford Guy. The Stricken Land. Garden City, New York: Doubleday and Co., 1947. 703 pp.

Vezquez-Calcerrada, P. B. Castaner: A Study of a Planned Rural Community in Puerto Rico. Rio Piedras, P.R.: Agricultural Experiment Station, Univ. of Puerto Rico, 1947.

White, Trumbull. Puerto Rico and Its People. New York: Frederick A. Stokes Co. 1938. 383 pp.

GLOSSARY

Agregado	Farm worker living and working on the property of a landlord.
Anafre	Portable iron charcoal-burning stove
Barrio	Sub-division of municipio - smallest political sub-division of towns or cities--urban or rural
Bohio	A rural hut made of wood, palm leaves or kerosene cans usually with thatched roof.
Central	Sugar Mill
CRUV	Urban Renewal and Housing Corporation
Consolidated School	A school conveniently located for attendance of children from isolated one-room or two-room rural schools--offering instruction in grades 4,5,6 & 7 - the precursor of the Second Unit Schools
Quadro	Plot of land less than 3000 sq. meters
Cuerdo	97% of an acre, approx. 4800 meters
FERA	Federal Emergency Relief Administration
Fiesta	Festival
Fiestas Patronales	Celebrations in honor of the day of the patron saint
Fogon	Stove made of concrete platform with holes to contain charcoal
Goose	An iron heated from an internal charcoal chamber

Glossary, continued

Jibaro	Puerto Rican term for rural peasant
Mayordomo	General foreman
Municipio	A division similar to a township in the U.S., a city or village within this geographical area, is the actual seat of government and gives its name to the whole municipio
Parcela	Piece of land used for both housing and services in housing developments
Plantain	Closely related to the banana
Poblado	Small settlement
PRERA	Puerto Rico Emergency Relief Administration
Publico	Cars used for public transportation as distinguished from buses
Ropero escolar	Stock of clothing to distribute to needy pupils established in Second Unit Schools
Rosario	Rosary service
Velorio	Wake
WPA	Works Progress Administration
Zafra	Sugar cane harvest
Zapato escolar	Collection of shoes for shoeless pupils in Second Unit Schools

Table 34: Income By Age

Income / Age	Less than $25	25-49	50-99	100-149	150-199	200-249	250-299	300-349	350 & up	None	No Info.
Less than 20				1							
20-29		2	6	9	1	2	1			6	2
30-39	1	3	4	8	7	7	1		1	14	2
40-49	1	4	9	10	3	5		1	1	15	3
50-59	4	3	4	4	1	3		1	3	24	2
60-69	2	4	3	5	1					28	
70 or more	1	1		1	1					16	
No info.		1				1					
	9	18	26	38	14	13	2	2	5	103	9

Income is for Oct., Nov., Dec., 1963.

Table 35: Education by Income

Education / Income*	1-2 Grade	3-4	5-6	7-8	9-11	4th yr H.S.	1-3 Coll	B.A or More	None	No Info.	Totals
Less than $25	3	1			1				4		9
25-49	2	7	3						6		18
50-99	7	8	3	2	2	2	1		1		26
100-149	3	7	8	10	7	2			1		38
150-199	3	3	2	1	3				2		14
200-249	1	4	3	4	4	1				1	18
250-299				1	1						2
300-349			1				1				2
350 up			1		1		1	2			5
None	7	23	13	15	3	6	1		30	5	103
Unknown	1	1	2	2	1					2	9
Totals	27	54	36	35	23	11	4	2	44	8	244

*Income average for Oct., Nov., Dec., 1963. Directors felt that respondents would not give accurate figures for a longer period. This is a period when there is no sugar cane cutting, no coffee crop, and in other crops a slack period.

36: Age - Education

No.	Age Group	Grade Completed 1-2	3-4	5-6	7-8	9-11	4 yrs. H.S	1-3 Yr. College	Bachelor or over	No Education
1	Under 20		1							
29	20-29	2	6	3	7	6	5			
48	30-39	5	12	9	11	6	2		1	1
52	40-49	6	11	13	5	8	2	2	1	2
49	50-59	8	14	5	8	1	2	2		8
43	60-69	2	9	6	4	2				16
20	70 and over	3								17
2	Undet.									
244	Total	27	54	36	35	23	11	4	2	44

Table 37:
1. Information on highest income group in each community.
2. Information on highest percentage in given income group.

1			2		
	Income 200-350+				
Community	No.	Percentage	Distribution of Income by Families		
Loiza	5	15.0	8(0-49)	10(50-99)	11(100-350+)
Juncos	2	11.8	5(0-49)	6(50-150)	4(150-350+)
Cidra	8	47.2	5(0-99)	4(100-200)	8(210-350+)
Bayamon	28	42.8	18(0-99)	28(100-250)	20(250-350+)
Salinas	7	22.1	8(0-49)	17(100-200)	7(200-350+)
Juana Diaz	2	12.0	6(0-99)	6(100-150)	5(200-350+)
Adjuntas	5	29.3	8(0-99)	5(100-250)	4(250-350+)
Moca	7	39.1	6(0-99)	8(100-250)	4(250-350+)
Aguadilla	2	13.4	4(0-49)	9(50-150)	2(250-350+)
Arecibo	3	20.2	6(0-99)	6(100-200)	3(200-350+)

Table 38:

Percentages Out of Labor Force or Unemployed, 1963

Community	Out of Labor Force	Unemployed	Total
Loiza	12.7	25.0	37.7
Juncos	5.9	17.6	23.5
Cidra	6.0	11.7	17.7
Bayamon	15.9	6.1	22.0
Salinas	16.0	12.4	28.4
Juana Diaz	6.2	17.6	23.8
Adjuntas	6.1	17.6	23.7
Moca	11.0	11.1	22.1
Aguadilla	13.3	33.3	46.6
Arecibo	26.7		26.7

Table 39: Matriculation in Ten Second Unit Schools 1963-64 *

School District	Number of Second Units	I	II	III	IV	V	VI	VII	VIII	IX	Total
Loiza	Mediania Alta	160	161	224	119	146	168	127	116	114	1335
Juncos	El Mango	60	79	69	65	113	85	106	106	84	767
Cidra	Bayamon	63	43	71	74	64	61	47	43	36	502
Salinas	Lapa	73	39	36	36	53	41	210	163	108	759
Juana Diaz	Collores	29	27	54	38	34	60	61	60	44	407
Adjuntas	Yahuecas	45	30	39	31	77	47	58	54	40	421
Moca	Voladoras	40	31	34	58	59	61	67	45	50	445
Aguadilla	San Antonio	134	115	127	147	107	111	130	108	86	1065
Arecibo	Sabana Hoyos	49	46	69	77	130	123	129	62	71	756
Bayamon	Hato Tejas	182	211	189	254	228	185	251	347	157	2004

* Commonwealth of Puerto Rico
Department of Education

GENERAL INFORMATION ON THE STUDY OF STANDARDS OF LIVING IN THE RURAL ZONE OF PUERTO RICO

The purpose of this study is to give us information as to the way in which the country people, at different levels, live.

From the standpoint of Social Work this is very much needed in developing a program suitable to the needs. For example, if we can correlate a definite income with certain occupations, housing conditions, health, etc., we can see better how, within that income, conditions may be improved by education; how resources of the Government can supplement income (Department of Agriculture, Department of Health, etc.); how the better use of time can add to the health and well-being of the family. As we all realize, until economic conditions change, we must look to improving the standard of living under existing conditions.

This same material is to be used by the committee on Revision of the Rural Home Economics Curriculum. This will insure, as far as Home Economics in Second Units is concerned, a common background of knowledge of the living conditions in various typical communities. The curriculum will aim constantly to see these conditions as they exist and to offer in the classroom and laboratory practical methods of attacking the actual problems in our rural communities.

The joint purpose of this study will therefore insure the harmonious working of the Home Economics curriculum and the Social Work program. The curriculum will then be based on actual home conditions and the Social Work program will extend and interpret the teachings and standards of the school in terms of community and adult life.

The information on foods is a simple qualitative study which will be put at the disposal of the School of Tropical Medicine. The findings of this study will also be used in determining objectives in Home Economics relative to food and diet in rural communities and by Social Workers in the extension of these objectives to the community.

Factors considered in selection of localities:

1 - Representative crop regions: sugar, tobacco, coffee, fruit, minor crops.

2 - Different geographical regions: Mountain, coastal plain, irrigated sections, etc.

3 - Different systems of land ownership: large company, small company, large individual, small individual.

4 - Local industries:

Localities selected:

1 - Adjuntas (Yaheucas)
2 - Aguadilla (San Antonio)
3 - Arecibo (Sabana Hoyos)
4 - Bayamón (Hato Tejas)
5 - Cidra (Bayamón)
6 - Juana Díaz (Collores)
7 - Juncos (Mangó)
8 - Loíza (Medianía Alta)
9 - Moca (Voladoras)
10 - Salinas (Lapa)

Selection of families:

1 - Number for study: 15 in each selected region.

2 - Distribution: 3 income levels, based on observed standards of living. No more than one family of exceptionally high level and one of exceptionally low level should be included.

After you have selected the 15 families you will have 5 families from each of the 3 levels, namely:

5 families from level No. I, High
5 families from level No. II, Medium
5 families from level No. III, Low

3 - Method of selection:

a - From 50 families of Social Workers Survey, 1929-30, in localities where these surveys are available. (Some of these cards were destroyed by the hurricane; in a few communities where Social Work was begun last year this survey was not required.)

b - Families with whom Social Worker is in intimate contact, wherever possible covering a period of two or three years.

c - Families who will cooperate with Social Worker and Home Economics teacher in securing reliable information; that is, families who will be interested and intelligent.

d - Families in which wage-earner works in the community as well as residing there.

4 - Out of the 15 families selected, one from each income level (high, medium or low) should be chosen for the special studies to be made by the Home Economics teacher for Inventory of Household Equipment Form E); Kinds of Foods (Form F); and Household Accounts (Form G).

DIRECTIONS TO SOCIAL WORKERS

You will see from this that your community is one of those selected for this study. Will you please go over all the material carefully before beginning the work. The value of the study will depend very largely on your selection of the fifteen families.

You will have to use judgment in the use of the survey cards. Wherever possible use them, but it would be advisable after you select your families, to go over the cards for that family and make a list of the information which you will have to get new; that is, you may find that family conditions, or wages or housing, recorded in 1929-30, have changed. If you have the items listed you can correct them when you visit the family.

You will see that the information on foods, on household furnishings and the keeping of household accounts is new. The Home Economics teacher will take charge of this, but will work with only three families, one from each income level. These three families must be among the fifteen chosen for the whole study. The same three families will be used

for (1) Inventory of household equipment, Form E; (2) Kinds of food eaten by country people of Puerto Rico, Form F; (3) Household accounts. The three families selected for these three special purposes should be marked with a star wherever they appear on the other forms of the study.

As you will see, after reading over all the material, you and the Home Economics teacher will need to hold frequent consultations and to work closely together on the study as a whole.

INSTRUCTIONS FOR FILLING FORMS S. L.

1 - Most of the information requested in these forms can be acquired from the Survey Cards filled by you for the study of the 50 families in relation to Social work.

2 - There are few new items inserted for which new information must be acquired. In all cases the information must be brought up-to-date.

3 - Give each family selected for this study a number and keep it throughout all blanks. It should be the same number appearing in the Social Work Survey and Family Face Card.

A - General

1 - Columns 7 and 8 refer to whether the burden of supporting the whole family rests on the man or the woman. Check which.

2 - Column 8: Use the key words on the Family Face Card.

3 - Columns 9, 10 and 11: Just check the source if any relief has been obtained by the family.

4 - Columns 12 and 13: Check which.

5 - Column 14: Give the time in number or fractions of days per week devoted by the head of family to community activities.

6 - Columns 15 and 16: Check if either belongs to any community organization.

7 - Columns 17 and 18: Give the amount of leisure time in terms of days and parts of days per week.

B. Housing Conditions

1 - Columns 1 and 2 should be identical to columns 1 and 2 in Part A.

2 - Column 3: Give size of house in feet thus 10 x 15. The width should be the 1st number.

3 - Columns 5, 6, 7, 8 and 9: This information is new. Just give the number of rooms of each denomination.

4 - Columns 10, 11 and 12: Just check which.

5 - Columns 13, 14 and 15: Check the right column. Columns 14 and 15 call for new information. Column 13 should include uncovered barrels and other containers.

C - Economic

The purpose of this information is to find out what is the total income received by the family and how they distribute it.

1 - Column 3: Give the weekly amount (money only) received as wages or salary. In case the head of family is not a wage earner but a business man or farmer give his weekly income (average or estimate) in Column 5 and indicate the fact in Column 19.

2 - Column 4: Give an estimate of the value of food raised and consumed at home during each week. The amount in this column represents an income which is used at home, which, if not raised at home probably would have been

bought somewhere else.

3 - Column 5: Enter here any other income for example, value of food raised and sold. Most of the farmer's income should go in this column.

All income should be reported in terms of money. The total sum of columns 3 and 5 will give all moneys available for expenditure.

4 - Columns 6, 7, 8, 9, 10 and 11: Insert in these columns the proportional part of the weekly income spent for each of the items mentioned.

Food should include all moneys spent for things which are to be eaten.

Rent should include taxes and any money paid for the use of property.

Health should include money spent on medicine, doctor's visits, etc.

Clothing should include all expenditures for personal use such as dresses, shoes, hats, etc.

Miscellaneous includes any other expenses which cannot be classified among the previous ones. This should include charity, gifts, etc.

Operating Expenses should include such expenditures as household equipment, light, cleaning material, etc.

Expenses for transportation should be classified with the item on which the major expense involving transportation falls. Example: Expense for transportation for the purpose

of getting the physician should be included with Health expenses.

All the information on income and expenses should be carefully checked and care should be taken to get as accurate information as possible.

5 - Columns 13, 14, 15, 16 and 17: Fill with the estimate acquired. If possible consult local Internal Revenue Office.

6 - Column 18: If the family lives on a farm for which they pay rent, give the total number of cuerdas.

D - Health

1 - Columns 3, 4, 5 and 6: Give the number of persons treated so far for the different diseases. This information must be brought up-to-date.

2 - Columns 7, 8, 9 and 10: This represents a new information. Check the source from which they get water for drinking purposes.

E - Inventory of Household Equipment

This is a new thing. It will be filled by the Home Economics teacher. One page must be filled for each family. There shall be 3 such pages, one for each of the 3 selected families from each level within the 15. The case number and level should correspond to that of the rest of the information for the same family.

1 - Columns 1, 4 and 7: Give the name of the article. Example: Chair, etc.

2 - Columns 2, 5 and 8: Give the kind of article, thus: Wooden, if the article was a chair.

3 - Columns 3, 6 and 9: Give the number of articles of the same class found in the house.

4 - Column 10: Add any other article not mentioned or give any special explanation of information filled.

F - Kinds of Food eaten by country people in Puerto Rico

This is new information. It will be filled by the Home Economics teacher. One sheet must be filled for each of the 3 selected families for each day. The information should be gotten for seven days (representing all days of the week; that is, Monday, Tuesday, etc.). The seven days need not necessarily be consecutive.

1 - Column 1: Give the approximate time at which the meal is taken.

2 - Column 2: Give the name of the meal; that is, desayuno, almuerzo, parva, etc.

3 - Column 3: Give the list of dishes served; that is, arroz blanco, habichuelas coloradas, pan y guineo, etc.

4 - Column 4: Name every kind of good used in cooking each dish including small amounts of food used to flavor it, such as calabaza, pimiento, achiote, tomate, etc.

G - Family Account

1 - There are 3 sheets of this kind in the study. One for each one of the 3 families chosen from the three different income levels. These three families must be among the 15 chosen for the complete study, and they must be the same three families as used for the information on Forms E and F.

2 - These sheets will be filled by the Home Economics teachers.

3 - Detailed daily accounts of family income and expenditures will be kept by the Home Economics teacher in order to have complete first hand data to enter weekly on this sheet. This means that she will actually keep the accounts for the three families for a period of 8 weeks or two months, from March 4th to May 5th.

4 - The daily accounts with the weekly totals will be forwarded to the Department attached to the corresponding sheet, not later than May 10, 1933.

5 - Identify each account sheet used with the corresponding Case Number and Level.

6 - Keep a sheet for each one of the expenditures as listed below:

a - Food: Includes groceries, dairy and garden products, meat, fish, etc. purchased.

b - Rent: Includes payment for use of house, land, etc. Taxes, interest on mortgage, insurance, major repairs.

c - Health: Includes medicines, doctors, transportation to clinics, hospital, etc.

d - Clothing: Includes dresses, underwear, shoes, suits, household linens, etc.

e - Recreation: Includes fiestas, rosarios, velorios, dances, movies, etc.

f.- Operating expenses include lighting, fuel, soap, household furniture, equipment, repairs, etc.

g - Miscellaneous: Includes charity, gifts, education, periodicals, books, etc.

Use notebook paper ruled as follows:

Case Number _____ FOOD Level _____

Date	Article	Expenditures Cash	Expenditures Credit
April 1	20 lbs. rice at 2 1/2¢	$ .50	
1	9 lbs. beans assorted at 4¢	.36	
1	1 lb. ham at 8¢	.08	
2	1/2 lb. coffee		$ .17
2	2 lbs. lard at 7¢		.14
7	1 lb. brown sugar		.05
	TOTAL	$ .94	$ .36

Enter data daily on corresponding sheet (food, clothing, rent, etc.). Find weekly total of each sheet.

7 - Make a weekly summary of all expenditures:

Case No. _____ EXPENDITURES Level _____

Date	Summary	Expenditures Cash	Expenditures Credit
April 1 - 7	Food	$ .95	$ .25
	Rent	--	--
	Health	.50	--
	Clothing	--	.40
	Recreation	.10	--
	Operating Expenses	--	.25
	Miscellaneous	--	.25
	TOTAL	$ 1.55	$ 1.15

8 - Keep an income sheet. Enter daily all cash received with date, source and amount. Find the weekly totals.

Case No. _____ INCOME SHEET Level _____

Date	Source	Salary Wages	Value of other inc.
April 1	Wage	$ .40	
2	1 qt. milk sold		$ .06
3	2 eggs sold		.04
4	10 lbs. batatas sold		.20
5	money borrowed		.25
6	Wage (1/2 day)	.20	
7	Wage	.40	
	TOTAL	$ 1.00	$ .55

9 - Keep a sheet on the Estimate Value of Food Raised and Consumed by Family. Enter data daily. Find weekly totals.

Case No. _____ ESTIMATE VALUE OF FOOD RAISED AND CONSUMED BY FAMILY Level _____

Date	Kind of Food	Estimated Value
April 1	3 eggs	$ .06
2	2 qts. milk	.12
3	10 lbs. batatas	.20
4	5 lbs. yautia	.10
7	1 mano guineos	.04
	TOTAL	$ .52

10 - After having the weekly totals of the items of Sheet G, Family Accounts, you are ready to fill it. No guesses or estimates will be considered. Only the data from daily accounts and weekly totals should appear on this sheet.

STANDARD OF LIVING

Case No. _____ G - FAMILY ACCOUNTS Level _____

Week	Income			AMOUNT OF MONEY INCOME SPENT							
	Sal. or Wage	Value Food Raised	Value Other Inc.	Food	Rent	Health	Cloth-ing	Re-crea-tion	Op. Exp.	Mis.	Credit
1	2	3	4	5	6	7	8	9	10	11	12
Apr 1-7	$1.	$.52	$.55	$1.20	--	$.50	$.40	$.10	$.25	$.25	$1.15

Check: It should be noticed that the sum of Column 2, 4 and 12 equals the sum of columns 5, 6, 7, 8, 9, 10 and 11.

Column 3 is a separate item by itself.

STUDY OF THE STANDARD OF LIVING OF COUNTRY PEOPLE
IN PUERTO RICO

Second Unit of _____

A - General

Level	Case No.	Agregado Medianero etc.	Occup. of head of fam.	No. in fam.	Support of fam.		Civil Status of fam.	Relief if Obtained			Attend. at Church		Time devoted to com. activities	Member of any com. organ.		Amt. of leisure time	
					M.	W.		Muni-cipal	Red Cross	Lo-cal	Reg.	Oca.		M.	W.	M.	W.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
High																	
Sum-mary																	
Med.																	
Sum-mary																	
Low																	
Sum-mary																	

STANDARD OF LIVING

B - Housing Conditions

Level	Case No.	House		Number of Rooms in House					Latrine			Surroundings			REMARKS
		Size of House	Material	Bed Rms.	Salas	Bath Rooms	Dining Room	Kitchen	App. Dept. Health	by Other type	None	Breeding places for mosquitos	Flower garden	Vegetable garden	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HIGH															
Summary															
MEDIUM															
Summary															
LOW															
Summary															

STANDARD OF LIVING

C - Economic

Level 1.	Case No. 2	Income: Weekly Income wages 3	Income: Value of food raised for home consum. 4	Income: Value other income 5	Amount of money income spent: Food 6	Rent 7	Health 8	Cloth-ing 9	Re-crea-tion 10	Op. Exp. 11	Misc. 12	Value of property owned: Houses 13	Land 14	Stock in store 15	Live-stock 16	Other 17	Amt. land rented 18	RE MA
HIGH																		
Sum-mary																		
MEDIUM																		
Sum-mary																		
LOW																		
Sum-mary																		

STANDARD OF LIVING

D - Health

Level	Case No.	Number of persons treated for:				Sources of drinking water				REMARKS
		Hookworm	Malaria	Tuberculosis	Other Diseases	Cistern	Aqueduct of artesian well	Other form rain water	Brook or river etc.	
1	2	3	4	5	6	7	8	9	10	11
HIGH										
Summary										
MEDIUM										
Summary										
LOW										
Summary-										

STANDARD OF LIVING

G - Family Accounts

Case Number _____

Level _____

Week 1	Income: Salary or wage 2	Income: Value of food raised 3	Income: Value of other inc. 4	Amount of Money Income Spent: Food 5	Rent 6	Health 7	Clothing 8	Recreation 9	Operating Expenses 10	Miscellaneous 11	Credit 12
Mar. 4-10											
Mar. 11-17											
Mar. 18-24											
Mar. 25-31											
Monthly Totals											
Apr. 1-7											
Apr. 8-14											
Apr. 22-28											
Apr. 29 to May 5											
Monthly Totals											

_____
(Food, Rent, etc.)

Case No. _____ Level _____

Date	Article	Expenditures	
		Cash	Credit
		$	$

Estimate Value of Food

Raised and Consumed by Family

Case No. _____ Level _____

Date	Kind of Food	Estimated Value
		$

Income Sheet

Case Number _____ Level _____

Date	Source	Salary Wages		Value of Other Income	
		$		$	

Expenditures

Case Number _____ Level _____

Date	Weekly Summary	Expenditures			
		Cash		Credit	
		$		$	

Average Consumer Price Index - All Items

(Source: Bureau of Labor Stiatistics, U.S.Department of Lab

Base A (1947-49 average taken as 100) " $1.23 in 1957-59
Base B (1957-59 average taken as 100) " $ .814 in 1947-49
Base C (1932 average taken as 100) " $2.10 in 1957-59

Interpretations:

$1 in 1932
could buy
food for:
$2.23 in 1963
$2.21 in 1962
$2.06 in 1957
$1.76 in 1950
$1.00 in 1932
$1.28 in 1925
$ .74 in 1915

Year	1947-49 Base A	1957-59 Base B	1932 Base C
1963	$1.181	$1.062	$2.23
1962		$1.054	$2.21
1961		$1.042	
1960	$1.26	$1.031	
1959	$1.246	$1.015	
1958	$1.235	$1.007	
1957	$1.202	$ .980	$2.06
1956	$1.162	$ .947	
1955	$1.145	$ .930	
1954	$1.148	$ .936	
1953	$1.144	$ .932	
1952	$1.135	$ .925	
1951	$1.110	$ .905	
1950	$1.028	$ .838	$1.76
1949	$1.018	$ .830	
1948	$1.028	$ .838	
1947	$ .955	$ .778	
1946	$ .834	$ .680	
1945	$ .769	$ .627	
1944	$ .754	$ .613	
1943		$ .603	
1942		$ .568	
1941		$ .513	
1940	.539	$ .488	
1939		$ .484	
1938		$ .491	
1937		$ .500	
1936		$ .483	
1935	.537	$ .478	
1934		$ .466	
1933		$ .451	
1932	.584	$ .476	$1.00
1931	.650	$ .530	
1930	.714	$ .582	
1925	.750	$ .611	$1.28
1920	.857	$ .698	
1915	.434	$ .354	.74

Questionnaire for 245 Heads of Families

THIRTY YEARS CHANGE
IN TEN SELECTED
RURAL AREAS OF PUERTO RICO

Family No. _____

"Barrio" _____

Municipality _____

Interviewer _____

1. Who is the head of this family? _____

2. How long have you lived in this "barrio"? _____

_____

3. Where did you live before? _____
Sector "Barrio" Municipality

4. Where did you live five years ago? _____

5. Tell me, do you own this house? Yes _____ No _____

If you own it:

a. Did you buy it?

b. Did you build it yourself?

c. Other

If you do not own it:

d. Have you rented it? _____

e. Don't you pay rent? _____

f. Other _____

6. Kindly observe and indicate the type of construction.

a. Concrete _____

b. Wood and zinc _____

c. Wood and straw _____

d. Other: _____
(Specify)

_____

_____

7. Let us now talk about the persons who live in this house, how many are they?_____

Let us take one by one, starting with the head of the house hold:

What is the relationship to the head of the household?	How many years old?	Married or Single?	Last grade completed	Vocational training	Where does he or she work?	What religion is he a member of?
Relationship*	Age	Civil Status**	Education	Training on the job	Present occupation	Religion

* For exact relationship with head of family, please indicate:

head	brother or brother-in-law
wife	cousin (man or woman)
husband	aunt or uncle
parents or parents-in-law	niece or nephew
son or stepson	no relationship

** For civil status please specify:

single	living together (less than 5 years
church marriage	divorced or separated
legal marriage	married (lives separately)
consensual (more than 5 years living together)	widower

8. Where was the head of the family born?

_____

"Barrio" Municipality

9. We have already talked about the persons who live with you in the house.

Have you had any other children living apart or who are dead? (children of both husband and wife) Yes_____ No_____

If the answer is yes:

a. How many children have you had altogether?_____

b. Are any of them dead? Yes_____ No_____

If the answer is yes:

a. How many died before they were five years old?

Is there any member of the family who has moved away but visits you once in a while? Yes_____ No_____

10. Turning now to another subject, I would like to know something about the work and living conditions here.

a. Do you own any land? Yes_____ No_____

If the answer is yes:

b. Is this land your own or does it belong to the Land Authority? Property_____ Land Authority_____

c. How many "cuerdas" do you have?_____

d. Do you work your land mostly for your own consumption or for business purposes?

1. For your own consumption_____

2. For business purposes mainly_____

3. For both your own use and business purposes_____

11. Do you sell any home-manufactured products? Yes_____ No_____

If the answer is yes:

1. Which?_____

_____

12. Please tell me, is getting work here in the "barrio"

a. Difficult?_____

b. Somewhat difficult?_____

c. Easy?_____

Please tell me, what was more or less the family income including money, agricultural products, help from relatives, and other sources, last month, December?_____

November?_____

October?_____

Family Income in 1963

Sources of Income	Dec.	Nov.	Oct.
lary husband_____			
wife_____			
others_____			
_____			
_____			
rm (cash) or siness			
terest accrued			
ntals			
rse Races or ttery			
ceived from relatives living the United States			
elp from relatives, Public elfare, and others			

Scholarships and other
aids to students

*Please make any other additional comments. Ex: If any months were exceptional

14. Now, in terms of the whole year, what was the total family income?

    a. Less than $500.00_____

    b. From $500.00 to $1,000.00_____

    c. From $1,000.00 to $2,000.00_____

    d. More than $2,000.00_____

15. Would you say that borrowing money or buying on credit are easy or difficult? Easy_____ Difficult_____

16. With respect to the household expenditures ... how much did you spend, more or less, last week on:

    a. Food (for the whole family)_____

    b. Transportation_____

    c. Recreation_____

    d. Clothing (if you cannot give the weekly expenditures, please give us the monthly or yearly figures)_____

    e. Medicines_____

17. How much did you pay last month for

    a. Electricity_____

    b. Water_____

    c. House Rent_____

    d. Clothing_____monthly_____yearly_____

    e. Payment of debts or loans_____

    f. Other expenditures_____

Now let us talk about the health of the family.

18. Does anyone in the household have physical defects?

Yes_____ No_____

If the answer is yes:
a. What kind of incapacity does he or she have?

19. Has anyone in the family been ill for some time?

Yes_____ No_____

If the answer is yes:

a. Who?_____
relationship to head of family

b. What illness does he have?_____

20. Besides this, was there any case of serious illness in the family in 1963? Yes_____ No_____

If the answer is yes:

a. What illness did they have?

21. Is there anyone in the family who is mentally ill?

Yes_____ No_____

22. Was there any person in the family hospitalized last year?

Yes_____ No_____

If the answer is yes:

a. Where was he or she hospitalized?

1. Municipal Hospital_____

2. Health Center_____

3. District Hospital

4. Private Hospital

23. Was any child born in this family last year? Yes_____ No_____

If the answer is yes:

a. Where was he born?

1. At home_____

2. In the hospital_____

b. Who delivered the child?

1. A doctor_____

2. A midwife_____

3. Others_____
specify

Let us now turn to another subject:

24. Is the family interested or not in spiritualism?

Yes_____ No _____

25. Has the family ever attended spiritualist meetings or centers?

Yes_____ No_____

26. What do you think of spiritualism?

26. Comments on question 26.

27. Do you or any member of this household receive government help?

Yes_____ No_____

If the answer is yes:

a. What kind of help do you receive?

1. Money Yes_____ No_____

If yes: (a) How much do you receive monthly?_____
total

2. Does the family receive federal surplus commodities? Yes_____ No_____

If yes: (a) Why does it receive such help?

(1) Illness or desertion of father or mother_____
(2) Incapacity_____
(3) Old age_____
(4) Blindness_____
(5) Illness_____
(6) Other_____

28. Do you or any other family member receive financial help from any other source? Yes_____ No_____

If the answer is yes:

a. From what source?

1. From religious sects Yes_____ No_____

2. Other_____
specify

29. Has any child in the family been placed in an institution?
Yes_____ No_____

If the answer is yes:

a. Why is he in the institution?

1. Lack of resources_____

2. Delinquency_____

3. Behavior problems_____

4. Physical defects_____

5. Mental retardation_____

30. Do you get milk from the Public Health Unit? Yes_____

No_____

31. Have the children in this family been given shoes from the Government's Shoe Program? Yes_____ No_____ There are no children_____

Community activities. (Data for the whole family are to be requested.)

32. What do you do in your leisure time? Who?

a. Baseball games_____ _____

b. Other athletic games: which?

_____ _____

_____ _____

_____ _____

c. Cock fights_____ _____

d. Dances_____ _____

e. Radio_____ _____

f. Television _____ _____

g. Wakes _____ _____

h. Family parties _____ _____

i. Rosaries _____ _____

j. Baptisms and weddings _____ _____

k. Movies _____ _____

l. Meetings with neighbors _____ _____

m. Reading newspapers _____ _____

n. Reading books _____ _____

o. Dominoes _____ _____

p. Card games _____ _____

q. Other recreational activities ___ _____
please specify

_____ _____

_____ _____

33. Is the school used for community activities or not?

Yes_____ No_____ I do not know_____

34. Does the family take part in school activities in the "barrio"

Yes_____ No_____

If the answer is yes:

a. What activities have you attended?

1. Meetings? Yes_____ No_____

2. Social activities? Yes_____ No_____

35. Can you read and write Spanish? Yes_____ No_____

36. Can you read English? Very well_____ A little_____ No_____

37. Do you speak English? Very well_____ A little_____ No_____

If the answer is yes:

The interviewer must make the following questions in English.

Let us see if you and I can understand each other in English:

Please, what is the name of this barrio?

How many children do you have?

What time do you go to bed at night?

Understood and answered everyting in English____some____

Understood but did not answer in English_____

Did not understand a thing_____

38. Have you ever traveled outside of Puerto Rico? Yes____ No_____

If the answer is yes:

a. What countries have you visited?

United States:	Other countries: please specify
Date_____	Date_____
_____	_____
_____	_____
_____	_____
_____	_____

b. What was the purpose of your trip?

First time -

Second time -

Third time -

Other times -

c. When did you return to Puerto Rico?

d. Tell me, why did you decide to return?

39. Has the family ever lived in town? Yes_____ No_____

40. Would you say you like living in the country, very much____ a little_____ or that you do not like it_____

41. Would you like to go on living here or would you rather move to some other place? Stay here_____ Move_____

42. Has the family moved within the "barrio"? Yes_____ No_____

If the answer is yes:

a. Why did it move?

1. friends_____

2. work_____

3. others (specify)_____

b. Where do you work?

1. In this "barrio"_____

2. In town_____

3. Some other place (please specify)_____

43. Speaking of something else, please tell me, how many rooms are there in this house? (Please include living room, dining room, kitchen, bathroom, and bedrooms) _____

44. Do the male and female members of the family sleep in separate rooms? Yes_____ No_____

45. Does the married couple sleep in a room by itself? Yes___ No___

46. Does the house have:

a. toilet? Yes_____ No_____

b. latrine? Yes_____ No_____

c. shower? Yes_____ No_____

47. What does the family cook with?

a. wood Yes_____ No _____

b. charcoal Yes_____ No _____

c. kerosene Yes_____ No_____

d. Electricity Yes_____ No_____

e. gas Yes_____ No_____

48. What does it iron with?

_____

_____

_____

_____

_____

49. Does the house have running water? Yes_____ No_____

If the answer is yes:

a. Do you get your water from the river? Yes_____ No_____

b. Cistern? Yes_____ No_____

c. Public faucet? Yes_____ No_____

d. Other_____
specify

50. Is there electric light in the house? Yes_____ No_____

If the answer is no:

What do you use for light?_____

51. Do you have a radio? Yes_____ No_____ T.V.? Yes_____ No_____

Lamps hanging from the ceiling? Yes_____ No_____

52. Is there a public telephone in the "barrio"? Yes_____ No_____

53. Is there a telegraph office? Yes_____ No_____

54. Is there a post office? Yes_____ No_____

Mail box? Yes_____ No_____

55. Do you use the telephone? Yes_____ No_____

the telegraph? Yes_____ No_____

the post office? Yes_____ No_____

56. Where does the family make its purchases?

a. supermarket_____

b. store_____

c. street vendor_____

d. small store_____

e. others_____

57. Do you roast and grind your coffee at home? Yes____ No____

58. Do you buy canned foods? Yes_____ No_____

If the answer is yes:

a. Which?_____
please specify

59. How many times a week does the family eat meat?_____

Fish?_____

60. How many liters of milk, more or less, does the family use daily?_____

61. Do you have a stove? Yes_____ No_____

If the answer is yes:

a. What do you use it for?

62. Have you bought anything on credit? Yes_____ No_____

If the answer is yes:

a. Which?

b. How are you paying them?

63. How many changes of clothes do you have? (dresses)

What about your husband? (trousers and shirts)

Wife	Husband
2 or less_____	_____
3 to 5 _____	_____
6 to 10_____	_____
more than 10_____	_____

Military Service:

64. Is there any veteran in the house? Yes_____ No_____

If the answer is yes:

a. How many?_____

Does any one of you belong or has belonged to the National Guard? Yes_____ No_____

a. How many?_____

65. How many persons in the house voted in the last election?

_____

66. How many intend to vote in the coming elections?_____

67. Have you had any difficulties with the police? Yes_____ No_____

a. Traffic_____

b. children_____

c. other reasons_____
please specify

68. Do you think one lives better or worse now than 30 years ago?

Better_____ Worse_____ The same_____

Does not know_____

a. Reasons

69. Do you think there are now more facilities in this community than 30 years ago?

	More	Less	The same
a. school	_____	_____	_____
b. for getting a job	_____	_____	_____
c. medical care	_____	_____	_____
d. hospitalization	_____	_____	_____
e. communication	_____	_____	_____
roads and highways	_____	_____	_____
telephone	_____	_____	_____
telegraph	_____	_____	_____
automobiles and buses	_____	_____	_____
airplanes	_____	_____	_____
f. housing	_____	_____	_____

70. Would you say that one eats better or worse now than 30 years ago?

Better_____ Worse_____ The same_____

71. How does politics compare now with 30 years ago?

a. Why do you think so?

72. In general, would you say that we are better or worse persons than before? For example:

a. better neighbors

b. better citizens

c. better parents

d. better children

e. better spouses

Why do you think so?

73. Do you think that employers and employees show each other more or less respect now? More mutual respect_____

Less mutual respect_____

74. Do you think that because of the government's development program life in this community has improved on account of services such as roads, electricity, agricultural programs, schools, health services, employment services, and others?
Yes_____ No_____ Does not know_____

a. Why do you think so?

75. If the person interviewed is less than 40 years old:

a. Thirty years ago life was different from what it is today: from what you have heard about that time, would you like to have lived then? Yes_____ No_____

Why do you feel that way?

If the person interviewed is over 40 years old:

b. Thirty years ago life was different from what it is today. Would you like to be able to live as you did then? Yes_____ No_____

Why do you feel that way?

DEPTH INTERVIEW QUESTIONNAIRE

THIRTY YEARS OF CHANGE IN TEN SELECTED AREAS OF RURAL PUERTO RICO

Family No. _____
Barrio _____
Municipality _____
Interviewer _____
Person Interviewed _____

_____

1. As I was telling you, we are interested in knowing whether there have been changes in the ways of life and habits of the people nowadays when compared to the situation which existed 30 years ago .... When you think of how the landlord treated his squatters and laborers, would you say that there have been changes in the relationship or that now landlords treat their squatters and laborers more or less the same way they did 30 years ago?

   Why do you say so?

   Do you like it better the way this relationship is now, or do you think it was better as it used to be?

2. And, as far as being up-to-date on the life and happenings in the barrio, do you think there have been changes?

   Do you think that people are more aware now than they used to be of the needs and problems of their barrio, or don't you think so?

   How do you account for that?

3. Participation

In connection with community problems, how are these solved? For example, if a road is to be made or a school built, what steps are taken?

Who, as a rule, assumes responsibility for such action?

4. Participation

Do you think that something could be done to improve living conditions in in this community?

What things, for example?

Who, in your opinion, should be held responsible for this?

Do you think that people in the community could do something to improve conditions here?

What about you?

5. Participation

Have people in this barrio in some way participated in meeting the problems of their barrio?

Please tell me, what have they done? (Get specific details of action undertaken.)

For what type of projects?

What about you? Have you somehow taken action to help solve community problems? What have you done?

6. Knowledge of the Outside World

Would you say that people nowadays are better informed of what is happening

outside their barrio? Say, for example, of what happens in the nearest town? In San Juan? In the United States? Or in other countries? (Ask them to give examples and reasons.)

7. Participation

Are people in this barrio given the opportunity to be heard on matters which affect them? For example, when the government is to undertake a project, such as a road or some other thing that affects the people of the barrio?

8. I have been told that in former years people used to do business without the need to sign any documents because people kept their word. What do do you think of such a way of doing business?

Do you believe that, as far as business matters are concerned, one could rely now on the spoken word or would you say that it is advisable now to have the documents signed? Why?

9. Some people say that formerly life was happier than today but others do not share this opinion.

What is your opinion on this? Do you think that people are more or less happy now than they were 30 years ago?

10. We have been talking about people of former times. Do you believe that life was less difficult than it is now or do you think it is easier nowadays? In which ways is it more difficult?

11. In your opinion, should changes in the ways of life come suddenly or gradually? For example: (To get jobs; to give people land.)

How could changes be more rapid?

12. Are people nowadays more or less anxious to improve their lot than people 30 years ago? Are they just the same in this respect?

With regard to: Education of their children
Employment opportunities for their children
Home equipment and facilities

13. Goals

Would you change your job if you could?

14. For what type of work would you change your present job?

15. With regard to salaries, are you satisfied with what one gets now or would you say that salaries are unfair?

16. Do you think that you have been handicapped because of insufficient schooling?

a. Yes _____
b. No _____
c. Does not apply _____

17. Up to what grade would you like your children to get in school?

18. What kind of occupation would you like your children to have?

19. On the value of human beings

In terms of the consideration and respect among people:

Would you say that people show more or less respect for others now than formerly? For example:

A. for neighbors
B. for parents
C. for teachers
D. for police officers

Explain.

20. One way of showing respect for people is by considering and respecting their rights.

Do you think that nowadays people show more or less respect for the rights

of others? Example: Standing in line and waiting for turn
Refraining from making noises

21. Would you say that people are more or less hospitable with their neighbors than before?

22. Government

Do you believe that government programs have helped to improve living conditions in Puerto Rico? Yes _____ No _____

If the answer is yes:

How?

If the answer is no:

Why?

23. Should the government expropriate your house and land to make possible a rural resettlement community and thus improve the living conditions of many families; how would you feel?

24. If you were not allowed to build a house in the place you would like to build it because this would interfere with the government plans, how would you feel?

25. Have you in some way benefitted from government programs?

Yes _____ No _____

If the answer is yes: How?

If the answer is no: Explain

26. Would you say that you have contributed in a way to the government's programs for your community? How?

27. Social Status

You know that in every place people fall in different social classes. How many social classes are there in this barrio?

28. If we were to classify the families in this barrio into four classes - high, middle high, low middle and low, to which would you say you belong?

High _____ High middle _____ Low middle ____ Low ____

29. And the majority of your friends to which class would say they belong?

High _____ High middle _____ Low middle ____ Low ____

30. As a rule, do you attend dances, social meetings and parties of the high high class ____ high middle ____ low middle ____ or low____?

31. What about your children, do they attend social activities and parties of families belonging to the high class ____ high middle ____ low middle ____ or low ____?

32. What determines, in your opinion, the classification of a family in one social class rather than in some other?

Income ____ Education ____ Occupation ____ Heredity (family) ____

33. Would you say that it is now easier or more difficult to rise to a higher class than it used to be?

Easier ____ More difficult ____ Why? _____

34. Do you think it possible to rise socially? Yes ____ No ____. How?

35. Is it right to have these class differences? What is your opinion on this?

36. Work

Do you think there have been any changes with regard to the employment situation in your barrio in the last years? Yes ____ No ____. If the

answer is yes: a. What are the changes?
b. What in your opinion is the reason for such changes?

37. Would you like your children to work in the field of agriculture? Yes ____

No ____. Why?

38. Do you believe it is right for the woman to work outside the home? Yes ___

No ____ A. Why?

Same question asked with regard to the following:

In cases of married women
In cases of married women with children
In cases of married women without children.

39. What do you think of labor unions?

a. What are the advantages for the workers?

b. What are the disadvantages?

40. Family and relationship among its members

Do you believe that:

a. Women should always respect (obey) their husbands? Yes ___ No ___

b. Women should ask their husband's permission when they wish to go

1. outside their home? Yes ____ No ____

2. visit their neighbors? Yes ____ No ____

3. to town? Yes ____ No ____

c. That the husband should not inform the wife of his earnings?

Yes ____ No ____

41. Do you think that the fact that the wife works outside the home affects somehow the marital relationship? Yes ____ No ____ How?

How, in your opinion, does a husband whose wife works outside the home feel? Satisfied _____ Dissatisfied ____. Explain.

42. Who do you believe should have major responsibility for the upbringing of the children? Father ____ Mother ____ Both ____. Why do you feel that way?

For example: If a girl has a boy friend of whom the parents do not approve, who should be the one to discuss it with her.

43. Do you think that nowadays people feel more or less responsible for:

	more	less
grandparents	____	____
aunts and uncles	____	____
parents	____	____
children	____	____

With regards to the size of the family, do you think that people in this barrio would like to have many or few children?

44. What is your opinion with regard to the way children behave nowadays?

45. What do you think of the freedom which youngsters now enjoy?

46. What about the freedom women enjoy at present?

47. Do you think women should smoke?

48. Do you believe in having women drink alcoholic beverages at home or at social parties in the barrio?

49. In your opinion, is juvenile delinquency increasing? Yes ____ No ____ What could the reason be for it?

50. <u>Religion</u>

Speaking now of religion, would you say that people are now more or less religious than they were 30 years ago? More ____ Less ____. What makes you think so? What is the evidence for this?

51. Would you say that people nowadays attend church more or less frequently than before?

52. Do people in your barrio expect you to attend church or does it make no difference to them whether you attend or not?

53. Would you say that nowadays people believe more or less in the value of prayers (novenas, masses, God's power, etc.) than they did 30 years ago?

54. What in your opinion is the value of religion? How can religion help people? In what cases would you say that religion cannot help people?

55. Do you believe that religion gives people more security and self-confidence or don't you think so? Explain.

56. I am going to give you two different ideas and ask you to tell me with which one you are more in agreement:

Things which are going to happen to one in this life are already predetermined and one cannot do a thing to change them.

One can, through self-effort, make one's destiny and make decisions to improve and alter one's life stream and future.

57. Does religion prevent you from doing certain things you would like to do' or would you say that it does not interfere with yourlife in a way that affects you negatively?

58. Do you believe that religion makes people more humane towards their neighbors or would you say that it does not affect them in that way?

59. Do you think people are more or less hospitable now than they were before? For example: do they help their neighbors more?

(Try to find out whether, due to a better financial and employment situation, people are less hospitable or feel less responsible towards their neighbors in terms of helping them.)

Selected Answers to Questions from Depth Interviews

1a. Question: Do you believe that the manner of the owner with his laborers is different or is the same as it was 30 years ago?

Answer: It has changed. The laborers were obliged to do what the owner of the farm said (30 years ago). They were obliged to vote for the party of the owner of the farm. They had no choice but to do what the owners said... when they gave an opinion it became the law. That is over. Today the laborer has the protection of the government and they have the right to accept what they want -- or move to some other place of employment. They like it better this way. Now the laborers have the permission to go on strike...the power to participate in different discussions...and also decide if they want to keep working or not for certain farm owners.

2nd Question: By living in the village and knowing what goes on every day, do you think there have been changes? Are people more aware than they used to be of the needs and problems of their barrio? How do you account for this?

Answers: In the municipal government they count on persons who went back and forth for information on village doings. Now we have more communication between persons and we know everything right away. They discuss each sector of the

village and their problems and necessities.

Today the village has leaders, social programs and smart hillbillies who keep the village informed.

Because of the increase in population we have more communication of news... nobody wants to miss anything.

When they have public meetings, the village citizen can express his opinions and try to find solutions to their problems... more ease of expression and communication.

The people find out about improvements in different places and they have a constant concern for improvement. There is a lot of communication among the people of the village and they are acquainted with what has been done and what is going on... not only the village but the whole island (is aware). Today the people participate in everything. They can give their own ideas and plan on them if they want. We get information from television and radio.

Now they know less. Before when something happened the people acted quickly. Now when something happens the people won't even go as a witness.

Because of the increase horizontal and also vertical, People are more related with each other. We have more communication because of village planning which consists of streets and highways.

Now the people comment more. Before you were afraid to talk and concealed things because if the Patron found out you would be punished. Today we have the freedom of speech... Today we have more freedom... we have roads and highways which facilitate the passing of news.

We know what happens rapidly. Now we know more because the kids are smart and know about everything and tell everything. Now they talk more because before you didn't give any importance to it. Today we are more intelligent and can understand better what the consequences might be.

...don't pay any attention to what is going on. Before you didn't know as much because you were isolated and it took longer to get the news. Now we have more people to spread the news. Now we have more relation with the people and know about everything. Because you know the people better, they bring the news to you. Because of the facilities of the roads the people travel further and see more.

When good things happen you never know of it but when something goes wrong you find out. Don't know anything about before-- was too young.

We know about what is going on in the village now, like we did before.

Today you know right away when somebody gets sick because the people are always gossiping. I'm always busy with my housework and I don't have time to find out... I don't know about before.

Now everybody in the village knows about everything before it has happened...there are so many lazy people sitting around they find out everything. Because of the civilization we have through the medium or radio, telephone and television.

Today we find out in about five or ten minutes all that has happened. Before it took years to find out (awareness) to the civilization by the policeman. The people get the information before the patient arrives at the hospital.

If (up-to-date) they build a community center, a park, and a school. Now there is so much vanity that the children ask for too much. We have money for all this. This obliges the changes and movements of people so that they know what is happening in the village.

3rd Question: How do you resolve the problems of the village? Who assumes responsibility for such action?

Answers: The neighbors get together and sign a petition and go to see the Mayor. Generally, the person most interested is in charge of this.

4th Question: Do you think that something can be done to improve the life in this community? What things? Who should be responsible? Can the people do something. How about you?

Answers: A factory. We have a group of persons who are in charge of soliciting what is needed. They get together in a school and when the Mayor comes in they tell him what they need for the village. Yes (the people should do something)... Yes (I should).

Here we need water or public faucets. We need electric lights; also if we are going to better our life we should fix the streets and public telephones...I believe that the Municipal Government should be in charge. Nothing (for people to do). If I could, I would like to have an interview with someone (to improve conditions).

5th Question: Have people in this barrio participated in meeting the problems of their barrio? What have they done? What types of projects?

Answers: Neighbors get together and dig the ditches and drains, etc. Also in the project of mutual help. They work 203 days and if they cannot keep going they pay 2 or 3 people to finish the work for them. (I) participated in the project houses and by signing.

8th Question: In previous days people made negotiations without signing documents. What do you think about this? Can one rely in business matters on the spoken word or would you say that it is advisable now to have the documents signed? Why?

Answers: It was a mistake. They made traps. There were cases where great capital in a family where the head passed away (the family) did not even know how much he had. Now with the income tax you have to keep a record of all expenditures. Documents should be signed. This is done in front of a lawyer...and even with that they fail. We have seen a lot of court cases and think that they are not valid. When the lawyers look at the papers they try to make out that there are five legs on a cat.

In those days it was all right. They were mustached men and men of their word. Now it has to be signed. Now the word has no value. If someone comes with more knowledge, the word is no longer valid. This means that the other one has to be prepared...

9th Question: Some people say that formerly life was happier than today but others do not share this opinion. What is your opinion on this? Do you think that people are more or less happy now than they were 30 years ago?

Answers: Before it was easier, they had more consideration for the poor people. Today the people are too selfish. Before you made less money but you could do more with it. Everybody had their meals because they cultivated. Now everything is sugar cane.

10th Question: Do you believe that life was less difficult than it is now or do you think it is easier nowadays? In which ways is it more difficult?

Answers: Before you had more difficulties. Now we have ambulances, roads, and lights, transportation and medical facilities.

36th Question: Work: Do you think there have been any changes with regard to the employment situation in your barrio in the last years? What are the changes, if so: Your opinion for the reason for change.

Answers: Now we have to pay double to the people for the same kind of work that they used to do before for less salary. With the change in atmosphere and life everything is high and what you make isn't enough.

Before they had less work. Now they can cut sugar cane everywhere and they have the facilities to go to town to look for work. The Government gives help in sowing and in that way they cultivate more places and...make more work. The Government gives money and fertilizer to sow the sugar cane and tobacco.

Before you would not find the women working but now because of so many factories we have women working and more men working.

Before the only place you could find a job was on a farm, now you can find a job any place even in construction. Because of the administration of the Government -- it is good.

We have more movement or work. There is construction everywhere and building projects. We owe all that to the government.

The factories are close. Before all the work was with sugar cane. Today we have more variety. Factories are established by Americans.

Today we work less and make more money. Before you had more work to do but you made less money. The government and the legislature are the ones that move all these things.

Now they can go a lot farther to look for work. There are more facilities for transportation.

Now there is always work. You can leave here and always find a job in another place. We owe this to the new government.

We are progressing in work. If you don't work in one thing you can in another. To the party, Popular Government (reason for change.)

We now have factories which didn't exist before. We have favorable changes in agriculture in modernizing and mechanizing. The community has grown up and we need better and more opportunities for work so that the people can win their bread.

There is more opportunity for employment and more salary. Now everybody wants to own their home and there are a lot of them under construction. They have highways, cement and louver factories -- all these you need for construction.

Before most of the work was done by hand, today we have more machines and more preparation and a greater variety of work. To the government (reason for change).

Believe it is equal.

It's easier to find a job. As soon as the people progress they find a better job. Now we have more factories, more construction and that's why it is easier. Because of progress. As the years go by we have advanced culturally and the people want to know more; the town aspires to more progress.

<u>37th</u> Question: Would you like your children to work in the field of agriculture? Why?

Answers: No -- once they had a farm and the work came to a stop.

The environment of agriculture is dismal and the work is too hard.

We have a farm at El Rosario which we have leased for many years as no one in the family is interested in living in the country far away from civilization and progress.

They are working in more professions. When I retire I'll dedicate all my time to agriculture.

You don't have to kill yourself working in agriculture. You still make money.

To do both things. Go to school and find a different job. Agriculture is a good idea for a business.

No, he's not going to like it because he wants to be a mechanic. If he can't afford to go to school he will have to take what he can get. But if he finishes his education he can get a better job.

Yes.

Everything on the outside is so high that if we plant our own crops it will be easier to have something to eat.

That's my pleasure. Work in agriculture.

You have to make provision for bad times.

Because agriculture is a necessity in this country, I would be proud of a son who would help the country through agriculture.

After the lands belong to you, it is good and you can make profit.

Yes, because I am delighted with agriculture.

If he wants it, yes. Cultivation of the farm is good business. Now we don't work on agriculture too much. If you know how to work them you can have success.

<u>38th</u> Question: Do you believe it is right for the woman to work outside the home? Why? Married women? Married women with children? Without children?

Answers: If they don't have any children, they can work out.

The mother has enough work with her children and she should take care of her home. A married woman ought to help her husband.

No. The women to start have the intention of working to help the husband but then after a while they take off and gad about with other men.

The man that gets married should have his wife at home and provide her with what she needs.

People don't have as much respect for women who work outside as they do for those who stay home.

With the understanding that she is to help her husband.

It is necessary in case her husband gets sick.

The baby should not be left alone. When the children are grown up, the problem is the women's. The first obligation of a married woman is her children.

No.

Always if the salary of the woman is necessary to the economy of the home.

The house is not taken care of the same and the wife is not waiting for her husband. (She should not leave the house because the only time she should work out is if she is working with her husband.) He is opposed under all circumstances.

She abandons the house and the children.

Yes, in case of necessity.

It all depends if it doesn't interfere with the education of the children. Any mother should not abandon her children nor leave them with the maid.

It is an advantage for both of them to work before they have any children. After they have children it is better for the woman to take care of the children to insure the tranquility of the home.

39th Question: What do you think of labor unions? Advantages for the workers? Disadvantages.

Answers: Social security, contribution, etc. We try to help the patron with the laborer, as soon as the Union starts the patron doesn't worry and lets the Union solve the problems of the laborers and their families. The Patron stays away from the Union. If a laborer needs a loan, the Union concedes it and tries to help all they can. Many Unions stir up hate.

Sometimes it is good but most of the time it interferes with the progress of the business -- fomenting strikes and lack of understanding. They have insurance, they make claims to the Patron, raise of salary. The Patron doesn't worry about the problems of the laborer -- without the Unions the Patron and the laborer would work better together with regulations.

Don't know. The husband doesn't belong to the Union (works on the train).

They're good. Before the poor had no defense, no one to back them up -- today they are protected. They have Unions that abuse -- they steal from the laborers and they go away with the money. The ones of the Government are good.

They are necessary because previously the laborers were abused. They have a limit to the hours worked and a fair minimum salary. Sometimes the laborers claims are unjust to business. Example -- you never miss the water till the well runs dry.

Some benefits for the Patron and for the laborers. They discuss problems without friction between Patron and laborer. Sometimes the laborers ask so much from the Patron that it hurts the Patron and then they close the factories because they can't agree.

If it weren't for the Unions, the Patron would have no respect for the laborers. If a Union member passes away, they help the widow with money

Help with money, for accidents, etc. Before there was nothing like this.

The Union has advantages because it makes settlements. They give employment and help unemployment.

They are good. Struggle for the well-being of the laborer. Before, nobody backed them up. Not any (disadvantages).

They are good. In case of necessity the Unions have a meeting and agree to use the funds in case of the sickness of a member. It doesn't have any disadvantages.

It is a defense organization. In union there is strength. Hospitalization, if you get sick, you get sick benefits. Not any (disadvantages).

It is good. By having a Union you can get more power through unity.

It's good. It gives benefits for sickness, unemployment and medicines for the children.

They are good and favor the worker. Favors the worker very much (advantages). There is no disadvantage.

COMMUNITY EDUCATION PROGRAM

Selection and Training of Leaders for Community Education Program*

1. Was he a man of the people? A man whose aim is to build self-confidence in the individual, must first believe in that individual. We wanted a man of quiet dignity, who spoke of his neighbor as a man like himself. We did not want a man who thought in the "we-they" pattern. We preferred him to live in the country and if he did, to do so by choice rather than by chance. However, where he lived was not as important as how he felt about himself and his fellow man.

2. Could he work in his own community? Contrary to what some might consider good personnel practice, we believe there were no advantages to be gained by uprooting a man from his environment and sending him to a strange community. If for some reason a worker possesses qualities which make it difficult for him to relate himself to his own neighborhood, they would undoubtedly be the same ones which would make it hard for him to work elsewhere. The man we hoped to find was one who enjoyed working with his own people and would be accepted by them.

* Material taken from A Program of Community Development, The Story of the Division of Community Education, San Juan, Puerto Rico, 1963.

3. Was he a happy man at home? We foresaw that the demands of the job were so great that as far as his family went, the only man who could serve with security was one who, being a good husband and father, had the full support of his wife and children.

4. What concerns had he shown for the problems of his community? We wanted a man who had seen himself related to the other members of his community and had been involved in programs of planni and action. However, we were most interested in the way he had been active.

5. What were his attitudes toward authoritarian behaviour? Toward the "poor man's" right to participate? Toward the concept that more land, more education, and more influence is the accepted criteria for leadership? The candidate who showed disdain or lack of faith in the people's ability and right to think for themselves could hardly be successful at the task of stimulating all people, regardless of their station to work together for the common welfare.

6. Was he a secure person? When challenged, did he rationalize, go on the defensive, or discuss the problem with intelligence and freedom? We needed a man of stability. The depth of our interviews, the walks we took with him and the observations we made as he entered new situations gave us some evaluation of his security. However, we had to depend upon the three months of training to bring out a greater measure of this concern.

7. Did he have a set of moral values which he used on all situations and all people indiscriminately? Or was he a person capable of analyzing beyond the single act into the deeper motivations of human behavior? We believed there was no place in our program for the superficial moralist.

8. What was his attitude toward the opinions of others? Was he a man of intolerant partisan views in such areas as politics, labor, or religion? If so he would not be our man, for we were looking for one who would permit self-expression in others; a man free to work with all.

9. Was he a static personality or did he possess the capacity for growth? This was a basic concern. If he had this potential for growth and was not threatened by critical evaluation, he could reach high levels.

Training is an interrelated part of a program which puts as much importance on selection and supervision as on training. The same district supervisor and central office staff member who began the initial hunt for the man and who sat in the selection interviews, will later be present at the training session and then continue with supervision in the field.....If a man has the basic personal equipment for the job, he will find that each moment of stress is a door to new understanding.

TRAINING OBJECTIVES

1. To help the individual come to a clear understanding and acceptance of the principles of democratic life in a community. This is the paramount objective and becomes the guiding star around which other aims revolve. He will get this understanding by study and through personal experience, not by being told.

2. To examine at depth in the Puerto Rican society the cultural patterns of behaviour that have a direct relationship to democratic community life. We will help him dig into the roots of the attitudes of the people. He must come to an analytical, balanced approach to the people and their culture, at the same time keeping the warmth and understanding which make him one of them.

3. To look into himself and his own conduct with enough freedom and flexibility to be able to put a mirror to his actions, reflecting for his scrutiny everything from the way he talks to his children to the way he approaches a farm laborer as compared with the way he presents himself at the home of the land owner. Only to the degree that he is able to do this can he be objective in looking at others and thus get to a deeper sense of democratic principles--principles which otherwise would remain at an entirely theoretical level.

4. To create in him, as a result of continuous self-examination, a positive desire for personal growth based on an honest understanding of himself, his convictions and his motivations in relation to the aims of his work.

5. To help him through his own reasoning, to understand his role as an educator. There are intensive discussions of what it means to help a person come to his own conclusions rather than to be led to conclusions pre-determined for him. The details of the process of reasoning and the process used in helping a person come to his own conclusions are thoroughly discussed. Extensive use is made of role playing. At this stage, however, we put much more emphasis on the validity of the educational process than on the methods and techniques of the educator. These he will discover as he begins to work in the community and during later in-service training. It is better that the discovery of techniques and methods is postponed, for then he will be free to examine them and accept or reject them in the light of his experience. A firm foundation of beliefs is essential to prevent a man from falling into formulas.

6. To help the group organizer understand the structure of leadership within a democratic framework, learning to recognize the elements present in his culture which can contribute positively to the development of sound leadership and to identify the forces at works against it.

Because of the nature of his past experiences in a culture where the roots of leadership are authoritarian, the trainee will need not only this initial orientation period, but years of practice and many in-service training periods before he can come at full grips with this problem. A few weeks of training with a democratic group discussion leader can easily be put aside as theoretical when confronted with the stress of on-the-job decisions. A considerable amount of role playing is undertaken, with the aim of helping him evaluate his own concepts. In this healthy learning device, he gets many new slants on himself.

He may discover, for example, that he is so irritated at having sinned as a do-all in his own community, that he acts now toward such a leader by ignoring him or by pounding on him hard. He may find he is so deeply moved by his new awareness of the evils of dependency that he wants to choke this knowledge down the throats of neighbors who do not seem to care.

7. To help the trainee understand the meaning of group discussion. Of all the subjects brought to training, this is perhaps the only one where all the members of the group become involved in a totally new endeavor. Previous experience in this area has not provided them with a background upon which to make sound conclusions.

The analysis of this subject is left purposely for the end of training. By then the group has achieved some measure of cohesion, and each man is convinced of the value of good group discussion techniques from the struggle each has experienced rather than from text-book theories. The trainees are then able to analyze the behaviour patterns they will gradually shed. They look back with new awareness at the man who has blocked the progress of the group by forcing acceptance of his ideas without discussion; at the man who, appearing to listen, is really waiting for a pause to plunge in himself; at the man who hears the truth but argues against it because it is more comfortable emotionally to misunderstand. And in these men, each sees himself. He can now laugh at his earlier compulsion to spotlight himself by a beautiful but meaningless speech. And he is amused when he remembers how angry he became when the group rejected one of his brilliant ideas.

In fact, it often happens, that by the end of training, both supervisor and group organizer have become so sensitive to democratic procedures in group discussion that during the initial field experience, his fear of acting undemocratically produces passivity when he could and should be more dynamic. But we think it better to take this risk, for it is easier to develop conscious techniques with a man who begins with this kind of sensitivity than with one who ignores the implications of autocratic action.

8. <u>To help the field worker organize a program of work, keep adequate records, and have a positive attitude toward supervision.</u> This is not introduced until the end of training and is presented then in such a way as to leave the worker free to contribute to its formation. When a plan of work is finally developed it is the result of group thinking. The records the group organizer agrees to keep are those which he and his fellow workers decide are essential to the task. The supervisory relationship is evolved from many periods of discussion in which he contributes his share of the thinking. In this way, the organization of his job comes about, not arbitrarily, but in a spirit of analysis and study. The careful planning by the group organizer of each day's activity; his weekly schedule based on a three month's program of work; his well-kept, functional records, many of them reading like diaries; the high level of supervision that prevails throughout the program, all attest to the fact that this approach is the most successful one.

In spite of the fact that this program requires time because of its special forms of community education and training of leaders, it shows (at the end of 1963) technical help given for the continuation of 71 aqueducts, 62 roads, community centers and school construction. Fifteen thousand families had benefited from the program in 162 communities, 159 projects had been carried out at a cost of $2,813.00.00 of which $1,440,000.00 came from government general funds, plus 117 projects, $1,898,000.00, state cost $939,000.00. Thirty-nine projects were in process. In the budget for 1964-65, $700,000.00 is appropriated for work in 70 communities.

An Experience in Training

Let us now describe a training "vignette" in an attempt to give you some idea of how it begins and how it is developed.

One morning, at the appointed hour, a dozen newly selected group organizers arrive at our central office in San Juan, coming from different parts of the island, their suitcases in their hands. We then go together to the place where we will live for the next eight weeks. It is a camp--Camp Yukiyu--located in a quiet, rural setting in the eastern hills. The district supervisor and central office staff members who will later work with the trainees, join the group for as much time as their heavy schedule permits.

When the trainees gather for the first session, they are asked to introduce themselves to each other. Each is asked to tell a little about his life. They they are asked to state in their own

words their idea of the aims of the program. One can see immediately a predominent assumption made by all, without exception. Each has now become a "student." Each is hoping to perform well so that he can "pass." His fellow trainee is a source of anxiety, lest he prove to be a better man. Each is striving to establish a direct relationship with the teacher.

However, they cannot quite harmonize this goal with the situation in which they find themselves. For example, the chairs are placed in a circle, with no prominent place for the teacher. The group is addressed in a friendly, relaxed way, and members are asked to come to an agreement as to what they think are the aims of the program. As each speaks, he is not able to determine whether he has said something that will "place him at the top of the class or flunk him." Furthermore, as the days go by, they come to realize it is a one-sided sort of affair. They are only asked about what <u>they</u> think. They have not been able to hear what the training officer thinks or to have her tell them what they ought to be thinking.

Some feel irritated, other desolate and others confident that the training officer will finally come through. Others decide to wait. But, as time passes and no answer seems forthcoming, there arrives a moment when the group feels at such a loss that they show their irritation openly. At this point, no matter what hour of the day, a break is called. It is the first moment in their short time of living together that they feel like a group, with a common cause--

the ineffectuality of the teacher. They talk about it together and when they return a spokesman raises the point formally and asks, "What is your definition? You are the only one who knows." But the training officer answers that she has no definition, none that she can pass on to them; that the important thing is for them to come to an agreement satisfactory to all. In some training groups this has been accepted, (sometimes with the inner conviction that they have an incompetent teacher, but one who must be appeased) and they have continued to struggle.

Not every group accepts, however, and on one occasion the turn of events became more dramatic. The group was small, only six, but up to this point all had shown a greater than usual anxiety to get the right answer from the teacher. They had allowed only two members of the group to answer most of the questions. One of these was a bright young man who kept boasting of his high academic preparation. He had become exceedingly patronizing toward the others, especially toward one man who had only a few years of schooling. This second man was older. He had been successful in his community as a political leader and he resented the younger man's effort as a valedictorian. They struggled continuously to be the first to answer a question. But, as the discussions progressed, both were confused that neither was proclaimed the better man.

When the inevitable moment came, the moment described in the paragraph above, it was the older man who had been chosen to confront

the training officer with the petition that they be told whether they were on the right path or not. He went into high praise of the learned teacher and said how much they appreciated her wisdom and judgment, but that the group was restless to hear the truth from her. The trainees then joined in and talked about their resentments and frustration. Finally, the training officer asked them, "Why do you think you have been allowed to suffer so?" The bright young man answered, "Because you wanted to get to know us better. You wanted to find out if we could really do this job." The training officer then replied, "Well, if that is so, this condition has gone on long enough. I will therefore end your suffering by giving you the definition." The two "leaders" jumped up from their chairs and shook hands in congratulation. They exclaimed that this was what they had told the group--to relax and answer questions in a way that would help the teacher see that they were intelligent and then wait for the moment when the teaching would really start.

Now they all sat, alert and expectant, notebooks in hand, ready to copy "the definition" from the blackboard. The training officer rose, took up a piece of chalk and wrote the following: "The aim of this program is to orient communities in projects where political leaders are helped to get the masses of the people to cooperate physically. The ultimate aim is to strengthen the good leaders, to identify those neighbors who do not work hard, and thus, assure the continuation forever of the present government."

Most faces fell as they read and reread what had been written. One quality we had clearly recognized in the selection of all these men was their non-sectarian view of life. Now they felt really trapped. The older man was the first to react. Did the "teacher" mean to write "masses"? Was she using word "political" advisedly? It took only an aggrieved look to make him feel apologetic. When another man asked if by "government" the teacher meant "political party," he was sternly asked, "Are you suggesting I might be wrong? This definition is very clear. More than that, it comes from me." All hastened to assure the training officer that they understood the definition perfectly. "Well then," she said, "I hope you will all memorize it. We will continue our discussinn tomorrow."

On the following morning it was obvious they had spent hours together the previous evening trying to come to terms with the paragraph. The session started by asking them if they had learned it by heart. The one member who had kept most silent from the beginning, burst out at this point with the remark that he could learn nothing he did not understand. And then, as though the dam was broken, they all talked at once. They said it was not so much the meaning of the words, but the implications, that disturbed them. Finally, the older man said quietly, "If I had known this was the aim of the program, I would never have joined it." The room was silent. "Neither would I join a program with such aims," the training officer said, just as quietly. Suddenly, the place was a bedlam.

What did she mean? Had she not stated clearly that these were the aims? How could she now criticize them? Was she perhaps playing games with them? When the room had quieted down and they were able to hear again, she said, "As long as you continue to accept the opinion of another without using your own heads; as long as you consider the act of thinking to be a suffering, then anyone can play games with you."

They were struck dumb for a minute, and then they understood. The rest of the morning was spent in a slow recounting of every step, from the first day up to that very moment. They were able to examine their actions, and remorselessly they held the mirror to their motivations. They had moments of hilarity as they reviewed their empty struggles as "good" students in competition with each other, but they had many more times of serious probing into the way they had behaved. At the end, one of them stated, "I thought I had wasted three days in getting nowhere. I have never spent my time better, even if at the moment I did not know it." The group agreed to try to reach a definition of its own. And then the discussion took on the pattern that usually takes shape in the group--the one which is now described below.

At the beginning the trainees describe their aims in the future work in terms of a dream; a dream in which they see the rural people someday enjoying the advantages of modern life through aided self-help programs. They talk of roads, aqueducts, schools, adult

evening classes, and they talk of their function as one to help the people put their backs to the task. During such a discussion they keep looking at the face of the training officer for a satisfied smile or nod, but they find only an interested, non-commital expression. They assume they are on the right path for they do not hear her disagree. The definition is then written on the blackboard: "The aim of the program is to help a community solve problems such as roads and aqueducts by working together and making the best use of the help they can get from their government." They are then asked, "Are you satisfied with this definition?" They nod in agreement, and at this stage they do not doubt that this is the "true definition." They have worked it out together. However, there is always one in the group who does not feel satisfied. He raises his hand and says timidly, "I thought our work was different." But he is blasted into silence by the irritation of the others. They feel he is slowing the progress of the discussion. He dares not pursue the point, for neither he nor his companions have yet learned what it means to be good participants in a discussion. The training officer's quiet probing into what he meant, leaves him at a point of panic lest he show himself dumber than the rest. He almost wishes he had not spoken in the first place.

The group then moves confidently to the next point: to illustrate how this aim would be accomplished by working it out through role playing. Before the role playing begins they are asked to agree

on the stage setting. A simple map of a community is drawn on the blackboard. A few lines sketch in the jeep trail, X marks are used to indicate homes along the trail. "How would you begin your work here on the first day you visit the community?" Somebody suggests to contact the leaders and the influential people since they are the ones who can get the others to cooperate. Another suggests meeting with those leaders after visiting each in their homes. Most agree and proceed to enumerate those they would consider important enough to visit and to bring together. The only disagreements come over such details as when they would call the meeting. By now they are eager to act out the home visits and the meeting and they take their roles willingly.

As before, there is always the non-conformist who bursts out in protest at what he thinks is wrong. No other neighbors will be visited in the community, he says. But again he is told by the others to relax, that those people will come later when the group organizer and the leader know what work they will be assigned. And since only a few days of training have gone by, such a man will only look at the training officer and finding no apparent support in her expression, he will prefer to keep quiet. The drama starts, with a trainee playing the role of the group organizer and the training officer playing the role of the leader being visited.

As she plays her ole, the training officer shows that she has no faith in people. Her responses reveal a high degree of

authoritarianism and her manner is subtly condescending. However, she is in favor of the new venture, and promises full cooperation. Needless to say, the tramplings upon the rights of people go unheard, for the trainee who is acting as the group organizer is mainly concerned with how well he is playing his own role. Meanwhile, the rest of the group is watching and nodding with approval at the expert way he is handling the leader--smooth praises to soften her up, easy acquiescence to avoid her wrath, bright maneuvering to get her to cooperate. Finally, the two agree on the problem they think is the most urgent, but they are careful to emphasize that this is only tentative. They must consult others.

The group feels satisfied with results thus far and suggests that the role playing move on to the next step. The leader and the group organizer now join hands to visit a number of carefully selected persons of influence. Next comes the meeting of these selected neighbors. After a few speeches full of praise for each other, they get down to business and enumerate the problems of the community. A decision is taken as to the most urgent of these, and a plan is made to solve it. And soon, it is clear that these men of influence have been chosen well by the leader and the group organizer. There is among them the man who has land to give; the man who can knock on any agency door; the one who can get the mayor to lend the bulldozer and, of course, those who have money and can be persuaded to donate some of it. All, of course, have their own

constellation of followers and thus all can contribute one thing in common: the hands of the people for the work that must be done.

The next step is the "community meeting" where the people are told what the project will be and the work that they will do. They are efficiently organized and then dismissed until word goes out that calls them to their duty. At this point in the drama most members of the training group feel certain the project will be a success. They cannot see how much "scientific" planning can fail. And they smile happily at the training officer, who at this point calmly calls for a break in the discussions. She feels the need of coffee, hot and black, but they assume it is for the well deserved rest they have earned. They cannot guess that the more placid the training officer looks the more she is bursting with the challenge of helping them bring vision to eyes that see not and hearing to ears that hear not.

After the coffee break, the group is asked to move into another aspect of the situation. A question is asked with great care to make it sound casual and relaxed. Would it not be worthwhile now, to take a more detailed look at all the people who live in the blackboard-drawn community? The group returns to the map. Each trainee is asked to think hard and to answer with sincerity some simple questions. Who are the people who live along these mountain trails? Is Juanito, the barefoot illiterate living on that remote hilltop, a human being? Does he have a head of his own?

Can he think? Would it be biologically possible for Juanito to think with the head of Don Jose, the leader--or vice versa? Is Juanito part of the community? Has his barefootedness anything to do with his capacity to reason? Does he have a right to express himself? Is he a "peon" good only for fixing the road or should he participate in the thinking and planning? How does it happen that this chance has been denied him thus far?

The same questions are asked about the people whom nobody takes seriously; the young man who helps his father farm, the widow with six children, and the squatter without land enough for a garden. Slowly, sometimes painfully, the group moves toward a positive answer for each question. It is necessary, in some groups, to dwell longer on an analysis of the difference between the capacity to think and the opportunity some have had to acquire knowledge through academic preparation. This is particularly true if there is in the group a person whose security comes from collecting credits the way squirrels do nuts; someone for whom an additional year of schooling places him just one step further above those he considers unworthy.

In the end, however, the process of reasoning provides the answers for the group. And an interesting observation is that although every trainee has been absorbed in the discussion, no one has yet seen any direct connection with the previous role-playing. Finally, the training officer announces she has a tough question for

the group. She goes to the blackboard and writes the following: "If you admit that Juanito, Dona Maria, Pedro and the others have a head of their own, if you agree that they too have a right to be included, how in the name of progress, have you shown such a lack of respect for these neighbors that you have ignored them completely in your little drama and fixed everything with the leaders alone?" In some groups, at this point, you can hear a pin drop. In other groups, the place explodes in protest. But whatever the reaction, a halt is called, a good long one, for each man needs to find a quiet corner when he can curl up, lick his wounds and ruminate.

By the following day, it is time to come together again--to relive the role playing and try to understand where and why they have gone off the track. After much analysis, they are at last able to face the basic question squarely. Is it possible to think of a program that would have as its goal the development of a faith and respect so deep in each person in the community that the natural conclusion would be that every citizen would consider it his right and responsibility to safeguard with his neighbor all matters concerning the common welfare? And in the minds and hearts of people, could it be that they would consider the upholding of this faith a goal as important as the solution of any physical problem? And could that be considered the true aim of community development even if no work projects were underway?

This is the time for clear thinking. The days pass and gradually the response reaches a level of sober agreement. Little by little each trainee begins to examine his earlier years. His analysis, shared aloud with the others, helps him look into those patterns within the culture which influenced him to act the way he did. He tells of how he served the people using methods which unconsciously denied them the right to think and speak. He sees that he was so concerned with material progress that he often sacrificed the beginnings of democratic growth. When this self-study is over, he is asked another landmark question: does he feel that the basic principles and objectives of the program are so important that he can leave the old ways and dedicate himself to this work forever?

And, at this point, no one can answer for him. He must speak for himself. If his case is serious, almost he alone can find the solution. If he comes out of it at peace with himself, there is little doubt that he will ever return to the old ways of thinking and acting. But if he holds back and cannot accept a world in which the Juanito's are equal participants in the democratic process; if he shares with Don Jose the belief that humanity will be saved through the intervention of the "natural" leaders, then he will prefer to think of these other concerns as "naive." Sometimes, when this happens, and he cannot be honest with himself, the doubting trainee squashes down his disagreement and thus postpones the inevitable day. Finally, however, he cannot stand the test and decides to leave, seeking

satisfaction in other ventures where he is free to think first of himself and his personal success.

Training, or a better word, "learning," never stops for anyone at any level. In fact when the initial weeks are over and he goes to the field, the group organizer may well feel that he is just beginning. He brings his concerns to supervisory conferences, to monthly district meetings and to frequent periods of in-service-training. In an atmosphere of mutual give and take, he is helped to grow into a man conscious of everything that is happening around him, alert to analyze all of it and to deal with it as a part of his learning. Instead of turning to ready-made formulas, he draws upon his own experience and the experience of his fellow workers, submitting every thought, word and deed to a careful examination under the spotlight of his basic principles. In this way he finds the strength to meet, not only the great physical task that lies ahead of him but also the intellectual, emotional and spiritual demands which will be even greater.