

UNCLASSIFIED

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D. C. 20523

ROCAP

PROJECT PAPER

INCAP INSTITUTIONAL STRENGTHENING PROJECT
(IISP)

AID/LAC/P-684

PROJECT NUMBER: 596-0169

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AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT DATA SHEET

1. TRANSACTION CODE
 A = Add
 C = Change
 D = Delete

Amendment Number _____

DOCUMENT CODE
 3

2. COUNTRY/ENTITY
 ROCAP/Guatemala

3. PROJECT NUMBER
 596-0169

4. BUREAU/OFFICE
 LAC

5. PROJECT TITLE (maximum 40 characters)
 INCAP Institutional Strengthening

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)
 MM DD YY
 06 30 94

7. ESTIMATED DATE OF OBLIGATION
 (Under "B" below, enter 1, 2, 3, or 4)

A. Initial FY 91 B. Quarter 3 C. Final FY 93

8. COSTS (\$000 OR EQUIVALENT \$1 =)

A. FUNDING SOURCE	FIRST FY 91			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total			1,790			4,400
(Grant)	()	()	(1,790)	()	()	(4,400)
(Loan)	()	()	()	()	()	()
Other						
U.S.						
Host Country Institution			2,134			2,134
Other Donor(s) USAIDS			0			2,000
TOTALS			3,924			8,534

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION PURPOSE	B. PRIMARY CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) HE	300B	300				1,390		2,390	
(2) ARDN						400		510	
(3) CS								1,500	
(4)									
TOTALS						1,790		4,400	

10. SECONDARY TECHNICAL CODES (maximum 5 codes of 3 positions each)
 510 520 540 550 560

11. SECONDARY PURPOSE CODE
 510

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code	R/H	DEL	NUTR	TECH
B. Amount	400	1,600	1,200	1,200

13. PROJECT PURPOSE (maximum 480 characters)

To strengthen INCAP so that it may be sustainable without further A.I.D. core financial support.

14. SCHEDULED EVALUATIONS

Interim MM YY MM YY Final MM YY
 02 93 06 94

15. SOURCE/ORIGIN OF GOODS AND SERVICES
 000 941 Local Other (Specify) CAC!

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment)

I certify that the methods of payment and audit plan are in compliance with the Payment Verification Policy.

for Richard F. Harper
 Gary Byllesby, Controller

17. APPROVED BY

Signature Irene Castilio
 Title Regional Director, ROCAP

Date Signed MM DD YY
 6 28 91

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
 MM DD YY

PROJECT AUTHORIZATION

Name of Country: Central America Regional (Guatemala, Panama, Honduras, Costa Rica, Belize, El Salvador, Nicaragua).

Name of Project: INCAP Institutional Strengthening Project.

Project Number: 596-0169.

1. Pursuant to Sections 103, 104, 105 and 106 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the INCAP Institutional Strengthening Project for Guatemala, Panama, Honduras, Costa Rica, Belize, El Salvador, and Nicaragua, involving planned obligations not to exceed Six Million Four Hundred Thousand United States Dollars (US\$ 6,400,000) in development assistance grant funds over a three year period from date of authorization subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local costs for the Project. The planned life of the Project is three years from the date of initial obligation.
2. The Project will strengthen INCAP so that it may be sustainable without further A.I.D. core financial support through at least the Year 2000. In order to achieve this Purpose, Project resources will be used to fund three types of institutional strengthening activities. IISP resources will strengthen INCAP strategic planning and management (SPM) by funding development of: (1) an effective SPM system; (2) an effective financial management system; and (3) an effective information management system. They will strengthen INCAP's technical and technology transfer capabilities by: (1) upgrading technical capabilities in six specific areas; (2) improving technology transfer capabilities; (3) upgrading INCAP laboratory facilities; and (4) expanding INCAP's Vitamin A program. The Project will strengthen INCAP's financial resource development (FRD) capacity by: (1) developing FRD plans and strategies; (2) improving staff marketing and promotion abilities; and (3) developing a strategy for establishment of an INCAP endowment fund. In addition to funding short-term technical assistance, training and limited commodities, the Project will provide sharply declining levels of salary, operational and administrative support to INCAP over the three year life of the Project.
3. The Project agreements which may be negotiated and executed by the officers to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate:

A. Source and Origin of Commodities, Nationality of Services

No local procurements are authorized except as A.I.D. may otherwise agree in writing, with the following exceptions: (1) Commodities of U.S. origin, which are otherwise eligible for financing, if the value of the transaction is estimated not to exceed \$100,000 exclusive of transportation costs; (2) Commodities of Geographic Code 899 origin, if the value of the transaction does not exceed \$5,000; (3) Commodities and services which are available only locally, including utilities, communications, rental costs, petroleum, oils and lubricants, newspapers, periodicals and books published locally, and other commodities, services and related expenses that, by their nature or as a practical matter, can only be acquired, performed, or incurred locally, and (4) Technical services when the value of the transaction is estimated not to exceed \$250,000. Ocean shipping financed by A.I.D. under the Grant shall be financed only on flag vessels of the United States, except as A.I.D. may otherwise agree in writing.

B. Conditions Precedent to Disbursement

Prior to the first disbursement under the Grant, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Grantee shall, except as the Parties to the Grant Agreement may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D.:

(1) An opinion of counsel acceptable to A.I.D. that the Agreement has been duly authorized and/or ratified by, and executed on behalf of, the Grantee, and that it constitutes a valid and legally binding obligation of the Grantee in accordance with all of its terms; and

(2) A statement of the name of the person holding or acting in the office of the Director of the Grantee, and of any additional representatives, together with a specimen signature of each person specified in such statement.

Prior to any subsequent disbursement under the Project, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Grantee shall, except as the Parties to the Grant Agreement may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D.:

(1) Evidence that INCAP has hired a full time institutional marketing and promotion professional not currently employed by the Institute.

C. Covenants

The Grantee covenants that it will:

(1) Prepare and present for review by AID, during the first year of the Project, an institutional plan for marketing/promotion and financial resource development activities covering the period of the Project;

(2) Prior to undertaking Project activities for each year, furnish to A.I.D. a consolidated workplan and budget for activities for that year. Work plans and budgets will include individual workplans for strengthening activities related to specific technical areas;

(3) Agree to consult with bilateral USAID Missions in each participating country as part of its annual planning process, and to keep USAIDs informed of country program activities as appropriate.

(4) Submit a consolidated report of Project activities and progress for A.I.D. approval, in a format acceptable to A.I.D., both semi-annually and annually, and

(5) Provide such goods and services for the Project during the period from June 28, 1991, to June 28, 1994, as may be agreed upon between the Grantee and A.I.D., in an amount not less than Two Million One Hundred and Thirty Four Thousand United States Dollars (US\$ 2,134,000) equivalent.



Irenemaree Castillo
Director
Regional Office for Central American Programs

6.28.91

Date

Project Paper

INCAP INSTITUTIONAL STRENGTHENING PROJECT
(IISP)
(596-0169)

UNCLASSIFIED

United States Agency for International Development
Regional Office for Central America and Panama
(ROCAP)

June 1991

Authorized: US\$ 4,400,000
(Plus Estimated Add-Ons: US\$ 2,000,000)

Date: June 1991

5

INCAP INSTITUTIONAL STRENGTHENING PROJECT

(IISP: 596-0169)

EXECUTIVE SUMMARY

The Project. The INCAP Institutional Strengthening Project (IISP) is a three year, US\$ 8.534 million activity (US contribution: \$4.4 million plus US\$ 2.0 million in add-ons) designed to strengthen the Institute of Nutrition of Central America and Panama (INCAP) so that it can sustain itself as a relevant, effective and viable institution without A.I.D. core financial support through at least the Year 2000.

Background. The health status of Central Americans has improved significantly in recent decades, but this trend stalled in the 1980s due to economic crisis and civil strife. Even as the region approaches an era of relative harmony, efforts to attain health levels required for sustainable economic growth are beset by declining donor and national public sector financing. Health and nutrition is a high but competing development priority, and making the best use of scarce resources for health and nutrition will be a major challenge until economic growth permits greater financial allocation to the sector. Effectively addressing this will require support from a wide variety of sources in the 1990s. INCAP--whose mission is to apply science and technology to help solve regional food and nutrition problems--is a key catalyst in this process throughout Central America.

A.I.D. has been a longtime supporter of INCAP, and in the last five years ROCAP has funded about 40% of INCAP's program through the Oral Rehydration Therapy (ORT) and Technical Support for Food Assistance (PROPAG) projects. The primary intent of these projects was to help INCAP provide technical services to Central America, however, not to address long-term sustainability issues. Changing A.I.D. priorities and current financial realities now dictate that INCAP concentrate on long-term sustainability prospects. This process, begun in 1988, is well under way. INCAP's mission and objectives were redefined last year, and articulated in a Strategic Plan for the 1990s. What is still required is that INCAP focus its service portfolio, diversify its client base, and reduce staff.

The Problem. With over 40 years experience, INCAP has both an excellent technical track record and a strong history of client support. INCAP clients and sponsors since 1979, for example, have included nine governments, 15 universities, six private corporations, six UN organizations, the World Bank, and 21 foundations, NGOs and parastatals. INCAP is faced, however, with two

major and related problems. The first is overreliance on AID funding. Now accounting for 34% of INCAP's total budget (down from 42% in 1988), AID core support will be phased out entirely over the next three years. INCAP's second major problem is how to complete its transformation into a relevant, effective and viable institution without further A.I.D. core funding. This will require attitudinal, administrative, structural and financial change. The major improvements which must be made over the next three years are related to: (1) strategic planning and management; (2) technical and technology transfer; and (3) financial resource development.

Project Approach. The purpose of IISP is "to strengthen INCAP so that it may be sustainable without further A.I.D. core financial support". The essence of the Project is to enable INCAP to link its technical program performance to its ability to secure and manage its financial resources. Because INCAP's mandate is to help Central American countries address the region's food, nutrition and health issues, and its target group is and will continue to be predominantly the public sector, it is unlikely ever to be self-sufficient in the purely commercial sense. IISP is not designed to transform INCAP into a fully commercialized operation, rather it will make INCAP less reliant on A.I.D.--and as self-supporting as possible consistent with the nature of its mandate--by helping INCAP develop the planning, management, technical and marketing skills required to diversify and stabilize its portfolio of funding sources.

Project Activities. The Project will strengthen INCAP strategic planning and management (SPM) capabilities by funding development of: (1) an effective SPM system; (2) an effective financial management system; and (3) an effective information management system. It will strengthen INCAP's technical and technology transfer capabilities by: (1) upgrading technical capabilities in five specific areas; (2) improving technology transfer capabilities; (3) upgrading INCAP laboratory facilities; and (4) expanding INCAP's Vitamin A program. The Project will strengthen INCAP financial resource development (FRD) capabilities by: (1) developing FRD plans and strategies; (2) improving staff marketing and promotion capabilities; and (3) developing a strategy for establishment of an INCAP endowment fund. In addition to funding short-term technical assistance, training and limited commodities, the Project will provide sharply declining levels of salary, operational and administrative support to INCAP over the three year life of Project.

Project Achievements. At the end of the Project, INCAP will be providing goods and services in response to public and private sector client needs through decentralized in-country staff. It will have a strategic planning system that can set goals and priorities; alter its strategy, program and budget to fit changing circumstances; and reconcile its substantive mission with its long-term financial capabilities and opportunities. INCAP will have the technical and technology transfer capacity to effectively meet demand for goods and services in key areas, and have the flexibility to adjust its service portfolio and staff resources to accommodate changes in demand. It will also have the financial resource development system required to assure its long-term viability, and financial streamflows will derive from a more diverse and stable funding portfolio. Finally, INCAP should also be receiving increased levels of non-core financing from A.I.D. for program- and project-specific activities.

Beneficiaries. The proximal beneficiaries of the Project will be government ministries, public health and nutrition program implementors, international donor agencies, PVOs, NGOs, and commercial collaborators who will benefit from the improved quality, timeliness and cost of INCAP-provided goods and services. The ultimate beneficiaries will be the Central Americans whose health and nutrition status will improve through better access to more effective and efficient services.

Recommendation. IISP was designed in full collaboration with INCAP, and in consultation with the region's bilateral USAIDs and AID/W. Target activities have been carefully analyzed and fully vetted with INCAP, and are consistent with Central American, AID/W, bilateral USAID and ROCAP priorities and strategies. Technical, economic, financial, social and environmental analyses indicate that the Project purpose is attainable in three years with the resources allotted; that levels of funding required to sustain INCAP as a relevant, effective and viable institution through the Year 2000 are reasonably assurable with Project inputs over the LOP; that the Project will have significant positive sectoral impact in the region; and that significant adverse social or environmental impact will not result from Project implementation. It is therefore recommended that IISP be authorized and obligated in FY 1991.

Project Paper

INCAP Institutional Strengthening Project
(IISP: 596-0169)

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Acronyms and Abbreviations

ABS	Annual Budget Submission (AID).
A.I.D.	United States Agency for International Development.
AID/W	Agency for International Development/Washington.
AOC	Advice of Charge (AID).
ARDN	Agriculture, Rural Development and Nutrition Appropriation (AID).
AWP	Annual Work Plan.
BEO	Bureau Environmental Officer (AID).
CA	Central America.
CACM	Central American Common Market.
CDSS	Country Development Strategy Statement (AID).
CIDA	Canadian International Development Agency.
CP	Congressional Presentation (AID).
CP	Condition Precedent (AID).
DA	Development Assistance Funds (AID).
EOP	End of Project (AID).
EOPS	End of Project Status (AID).
FAR	Federal Acquisition Regulations (USG).
FAO	UN Food and Agriculture Organization.
FMR	Financial Management Review.
FMS	Financial Management System (IISP).
FRD	Financial Resources Development (IISP).
FY	Fiscal Year.
GAA	Grant Agreement Amendment (AID).
GDO	General Development Office(r) (AID).
GTB	Grupo Technico Basico
HB	Handbook (AID).
HC	Host Country.
H/N	Health and Nutrition.
HQ	Headquarters.
ICAITI	Central American Institute for Research in Industrial Technology.
IDB	Inter-American Development Bank.
IEE	Initial Environmental Examination (AID).
IISP	INCAP Institutional Strengthening Project.
INCAP	Institute of Nutrition of Central America and Panama.
IPO	International Public Organization.
IQC	Indefinite Quantity Contract (AID).
LAC	Latin America/Caribbean Bureau (AID).
LAC/DR	Latin America/Caribbean Bureau Office of Development Resources.
LC	Local Currency.
LOP	Life of Project.
MCH	Maternal and Child Health.
MOH	Ministry of Health.
NGO	Non-governmental Organization.

Acronyms and Abbreviations
(concluded)

ORT	Oral Rehydration Therapy.
OYB	Operating Year Budget (AID).
PACD	Project Activity Completion Date (AID).
PAHO	Pan American Health Organization.
PASA	Participating Agency Service Agreement (USG).
PDO	Project Development Office(r)(AID).
PID	Project Identification Document (AID).
PIL	Project Implementation Letter (AID).
PIO	Project Implementation Order (AID).
PIO/C	Project Implementation Order/Commodities (AID)
PIO/T	Project Implementation Order/Technical (AID)
p-m	Person-month(s) (AID).
PP	Project Paper (AID).
PROPAG	Technical Support for Food Assistance Project (ROCAP).
PSC	Personal Services Contract (AID).
PVO	Private Voluntary Organization.
RCMO	Regional Commodity Management Officer (AID).
RCO	Regional Contracts Officer (AID).
RDS	Regional Development Support Project (ROCAP).
RDSS	Regional Development Strategy Statement (ROCAP).
ROCAP	Regional Office for Central America and Panama (AID).
SAR	Semi-Annual Report (AID).
SPM	Strategic Planning and Management (IISP).
SOW	Scope of Work.
TA	Technical Assistance.
TAC	Technical Advisory Committee (IISP).
UNDP	UN Development Programme.
UNICEF	UN Children's Fund.
U.S.	United States.
USDH	United States Direct Hire Employee (AID)
USG	United States Government.
USAID	United States Agency for International Development.
VITAL	Vitamin A Project (AID).

Project Paper

INCAP Institutional Strengthening Project
(596-0169)

1.0 PROJECT BACKGROUND AND SUMMARY DESCRIPTION

The Sectoral Context. Central American populations have achieved significant improvements in health status in recent decades. This trend stalled in the 1980s, however, due to economic crisis and civil strife. About 22% of children under age five are significantly below standard weight for age, infant mortality rates are about 70 per 1000 live births for 80% of the region's population, and large segments of the population face food insecurity. Even as the region approaches an era of relative harmony, efforts to attain desired sectoral goals are beset by growing populations and the declining financial resources of donors and the public sector.

Improving health and nutrition is a high if competing public sector priority among all regional governments, and making the best use of scarce resources for health and nutrition will be a major challenge until economic growth permits greater resource allocations to the health sector. Effectively addressing this problem will require assistance from a wide variety of sources in the 1990s if present gains are to be consolidated, and if public and private health systems are to equip themselves to meet future needs. A key catalyst in this process is the Institute of Nutrition of Central America and Panama (INCAP).

The Institute. INCAP is the oldest extant regional organization in Central America. Founded in 1949, its mission is to apply science and technology to help solve regional food and nutrition problems. INCAP is governed by an Executive Council which includes the Health Ministers of its seven member countries (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Belize), and is administered by the Pan American Health Organization (PAHO) at the request of its member countries. INCAP has its own independent legal standing, however, and is classified as neither a "governmental" nor "non-governmental" organization. Rather, the Institute has the legal standing of a Public International Organization (PIO) under local--but not U.S.--law, separate and apart from the governments and organizations (including PAHO) that form its Executive Council.

Since its inception, INCAP has enjoyed international renown for high quality research. The last decade, however, was a period of both regional upheaval and major internal change within the Institute. At the beginning of the 1980s, INCAP faced a severe internal crisis when PAHO rescinded international status for INCAP employees, and most of INCAP's senior staff opted to retain their international status by leaving the Institute. On its own initiative, INCAP responded by "Centralamericanizing" both its staff and its orientation towards regional service. It also redefined "success" as service to its member countries, increased its emphasis on transfer and application of health and nutritional research, and began to concentrate on finding practical solutions to the region's urgent sectoral problems.

Agency Support for INCAP. A.I.D. has been a longtime supporter of INCAP. Of special importance has been ROCAP funding of about 40% of INCAP's program through the ORT, Growth Monitoring and Education (ORT) and Technical Support for Food Assistance (PROPAG) projects. These two activities provided critical support to the rebuilding and reorientation of the Institute. Their primary intent, however, was to help INCAP provide technical services to Central America. ORT was the vanguard of AID-supported child survival action in Central America, and the PROPAG Project filled a void in systematic support for the design and management of food assistance projects in the region.

While the ORT and PROPAG projects strengthened INCAP's technical capability at a critical moment, their purpose was not to address long-term sustainability issues. Indeed, actions taken to achieve project objectives were not always consistent with long-term institutional sustainability needs. The projects both indirectly strengthened and also strained INCAP's administrative and managerial capacity, and to meet project requirements INCAP's staff size expanded significantly and now largely reflects those project needs. Current financial realities, however, dictate that INCAP begin reducing and refocusing its staff resources.

The Problem. INCAP is currently faced with two major problems. The first is overreliance on A.I.D. funding, which currently accounts for 34% of INCAP's total budget. This direct financial support will be phased out over the next three years. The second is how to complete INCAP's transformation into a relevant, effective and viable institution addressing the health and nutrition needs of Central Americans without predominant reliance on A.I.D. budgetary support. This transformation, already well in progress, will require further attitudinal, administrative, structural and financial changes. There are, specifically, three institutional weaknesses which must be strengthened in the next three years: (1) weak strategic planning and management capabilities; (2) key gaps in its technical capacity to fulfil its mission and (3) uncertain long-term prospects for financial sustainability due to inadequate and unstable funding.

Project Response. A strong track record, steady institutional progress, and solid demand from both public and private sector organizations make it clear that INCAP can continue to play a vital role in improving the health and nutritional status of Central Americans. Because of this, IISP will "go the extra mile" to support, consolidate and expand these achievements. A three year, US\$ 8.534 million activity (direct U.S. contribution: \$4.4 million plus

add-ons), IISP is designed to "strengthen INCAP so that it may be sustainable without further A.I.D. core financial support" as an effective, viable and relevant institution addressing the nutrition, health and food security needs of Central America. The Project will specifically strengthen INCAP's: (1) strategic planning and management; (2) technical and technology transfer; and (3) financial resource development capabilities. By the end of the Project, the financial, technical and managerial resources required for INCAP to sustain itself at least through the Year 2000 will be reasonably assured.

The essence of IISP is to enable INCAP to link its technical program performance to its ability to secure and manage its financial resources. INCAP's mandate is to help Central American countries identify and address the region's food, nutrition and health issues, and its target group is and will continue to be predominantly the public sector. INCAP is therefore unlikely ever to be self-sufficient in the purely commercial sense, and IISP is not designed to transform INCAP into a fully commercialized operation. Rather IISP will make it less reliant on A.I.D., and as self-supporting as possible consistent with the nature of its mandate, by diversifying and stabilizing INCAP's funding portfolio.

2.0 PROJECT RATIONALE

2.1 THE SECTORAL NEED

Regional Health and Nutrition Status. Significant improvements in the health status of Central Americans have been achieved in recent decades. Infant and child mortality rates have declined, life expectancy has increased (and even approximates developed country levels in Costa Rica and Panama), immunization coverage has improved, and the use of oral rehydration therapy (ORT) for endemic gastrointestinal infections has grown. Economic crisis and civil strife, however, stalled these trends in the 1980s. Today:

- Infant mortality rates are 70 per 1000 live births in northern tier countries where 80% of the population lives (Guatemala, Honduras, El Salvador and Nicaragua);

- 22% of children under age five are significantly below standard weight for age (ranging from about 5% in Costa Rica to 30% in Guatemala);

- Child malnutrition has reverted to levels similar to those of 25 years ago; (the number of malnourished children under age five has increased by 39% since the mid 1960s, growing most strongly in Guatemala and Panama);

- Caloric availability is inadequate in the northern countries (22% of the population in El Salvador, and 28% in Honduras, is seriously short of food); and

- A decline in the purchasing power of salaried workers (20% in Honduras and 36% in Guatemala from 1983-1986; 99% in Nicaragua from 1972-1989) has seriously affected food security.

The Sectoral Problem. Even as Central America approaches an era of relative harmony and economic recovery, efforts to attain health and nutrition goals are beset by growing populations and declining public sector financial resources and external donor support. As the countries turn to the task of renewing economic growth by pursuing world market opportunities, basic public health services will compete with other priority needs--especially for the infrastructure required to expand agricultural and industrial production.

The challenge facing health sector donors in Central America is therefore two-fold: (1) how to make the best use of scarce resources for health and nutrition while economies recover; and (2) how to support this recovery by improving labor productivity through improved health and nutrition. This problem will continue to require assistance from a variety of sources over the next decade if sectoral gains are to be consolidated and health systems are to equip themselves to meet future economic and financial realities. The primary source of health and nutrition technology in the region, and undoubtedly one of the best such institutions in the developing world, INCAP is poised to play a key role in this process.

2.2 THE INSTITUTE

INCAP's Mission and Support Base. An urgent need exists for new approaches to improving nutrition, child survival and food security in Central America. With over 40 years experience, INCAP is a key player in the effort to fulfill these needs. INCAP's stated mission is to collect, generate, transfer and apply the knowledge, technologies and technical resources needed to help solve problems in health and nutrition. The Institute has the greatest capacity of any other Central American organization for leadership in promoting and complementing national health and nutrition programs, and has historically enjoyed strong public and private support for its activities. From 1979-1990, for example, while its major sources of funding were ROCAP and PAHO, INCAP's portfolio also included an average of 51 projects per year funded by nine governments, 15 universities, six private corporations, six United Nations organizations, the World Bank, and 21 foundations, NGOs and parastatals. In 1990 alone, INCAP's funding derived from four governments, seven universities, eight NGOs and foundations, two private corporations and four UN organizations.

Historical Perspective. INCAP's historical approach to solving regional sectoral problems, however, has been opportunistic--responding ad hoc to the requests of funding agencies and/or member countries. It expanded to its present size and diversity of activities with no explicit strategy directing either its overall functions and objectives, or its means of financial support. In early years, INCAP largely focused its efforts on scientific research related to food and nutrition and had little interaction with health ministries or other institutions that implement health programs. Gradually, it branched out into training programs in public health, nutrition and food technology, and later into providing technical assistance to health ministries and collaborating with labor, agriculture, education and other sectors.

Crisis in the 1980's. INCAP was crippled in the early 1980s by a series of internal and external crises. Much of the Institute's senior staff abandoned it when their status as international public servants was withdrawn; INCAP's Director and Administrator were kidnapped by Guatemalan guerrillas; socioeconomic and political turmoil throughout Central America threatened the whole idea of regionalism; and both public and private financial support declined. Reeling from this concatenation of crises, INCAP struggled to maintain its viability and edge back from the brink of disaster.

Renaissance. Beginning in 1988, and especially since 1990 under the leadership of a strong new director, INCAP moved rapidly to address its problems. Since that time, with the support of member countries and external donors, INCAP has rebuilt its scientific and technical excellence while reorienting its emphasis from research to technology transfer. This transformation culminated in development of an INCAP Strategic Plan--both comprehensive and ambitious--for the 1990s ("Plan Estratégico Institucional 1991-2000"). This Plan articulates both a new mission mandate and a new focus that reflects INCAP's readiness to adapt to changing internal and external environments. Fundamental structural changes identified in this Strategic Plan include:

- (1) A shift of primary emphasis from research to technology transfer;
- (2) A shift from being predominantly project responsive, to a strategic focus built on a clear mission statement;
- (3) A shift from a headquarters-oriented to a decentralized operational mode, with the country-based capability to respond to specific local needs;
- (4) A shift from primarily a nutrition in health focus, to operational involvement across sectors relevant to food and nutrition; and
- (5) A broadening of its clientele, from an almost exclusive focus on the public sector to greater concentration on PVOs, NGOs, universities, the food industry, and private organizations.

INCAP's objective in undertaking these changes is to become an organization which not only offers professional excellence, but also one which is relevant, effective, and viable. INCAP defines its "relevance" in terms of disseminating and using research discoveries in areas of high priority, potential applicability and effective demand. An example of this is INCAP's pioneering applied research and pilot intervention to lower perinatal/neonatal and maternal mortality. These accomplishments have international importance because of their innovative nature, and local importance because they will serve as a model for a much larger and longer term effort to be supported by USAID/Guatemala. INCAP defines "effectiveness" as its capacity to perform its intended functions in a manner that serves clients' needs, and its "viability" as the financial and managerial capacity to sustain a level of staffing, facilities and activities sufficient to provide long-term stability.

Consolidating and Expanding Institutional Reform. INCAP must continue adapting to changing realities, and its basic problem in this respect is that its program is largely determined by two organizations: AID and PAHO. AID alone has provided about \$15 million to INCAP in the last five years, mainly through its ORT and PROPAG projects which will conclude in 1991. While institutional strengthening was one objective of these projects, and they have helped INCAP prove its relevance to the region and demonstrate its potential, neither project has ensured INCAP's ability to sustain itself.

Donor resources for regional health programs are expected to decline in the 1990s, which leaves INCAP facing the question of how to provide continued assistance to the region and sustain the advances made over the last decade. It is neither desirable nor possible for ROCAP to continue core support to INCAP for the indefinite future, nor is it healthy for INCAP to be so dependent on ROCAP funding. Neither is it certain that other donors will make up for the loss of core financial support provided by AID in the last decade, although INCAP's market outlook is very positive (Annex G). To complete INCAP's transformation into a relevant, effective and viable institution will require overcoming institutional weaknesses in three key areas: strategic planning and management capabilities, technical and technology transfer capabilities, and financial resource development capabilities.

The Project and the Institute. With the investments of the past decade, INCAP is now poised to play a more significant and critically needed technical support role in Central America. If AID funding were to cease with the ORT and PROPAG projects, INCAP would probably continue to exist; it is likely, however, that it would retrench to an ineffective size and capacity. Conversely, a well-focused institutional strengthening project can help INCAP complete the transition to a truly viable organization--financially, managerially and technically--by going the extra mile to consolidate and expand upon the structural improvements realized to date. Given Agency policy of helping regional institutions become more self-supporting, this is clearly the time to help INCAP help itself.

IISP is a three year, US\$ 8.534 million activity (US\$ 4.4 million in ROCAP funding plus US\$ 2.0 million in add-ons) designed to support INCAP's transformation into a relevant, viable and effective organization that can sustain itself without continued A.I.D. core financial support. It has been designed in collaboration with INCAP and the region's USAIDs; INCAP staff actively collaborated in project design; and bilateral USAID and LAC/DR representatives were consulted throughout the design process.

2.3 RELATIONSHIP TO CENTRAL AMERICAN PRIORITIES AND STRATEGIES

Improving health and nutrition remains a high public sector priority among all regional governments. The Ministers of Health of CA and Panama, for example, in a declaration issued in Belize in September 1990, affirmed that ensuring adequate food, nutrition and health is essential to the development process. INCAP is the premier regional health and nutrition institute, and a key player in this process. Since its founding, and especially in the last decade, CA governments have voted twice to increase contributions by 20% (in 1981 and 1990) and arrears to the Institute have declined substantially. New membership by Belize in 1990--and perhaps the Dominican Republic in 1991--will augment this source of income and member contributions should constitute an increasing percentage of the recurrent budget as INCAP staff size declines. Paid in full, however, total member contributions would still constitute only a fraction of INCAP's budget at present expenditure levels. And with the financial crises currently facing the isthmus, it is unrealistic to expect substantial increases in government contributions beyond current levels.

INCAP both supplements and complements national sectoral resources. The most important INCAP contributions to country programs in Central America are:

(1) Surveying, analyzing, monitoring and effectively packaging health and nutrition data to make it accessible and useful to policy makers and deliverers of health/nutrition-related social services;

(2) Providing services and skills not readily available or too costly for individual countries. (INCAP's world-class laboratories, for example, are used as regional diagnostic facilities for polio, measles and cholera and support extensive health/nutrition research and analysis);

(3) Developing, field testing and transferring new technologies that make better use of scarce resources in child survival, nutrition and food assistance programs; and

(4) Developing and disseminating technical materials, and conducting technical training (including formal curricula and continuing education for doctors).

INCAP enjoys strong regional support because its program is consistent with, supportive of, and responds to changing regional priorities and strategies in the health sector. The IISP Project, by helping INCAP improve its effectiveness, relevance and viability, is therefore both fully consistent with and directly supportive of Central American sectoral priorities and strategies.

2.4 RELATIONSHIP TO A.I.D. PRIORITIES AND STRATEGIES

2.4.1 Agency and Bureau Priorities and Strategies

IISP falls clearly within the scope of applicable A.I.D. policies, including Institutional Development (March 1983; HB 1) and Nutrition (May 1982; HB 1). It is not, however, directly within the scope of A.I.D. policy on support to public sector institutions (see Recurrent Costs, May 1982; HB 1); albeit to a much lesser degree following implementation, INCAP will continue to rely upon public sector funding rather than function as an entirely commercialized operation. This is appropriate for INCAP given the nature of its mandate, and is also consistent with A.I.D.'s Recurrent Costs policy paper which recognizes that "even in market-oriented economies there is a legitimate role for government provision of certain goods and services."

The Project will directly contribute to furtherance of A.I.D. sectoral objectives in the region by addressing key constraints to the long-term viability of the region's major health and nutrition institution. Child survival remains an A.I.D. priority and the Agency is taking steps to strengthen the nutritional aspects of child survival including breastfeeding and growth monitoring. Relatively few health projects, however, contain significant nutrition components. Apart from specific campaigns (e.g. Vitamin A fortification, breastfeeding), the nutritional aspects of health are rarely dealt with in a unified, mutually reinforcing way. INCAP, which specializes in nutrition-based technologies for improved health, can help fill that need.

LAC Bureau Priorities and Strategies. The Project is also fully consistent with LAC Bureau priorities and strategies for the 1990's, articulated in the Bureau's approved Economic Assistance Strategy for Central America 1991-2000 (the "LAC 2000 Strategy"). One of ten major principles guiding AID development assistance in CA during the 1990's is that "A.I.D will help CA governments and the private sector improve the effectiveness, efficiency, financing and local control of basic social services, thus increasing access to them and assuring their sustainability. Further improvements in the sector

will require increased national financing of public programs (in contrast to donor-funded service delivery), and broadening of private sector financing of quality health and other social service delivery where feasible." Two of the three objectives of the LAC 2000 Strategy are directly relevant to the Project: (1) achievement of broad-based, sustainable economic growth and (2) attainment of effective regional cooperation.

The first of these objectives recognizes, as a key constraint to economic growth and the widespread benefits that emanate therefrom, "inadequate and inefficient resource mobilization and allocation for social services and infrastructure." The ten point program to achieve broad-based, sustainable economic growth includes "increased access to basic primary health care, family planning, and nutrition services by the poor and improved efficiency of these delivery systems." Among other target activities in support of this, AID will "help governments explore ways to mobilize alternative sources of financing through cost recovery, cost sharing, privatization, insurance schemes, and, where appropriate, targeted tax schemes." INCAP can contribute by helping to increase the effectiveness and efficiency of health programs. There is, furthermore, increasing awareness of the need to be able to demonstrate the impact of AID economic programs on the poor, and INCAP's strengths in surveys and surveillance can be drawn on to identify and apply measures to track impacts on health and nutrition.

The second of these objectives recognizes, as a key constraint to effective regional cooperation, that: (1) key institutions are financially weak because of member countries' failures to meet their designated financial contributions to these institutions; (2) regional institutions are excessively dependent on external resources, especially from A.I.D., whose level cannot and should not be sustained; and (3) managerial and technical capabilities of some regional institutions are weak, partly but by no means entirely because of their financial problems. The four point program to achieve effective regional cooperation includes "strengthening regional institutions and reducing their dependence on A.I.D. resources." Specifically, the LAC 2000 Strategy (1) recognizes the important role of some regional institutions in addressing a range of regional concerns; (2) states that regional institutions will nonetheless assume greater responsibility for their own core budgets; (3) states that A.I.D. will assist these institutions to pursue other means of financing, including other donor, endowment and self-financing mechanism, in anticipation of the institutions becoming independent of U.S. aid; and (4) states that A.I.D. will use the institutions where possible for specific tasks consistent with the CA development agenda.

The four point program to achieve effective regional cooperation also includes 'strengthening or initiating regional programs in the social sectors'. Specifically, the LAC 2000 Strategy states that A.I.D. will:

"Take advantage of opportunities provided by the CA governments to implement programs in the social sectors within a regional framework. One such opportunity is provided by a new regional initiative, 'Health and Peace for Development and Democracy,' adopted in 1990 by the Ministers of Health of the CA countries. A.I.D. will support this

regional initiative, thus helping to consolidate progress made during the 1980s in expanding access to basic maternal-child health and nutrition services and child survival interventions. The emphasis will be on mechanisms to assure the sustainability of these programs."

2.4.2 Bilateral USAID Priorities and Strategies

The Bilateral Role of INCAP. The vast bulk of sectoral work in health and nutrition must be done at the country level. Several bilateral USAIDs in Central America have significant health/nutrition portfolios, but in addressing health sector problems both they and national governments face the continued prospect of weak economic growth and possibly lower sector funding levels. This threatens national health/nutrition objectives, especially in Guatemala, El Salvador, Honduras and Nicaragua. There is a real prospect, moreover, that gains realized by A.I.D.'s joint regional-bilateral efforts could be seriously eroded.

Supported by two current ROCAP-funded projects--ORT and PROPAG--INCAP supplements and complements bilateral Mission programs in four major ways:

(1) Improving the quality and timeliness of data collection and analysis, information systems, and other tools that facilitate the interpretation and use of health, food and nutrition data;

(2) Providing technical support and training in key areas of Mission investment, such as ORT, growth monitoring and health/nutrition education;

(3) Conducting innovative, state-of-the-art applied research to support the next generation of child survival interventions, such as those targeted at objectives beyond those which existing programs in ORT, Acute Respiratory Infections, and Expanded Immunization Programs can attain. These include effective interventions to lower perinatal/neonatal mortality (representing 50% of infant mortality in most developing countries); treatment of persistent diarrhea (which follows dehydration as the next leading cause of diarrhea-related deaths in young children); feeding and dietary management during critical periods (e.g., weaning, pregnancy and lactation); and interventions to address micronutrient deficiencies (especially Vitamin A and iodine); and

(4) Developing and implementing money-saving innovations that improve the effectiveness of feeding programs by reducing food losses, improving management and logistics, and improving targeting.

USAID-Specific Priorities and Strategies. In Costa Rica, Belize and Panama, AID involvement in health, population and nutrition activities is diminishing and/or is very limited. In Costa Rica, most A.I.D. resources in the declining assistance portfolio support restructuring of the public sector, and the only current health sector activity is in family planning. In Belize, the Mission will be phasing out of the health sector entirely except for the health care

financing issue; it will, however, continue to be involved in water and sanitation. And in Panama, the only USAID activity identified (Annex G) over the mid-term that might tap INCAP resources is a potential cholera activity. AID bilateral missions in El Salvador, Guatemala, Honduras and Nicaragua, conversely, have portfolios in health, population and nutrition that are expected to continue for at least the next few years.

USAID/El Salvador has a major project with the Health Ministry (APSISA) through fiscal year (FY) '93 to support local health system development. This project, whose primary emphasis is on child survival interventions at the community level, will soon be rebid and the potential exists for INCAP to assist the project as a collaborating organization. This activity is complemented by the PROSAMI Project, designed to help private voluntary organizations (PVOs) implement primary health and child survival programs. PROSAMI will require training and TA in nutrition and growth monitoring throughout the seven year life of the project, and family planning will continue to be a strong programmatic focus of the Mission.

USAID/Guatemala plans to maintain an active role in supporting family planning activities, including the Population, Family Planning and Safe Motherhood Project in FY'92 that will build on work undertaken with INCAP on maternal and neonatal mortality. The Mission has also recently reinitiated its child survival project with the Health Ministry, and is planning a significant new FY'91 activity in water and sanitation. Food policy issues are another important concern of the Mission for which INCAP services could be tapped.

Parenthetically, and because of INCAP's past experience with correspondence courses (e.g., on child malnutrition and nutrition during pregnancy), ROCAP intends to employ INCAP through a Handbook (HB) 3 grant to develop and implement a correspondence course on the recognition and treatment of pesticide intoxications under the Regional Environmental and Natural Resources Management (RENARM) Project. This activity, to be funded at an estimated level of US\$ 280,000, is being coordinated with FECCOPIA and the Guatemalan Social Security Institute.

The USAID/Honduras Health Sector II project emphasizes improving management capability of the MOH, especially as it relates to acute respiratory infections, diarrhea and nutrition. Although the Mission is clear about its own priorities in this area, developing effective actions in the latter case has been problematic to date. The Mission suggested during a Preliminary Market Analysis survey (Annex G) that INCAP and the MOH Department of Nutrition consider submitting a proposal to be funded from the Health Sector II Project, which has about US\$ 200,000 available for nutrition activities. Possible areas of collaboration include development of a national nutrition strategy, and institutional strengthening of the Department of Nutrition. Health and nutrition communications is also an area of Mission emphasis, with food assistance and family planning activities constituting important elements of the Mission's sectoral portfolio.

USAID/Nicaragua is in the process of developing a health/population/nutrition strategy and expects to define its future portfolio by the end of FY'91. As immediate measures, the Mission supports the provision of pharmaceuticals,

immunization activities and, most recently, family planning. A recently signed US\$ 14 million project will support PVOs, with about US\$ 6.0 million programmed for health sector activities. There also exists potential for INCAP to collaborate with PRAGMA on a food needs assessment, as well as other nutrition/MCH activities which may arise in the near to mid term.

Role of IISP in Bilateral Programs. A Preliminary Market Analysis (Annex G) found that while most INCAP clients have a positive perception of INCAP, most bilateral USAIDs do not. To take advantage of this potential market, INCAP needs to improve its capacity to provide A.I.D. bilateral missions with those goods and services within INCAP's mandate that are in demand. Institutional decentralization through establishment of country teams was a major first step in achieving this objective, and IISP will support better responsiveness to bilateral USAIDs in three ways. First, country teams will prepare their own annual work plans (AWPs) and discuss them with bilateral USAIDs (where appropriate) prior to finalizing and submitting them to INCAP headquarters. These country AWP's will be incorporated into INCAP's overall AWP prepared and submitted to ROCAP for approval during each year of Project implementation. Second, closer day-to-day coordination with bilateral USAID health/nutrition officers will be encouraged by INCAP headquarters as an outgrowth of its new Project-supported marketing and promotional program.

The third way in which IISP will support improved INCAP capacity to respond to bilateral (and AID/W) needs relates to the type of future relationship anticipated between INCAP and A.I.D. A key objective of IISP is to help INCAP develop its technical and managerial competencies to the point where it will be able to meet Agency programmatic and project-specific needs, as well as the needs of other donors. This will be effected in two ways. At the specific request of AID/W and Mission bilateral HPN Officers, the Project includes an "add-on" mechanism designed to enable bilateral USAIDs and AID/W to easily access INCAP for activities consistent with the Purpose of IISP during the life of Project (LOP) (Sct. 5.4). Also, the Project will strengthen INCAP's financial management capabilities, and improve INCAP's capacity to contract with and successfully fulfill A.I.D. contract requirements--either as a direct contractor or sub-contractor--in conformance with all applicable A.I.D. regulations after the end of Project (EOP)(see related discussion in Scts. 5.4 and 8.2).

2.4.3 ROCAP Priorities and Strategies

IISP is fully with consistent with ROCAP strategies and priorities. ROCAP has funded about 40% of INCAP's program through the ORT and PROPAG projects in recent years, and at the April 1990 ROCAP Action Plan review it was decided to help accelerate that process while cutting the total funds available for it. ROCAP's position--then and now--is that because of INCAP's significant institutional progress a three year effort to consolidate those achievements is not only warranted but essential to A.I.D. regional sectoral objectives.

The LAC 2000 Strategy, approved subsequent to ROCAP's last Action Plan review, included a four point program to achieve effective regional cooperation. A key part of this plan is "strengthening regional institutions and reducing their dependence on A.I.D. resources". The Strategy recognizes the important role of some regional institutions in addressing a range of regional concerns, and assigns ROCAP "the lead in implementing A.I.D.'s strategy to promote sustainable regional institutions that will no longer depend predominantly on A.I.D.'s resources".

Subsequent Bureau agreement on this issue (State 159235) was that "ROCAP would help the Central Americans begin a process of identifying those regional institutions that have valid roles to play in the region. A.I.D. support for those with no identified role to play in carrying out the USG objectives under the Economic Assistance Strategy for CA should be phased out from A.I.D. assistance. A.I.D.'s objective in its relation with each CA regional institution should be to purchase services rather than provide core support. Plans for a reasonable and definitive phasing out of core support will be prepared by ROCAP for each CA institution A.I.D. supports". INCAP is one institution that has played and will continue to play an important role in addressing regional sectoral issues. ROCAP's objective with INCAP, consistent with the LAC 2000 Strategy, is to help it pursue other means of financing, assume greater responsibility for its own core budget, and become financially independent of U.S. aid.

While ROCAP does not currently have an approved Regional Development Strategy Statement (RDSS), the AA/LAC agreed at the April 1991 CA Mission Director's Conference on Regional Initiatives that ROCAP's FY'91 program--including the IISP Project--should proceed as planned (State 159235). ROCAP's RDSS, to be finalized in FY'92, will include IISP as one of a limited number of ROCAP activities directly focused on strengthening select regional institutions and reducing their dependence on A.I.D. resources.

2.5 RELATIONSHIP TO PREVIOUS PROJECTS

AID Support of INCAP. AID/Washington, bilateral USAIDs and ROCAP have all supported INCAP efforts over the past decade to provide services ranging from state-of-the-art research, surveys and data analysis to training, technical assistance and information services. The bulk of this A.I.D. support has come from ROCAP.

ROCAP's first assistance to INCAP in the early 1980s was a three year US\$ 792,000 grant to improve the Institute's outreach to the region. By 1984, INCAP redefinition of its priorities was sufficiently developed that it sought a larger role in dealing with what it identified as critical gaps affecting the region's food and nutrition status. The Institute proposed to catalyze a regional child survival initiative in Central America, and again received support from ROCAP through the ORT, Growth Monitoring and Education Project (ORT). To help its member countries deal with a proliferation of food assistance programs, INCAP also proposed to provide systematic support for planning and managing food programs and ROCAP agreed to fund this effort through the Technical Support for Food Assistance Project (PROPAG).

These two projects, totalling US\$15 million over almost seven years, have dominated INCAP's activities and development in recent years. Through them, INCAP acquired and upgraded staff capability in subject matter and skill areas of considerable relevance. Moreover, INCAP again found itself pioneering research of international importance, but of an increasingly applied nature. INCAP succeeded in meeting the key objectives of the two projects. This included making important contributions to child survival and food assistance programs through: (1) carrying out problem-solving applied and operations research; (2) helping countries develop national policies, strategies and program norms; (3) disseminating highly relevant and useful technical and scientific information; and (4) developing, testing and supporting implementation of new technologies. There were, however, limitations to what INCAP was able to achieve. First, INCAP's "regional" approach with AID money during this period did not include all of the region's countries until the final year of the projects. Second, while certain technical capabilities were strengthened at least temporarily with project support, the need to maintain state-of-art technical competence in response to changing regional needs remained. And third, other critical sustainability issues went unaddressed, principally with respect to strategic direction and stable financing. It soon became clear that these limitations must be addressed if INCAP were to continue resolving the region's persistent food and nutrition problems. This need, supported by a LAC Bureau emphasis on making key regional institutions less reliant on Agency funding, led to development of IISP.

IISP differs from past A.I.D. assistance to INCAP: it focuses on helping INCAP consolidate the institutional gains made since 1988, and it will help INCAP capitalize on areas where it has a comparative advantage in the provision of health sector goods and services. In Guatemala, El Salvador, Honduras and Nicaragua, INCAP can have the greatest impact by providing services which these countries cannot provide for themselves except at higher cost and/or with unnecessary duplication of facilities.

ROCAP Experience with Other Comparable Projects. ROCAP has 25 years experience in implementing projects through regional institutions, and most of ROCAP's current portfolio works through such institutions. In recent years, ROCAP's institutional work has reflected an increasing concern with the same types of sustainability issues which underly IISP, and design of the Project has drawn upon lessons learned from A.I.D.-supported institution building projects both within and outside of ROCAP's direct experience.

One example of this is the Resources for Industrial Development Project (REDI), designed to help the Central American Institute for Research in Industrial Technology (ICAITI) respond to the needs of industry on a more demand-driven, cost recovery basis. The REDI Project offers useful lessons for IISP in terms of (1) developing an outward, client-oriented strategic planning focus; (2) improving management, especially fiscal management; and (3) strengthening institutional technical capabilities to better fit strategic objectives and client needs. Among EOP indicators of REDI, for example, are a menu of needed services, the ability to carry out market assessments, a long-term planning and strategy process, a marketing strategy, staff training focused on the demand-driven menu, improved cost control, and better contracting, financial and administrative systems and procedures.

There are fundamental differences between ICAITI and INCAP, however, and REDI is not a wholly appropriate model for IISP. ICAITI's products and services, for example, are highly suitable for private sector clients who can pay for as well as use those services. INCAP, conversely, produces goods and services that principally support public sector programs, and those who most directly benefit from INCAP services are seldom those who can or do directly pay for them. INCAP plays a valued role as an advocate, moreover, so that it must lead as well as respond to demand for improved health and nutrition.

3.0 PROJECT DESCRIPTION

The IISP Project is a three year, US\$ 8.534 million project (A.I.D. contribution: US\$ 4.4 million plus 2.0 million in add-ons) designed to strengthen INCAP so that it may be sustainable without further A.I.D. core financial support. The Project assumes that INCAP will be sustainable so long as its products and services are sufficiently valued by financial supporters and users of INCAP for them to continue supporting INCAP provision of additional products and services. The essence of IISP is therefore to enable INCAP to link its technical program performance to its ability to secure and manage its financial resources.

In the context of the Project, the term "sustainability" implies institutional relevance, effectiveness and viability. "Relevance" is defined here as INCAP's capacity to promote the dissemination and use of science-based information and technologies in areas of high potential applicability and demand; "effectiveness" is defined as INCAP's capacity to provide the products and services within the scope of its institutional mission; and "viability" --as opposed to "survivability"--is defined as INCAP's financial and managerial capacity to sustain a level of staffing, facilities and activities sufficient to provide for its long-term stability as a science-based institution. Inherent in the definition of INCAP "sustainability" is therefore that INCAP becomes sustainable as a relevant, effective and viable institution addressing the nutrition, child survival and food security needs of Central America.

Both independently and with ROCAP support, INCAP has taken important steps toward assuring its future sustainability. INCAP's Strategic Plan for 1991-2000 both identifies important institutional weaknesses, and outlines changes now under way to respond to its changing internal and external environments. IISP will help INCAP to put in place those institutional skills and systems required to ensure institutional sustainability. The Project specifically supports actions to address INCAP's three principal weaknesses: (1) strategic planning and management systems; (2) potential gaps in the Institute's technical and technology transfer skills required to achieve its mission; and (3) weak financial resource development systems. IISP will provide sharply declining levels of salary, operational and administrative support to INCAP over the three year LOP, while also providing short-term technical assistance, training and commodities.

3.1 PROJECT OBJECTIVES: GOAL, PURPOSE AND OUTPUTS

The Goal of IISP is "reduced infant and child mortality, and improved food security and nutritional status among nutritionally vulnerable populations in Central America and Panama". The Purpose of the Project is "to strengthen INCAP so that it may be sustainable without further A.I.D. core financial support".

IISP has three principal outputs (Annex B). The Strategic Planning and Management Component, funded at an A.I.D. non-add on level of US\$ 677,000, will design, institutionalize and implement: (1) an effective strategic planning and management (SPM) system, including annual operating plans and a system for monitoring and evaluation; (2) an effective financial management system (FMS) that can account for a diversified funding mix and provide timely, accurate information for decisions regarding resource allocation; and (3) an effective information management system (IMS) that meets scientific/technical as well as management and financial needs for organizing, accessing, analyzing and communicating information.

The Technology and Technology Transfer Component, funded at an A.I.D. non-add on level of US\$ 2,469,750, will upgrade INCAP's technical capabilities in a minimum of five specific areas: Vitamin A; food planning and economics and food and nutrition surveillance; operations research; applied anthropology; health/nutrition communications; and breastfeeding and infant feeding. It will also improve technology transfer capabilities through training, upgrade INCAP laboratory facilities to meet basic institutional needs, and expand INCAP's Vitamin A delivery program.

The Financial Resource Development Component, funded at an A.I.D. non-add on level of US\$ 602,500, will develop and institutionalize effective financial resource development (FRD) plans and strategies that increase revenue through program funding, constituent support (i.e., PAHO and member country contribution), and cost recovery including in sales of products and services. It will also improve staff FRD capabilities--in market/demand analysis, client-oriented needs assessment, promotion, communications, marketing, and project development/negotiation--through training and hiring of select new staff. Finally, feasibility analyses will be completed and strategies developed for establishment of an INCAP endowment fund.

3.2 DESCRIPTION OF PROJECT ACTIVITIES

3.2.1 Strategic Planning and Management Component

INCAP's activities have for the most part complemented other health and nutrition initiatives in the region, and decentralization of staff through establishment of country teams has been well received as a significant step to improve the relevance and responsiveness of INCAP's technical support. INCAP now has at least two representatives resident in each country (except Belize) operating out of PAHO's offices, whose function is primarily to carry out donor projects rather than to plan programs in accordance with individual country priorities. Decentralization is more than just moving staff out of headquarters, however, and program development, management responsibility and related administrative functions are being decentralized as well. In general, the overall directions laid out in INCAP's ten year plan represent a promising agenda, and IISP will support INCAP's move to a planning and management system that enables it to better respond to changes in the region's nutrition sector needs.

Planning. Planning is the first element of this system. In essence, "strategic planning" means being able to balance short- and long-term needs, objectives and opportunities. Evidence that strategic planning has been improved at INCAP will include annual plans that identify priorities and set objectives in light of the current financial picture, other internal factors and external conditions, and especially the needs and likely demand for INCAP products and services.

Strategic planning will also be applied to specific technical functions (e.g. operations research, communications, graduate/post graduate training) and specialties (e.g. breastfeeding/infant feeding, food planning, food and agricultural sciences). Setting priorities and objectives will follow an analysis of needs, opportunities and client interests, as well as corporate experience and staff capabilities. Action plans and strategies will then be developed, including appropriate marketing and promotion activities, cost analyses, and determination of monitoring and evaluation benchmarks. External reviews will be included through technical assistance and/or the Technical Advisory Committees. This process, carried out in specific areas, will model and contribute to overall institutional strategic planning. The planning system will also involve collecting and analyzing information to monitor and evaluate progress towards reaching strategic objectives. This system will build on--but must go beyond--project level monitoring. INCAP needs to be able to demonstrate how well it is achieving its mission, and also to obtain or generate the information required to adjust its course when progress appears inadequate.

INCAP has in place some of the building blocks for an effective strategic planning system, but making such a system work requires--above all--willing and capable staff. While significant financial inputs are not required to effect this, the Project will provide some short-term technical assistance in planning and related personnel and operational support to launch and maintain the system.

Fiscal Management. Fiscal management is the second element of a sound strategic planning and management system. INCAP financial administration functions well, but fiscal management goes beyond accountability questions and is the responsibility of the Director and other senior managers rather than that of the Administrator alone. Sound fiscal management for INCAP implies capabilities not currently well developed within the Institute. These include: (1) the ability to manage and account for a greater diversity of funding, including restricted and unrestricted funding; (2) the ability to provide accurate, timely information for decisions on resource allocation, including identification of actual costs and appropriate pricing and budgets; and (3) stewardship of resources through financial controls, cost controls and money management.

The Project will establish sound fiscal management at INCAP consistent with its needs. In the past year, with short-term technical assistance, INCAP has overhauled its financial administration system. It has also identified such essential needs as the ability to extract key data from its accounting system, link them with project monitoring data, and then produce timely, relevant

indicators for management decisions. The Project will support design, modification and installation of the needed financial management systems, beginning with a determination of the essential information that managers can and will use to make better decisions. The Project also will install contracting and financial control systems to enable INCAP to adhere to all applicable A.I.D. regulations required to implement activities with A.I.D. In addition to technical assistance, inputs provided by the Project will include training, commodities, and reimbursement for some operational costs.

Information Management. More effective Information Management Systems are needed not only for planning and management, but also for management, access and communication of INCAP surveys and technical data and for strengthening its financial resources. Because this is a cross-cutting need with inputs that cannot easily be separated by Project component, Information Management Systems is included as an element of the Strategic Planning and Management Component. Needs for new and upgraded information systems management include improving internal and external communications and linkages; organizing, accessing, and analyzing data; strengthening scientific and technical data bases; and rationalizing and improving use of existing hardware.

INCAP has laid out an ambitious, multiyear plan of action to improve its information management systems. The Project will support this plan with short-term technical assistance, training and commodities, as well as through reimbursement of some staff and operational costs.

3.2.2 Technical Capabilities and Technology Transfer Component

Technical and Technology Transfer Capabilities. The ability to deliver consistently high quality and relevant technical services is central to INCAP's mission and sustainability. With a current staff of 323 people as of June 1991--including 86 professional, 112 technical, 75 administrative and 50 service staff--INCAP is aware that it must arrive at an overall staff size that is consistent with its financial resources and institutional mandate. The process of staff "downsizing" is well under way. Largely because of the end of the ORT and PROPAG projects, and reduced financing under IISP, INCAP expects to reduce staff by an additional 30% in 1991. To some extent this represents a healthy downsizing consistent its strategic objectives. The market assessment carried out as part of project development, however, together with INCAP's strategic mission statement, suggest that key technical areas need to be continued and in a few cases strengthened. Accordingly, the Project will provide a diminishing level of support to maintain selected staff capabilities, at the same time that INCAP seeks the means to assure its long-term ability to maintain essential staff resources. In this respect, INCAP is in the process of determining what staff skills will be required and the specific positions that will be added or deleted for that purpose.

Maintaining INCAP's state-of-the-art scientific and technical capacity will be supported by establishing Technical Advisory Committees (TACs) composed of the institute's own personnel and national, regional and international scientific counterparts. The TACs will provide an external review of the quality and

relevance of INCAP's current activities and future plans. To date, INCAP has convened TACs to review its program and plans, but as part of the Project TACs will also be convened in selected specific technical areas. TAC members will be selected based on their ability to assess both the scientific/technical content of INCAP's program, and the adequacy of INCAP's technology transfer and outreach activities. With external assistance, INCAP will also review and revise its human resource development and administration systems, inventory its scientific and technical staff, determine where specific gaps lie, and design and conduct training programs and/or adjust its staffing as appropriate.

A cornerstone of INCAP's strategic plan is increased emphasis on technology transfer. The in-country INCAP teams are INCAP's front line for technology transfer, and evidence to date supports the promising potential of this strategy. These teams also represent key resources in identifying new INCAP clients and funding sources. The Project will provide declining support over the LOP for the country teams, while INCAP identifies alternative funding sources to maintain them. Country teams will analyze needs, identify clients/potential funding agents, carry out recommended activities, and plan and deliver (or facilitate delivery of) technical services to member countries.

To realize their potential, the country teams need to upgrade both their technical know-how and technology transfer skills. Maintaining and upgrading technical skills is a constant need for applied research organizations such as INCAP, and as such is essential for future sustainability. The Project will help INCAP maintain and upgrade its on-staff capabilities in: (1) food planning and economics; (2) food and nutrition surveillance; (3) operations research; (4) applied anthropology; (5) maternal and child health programs, especially breastfeeding and infant feeding; (6) communications; (7) human resources development; and (8) food and agricultural sciences. Determining and implementing specific activities in specific technical areas will be based on a strategic planning process that integrates technical, financial and planning and management considerations.

The Project will provide interim support through training and technical assistance to upgrade staff skills, and to help make the staff portfolio more responsive to projected needs. In addition to technical assistance provided directly by the Project, INCAP will maintain relationships established with AID centrally funded projects such as the Mother Care, Quality Assurance, Health Communications, Nutrition Communications, and Wellstart projects.

Laboratory Capabilities. INCAP's laboratory capabilities are highly valued both within and outside of Central America. INCAP serves as the regional reference laboratory for a range of infectious and immunizable diseases, including polio, shigella, measles and, most recently, cholera. Moreover, INCAP laboratory capabilities related to micronutrient analysis are unrivaled in the region. There is significant private sector demand for laboratory tests conducted by INCAP's Food Chemistry and Biochemistry Section, especially in Guatemala. As with staff capabilities, however, equipment needs to be constantly updated in order to maintain state-of-the-art expertise. The Project will therefore fund the replacement and addition of critically needed equipment in order to maintain INCAP's laboratory strength. Technical assistance to upgrade laboratory management and maintenance will be provided

as an initial step. During Project implementation, INCAP expects to increase the cost recovery of its laboratory services as one means to support its continuing capability in this area.

Vitamin A Programs. Vitamin A represents a special area of concern to Central America, INCAP and A.I.D., and the Project will therefore earmark US\$ 400,000 to support INCAP's Vitamin A-specific activities. With support for personnel and operations costs, and provision of some commodities, INCAP will implement a strategy to help member countries reduce Vitamin A deficiency through a mix of appropriate interventions. Special emphasis will be given to promoting the production and consumption of Vitamin A-rich foods. A review of existing information on the extent and nature of Vitamin A problems and programs in the region will initially be conducted, and INCAP's activities--building on this review--will be directed towards identifying and implementing solutions to those problems. This will include both improving the knowledge, attitudes and practices of health workers, and improving the diets of target populations. Laboratory analyses will complement these applied activities, e.g. by identifying the carotenoid content of local foods and supporting quality control for Vitamin A sugar fortification. Special studies will also be conducted, including an assessment of Vitamin A capsule distribution activities and a sugar consumption study.

In carrying out its activities, INCAP will collaborate closely with VITAL, the AID centrally funded Vitamin A project. VITAL staff are working with INCAP in developing the implementation plan for this Project activity, and will collaborate on evaluating the effectiveness of Vitamin A capsule distribution programs. Through these activities, INCAP's programmatic and laboratory capabilities in the area of Vitamin A will be significantly upgraded.

3.2.3 Financial Resource Development Component

Financial Overview. Whether INCAP can continue to attract sufficient financial resources to maintain itself as an effective, relevant and viable institution remains an open question. INCAP has made major progress in the last two years, however, in diversifying its funding portfolio and expanding financial revenues. This progress is clearly reflected in data on INCAP funding by source from 1988 to 1990, summarized in Table 3-1. Over this period, annual expenditures rose from US\$ 5.5 to US\$ 6.3 million. Of this, PAHO's contributions climbed both in absolute terms (by 42%) and as a percent of total funding (from 18 to 21%). Member country contributions, while declining slightly as a percentage of total revenues, also increased in absolute terms (by 8%); member states voted in 1981 and again in 1990 to increase their annual quotas to INCAP by 20%, moreover, and member payments are increasingly current. The most significant trend during the 1988-1990 period, however, is INCAP's increasing success in attracting non-AID funding. Non-AID revenue increased in absolute terms by 45%, and as a percent of INCAP funding from 28 to 35%. AID's contribution, conversely, declined both in absolute terms (by 9%) and as a percent of INCAP funding (from 42 to 34%). For the first time in recent history, moreover, in 1990 revenue from non-AID projects exceeded that from A.I.D. This trend is auspicious, and current indications are that INCAP can continue to diversify its funding portfolio.

Table 3.1

Change in INCAP Funding by Source 1988-1990
(US\$)

Source	Ordinary funds				"Fiduciary funds"				Total			
	Amount		Percent		Amount		Percent		Amount		Percent	
	1988	1990	1988	1990	1988	1990	1988	1990	1988	1990	1988	1990
<u>PAHO</u>	942,000	1,341,793	58.9	68.6	47,000	0	1.2	0	989,000	1,341,793	18.0	21.3
<u>Members</u>	315,000	339,111	19.7	17.3					315,000	339,111	5.7	5.4
<u>Non-AID Projects</u>					1,537,000	2,228,101	39.5	51.3	1,537,000	2,228,101	28.0	35.4
<u>Goods/Services</u>	342,000	274,009	21.4	14.0					342,000	274,009	6.2	4.3
<u>Subtotal</u>	<u>1,599,000</u>	<u>1,954,913</u>	<u>100.0</u>	<u>100.0</u>	<u>1,584,000</u>	<u>2,228,101</u>	<u>40.7</u>	<u>51.3</u>	<u>3,183,000</u>	<u>4,183,014</u>	<u>57.9</u>	<u>66.4</u>
<hr/>												
<u>A.I.D.</u>												
<u>ORT</u>					1,335,000	1,281,307	34.3	29.5	1,335,000	1,281,307	24.3	20.4
<u>PROPAG</u>					821,000	750,591	21.1	17.3	821,000	750,591	14.9	11.9
<u>Other</u>					153,000	80,333	3.9	1.9	153,000	80,333	2.8	1.3
<u>Subtotal</u>					<u>2,309,000</u>	<u>2,112,231</u>	<u>59.3</u>	<u>48.7</u>	<u>2,309,000</u>	<u>2,112,231</u>	<u>42.0</u>	<u>33.6</u>
<hr/>												
<u>TOTAL:</u>	<u>1,599,000</u>	<u>1,954,913</u>	<u>100.0</u>	<u>100.0</u>	<u>3,893,000</u>	<u>4,340,332</u>	<u>100.0</u>	<u>100.0</u>	<u>5,492,000</u>	<u>6,295,245</u>	<u>100.0</u>	<u>100.0</u>

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INCAP's mandate as essentially a public service organization, however, limits the Institute's scope for financial sustainability. Because of its mandate and relationships to member countries, INCAP cannot simply seek financial survival by responding to market forces and reshaping itself into a pay-for-service commercial organization. Instead, it must identify sources of funding compatible with achieving its mission. This task is complicated by the fact that those who most benefit from INCAP's services are those who can least afford to pay for them. Institutional sustainability therefore requires INCAP to be responsive to the interests of both those who pay and those who benefit, and at the same time to induce donors to support activities benefiting those who cannot pay. A Financial Sustainability Analysis (Annex E.6) found that in the first year of IISP, even at projected modest levels of overall INCAP program growth, INCAP should be able to achieve the relatively small increase (about 5%) in non-AID funding required to meet 1992 revenue needs. For the second and third years of the Project, however, the Analysis found that as AID support steadily declines INCAP will be severely pressed to accelerate the pace of securing non-AID project funding.

Financial Planning and Staff Upgrading. With Project support, INCAP will develop and begin implementing a plan for financial self-reliance. This will involve developing the systems and capabilities required to increase revenue from three basic sources: (1) program and project funds from international agencies, foundations, universities, etc.; (2) constituent support, i.e., member countries and PAHO; and (3) cost recovery mechanisms, including sale of technical products and services. Project-supported activities will center on developing action plans and building staff capabilities in financial resource development. The latter includes the ability to analyze potential markets (and relate such analyses to the needs assessment underlying its strategic planning); to undertake promotional, public relations and marketing activities aimed at attracting and keeping clients; to develop projects and proposals; and to effectively communicate with all of its stakeholders. Since INCAP does not have staff capabilities in many of these areas, the Project will support new staff with these skills as well as training, short-term TA, materials production and other operating costs.

Endowment Fund Assessment. INCAP began the process of exploring endowment fund alternatives after an Executive Council determination--in September 1990--that an endowment could be of real strategic importance to INCAP's long-term financial sustainability by providing unrestricted funds now virtually absent from INCAP's funding flows.

IISP will help INCAP analyze the feasibility of establishing an endowment fund. Specifically, a threshold analysis will be conducted that will: (1) determine likely sources and amounts of endowment funding; (2) determine endowment uses within the context of INCAP's broader plan of financial planning and self-reliance; and (3) determine the most cost effective means for structure, governance and administration of the endowment. Determining endowment uses will specifically consider what limitations should be placed upon distribution and application of endowment proceeds, e.g., whether to relate endowment use to specific core staff positions, to gaps in donor funding for program activities deemed essential to INCAP's sustainability, or to other predictable needs for unrestricted or reserve funds.

This threshold endowment analysis should be concluded and brought to the Executive Council no later than its 1992 annual meeting. If the Executive Council authorizes INCAP to proceed with establishing an endowment, based on the options presented, an implementation plan for creating the endowment should be carried out within six months of Year 2 of the Project concurrent with the capitalization effort.

The endowment analysis will be conducted under the supervision of the INCAP Director, and will draw in large measure upon the technical assistance and professional capacity made available through the Project for financial planning generally. Additional technical assistance and professional services, anticipated to be available from within the region, will be required for analysis of suitable mechanisms for the structure and operation of the endowment. Because of the special character of endowment funding, such supplemental technical and professional assistance will also be required in the second year of the Project in the event that INCAP's Executive Council authorizes INCAP to proceed. While specialized assistance may be required for establishing an endowment, it is not anticipated that INCAP's efforts to secure endowment capital will require organizational capacity beyond that intended for its resource development activities generally.

It is not assumed that the endowment option will go forward only upon agreement by A.I.D. to contribute to its capitalization. The endowment analysis will explore whether A.I.D. endowment funding might be possible, consistent with firm A.I.D. policy proscriptions against use of DA funds for dollar endowments. Among the alternative endowment sources to be considered will be the existing constituency (member countries and PAHO), as well as potentially new funding sources known to consider endowment funding an acceptable approach to institutional sustainability. This may include the Inter-American Development Bank and the World Bank in conjunction with their "Social Dimensions of Adjustment Programs" now in development for the region.

The analysis will also include such matters as (1) possible access to debt-swap proceeds and blocked corporate assets for endowment funding purposes; and (2) arrangements for region-wide financial instruments such as those currently under consideration for natural resource management financing. Since local currency endowments are vulnerable to inflation and monetization policies, the endowment strategy analysis will specifically explore whether PAHO's practice of providing INCAP with dollar credits against local currencies (e.g., as with member contributions) can be made applicable to endowment contributions in local currencies.

The issue of the extent to which A.I.D. should support establishment of an INCAP endowment fund is discussed further in Section 8.1. With or without a fund, the future relationship of INCAP with A.I.D. will involve HB 3 grants and non-competitive contracts for specific research, education or technical support activities. If and when recent interpretation of A.I.D. procurement regulations permit (see sections 5.4 and 8.2), this relationship will also involve contracts awarded competitively for provision of goods and services.

3.3 END OF PROJECT STATUS

The purpose of IISP is to strengthen INCAP so that it may be sustainable without further A.I.D. core financial support, and explicit in the concept of "sustainability" is a future temporal benchmark. Since it is impossible to "objectively verify" any future status, the end of project status (EOPS) of IISP is "Reasonable assurance that adequate financial, technical and managerial resources exist for INCAP sustainability through at least the Year 2000".

Progress towards attainment of this objective will be monitored during Project implementation through a series of measures (see Sect. 7.0), and verification that the EOPS has been attained will occur through an EOP evaluation with three specific objectives. First, that evaluation will project INCAP financial streamflows through the Year 2000 based on the previous three year's financial data and an updated market survey. Second, it will evaluate the adequacy of INCAP's planning and managerial strength by (1) evaluating planning and managerial changes effected since 1988 and (2) evaluating the ability of those systems to respond to projected future needs through the Year 2000. Finally, the EOP evaluation will assess INCAP's technical and technology transfer strengths, including computer and laboratory facilities, in the context of the projected technical needs required to service INCAP's future financial suppliers.

Goods and Services. At the end of the Project, INCAP provision of goods and services will include: (1) support to donors and the public sector in policy analysis, policy dialogue and program development; (2) improved public sector food and nutrition programs; (3) high quality, timely and useful sectoral data; (4) improved information systems for both the public and private sector; (5) improved technologies for private sector organizations; and (6) state-of-the-art applied research. Improved marketing strategies for these goods and services are already being developed, and will be further refined during Project implementation. The core of this new, more market-oriented approach is sharpened response to client needs through strengthening of in-country staff and support for decentralization to the country level.

Strategic Planning and Management Capacity. At the EOP, INCAP will have in place a strategic planning and management system that enables it to (1) set institutional goals and priorities; (2) modify its staff and facilities, and alter its strategy, program and budget, to fit changing circumstances; and (3) reconcile its substantive mission with its long-term financial capabilities and opportunities. INCAP's strategic planning systems will factor into the decision-making process market, financial, technical and managerial considerations, and the Institute will have the capacity to effectively manage its human and financial resources and project portfolio.

Technical and Technology Transfer Capacity. At the EOP, INCAP will have the scientific and technical capacity to meet demand for goods and services, especially related to technology transfer in Vitamin A; food planning, economics and surveillance; operations research; applied anthropology; health/nutrition communications; and breastfeeding/infant feeding. INCAP will have better defined and focused its role in the food and agricultural sciences

and graduate/post-graduate education, and it will also--through decreased use of "core" contracts for staff services and increased use of limited appointment and short-term contracting arrangements--have the flexibility to adjust its service portfolio and scientific and technical staff to accommodate changes in demand for goods and services.

Financial Resources. At the EOP, INCAP will have a financial resource development system that improves the Institute's long-term financial viability, and INCAP funding will derive from a more diverse and stable funding portfolio. This should include: (1) increased member country contributions; (2) increased donor support and service contracts to work with national public and private organizations; (3) increased commercial/private sector revenues from the provision of goods and services; (4) continued direct (but non-A.I.D.) donor support; and possibly (5) revenue from an endowment fund. Although without continued A.I.D. core financial support, INCAP should also be receiving increased A.I.D. financing for program- and project-specific activities.

4.0 COST ESTIMATES AND FINANCIAL PLAN

IISP is a three year, US\$ 8.534 million activity. US\$ 4.4 million constitutes the direct U.S. contribution, in addition to which US\$ 2.0 million is anticipated in AID/W, Mission and ROCAP add-ons. The IISP budget reflects the Project's intent to help INCAP continue providing relevant and effective technical services while concurrently undertaking the institutional reforms necessary to ensure its long-term viability.

4.1 PROJECT COST ESTIMATES

Summary Project cost estimates are presented in in Table 4-1, summary cost estimates and a financial plan in Table 4-2, and a projection of expenditures by fiscal year in Table 4-3.

Cost Estimation. Direct U.S. (i.e. non-add on) Project costs were estimated taking into account two factors. First was an estimate of INCAP financial streamflows through the year 2000 under "mimimal" and "optimistic" funding scenarios. The Project's Financial Sustainability Analysis (Annex E.6) employed this approach to determine the "design case" range for INCAP required for the Institute to be viable, effective and relevant through the Year 2000, and therefore the "floor" for Project inputs requiring allocation to technical assistance, training, commodities and "core" (i.e., long-term TA/salary, operations and administration) costs. The second factor employed in cost allocation was a determination of the most effective means of funding the required technical assistance, training and commodities while at the same time ensuring that INCAP "core" support was sufficient to ensure viability over the LOP. In both of these contexts, it is important to note that a the Sustainability Analysis found that: "even before looking at the prospects for INCAP to sustain itself after the IISP Project, it must be concluded that INCAP will be stretched to the limit of its resource development capacity during IISP simply to keep pace with the dimished rate of AID funding over the coming three years" (see Section 9.1)

The add-on budget of US\$ 2.0 million was estimated as described in Sct. 5.4, based on: (1) recurrent discussions with USAIDs likely to access INCAP in the next three years and the nature of those Mission needs; (2) recurrent discussions with AID/W, and the nature of AID/W sectoral program needs; and (3) an assessment of the needs of other ROCAP projects for INCAP services in the next three years (see Annex E.5).

Budget Allocation. Of The total direct US contribution of US\$ 4.4 million, US\$ 457,000 or 10.4% will be expended on short-term technical assistance; US\$ 288,500 or 6.6% on short-term training; and US\$ 499,000 or 11.3% on commodities. US\$ 90,000 or 2.0% is budgeted for evaluations and US\$ 60,000 or 1.4% for audits. Most US Project resources--US\$ 2,765,537 or 62.8%--are allocated to continue funding of certain INCAP "core" costs at a rapidly declining level over the LOP. These include long-term TA/salary costs (US\$ 1,698,250 or 39%); operations costs (US\$ 656,500 or 14.9%), and administrative costs (US\$ 410,787 or 9.3%).

Expenditures by Year. Project expenditures by Project year exhibit considerable front loading (Table 4-1), declining from 57.4% in Year 1 to 33.1% in Year 2 to 15.5% in Year 3. Assuming a total INCAP budget of US\$ 8.5 million in each year of the LOP (see Annex E.6), the US contribution to "core" INCAP costs declines from 16.0% in Year 1 to 11.5% in Year 2 to 5.0% in Year 3.

"Core" Cost Funding. All Project budget resources allocated to supporting INCAP "core" costs are critical to ensuring INCAP functional viability over the LOP while structural institutional changes are taking place. The long-term TA/staff salaries budget is specifically consistent with the need to strengthen key staff areas at the same time that IISP supports a major reduction in overall staff (e.g., an estimated 30% staff reduction by the end of CY 1991 alone). Specific long-term TA/Staff positions to be funded are as follows. For the Strategic Planning and Management Component: (1) a Strategic Planning and Evaluation Specialist; (2) a Programming/Financial Administration Management Specialist (Year 1 only); and (3) an Information Systems Specialist, at a total Component three year cost of US\$ 142,500. For the Technology and Technology Transfer Component: (1) the existing seven GTB coordinators and seven GTB technicians; (2) nine headquarters professionals (a Micronutrient Specialist; Operations Research Specialist; Agricultural Economist; Food Planning Specialist; Nutrition Surveillance Specialist; Maternal Child Health/Breastfeeding Specialist; Communications Specialist; Applied Anthropologist; and Human Resources Development Specialist); and (3) three laboratory technicians, at a total Component three year cost of US\$ 1,593,250. For the Financial Resources Development Component: two new Marketing/Promotion Specialists at a total Component three year cost of US\$ 132,500.

4.2 METHODS OF IMPLEMENTATION AND FINANCING

Methods of implementation and financing are summarized in Table 4-4. The method of financing for A.I.D. funds expended on core costs, technical assistance, training, commodities and evaluations will be direct payment. The method of financing for audits will be host country reimbursement.

4.3 RECIPIENT CONTRIBUTION

INCAP's contribution to the Project will consist of the local currency equivalent of US\$ 2.134 million or 25% of total Project costs. This sum will include expenditures for the salaries of INCAP staff personnel (US\$ 1,707,000), operations (US\$ 269,000), equipment (US\$ 102,000) and training (US\$ 56,000). In-kind contributions in addition to this are also anticipated. A summary of the direct estimated INCAP contribution by fiscal year is presented in Table 4-5.

4.4 OBLIGATION SCHEDULE

Neither the Project nor the Congressional Vitamin A earmark which constitutes an integral part of the Project were included in ROCAP's FY'91 or FY'92 Annual Budget Submission (ABS), nor in ROCAP's FY'91 Congressional Presentation (CP). Vitamin A was included in the FY'92 CP at a level of US\$ 350,000, and the rest of the Project at a level of US\$ 4,000,000. The FY'91 Operating Year Budget (OYB) control level for Vitamin A was increased by US\$ 50,000 in April 1991 (State 132731), and now constitutes US\$ 400,000 of ROCAP's approved FY'91 OYB of US\$ 17,357,000.

An illustrative Project obligation schedule is presented in Table 4-6. At the time of Project design, ROCAP anticipated obligating US\$ 1,790,000 for the Project in FY'91; US\$ 2,500,000 in FY'92; and US\$ 110,000 in FY'93. Of the US\$ 4.4 million direct contribution, US\$ 2.39 million will be obligated from the Health (HE) appropriation, US\$ 0.51 million from the Agriculture, Rural Development and Nutrition (ARDN) appropriation, and US\$ 1.50 million from the Child Survival appropriateion.

4.5 RECURRENT COSTS

IISP funding has only limited recurrent cost implications for INCAP after the EOP. US\$ 304,000 worth of computer equipment and US\$ 195,000 of laboratory equipment will be procured that will require maintenance and expenditure for related consumables after IISP is completed. These facilities are primarily replacement items for existing INCAP commodities, however, and INCAP would therefore incur the same or perhaps greater recurrent costs (given higher maintenance costs for older equipment) without the Project. In addition, IISP will fund US\$ 188,750 in salary costs for three new staff personnel (one in planning and two in marketing/promotion) critical to Project success. INCAP is expected to reduce overall staff by 30% in the next six months alone, however, due to ORT and PROPAG termination and in response to IISP leverage. Given these factors, and that IISP will help INCAP reduce costs at all levels, it is therefore likely that recurrent costs incurred by INCAP after the EOP would be greater without the IISP Project than with it.

Table 4-1

Summary Project Cost Estimates by Project Year

(US Contribution)

Element	Cost Breakdown	Total Cost	Year 1	Year 2	Year 3
	(1991 Costs)	(US\$)			
1.	<u>Institutional Support Costs</u>				
	Long-term IA/Staff Salaries	1,698,250	877,889	608,417	211,944
	Operations Support	656,500	290,000	232,500	134,000
	Administration	410,787	189,722	137,829	83,236
2.	<u>Short-Term Technical Assistance</u>	457,000	232,500	150,000	74,500
3.	<u>Training</u>	288,500	119,000	99,000	70,500
4.	<u>Commodities</u>	499,000	416,000	83,000	0
5.	<u>Evaluations</u> (1 mid-term, 1 EDP)	90,000	0	45,000	45,000
6.	<u>Audits</u> (x 3)	60,000	20,000	20,000	20,000
7.	<u>Inflation/Contingencies</u> (4.3%)	239,963	115,271	80,146	44,546
	<u>TOTAL:</u>	4,400,000	2,260,382	1,455,892	683,726
	Add-Ons	2,000,000	800,000	600,000	600,000
	<u>GRAND TOTAL:</u>	6,400,000	3,060,382	2,055,892	1,283,726

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Table 4.2

Summary Cost Estimates and Financial Plan

Element	A.I.D.		INCAP		Total		Total
	FX	LC	FX	LC	FX	LC	FX + LC
1. <u>Inst. Support</u>	2,765,537	0	0	2,134,000	2,765,537	2,134,000	4,899,537
2. <u>Short-Term TA</u>	457,000	0	0	0	457,000	0	457,000
3. <u>Training</u>	288,500	0	0	0	288,500	0	288,500
4. <u>Commodities</u>	499,000	0	0	0	499,000	0	499,000
5. <u>Evaluations</u>	90,000	0	0	0	90,000	0	90,000
6. <u>Audits/FMRs</u>	60,000	0	0	0	60,000	0	60,000
7. <u>Inflation/Cont.</u>	239,963	0	0	0	239,963	0	239,963
Add-Ons	2,000,000	0	0	0	2,000,000	0	2,000,000
GRAND TOTAL:	6,400,000	0	0	2,134,000	6,400,000	2,134,000	8,534,000

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Table 4-3

Projection of Expenditures by Fiscal Year
(000's of US\$)

<u>Fiscal Year</u>	<u>A.I.D. Grant</u>	<u>INCAP</u>	<u>Add-Ons</u>	<u>Total</u>
1991	190	0	0	190
1992	2191	760	1000	3951
1993	1401	745	750	2896
1994	618	629	250	1497
TOTAL	4400	2134	2000	8534

Table 4.4

Methods of Implementation and FinancingA.I.D. Inputs

(000's of US\$)

Element	Description	Method of Implementation	Method of Financing	Amount		
				AID	HC	Other
1.	<u>Institutional Support Costs</u>	TA	Direct Payment	2,765,537	2,134,000	0
2.	<u>Short-Term Technical Assistance</u>	PSC	Direct Payment	457,000	0	0
3.	<u>Training</u>	PSC	Direct Payment	288,500	0	0
4.	<u>Commodities</u>	AID/W Proc	Direct Payment	499,000	0	0
5.	<u>Evaluations</u>	PSC	Direct Payment	90,000	0	0
6.	<u>Audits/FMRs</u>	HC Contract	HC Reimbursement	60,000	0	0
7.	<u>Inflation/Contingency</u>	n/a	n/a	239,963	0	0
<u>GRAND TOTAL</u>				4,400,000	2,134,000	0

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Table 4-5

INCAP Contribution
(000's US\$)

<u>Line Item</u>	<u>Fiscal Year</u>			<u>Total</u>
	<u>1992</u>	<u>1993</u>	<u>1994</u>	
Personnel	600	600	507	1707
Operations	100	90	79	269
Equipment	40	35	27	102
Training	20	20	16	56
TOTAL	760	745	629	2134

Table 4-6

Illustrative Obligation Schedule
(000's US\$)

<u>Fiscal Year</u>	<u>Total</u>	<u>Cumulative</u>
1991	1790	1790
1992	2500	4290
1993	110	4400

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5.0 IMPLEMENTATION PLAN

Implementation of IISP will impose no unusual burden on ROCAP. The Mission currently has an outstanding USDA PASA Health and Nutrition (H/N) Advisor, who is responsible for managing ROCAP's ORT and PROPAG projects and will be responsible for managing IISP under the oversight of ROCAP's USDH General Development Officer. While support from other technical, project and program officers will be needed to assist with implementation and track progress towards achievement of Project objectives, all appropriate personnel are available either from within the Mission or from A.I.D. officers with Central American regional responsibilities.

5.1 AUTHORIZATION AND OBLIGATION

Immediately after final approval by the Project Committee, and as with ORT and PROPAG, IISP will be authorized in the field with the signing of a Handbook (HB) 3 Grant Agreement between ROCAP and INCAP/PAHO. INCAP is neither currently registered as a Public International Organization (PIO) eligible for a HB 13 Chapter 5 grant under A.I.D. regulations, nor do A.I.D. plans to "exercise a substantial degree of control" over the Project make IISP eligible for a grant under other chapters of HB 13. IISP is, conversely, fully appropriate for grant funding under HB 3 pursuant to HB 3 Chapter 6 Section 6C ("Use of the Agreement") which states that: "a Project Loan or Grant PROAG can also be used for projects involving regional or international organizations".

Funds will be obligated in three fiscal years, 1991-1993. The first, of US\$ 1.790 million, will be obligated upon signature of the Grant Agreement in FY'91. The second and third obligations, to occur on or about July 1992 and July 1993 respectively, will require amendments to the Grant Agreement, currently planned at levels of US\$ 2.5 million and US\$ 110,000, respectively. These figures may increase or decrease subject to the availability of funds. Transfer of obligated amounts in FY'92 will be contingent upon satisfaction of a Condition Precedent (CP) to disbursement. Once ROCAP is satisfied that this CP has been met, ROCAP will notify the INCAP Director in writing via a Project Implementation Letter (PIL) and commence second disbursement procedures. A Project implementation schedule is presented in Table 5-1 at the end of this section.

5.2 CONDITIONALITY

The CP to second disbursement included in the Grant Agreement requires that INCAP hire a full time institutional marketing and promotion professional not currently employed by the Institute. This CP, essential to Project success, has been reviewed and vetted by INCAP, and both ROCAP and INCAP believe that it will be feasible to satisfy it on schedule. A formal review of progress towards meeting the CP will occur in or about the month of April 1992 to ensure that sufficient time exists for INCAP to provide evidence that it has been met prior to the second disbursement of funds. Upon

submittal to ROCAP of evidence that the CP has been met, evidence will be reviewed by ROCAP and the Regional Legal Advisor. A finding that the CP has been met will be confirmed by issuance of a PIL.

Three major Project covenants will also be included as part of the Grant Agreement. These are that: (1) INCAP prepare and present for review by AID during the first year of the Project an institutional plan for marketing and promotion and financial resource development activities covering the period of the Project; (2) INCAP furnish a consolidated workplan and budget for activities for each year of the Project, including individual country work plans and work plans for strengthening activities related to specific technical areas; and (3) INCAP consult with USAID Missions in each participating country as part of its annual planning process, and keep USAIDs informed of country program activities as appropriate. INCAP will also submit a consolidated report of Project activities and progress for A.I.D. approval both semi-annually and annually.

5.3 PROJECT MANAGEMENT

Use of an institutional contractor to implement IISP was rejected by ROCAP for two reasons. First, the need for an institutional contractor on purely managerial grounds was not compelling. ROCAP has a full time H/N Advisor who has successfully managed the ORT and PROPAG projects with INCAP; the level of procurement required during implementation is limited; and INCAP has the proven capability to implement its own responsibilities under the Project. Second, the institutional strengthening nature of the Project-- and the need for INCAP to increasingly assume responsibility for all actions required to implement its client's projects--was considered by the PP design team to be inconsistent with use of an institutional contractor for IISP.

IISP will be implemented on behalf of A.I.D. by ROCAP. The USDH Project Officer responsible for the Project will be ROCAP's General Development Officer (GDO), who will supervise the Project Manager responsible for day-to-day Project implementation. ROCAP'S Health and Nutrition (H/N) Advisor will act as Project Manager for IISP, and will be responsible for oversight and quality control of all implementation actions. Key responsibilities of the Project Manager will include: (1) reviewing and obtaining ROCAP approval for INCAP's Project-related Annual Work Plans (AWPs); (2) liaison with AID/W and USAID bilateral missions on issues related to IISP implementation; (3) expedition, oversight and quality control of AID/W and USAID bilateral requests for INCAP assistance through the Project's add-on mechanism; (4) overseeing all Project procurement, and ensuring that procurement is consistent with achievement of Project objectives and conducted in accordance with A.I.D. regulations; and (5) preparing and presenting ROCAP Semi-Annual Reports for IISP.

ROCAP's current H/N Advisor is under a two year PASA agreement, funded through 31 July 1992 under ROCAP's Regional Development Support (RDS) Project (596-0162). Either a contract extension or a new contract will be executed prior to 31 July 1992 to ensure continuity of appropriate in-house technical capabilities to manage the Project from 1 August 1992 through the PACD. If

the current H/N Advisor opts not to extend her contract, a new H/N Advisor contract--also funded under ROCAP's RDS Project--will be executed in sufficient time to permit an overlap between the incoming and outgoing H/N Advisor. In addition to the USDH Project Officer and H/N Advisor/Project Manager, ROCAP will be able to draw on the services of the USDH RLA in Tegucigalpa, Honduras, and on the services of the USDH contracting and commodity procurement officers in Guatemala City as needed during implementation.

5.4 THE IISP ADD-ON MECHANISM

Contracting Limitations. As A.I.D. procurement regulations and the 1984 Competition in Contracting Act are currently interpreted, any organization receiving institutional strengthening assistance from A.I.D. may thereby be considered to have an unfair competitive advantage in contracting with A.I.D. (see Annex A). Under this interpretation, INCAP is even now (by virtue of the nature of previous A.I.D. assistance to INCAP) ineligible to compete directly for A.I.D. contracts--regardless of mechanism used to obligate IISP. The operational constraints associated with this issue go far beyond INCAP and IISP, however, and could potentially affect many HB 3 and HB 13 organizations which have received A.I.D. assistance since passage of the 1984 Competition in Contracting Act. Because of the potential seriousness of this issue with respect to Agency operations in the region, ROCAP will seek a regionally acceptable solution to the problem in full coordination with bilateral USAIDs, grant recipients and AID/W early in IISP implementation (see Section 8.2). INCAP contracting and financial management capacity will nonetheless be strengthened during IISP implementation to enable INCAP to contract or subcontract with A.I.D. on a competitive basis if and when permitted by either revision of the A.I.D. procurement regulations or revision of the interpretation of those regulations.

One assumption at the purpose level of the IISP logical framework (Annex B) is that "A.I.D. competitive contracting limitations with respect to INCAP are either resolved or do not significantly affect INCAP financial sustainability prospects". While early resolution of the issue would clearly be optimal, even without a resolution INCAP's financial sustainability should not be significantly affected because there exist other means of accessing INCAP to accomplish A.I.D. programmatic and non-IISP project-specific objectives.

Accessing Alternatives. Unless and until the competitive contracting issue is resolved, USAIDs, AID/W and ROCAP (for non-IISP projects) can access INCAP for assistance in one of three ways, as appropriate. First, they can execute HB 3 grants with INCAP (including Limited Scope Grant Agreements) for activities that support INCAP's programs. Second, both AID and AID contractors can access INCAP for provision of goods and services through non-competitive contracts or sub-contracts in cases where non-competitive procurement is appropriate and new Buy America provisions can be met. And third, in response to AID/W and Mission demand (Annex A), IISP includes an "add-on" mechanism permitting AID/W and bilateral USAIDs to easily access INCAP for activities consistent with the Purpose of IISP during Project implementation.

Purpose of the IISP Add-On Mechanism. The AID/W Project Committee PID Review Cable (Annex A) stated that "some A.I.D. missions have expressed interest in accessing INCAP through add-ons (similar to buy-ins for contracts) to this grant. ROCAP should, therefore, ensure that the necessary conditions are in place to permit add-ons and encourage missions to make use of INCAP's services." Establishing an IISP add-on mechanism is, moreover, fully consistent with ROCAP's desire to (1) complement bilateral USAID programs; (2) facilitate access to ROCAP projects; and (3) maximize the benefit of ROCAP activities to Agency programs. Pursuant to this, the IISP add-on mechanism has two specific purposes: (1) to permit AID/W and bilateral USAIDs to easily access INCAP during IISP implementation for activities that are consistent with the Purpose of the Project; and (2) to contribute to attainment of Project objectives by supporting improved INCAP financial sustainability.

Programmatic Acceptability of Add-On Activities. The purpose of IISP is "to strengthen INCAP so that it may be sustainable without further A.I.D. core financial support". Activities proposed for implementation under the IISP add-on mechanism shall therefore be considered by ROCAP to be programmaticaly consistent with the Purpose of IISP, and thus eligible for execution under the IISP Add-on mechanism, so long as they (1) are consistent with INCAP's institutional mandate in health and nutrition and (2) involve remunerative compensation for INCAP. In addition, proposed activities (3) should not be more appropriately implemented under a contract arrangement, and (4) must be completed by the IISP PACD. As the Grant Officer, the ROCAP Director will be responsible for ensuring that individual add-ons have been subjected to an acceptable programmatic analysis, i.e., are consistent with these four criteria.

Add-On Access Procedures. The procedures to be employed those by client organizations (i.e., USAIDs and AID/W) wishing to access INCAP through the add-on mechanism are as follows for activities that are part of an already authorized project. First, the client organization will cable to ROCAP ("Subject: IISP Add-On Request; For: IISP Project Manager"): (1) a description of the activities to be undertaken, including reporting requirements; (2) an illustrative budget; (3) a funding citation; and (4) the name of the responsible USDH Project Officer. Upon receipt, ROCAP will determine whether the proposed activity is programmaticaly acceptable. Subsequent to a finding of acceptability, the IISP Project Manager will then present the request to INCAP management and negotiate the request with INCAP on behalf of--and in full coordination with--the client organization.

Assuming agreement between the parties, the IISP Project Manager will then draw up a Grant Agreement Amendment (GAA) which: (1) amends Project funding to include the proposed request; (2) incorporates a description of the activities to be undertaken by INCAP; and (3) specifies the agreed costs of the activities. Each separate and identifiable activity will be the subject of a different GAA, and subject to separate and identifiable billing. To expedite execution of the GAAs, a PIO/T, PIO/C and/or PIO/P should be submitted by the client organization to ROCAP. The GAA will then be signed by the Director of ROCAP, and countersigned by the INCAP Director or other approved INCAP agent. After execution of the GAA, INCAP will assume responsibility for completing the requested activities under the technical direction and oversight of the

USDH Project Officer or his designee at the client organization. An activity completion report will be prepared by INCAP for these add-on activities, and submitted for approval to the client organization and for information (only) to ROCAP.

INCAP will present separate financial invoices for each separate add-on activity to the Controller's Office, Guatemala City, at a frequency consistent with the length of time required to complete the requested activities. For relatively short-term activities, e.g., one to three months, a single invoice may be submitted after activity completion. For longer activities, invoices may be submitted monthly. Upon receipt of invoices, the Controller will forward the invoices to the USDH Project Officer of the client organization for approval. Subsequent to approval, the invoices will be forwarded back to the Controller/Guatemala City for processing of the bill.

For OYB transfers, client organizations wishing to add on to the mainstream IISP activities described in this PP will simply cable to ROCAP OYB transfer authority and other standard OYB transfer information.

Management of Add-On Activities. Add-on activities under IISP will be conducted under the technical oversight and management of the originating A.I.D. Mission or Office. This is necessary for three major reasons. First, while USAIDs and AID/W have specified that they need the add-on mechanism to facilitate access to INCAP, they have also specified that in order to use the mechanism they will naturally require direct technical control and management oversight over the add-on health and nutrition activities they will fund from their own OYBs. This will permit them to both ensure quality control over and maximize INCAP responsiveness to the specific needs of the projects from which funding will derive. The only exception to this stated during Project design was for OYB transfers, where direct management control would be relinquished. Second, the strategic planning, management, technology transfer and marketing objectives of the Project will require that INCAP solidify progress in devolving authority to its in-country field teams. This again is an issue of client-responsiveness, and requires execution of funded activities to the maximum extent practicable at the most local, client-specific level. And third, even were client oversight, management and responsiveness needs not compelling, ROCAP will not have the staff capacity on-line to carefully manage a diverse array of add-on activities in addition to management of the core IISP-specific interventions described herein.

For these reasons, and unless otherwise agreed to by ROCAP and the originating Mission or Office, ROCAP responsibility with respect to add-on activities will generally be restricted to: (1) ensuring that the proposed add-on activities are programmatically acceptable; (2) negotiating requests for assistance with INCAP on behalf of the client AID organization; (3) preparing and executing Grant Agreement Amendments (GAAs) for the activities; (4) and processing INCAP financial invoices. Where appropriate, however, and requested by the client organization, ROCAP is willing to consider on a case-by-case basis assumption of technical and managerial oversight of add-on activities.

Estimation of Add-On Budget. Add-on and buy-in levels are always exceedingly difficult to estimate because of the nature of changing circumstances in both the field and AID/W over the life of a project. The US\$ 2.0 million budgeted for IISP add-ons over the LOP of IISP reflects the consensus of key bilateral USAIDs, AID/W and ROCAP on what the realistic maximum case add-on level should be. That consensus was in turn reached based on: (1) recurrent discussions with USAIDs likely to access INCAP in the next three years and the nature of those Mission needs; (2) recurrent discussions with AID/W, and the nature of AID/W sectoral program needs; and (3) an assessment of the needs of other ROCAP projects for INCAP services in the next three years (see Annex E.5).

IISP's US\$ 2.0 million LOP add-on estimate is based on the results of this assessment, and reflects a probable buy-in level of approximately US\$ 1.0 million in the first year and a half of IISP implementation. AID organizations most likely to access INCAP through the IISP add-on mechanism are AID/W, USAID/Honduras, USAID/Nicaragua, USAID/Guatemala and ROCAP. Given INCAP experience with similar activities, ROCAP alone expects to obligate approximately US\$ 280,000 of RENARM funds in the next six months for INCAP to develop and execute a course on recognition and treatment of pesticide intoxications.

5.5 TECHNICAL ASSISTANCE NEEDS

A summary of technical assistance needs required to implement IISP, broken down by output, suboutput, task, year, duration, source and cost, is found in Table 5-2 at the end of this section. A total of 42.85 person-months will be required, at an estimated Project cost of US\$ 457,000. This estimated cost, constituting only 10.4% of the direct U.S. Project contribution, reflects a heavy Project reliance (32.65 person-months or 76%) on Central American technical specialists. The Project proposes to use local specialists to the extent practicable for four reasons: (1) high quality specialists for most required tasks are available locally; (2) local specialists are familiar with the regional context of INCAP activities, and therefore can provide more context-appropriate technical assistance; (3) use of local specialists is appropriate from the institutional strengthening and post-EOP continuity perspectives; and (4) the cost of local specialists to the Project is about a third of the cost of U.S. specialists.

A total of 10.2 person-months of U.S. TA will be required for Project implementation. Specialized needs requiring expatriate TA include: (1) helping develop a Project/Program monitoring and evaluation system (1.1 p-m); (2) reviewing information management system bids and ensuring proper functioning of new hardware and software systems (0.6 p-m); (3) developing methodologies for needs assessments and technology transfer (4.5 p-m); (4) analyzing INCAP capabilities and articulating alternative future roles in food and agricultural sciences (2.0 p-m); (5) assessing operations research and iron deficiency capabilities (1.5 p-m); (6) participating in the three Technical Advisory Committees (travel and per diem only); and (7) advising on INCAP laboratory management (0.5 p-m). An additional US\$ 100,000 has been budgeted for short-term TA for purposes "to be determined" over the LOP.

5.6 TRAINING PLAN

A Training Plan for IISP is attached as Annex J. The total direct US contribution to training is US\$ 288,500 and the total INCAP contribution US\$ 56,000 equivalent, both declining over the LOP. The US contribution is allocated by Output and Suboutput, with US\$ 64,500 supporting strategic planning and management objectives; US\$ 159,000 supporting technical and technology transfer objectives; and US\$ 65,000 supporting financial resource development objectives. All training will occur in Central America, except for specialized financial management training and specific technical courses which will take place in the U.S. Training services will be procured and PIO/Ps prepared in accordance with activities approved in INCAP's Annual Work Plans.

5.7 SUMMARY OF IMPLEMENTATION RESPONSIBILITIES

5.7.1 ROCAP

ROCAP will be responsible for: (1) authorizing the Project (ROCAP/PD); (2) preparing and signing the Grant Agreement (ROCAP/PD and ROCAP/OD respectively); (3) amending the Grant Agreement for add-ons through Project Agreement Amendments (Project Manager); (4) preparing and clearing PIO/Ts, PIO/Cs and PIO/Ps for procurement of goods and services (Project Manager); (5) completing procurement actions (RCMO and RCO); (6) reviewing and approving INCAP's Annual Work Plans (Project Manager, key USDH Officers, ROCAP/OD); (7) monitoring Project activities, including formal semi-annual Project reviews with INCAP and preparation of semi-annual project reports (Project Manager); and (8) Project quality control (Project Manager, ROCAP/GDO, ROCAP/PD).

5.7.2 INCAP

INCAP will be responsible for implementing IISP. This includes, but is not restricted to, responsibility for: (1) signing the Grant Agreement; (2) preparing Annual Work Plans (AWPs), including both country team AWPs and HQ AWPs; (3) participating in semi-annual progress reviews with ROCAP management; (4) preparing scopes of work (SOWs) and providing the information required of ROCAP to complete PIOs; (5) clearing PIOs (either the Director or his designee); (6) providing goods and services requested by bilateral USAIDs and AID/W through the add-on mechanism, insofar as those requests are consistent with its organizational mandate and technical and managerial capabilities; (7) managing and providing quality control over short-term technical advisor input; (8) managing commodities funded by the Project; (9) managing training activities funded by the Project; and (10) cooperating with audit and evaluation teams.

Bilateral USAIDs will be consulted by INCAP country teams as part of their annual work planning process, and AWPs and semi-annual progress reports will be sent to Missions for review and comment. ROCAP's Project Manager will also facilitate as appropriate the development of other formal, periodic exchanges

between Missions and INCAP country teams; in Honduras, for example, INCAP's Country Team Coordinator now attends monthly USAID/Health Team meetings. While periodic progress review meetings of CA Health Officers solely for this Project may be impracticable given OE funding constraints, ROCAP will take the initiative to include a project review session as part of other regional meetings such as occurred in the November 1991 subregional meeting in Costa Rica and the planned regional HPN meeting in late September 1991.

5.7.3 Bilateral USAIDs and AID/Washington

Bilateral USAIDs and AID/W will have no IISP Project implementation responsibilities per se. To the extent that they employ the IISP add-on mechanism to access INCAP goods or services, however, they will be responsible for (1) cabling SOWs, illustrative budgets and funding citations for those requests; and (2) managing add-on activities. ROCAP anticipates requesting feedback on INCAP performance related to these requests, and also anticipates receiving feedback on other Project-related issues from bilateral USAIDs and AID/W on an ad hoc basis.

Table 5-1

Implementation ScheduleStart Project Year One

Project Month	Date	Action	Responsible Parties
<u>1991</u>			
0	6/25	Project Authorized	ROCAP
	6/27	Grant Agreement Signed	ROCAP, INCAP
1	7/15	PIL 1 Issued	ROCAP
2	8/15	Recruitment of Marketing Staff begins	INCAP
3	9/15	Lab/info management equipment ordered	INCAP, ROCAP
4	10/15	Market staff on board	INCAP
5	11/		
6	12/1	INCAP AWP due to ROCAP	INCAP
	12/10	Semi-Annual Project (SAP) Review	INCAP, ROCAP
	12/15	PIO/T for new P.M submitted	ROCAP
<u>1992</u>			
7	1/15	ROCAP approval of INCAP Year 1 AWP	ROCAP
8	2/28	Contracting completed for Year 1 Audit	ROCAP, INCAP
9	3/15	Contracting completed for new P.M.	ROCAP
10	4/15	3 Year Market/Promotion plan completed	INCAP
11	5/15	New Project Manager designee on-line	ROCAP
12	6/01	Audit	ROCAP, INCAP
	6/10	Semi-Annual Project (SAP) Review	INCAP, ROCAP
<u>Start Project Year Two</u>			
13	7/31	ROCAP H/N PASA expires; New P.M. assumes charge	ROCAP
	7/31		
14	8/31	Endowment options reviewed by Board: go/no-go	INCAP
15	9/30		
16	10/15	Contracting completed for mid-term Eval.	ROCAP, INCAP
17	11/		
18	12/1	INCAP AWP for Year 2 due	INCAP
	12/1	Financial Accounting System fully operational	INCAP
	12/10	Semi-Annual Project (SAP) Review	INCAP, ROCAP
<u>1993</u>			
19	1/15	ROCAP approval of Year 2 INCAP AWP	ROCAP
20	2/01	Mid-term Evaluation	INCAP, ROCAP
	2/15	ROCAP approval of INCAP Year 2 AWP	ROCAP
	2/28	Contracting completed for Year 2 Audit	INCAP, ROCAP

Table 5-1

Implementation Schedule
(concluded)

Project Year 3

Project Month	Date	Action	Responsible Parties
<u>1993</u>			
21	3/		
22	4/		
23	5/		
24	6/01	Year 2 Audit	INCAP, ROCAP
	6/10	Semi-Annual Project (SAP) Review	INCAP, ROCAP
<u>Start Project Year Three</u>			
25	7/		
26	8/		
27	9/		
28	10/		
29	11/		
30	12/1	Year 3 AWP due to ROCAP	INCAP
	12/10	Semi-Annual Project (SAP) Review	INCAP, ROCAP
<u>1994</u>			
31	1/15	ROCAP clearance of Year 2 AWP	ROCAP
32	2/15	ROCAP approval of Year 3 INCAP AWP	ROCAP
	2/28	Contracting completed for EOP evaluation	ROCAP, INCAP
33	3/01	Contracting completed for Year 3 Audit/FMR	ROCAP, INCAP
34	4/		
35	5/		
36	6/01	Year 3 Audit	ROCAP, INCAP
	6/01	EOP Evaluation	ROCAP, INCAP
	6/10	Semi-Annual Project (SAP) Review	INCAP, ROCAP
	6/30	PACD	n/a
37	7/31	Project Closeout Report	ROCAP

Table 5 2

Technical Assistance Needs, Sources and Costs

<u>Output/Suboutput/Task</u>	<u>Year</u>	<u>Person-Months</u>	<u>Source</u>	<u>Cost Estimate (US\$)</u>
<u>OUTPUT 1: STRATEGIC PLANNING AND MANAGEMENT</u>				
<u>Suboutput A: Strategic Planning and Management System</u>				
<u>Task 1.</u> Facilitate and Support Annual Strategic Planning Meetings.	1	0.50	CACM	\$ 2,500
	2	0.50	CACM	2,500
	3	0.50	CACM	2,500
<u>Task 2.</u> Project/Program Monitoring and Evaluation System.	1	0.60	US	7,500
	2	0.50	US	7,000
	3	0.40	CACM	2,400
<u>Suboutput B: Financial Management System</u>				
<u>Task 1.</u> Design/modifications to Financial Management System. (Note: See also Suboutput C Task 5)	1	3.75	CACM	25,000
	2	3.00	CACM	20,000
	3	1.00	CACM	5,000
<u>Suboutput C: Information Management System</u>				
<u>Task 1.</u> Review of bids; functioning of new hardware & software (e.g., LAN)	1	0.30	US	4,000
	2	0.30	US	4,000
<u>Task 2.</u> Equipment and Data security.	1	0.50	CACM	3,000
<u>Task 3.</u> Regional communications system.	1	0.75	CACM	5,000
	2	0.75	CACM	5,000
<u>Task 4.</u> Data base, bibliographic and library system development.	2	0.75	CACM	5,000
	3	0.75	CACM	5,000

Table 5-2

Technical Assistance Needs, Sources and Costs
(Page 2)

<u>Output/Suboutput/Task</u>	<u>Year</u>	<u>Person-Months</u>	<u>Source</u>	<u>Cost Estimate (US\$)</u>
<u>OUTPUT 1: STRATEGIC PLANNING AND MANAGEMENT</u> (continued)				
<u>Suboutput C: Information Management System</u> (continued)				
<u>Task 5. MIS Development and adjustment.</u>	1	1.50	CACM	\$ 8,000
	2	1.50	CACM	8,000
	3	1.50	CACM	8,000
			<u>Subtotal</u>	<u>\$129,400</u>
<u>OUTPUT 2: TECHNICAL CAPABILITIES AND TECHNOLOGY TRANSFER</u>				
<u>Suboutputs A and B: Technical and Technology Transfer Capabilities</u>				
<u>Task 1. Methodologies for needs assessment and technology transfer.</u>	1	2.00	US	30,000
	2	1.50	US	22,500
	3	1.00	US	15,000
<u>Task 2. Analysis of INCAP capabilities and role in food and agricultural sciences.</u>	1	2.00	US	30,000
<u>Task 3. Operations research</u>	2	1.00	US	15,000
	3	0.50	US	7,500
<u>Task 4. Technical Advisory Committees (x3) (travel and per diem only).</u>	1		US	5,000
	2		US	5,000
	3		US	5,000
<u>Suboutput C: Laboratory Capabilities</u>				
<u>Task 1. Laboratory management.</u>	1	0.50	US	\$ 7,500

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1
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Table 5-2

Technical Assistance Needs, Sources and Costs
(Page 3)

<u>Output/Suboutput/Task</u>	<u>Year</u>	<u>Person-Months</u>	<u>Source</u>	<u>Cost Estimate (US\$)</u>
OUTPUT 2: TECHNICAL CAPABILITIES AND TECHNOLOGY TRANSFER (continued)				
<u>Suboutput D: Vitamin A Program</u>				
TA to be provided through Centrally funded VITAL Project				
				Subtotal \$142,500
OUTPUT 3: FINANCIAL RESOURCES DEVELOPMENT				
<u>Suboutput A: FRD Plans and Strategies</u>				
Task 1. Development of Marketing and Promotional Plans and Strategies.	1	4.00	CACM	20,000
	2	3.00	CACM	15,000
	3	1.00	CACM	5,000
<u>Suboutput B: Upgraded Staff Capabilities</u>				
Task 1. Proposal writing, project development, and budgeting and negotiation.	1	1.00	CACM	5,000
	2	1.00	CACM	5,000
<u>Suboutput C: Endowment Fund Feasibility</u>				
Task 1. Technical analysis and professional advisory services regarding endowment fund.	1	2.00	CACM	10,000
	2	2.00	CACM	5,000
	3	1.00	CACM	5,000
				Subtotal \$70,000
To Be Determined				Subtotal \$115,100
				GRAND TOTAL \$357,000

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6.0 PROCUREMENT PLAN

6.1 PROCUREMENT RESPONSIBILITIES

No regional organization, including INCAP, has yet been certified by ROCAP as capable of handling procurements under A.I.D. Handbook 11 Host Country (HC) contracting procedures as revised. All procurement actions for goods and services funded by IISP will therefore be accomplished through A.I.D. Direct Contracting procedures, unless and until INCAP becomes certified by ROCAP pursuant to ROCAP procedures governing procurement of goods and services for HC contracting (ROCAP Mission Order 14.2). Those procedures require a Mission Assessment of the target institution, the scope of which is consistent with the level of contracting authorization required. Detailed assessments and a Mission Director determination are required for procurement actions over US\$ 250,000; a detailed assessment by the RCO and Controller is required for actions between US\$ 100,000 and 250,000; and a detailed assessment by the RCO or RCMO is required for actions between US\$ 10,000 and US\$ 100,000. For procurement actions under US\$ 10,000, a review is required by the Project Officer and either the RCO or RCMO.

A detailed assessment of INCAP by the RCO is scheduled for completion in late FY'91. If INCAP is certified as capable of handling procurements under HC Contracting regulations at that time, then all procurements below the threshold level established will be undertaken by INCAP during Project implementation. The procedures and respective responsibilities of INCAP and ROCAP to be followed for such procurements will be detailed by the RCO after completion of the detailed assessment.

For all non-HC procurement, and for all procurement until INCAP is certified, contracting will be done by the Regional Contracts Office in Guatemala City based on Project Implementation Orders (PIOs) for technical services (PIO/Ts), commodities (PIO/Cs) and training (PIO/Ps). PIOs will be prepared by ROCAP's technical and project development offices, based on requests initiated by INCAP. INCAP will be responsible for preparing the requests, including the applicable scopes of work, specifications, estimated budgets and time tables. The Director of INCAP or his designee will be responsible for clearing each PIO to be issued.

6.2 PROCUREMENT REQUIREMENTS

Proposed procurement under the Project will fall into five discrete categories: (1) technical assistance, (2) commodities, (3) training services, (4) audit services and (5) evaluation services.

Technical assistance. The procurement procedure for the IISP Project Manager (to be funded under ROCAP's Regional Development Support Project) will be initiated 240 days prior to departure of ROCAP's H/N Advisor. ROCAP's General Development (GD) and Project Development (PD) offices will initiate the required PIO/T, and will name thereon the Regional Contracts Office as the authorized agent to carry out the procurement. Because the anticipated transaction cost exceeds US\$ 250,000, the nationality of the new contract Project Manager will be limited to Geographic Code 000 (United States).

A series of short-term consultancies will be contracted throughout the LOP, beginning about two months after Project authorization. PIO/Ts to obtain these short-term services will be initiated by INCAP and completed by ROCAP's GD and PD offices. As the individual transactions will be valued at less than US\$ 250,000, both U.S. and Central American Common Market (CACM) contractors will be eligible to compete.

Commodities. An illustrative commodity procurement list for IISP is attached as Annex K. Total commodity procurement costs funded under the US contribution to IISP are estimated at US\$ 499,000. These relate directly to either INCAP information management (US\$ 304,000) or laboratory capabilities (US\$ 195,000). Specifications for these commodities will be developed by INCAP in the first three months after Project authorization, and included in PIO/Cs issued to the Regional Contracts Office during implementation. The provisions of the new Buy America policy will be applied to the commodities. Since the Regional Contracts Officer (RCO) will be responsible for procurement of all commodities, the RCO will be responsible for assuring compliance with the applicable A.I.D. shipping requirements and will ensure that no restricted or ineligible items are purchased.

Training. Short-term contracts for the provision of training to INCAP personnel will be required throughout the LOP. INCAP and ROCAP will develop the scopes of work for these services, and will process PIO/Ts and PIO/Ps for issuance to the Regional Contracts Office. The training contracts will be performed by U.S. and/or CACM contractors.

Audits. Audit services will be contracted for through the PIO/T mechanism by the Regional Contracts Office using IQCs that are in place at the time of contracting. The scopes of work will be developed by ROCAP and the AID/Guatemala Controller's Office. There are three audits proposed, one at the end of each year of Project implementation. These services will be performed by CACM contractors. Additional financial management review services (i.e., short-term TA) will be contracted for using on-line IQCs and CACM contractors during Project implementation.

Evaluation Services. At Month 18 and at Month 34, evaluation services will be contracted for using the PIO/T mechanism. ROCAP will develop the scopes of work and process the PIO/T documents for issuance to the RCO. U.S. and CACM contractors will be eligible to perform these services.

6.3 PROCUREMENT SCHEDULE

An illustrative procurement schedule is found as Table 6-1. Long-term technical assistance, evaluation services, and audit services will be procured at discrete points during implementation. Procurement of commodities, short-term TA and training services, however, will occur throughout implementation on an "as needed" basis. Since to the extent practicable these actions will be "batch" processed, they are shown in Table 6-1 as semi-annual procurement actions.

6.4 WAIVERS

No waiver requirements have been identified. If the need for waiver(s) is identified during Project implementation, all applicable A.I.D. procedures will be followed.

7.0 MONITORING AND EVALUATION PLAN

7.1 MONITORING

Mechanisms by which IISP will be monitored include: (1) Annual Work Plans (AWPs); (2) Annual Reports; (3) consultant reports; (4) USAID bilateral and AID/W reports on the quality of INCAP services provided under the IISP add-on mechanism; (5) field trips and trip reports; (6) personal contact between ROCAP Project management and INCAP headquarters; (7) Project financial reports issued by the Controller's Office; (8) external evaluations; and (9) audits.

Project activities and achievements will be monitored at four different operational levels. First, the ROCAP Project Manager will monitor progress through AWPs, Annual and Semi-Annual Reports, formal quarterly meetings with INCAP staff to review progress, consultant reports, USAID bilateral and AID/W reports, trip reports, personal contact with INCAP staff, external evaluations and audits. Under the supervision of the USDH Project Officer, the Project Manager will also maintain close contact with INCAP management and will perform site and end-use inspections to ascertain the extent to which INCAP is improving its technical capacities and--through marketing outreach--improving its prospects for long-term financial sustainability independent of A.I.D. "core" institutional support.

INCAP management will monitor the quality of technical assistance and training received by the Institute through internal staff reports, both formal and informal, to INCAP management. Bilateral USAIDs and AID/W offices working with INCAP through the add-on mechanism will monitor the quality of the services received through staff reports, and will feed back this information to ROCAP in the course of authorizing payments. Finally, the ROCAP USDH Project Officer will oversee all of the above through the same mechanisms as the Project Manager, as well as monitor the disbursement of funds through review of periodic Project financial reports issued by the Controller's Office.

Project monitoring activities will be facilitated by a Project reporting system. INCAP field offices will prepare their own AWPs, discuss them with USAID bilateral missions and other donors, finalize them, and submit them to INCAP headquarters annually during Project implementation. These will be appended to and form part of the basis for INCAP's overall AWPs, to be submitted to ROCAP for approval. An annual report will also be submitted by INCAP at or near the end of each year of implementation, either together and concurrent with or separate from submittal of AWPs, and semi-Annual Reports will be submitted in or about the month of June in each year of IISP.

7.2 EVALUATIONS

Two external Project-funded evaluations are planned. A mid-term evaluation, to take place o/a Month 18 of Project implementation, will focus on: (1) progress in attaining Project objectives at the output level of the logframe; and (2) development of an INCAP endowment fund. An end-of-Project (EOP) evaluation, to take place o/a Month 34 of implementation, will focus on:

(1) attainment of Project objectives at the purpose level of the logframe; and (2) lessons learned from the Project. The EOP evaluation will verify that the EOPS has been attained in three ways. First, it will project INCAP financial streamflows through the Year 2000 based on the previous three year's financial data and an updated market survey. Second, it will evaluate the adequacy of INCAP's planning and managerial strength by (1) evaluating planning and managerial changes effected since 1988 and (2) evaluating the ability of those systems to respond to projected future needs through the Year 2000. Finally, the EOP evaluation will assess INCAP's technical and technology transfer strengths, including computer and laboratory facilities, in the context of the projected technical needs required to service INCAP's future financial suppliers.

7.3 AUDITS

Beginning in FY'92, all institutions through which ROCAP works will be audited each year using project funds. This applies to INCAP, and Project funds are earmarked for non-government institutional audits in each year of Project implementation. Funds for procurement of specialized financial management services to help INCAP resolve any audit issues which may arise--as well as to deal with other financial issues as they may come to light--are budgeted under short-term technical assistance.

8.0 POLICY ISSUES

Two major policy issues relate to IISP: (1) the extent to which AID should support establishment of an INCAP endowment fund; and (2) potential limitations on competitive contracting by organizations receiving A.I.D. institutional strengthening support.

8.1 SUPPORTING ESTABLISHMENT OF AN ENDOWMENT FUND

The first issue, the extent to which A.I.D. should support establishment of an endowment fund, encompasses two separate subissues: (1) whether establishment of an endowment fund is critical to IISP long-term sustainability; and (2) whether an endowment fund is advisable even if not necessary for INCAP sustainability.

The Financial Sustainability Analysis (Annex E.6) for IISP estimated two post-EOP funding scenarios: (1) a "minimalist" scenario with endowment income beginning at US\$ 300,000 in 1996 and slowly increasing to US\$ 500,000 in the Year 2000; and (2) an "optimistic" scenario with endowment income beginning at US\$ 500,000 in 1996 and slowly increasing to US\$ 700,000 in the Year 2000. The conclusion of the Sustainability Analysis was that while post-EOP maintenance of INCAP under the "optimistic" scenario is near the upper edge of any reasonable expectation, INCAP sustainability under the "minimalist" scenario (i.e., with INCAP operating at roughly current levels) is clearly attainable even without an endowment fund.

The Financial Sustainability Analysis nonetheless made a strong case for the establishment of an INCAP endowment fund, citing: (1) the complex problem of balancing INCAP's desired levels of operation and its available levels of financial support; (2) the financial and qualitative flexibility an endowment fund would provide; and (3) global experience indicating the benefits of endowment funding for organizations with a public sector mandate which are undercapitalized by resource allocators.

In addition, the A.I.D. Administrator's policy guidance of 29 May 1991 (State 175349) summarized lessons learned from recent LAC experience in endowment funding of institutions. While this guidance noted that "the record of experience with which to identify lessons is still very limited", it cited seven major Agency findings:

(1) AID endowments are being used both to strengthen and sustain the financial base of existing development institutions, and to create new ones capable of dynamic and innovative leadership;

(2) Endowed non-governmental institutions have several advantages over public sector organizations. These include their ability: (A) to achieve long-term continuity in programming as free standing institutions unimpaired by political interference or erratic funding; (B) to attract and compensate the most able leaders and staff through market-value salaries; and (C) to create an organizational system with flexible procedures and incentives that encourage entrepreneurial performance and client-centered, problem-solving approaches;

(3) AID endowments need to be carefully designed to complement government activities, thereby avoiding duplicating or undermining existing government capacities and generating potential political backlash from within the public bureaucracy;

(4) Various incentives can be used to ensure continuing responsiveness of the endowed organization to its clientele;

(5) Measures are required to protect the endowment from devaluation;

(6) There exist protective measures that help ensure against improprieties in the management of an endowment; and

(7) AID can assume a long-standing direct role in monitoring the governance of an endowment.

It is the position of ROCAP that while an endowment fund is not essential to the long-term sustainability of INCAP as a relevant, viable and effective institution at a "minimalist" level, there is nonetheless a strong rationale for exploring establishment of an INCAP endowment fund. IISP will therefore allocate Project resources to helping INCAP explore the feasibility of endowment fund alternatives in the first year of implementation. This support will be provided with the proviso that A.I.D. is not committing itself to capitalization of any endowment fund which may ultimately be established. The findings of the endowment fund feasibility/alternatives analysis, and the appropriateness of A.I.D. participation in capitalizing such a fund, will be explored in detail with bilateral USAIDs and AID/W prior to submittal of the findings of the analysis to the INCAP Executive Council in August 1992 for a "go-no go" decision.

8.2 COMPETITIVE CONTRACTING LIMITATIONS

As A.I.D. procurement regulations and the 1984 Competition in Contracting Act are currently interpreted, any organization receiving institutional strengthening assistance from A.I.D. may thereby be considered to have an unfair competitive advantage in contracting with A.I.D. (see Sect. 5.4 and Annex A). The operational constraints associated with this issue go far beyond INCAP and IISP, and could potentially affect many HB 3 and HB 13 organizations which have received A.I.D. assistance since passage of the 1984 Competition in Contracting Act. The number of HB 3 and HB 13 grant recipients with which A.I.D. has worked in CA over the years is considerable, and in many cases A.I.D. considers these recipients as essential deliverers of development assistance required to attain key U.S. foreign policy objectives. ROCAP believes that this recent interpretation of the procurement regulations could in the future significantly constrain the Agency's ability to use HB 3 and HB 13 grant for important program- and project-specific activities, and therefore could significantly constrain the Agency's future ability to attain its regional development objectives in Central America.

Because of the potential seriousness of this issue with respect to Agency operations in the region, ROCAP will seek a regionally acceptable solution to the problem in full coordination with bilateral USAIDs, grant recipients and AID/W. This process will involve: (1) articulating the problem, its implications, and possible alternative solutions to it; (2) analyzing and recommending the best and most appropriate solution(s); (3) vetting those recommendations within the region; and (4) proposing regionally acceptable solution(s) to AID/W for approval.

9.0 SUMMARIES OF KEY ANALYSES

9.1 INSTITUTIONAL, ADMINISTRATIVE AND TECHNICAL ANALYSIS

Because of the interdependence of the institutional, administrative and technical features of this Project, key institutional analyses--Financial (Annex E.1), Technical (E.2), Information Management (E.3), Strategic Marketing (E.4), Funding Prospects (E.5) and Financial Sustainability (E.6)--are combined in a single analytical document attached as Annex E. In concert, these six analyses conclude that the IISP Project purpose is attainable over a three year time frame with the resources available: i.e., that with Project support INCAP should be able to secure alternative funding to replace the diminishing levels of AID support over the next three years and remain a relevant, effective and viable organization through at least the Year 2000. These analyses also demonstrate that the levels of funding required to sustain INCAP as a viable institution beyond the LOP are attainable.

The ORT and PROPAG projects have made a contribution to institutional strengthening of INCAP by supporting an increase in INCAP's technical capacity. Neither of these projects, however, addressed INCAP sustainability in a systematic and realistic way. The two projects will conclude in 1991 having helped INCAP prove its relevance and worth to the region, but without enabling INCAP to fully sustain its programmatic advances. IISP is designed to reasonably ensure INCAP's sustainability at least through the Year 2000 without continued A.I.D. core financial support, and will focus on three major institutional weaknesses: (1) strategic planning and management capabilities; (2) technical and technology transfer capabilities; and (3) financial resource development capabilities. These linked outputs will achieve the Project's purpose-level objective of sustainability by enabling INCAP to become a relevant, effective, and therefore viable institution addressing the nutrition, child survival and food security needs of Central Americans. The essence of the Project is to enable INCAP to link its technical program performance to its ability to secure and manage its financial resources.

9.1.1 Institutional Background

INCAP was established in 1949 by an agreement between the Pan American Sanitary Bureau (now PAHO), the Kellogg Foundation, and the six countries of the region, with Belize subsequently subscribing as a member country. INCAP's ruling Executive Council is composed of delegates of each of the member countries--traditionally represented by the Ministers of Health--along with the Director of PAHO who serves as the President of the Council and the INCAP Director who serves as an ex officio member. The Council meets annually in one of the member countries to approve INCAP's budget, to receive and review audit reports, and to review and establish major policies.

INCAP has its own independent legal standing ("personeria juridica"). Under the laws of Guatemala and the region, INCAP is classified neither as a "governmental" nor--in the common usage of the term--a "non-governmental" organization. Rather, INCAP has the legal standing of a Public International Organization (PIO), separate and apart from the governments or organizations that form its Executive Council. With this legal standing, INCAP has the capacity to enter into contracts and agreements in its own name. Under INCAP's governing agreement with the member countries and PAHO, PAHO serves as a legal representative for INCAP in major administrative matters. PAHO undertakes this role in the capacity as agent for INCAP, however, and has no greater role in governance of INCAP than afforded through its membership on INCAP's Executive Council.

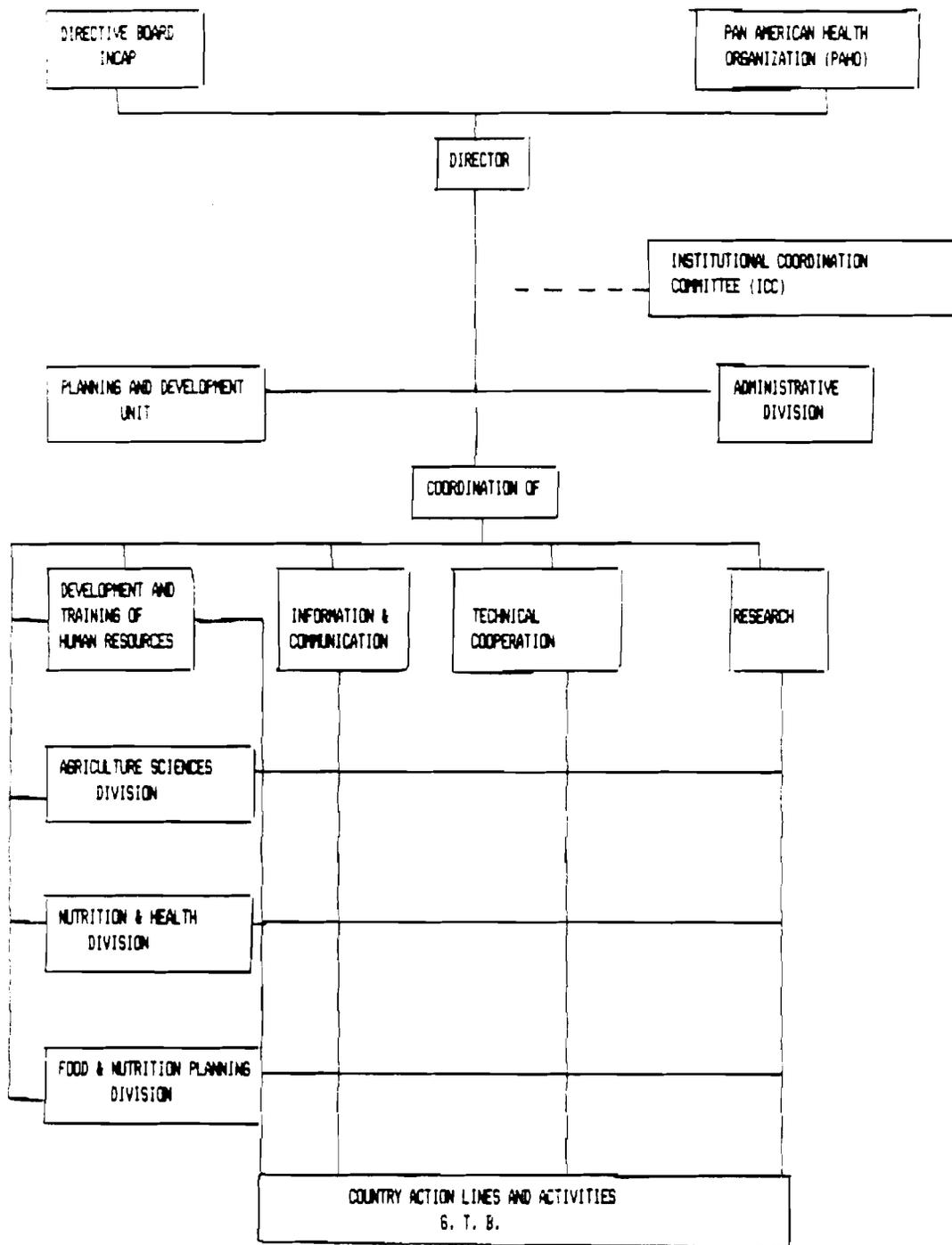
When initially established, INCAP received most of its support from PAHO and its technical/professional staff were PAHO employees. PAHO contributions to INCAP have declined in recent years to about 18-21% of expenditures, and currently only the Director and Administrative Officer are PAHO employees. INCAP's relationship with PAHO is nonetheless advantageous to INCAP in many ways. PAHO's contribution (about US\$ 1.3 million in 1990) constitutes about 21% of INCAP's total annual budget; it handles a significant amount of INCAP's administrative needs; it has offices in each member country to which INCAP personnel are assigned; the relationship ensures tax exempt status for INCAP's headquarters and country operations; it ensures access to lines of credit; and it provides a mechanism to convert local currency into hard currency. Because of these advantages, significant changes in the institutional relationship between INCAP and PAHO are currently considered neither advisable or warranted.

In recent years, INCAP has become increasingly responsible for generating other needed revenues and the bulk of these revenues have derived from ROCAP's ORT and PROPAG projects. While these projects have not been institutional support projects per se, they have constituted the equivalent of institutional support because they pertain to those programs and services that are the very essence of INCAP. As intended in the projects, INCAP has over the life of these projects sought funding diversification. In 1988, ORT and PROPAG constituted some 40% of INCAP's total funding and 60% of its restricted (or so-called "fiduciary" funding); by 1990, these figures had been reduced to 33.6% and 48.7% respectively (see Table 3-1). INCAP's funding portfolio today includes over 50 projects funded by sources other than PAHO, member contributions, and A.I.D. (including USAIDs). Significantly, by 1990 funding from non-AID projects (35.4% of total funds) had exceeded AID-funded revenues (33.6%).

INCAP is headquartered in Guatemala City and at the time of Project design employed 320 persons. Of these, 90 are professionals, 151 are technical and administrative support personnel (including lab technicians), and 79 are general services and maintenance personnel. In the mid 1980s, reflecting its multi-sectoral approach, INCAP adopted (and currently retains) a matrix organizational form, with intersections between functional or technical divisions and cross-cutting coordinating and supporting units (Fig. 9-1).

FIGURE 9-1

INCAP STRUCTURE



In the 1970s, INCAP began to adopt a more multi-sectoral approach to nutrition and family health. It also began to increase its scope beyond pure research to dealing with adaptation and application of research results. Through the 1980s, INCAP continued its programmatic diversification. This was based upon a broader understanding of nutrition and food security needs, as well as some greater responsiveness to the interests and demands of national institutions within the region.

By 1988, in the midst of rapidly changing internal and external environments, INCAP began a comprehensive strategic planning process, resulting in June 1990 in a Strategic Plan for the 1990s. Included within the objectives of this Plan is the capacity to sustain itself over time while continuing to fulfill its programmatic mission. The IISP Project is intended to be an essential ingredient in assisting INCAP to meet this objective.

9.1.2 Technical and Technology Transfer Capabilities

Of the recent institutional changes at INCAP, the most likely to influence IISP results is decentralization. Based upon planning in the late 1980s, INCAP in 1990 established country-level representational teams known as "Grupos Technicos Basicos" (GTBs). GTBs are multi-disciplinary teams intended to be: (1) the principal instrument for INCAP in transferring technology to the national and local level; (2) the link between INCAP's science-based research and the adaptation/adoption of research findings; and (3) the means whereby INCAP can more effectively know and be known by national and local level users of INCAP's services and products. INCAP's experience with the GTBs is scarcely more than one year old, but the experience has confirmed to both INCAP and ROCAP that the decentralization embodied in the GTB program is essential not only to INCAP's service delivery (i.e. technology transfer) but to INCAP's capacity for program evaluation, for demand/needs assessment, and thus for financial resource development.

INCAP's technical capabilities are considerable. The largest and strongest division, Nutrition and Health, was supported through the ORT Project and is particularly strong in: (1) nutrition and infectious diseases, especially diarrhea; (2) protein calorie malnutrition and specific nutrient deficiencies; (3) breastfeeding and infant/child feeding; and (4) nutrition and maternal child health.

The Food and Nutrition Planning Division has strong analytical and planning skills, particularly in nutrition surveillance, consumption, community education and especially food assistance programs. In Food and Agricultural sciences, strengths are largely divided between a now departing "old guard" and a less experienced but promising cadre involved in developing INCAP's nutritional cookie. The latter Division needs, however, to concentrate its efforts on analyzing (1) internal strengths and the needs of clients, potential donors and buyers of services; and (2) competing/collaborating institutions (e.g. ICAITI, IICA, CATIE, CITA and CYMMIT) and private sector groups. General strengths that cut across divisions include applied and operations research and training, including non-formal, post-graduate and continuing education.

One important overall weakness at INCAP is in economics, especially in terms of tracking household level effects of economic changes on nutritional status. INCAP is also vulnerable in other areas even given its current strengths; capabilities in applied anthropology, operations research, food planning and surveillance, for example, are all threatened by the end of ORT and PROPAG funding. Also, INCAP's long standing excellence in laboratory work is jeopardized by outdated equipment and procedures.

9.1.3 Strategic Planning and Management Capabilities

INCAP's strategic planning system was developed over the past two years through a highly participatory process within the Institute, and with close collaboration and effective use of external consultants (principally funded by ROCAP). INCAP continues to function as a matrix organization, which provides it with a sound capacity to promote the interplay between technical knowledge and application of that knowledge. INCAP is organized into three functional or technical divisions (agriculture and food sciences, nutrition and health, and food and nutrition planning) and four cross-cutting coordinating units (human resources development, technical cooperation, research, and information dissemination).

INCAP has begun to implement its 1991-2000 Plan. One concrete result of the 1989-1990 planning process was an INCAP decision to establish the country-specific GTBs to serve as an essential instrument for INCAP's transfer of technology--and thereby promote application of INCAP's science-based research--as well as for its reorientation to a more user-responsive operational mode. The proper composition and function of the GTBs, and the management challenges of this decentralized method of operation, are still being worked out by INCAP. Facilitation of this process will be supported by IISP. INCAP has not yet resolved the communications and information transfer issues which constrain its full exploitation of the GTB structure, and while it has reasonably well functioning program planning and budgeting systems the two tend to operate in isolation.

9.1.4 Financial Management Capabilities

INCAP's financial management system is generally sound in terms of its usefulness for administration and audit purposes. However, the accounting and reporting system is either not well designed, or not yet used to support basic management decisions. For example, INCAP does not routinely generate cash flow statements for management. Nor does it generate "funds accounting" reports usually required by management of institutions responsible for monitoring and overseeing a large number of restricted grants.

INCAP also does not yet have a clear system and approach to identifying and tracking a pool of costs as "overhead", nor does it routinely maintain information in a form useable for pricing its goods and services. While there are no noticeable defects in INCAP's financial and fiscal management that would deter continued AID grant relations with the Institute, INCAP does require some adjustments and refinements to its financial management systems in order to further sustainability objectives.

9.1.5 Information Management Capabilities

INCAP's information strategy and systems have undergone an intensive process of development in the past two years. Management has defined priorities for INCAP's information systems, and there have been diagnoses of problems and solutions prescribed for major aspects of those systems. There is currently a great variety of computer-based information functions, applications, and skills at INCAP, and there have been some innovative computer programming applications developed there. There are, however, several defects in the information management systems which could serve as constraints to institutional sustainability. These include weaknesses in intraorganizational communications and information links (e.g. between headquarters and the GTBs), and in development and presentation of information for management purposes related to program decisions and financial resource development. There are also gaps in the staff skills required for computer systems decisions, both hardware- and software-related.

9.1.6 Financial Resource Development Capabilities

Over the last two decades, INCAP has been primarily dependent upon two major sources of funding and technical support: AID and PAHO. Within the last five years, encouraged and supported in large part by AID's assistance through the ORT and PROPAG projects, INCAP has achieved a reasonably good level of funding diversification. Thus, whereas the ORT and PROPAG projects constituted almost 40% of INCAP's total funding in 1988, this had been reduced to 33.6% by 1990.

While INCAP has had some success in fund identification and grant negotiation, the organization is still without a clear system and consistent capacity for financial resource development which continues to be pursued largely on an ad hoc basis. The quality of proposal preparation is uneven, responsibilities for fund-raising or grant negotiation are spread over a number of personnel, and there is no long-term strategy for financial relationships required for creating the financial stability. INCAP is particularly vulnerable due to a lack of unrestricted funds enabling it to fill gaps in the timing and scope of donor interest and support.

9.1.7 Financial Sustainability Analysis

INCAP does not have a clear strategy and plan for achieving long-term financial stability. While it has increasingly shown deftness in securing financial support from non-AID sources, it will be pressed to its limits even during the course of IISP to (1) secure the necessary funds to replace those available through ORT and PROPAG and (2) at the same time respond to an expected increased demand for its services in the region.

An IISP Financial Sustainability Analysis (Annex E.6) rejected use of both "lowest level" and "cost-based" approaches to assessing the prospects for INCAP's financial sustainability. The "lowest level" approach, involving estimation of the lowest level of predictable costs that might be incurred in

1995 and subsequent years with INCAP operating at the minimum level required to be relevant and effective, was rejected because future cost levels for INCAP will be a function of user demand which are not susceptible to credible quantification. The "cost-based" approach was rejected because it requires assuming that there is a discernible point (and cost) below which INCAP cannot fall and remain viable in terms of its institutional mission, and projection of the costs required to be covered by revenues is grossly speculative. Instead, the approach employed had two basic elements. First, it estimated levels of resource mobilization that are reasonably attainable by INCAP, assuming its satisfactory absorption of IISP inputs. Second, it judged whether INCAP--with the assistance of IISP--will be sufficiently able to adjust its program level to correspond with available resources.

The Analysis concluded that the strategic planning capacity of INCAP supported by IISP should enable INCAP to better make difficult program and staffing choices when pressed to do so by the realities of limited funding. It noted, however, that the complex problems faced by INCAP in balancing between desired levels of operation and available levels of financial support argues strongly in favor of a concerted effort to establish some form of endowment fund as a means of obtaining unrestricted income. Many of the world's public sector science-based institutions find themselves stretched for the long-term financial support needed to maintain necessary continuity in professional staff and research/application activities, and virtually all international research centers and major national centers are actively seeking to establish endowment funds.

Given these two factors, two alternative projections of INCAP sustainability beyond the LOP were estimated. First, a "minimalist" approach projected whether post-EOP maintenance of INCAP at essentially current levels is attainable. The Analysis found with respect to the minimalist scenario that "clearly the answer is in the affirmative". Funding levels were found to be comfortably attainable by INCAP taking into account current resource mobilization capacity, the perceived demand/market for INCAP services, and the increased mobilization and management capacity of INCAP through IISP. While the revenue levels suggest a level of operations that is below INCAP's current aspirations, it does represent 1995 operations some 30% higher than in 1990. Expressed in terms of AID funding proposed under IISP, the scenario's projected 1995 funding level would be almost six times the amount of 1992 IISP funds budgeted for INCAP costs exclusive of commodities and TA (INCAP's 1991 budget is US\$ 8.5 million, or more than the minimalist scenario projects for 1995). Considering inflation, this scenario would have to be seen as a retrenchment; INCAP operations at the indicated level, however, would clearly not bring the Institute below the minimum level required to be viable in terms of its institutional mission. The second projection scenario, estimating a Year 2000 budget for INCAP of US\$ 14,775,000, was found "quite possibly to represent a projection somewhere near the upper edge of any zone of reasonableness in expectations for resource development for INCAP attributable to IISP."

The Financial Sustainability Analysis concluded that with the support available through IISP, INCAP should be able to secure alternative funding to replace the diminishing levels of AID support over the next three years. It also found that the levels of funding required to sustain INCAP as a viable institution beyond the EOP appear demonstrably attainable.

9.2 MARKET ANALYSIS

A preliminary analysis of INCAP's "market" over the 1-3 and 3-5 year time frames, i.e., current and potential public and private sector clients, is attached as Annex G.

INCAP is first and foremost a social service organization whose mission is to help governments in the region improve the nutritional and health status of the people in greatest need. INCAP's primary clients, the CA Ministries of Health, Education and Agriculture, have the greatest need for INCAP's services but no money to pay for them directly. Instead, the costs of providing those services are met through member contributions, PAHO support, and support from other donors such as A.I.D. The Market Analysis found that the emphasis given to diversifying/expanding INCAP's client base to include "paying customers" must be developed with this in mind, and should not occur to the detriment of INCAP's primary client--the public sector.

The Market Analysis also found that the philosophy of INCAP and the attitude of INCAP employees with respect to "market development" do not currently lend themselves to a major refocus of priorities from the public sector to the private sector. Nor do most of the services that INCAP provides. While INCAP needs to expand its client base, private businesses should be a minor--but increasing--part of that new base. INCAP's primary marketing task is to convince donors and collaborating organizations to finance INCAP involvement in delivery of priority services to the public sector institutions and PVOs with which INCAP works. A secondary but important task is to strengthen INCAP's ability to provide services on a fee-for-service basis. This diversification would: (1) expand INCAP's financial base; (2) improve its ability to service its primary clients; (3) improve its ability to attain its goals and objectives; and (4) ultimately improve its prospects for long-term sustainability as a viable and effective institution.

Major Client Groups. A.I.D. is by far the largest financial donor to INCAP, recently providing 33-42% of its total operating budget, followed by PAHO, INCAP's parent organization (see Table 3-1). Aside from these two core support organizations, the Market Analysis found that Ministries of Health are by far INCAP's largest client group. With primary responsibility for nutrition activities in most countries and limited budgets, their need for INCAP services is also the greatest. INCAP collaboration with PAHO provides INCAP both entree and influence in these ministries, and creates a greater responsibility on the part of INCAP to serve their needs. Ministries of Education and Agriculture are also important clients, especially insofar as school feeding programs, development of fortified foods and other nutrition-related programs are concerned. Member contributions to INCAP are far less than the cost of services provided, however, and only through other donor funding can INCAP meet the demand for services from the ministries. NGOs, foundations and universities--especially U.S. universities--have also been important INCAP clients although European donors and private corporations have played a relatively minor role to date.

Client Perception of INCAP. The Market Analysis found that while USAID bilateral missions have the most negative perception of INCAP, the institution is perceived positively overall by most of its other major clients. National Ministries of Health, U.S. universities and U.S. consulting firms have by far the most positive perception, and these organizations--as well as NGOs, local universities, research centers and even some businessmen--see INCAP as an important resource for technical assistance, training, materials or funding. (U.S. universities and U.S. consulting firms, in particular, see INCAP as an excellent collaborative institution.) Of these organizations, however, most ministries, NGOs, local universities and research centers are financially unable to employ INCAP on a pay-for-service basis.

Demand for INCAP Goods and Services. The Market Analysis found tremendous demand for INCAP goods and services throughout Central America. The greatest demand by far was from ministries, local universities, research organizations and NGOs--client organizations with the greatest need and the most limited available funds. One of the most important market opportunities for INCAP identified in the Market Analysis is with U.S. universities and consulting firms. These organizations expressed great interest in collaborating with and buying services from INCAP, and in many cases identified specific services they would like to procure (Annex K). USAID and other international donors also indicated interest in INCAP services, but for the most part lacked adequate information about the services and products INCAP is currently able to provide.

Private corporations do not appear to represent a large potential market for INCAP at the current time, with three possible exceptions. These are: (1) cookie manufacturers who can produce the nutritional cookie (e.g. Nabisco); (2) agro-industries who might be interested in conversion of agricultural waste or recycling of rejected export fruits and vegetables; and (3) food processors, who require assistance in quality control and/or the development of new food processing technology and formulas.

In general, the Market Analysis found that demand for INCAP services far exceeds INCAP's ability to supply those services--even if financial resources were available to fund them. INCAP therefore faces the difficult task of balancing demand from "non-paying" clients with its potential ability to supply the services and to find donors to pay for them. Directly germane to this, the Market Analysis reiterated the importance of INCAP not creating demand it cannot meet because of the potential for delivery of poor quality services or failure to deliver at all.

Specific Marketing Opportunities. The market analysis identified--by country, source and type of service--51 potential projects or activities that INCAP should explore during the LOP. Of these, six were in Guatemala; seven in El Salvador; seven in Honduras; seven in Nicaragua; two in Costa Rica; one in Panama; four in Belize; five with U.S. universities; eight with U.S. consulting firms; one with AID/W; one with the EEC; one with the United Nations; and one with the World Bank.

Recommended Marketing Strategy. In the 1-3 year time frame, i.e. over the Project LOP, the Market Analysis recommended that INCAP:

(1) Focus on marketing its services to donors and collaborating organizations who will provide funding for the priority activity of INCAP, i.e. serving the needs of the CA government ministries, universities and local PVOs/NGOs. This includes European donors, U.S. consulting firms, U.S. universities, USAID bilateral missions, NGOs, the Japanese, the World Bank, CIDA, UNDP, UNICEF, FAO and PAHO;

(2) Expand the services provided in association with PAHO, which hopefully will result in increased funding therefrom;

(3) Expand marketing of its two existing nutritiously blended food products;

(4) Expand marketing of laboratory services and services related to micronutrients, infectious diseases and food analysis/food quality;

(5) Strengthen its capability to promote its services; write proposals; cost out and price its services; prepare realistic, competitive budgets; and respond to requests for assistance and requests for proposals;

(6) Analyze the needs of the private commercial sector in areas consistent with its mission and capabilities--i.e. food processors, food producers/farmers, agro-industry and food exporters--in collaboration with U.S. universities;

(7) Develop agricultural and food science capabilities that can be sold to the private sector in collaboration with U.S. universities; and

(8) Test potential new products and services. These include conferences and conference planning; development of a training center; for-sale publications; technical translations; media/graphics design; logistical and information support for the regional TA activities of other organizations; and bibliographic searches.

In the 3-5 year time frame, the Market Analysis recommended that INCAP:

(1) Focus more on expanding its activities in the private sector relative to its public service mandate, perhaps in collaboration with U.S. universities; and

(2) Focus on developing modified services and products in response to changing needs that were successfully tested and analyzed during the previous three years.

Other important recommendations of the Market Analysis were that INCAP:

(1) Explore the possibility of exchanging Guatemalan arrears for ownership of the government land occupied by INCAP;

(2) Focus institutional or centrally funded contracts with selected European donors, the Japanese and the World Bank;

(3) Develop a comprehensive marketing approach to each potential client, e.g., the GTZ, the World Bank and the IDB; and

(4) Explore the feasibility of establishing a 501 C-3 organization in the U.S. for fundraising purposes.

9.3 ECONOMIC ANALYSIS

An IISP Economic Analysis is attached as Annex H. That Analysis concurred with earlier analyses performed for other INCAP assistance projects in finding that--since most project benefits are unquantifiable--standard cost-benefit analytical methods cannot meaningfully be applied to this type of institutional strengthening project. Indeed, economic analysis of IISP was found to be even more speculative than for earlier INCAP projects because it does not include immediate benefit generators such as nutrition interventions per se. Rather, it is designed to enhance INCAP's ability to implement such interventions.

The greatest Project benefits will ultimately be reduced morbidity and mortality, and improved performance in school and in the workplace. From the regional perspective, the total direct US Project contribution of US\$ 4.4 million amounts to about 18 US cents per capita of the CA population, or about 6 US cents per capita per year. If annual INCAP expenditures should stabilize in the Year 2000 at, e.g., US\$ 10 million per year, that 40 cents per capita would still be a minuscule fraction of the total resources used annually for health and nutrition in Central America.

The Economic Analysis found, however, that there are five aspects of the Project which support the expectation of substantial future economic return on investment: (1) least-cost execution; (2) indirect returns from improved human productivity; (3) lower cost resolution of future health problems; (4) improved attitudinal changes with respect to market awareness; and (5) improved institutional sustainability. On the basis of these findings, the analysis concluded that economic return on Project investment should be significantly positive.

9.4 SOCIAL SOUNDNESS ANALYSIS

An IISP Social Soundness Analysis (Annex I) found no significant social issues related to Project design. IISP deals with the evolution of INCAP--an institution devoted to solving the fundamental social problem of poor nutrition--as a technically sound organization able to support itself without further "core" institutional support from A.I.D. The ability of Central Americans to bring about their own development depends heavily on their access to sufficient nutrition and adequate health care. Donors,

governments and private agencies recognize this and have spent millions of dollars to improve health and nutrition in Central America; many people, however, still lack food security, adequate health care and proper nutrition. The causes are numerous: cultural isolation of indigenous ethnic groups, physical isolation of rural populations, low levels of basic literacy, limited instruction in health and hygiene, limited financial and technical resources of governments and private institutions, and a widespread lack of health and sanitation facilities.

No adverse social impact is anticipated for any group as a result of the Project. The immediate Project beneficiary will be INCAP itself, which will be supported by a wide range of donors and service procurers and will cease to be substantially dependent upon the vagaries of A.I.D. appropriations. The immediate beneficiaries will also include INCAP's staff, who will be better trained, more market oriented, and presumably better able to produce and earn more within INCAP or elsewhere in business or public service.

Secondary Project beneficiaries will include all of the public and private entities which use INCAP goods and services. These will include Ministries of Health and Education, PVOs, NGOs, private health practitioners, nutritionists, pharmacists, professional associations in the health sector and Universities, as well as paramedical and informal health practitioners such as auxiliary nurses, health promoters, midwives and small commercial retail outlets. Through interaction with a strengthened INCAP and its programs, they and their staffs will improve the planning, management and technical quality of their own work. This second stage represents a dispersal of benefits, and will improve the channels for delivery of Project-funded benefits to the tertiary beneficiary group.

Tertiary Project beneficiaries will be all those Central Americans whose health and nutritional status will improve through better access to more effective and efficient services and nutritionally improved processed foods. These include mothers and children targeted by food, nutrition and MCH programs; needy families most affected by economic and structural adjustment programs; and all those who lack the mental and physical energy needed to contribute to their own development.

Women and their children are the principal beneficiaries of public health and nutrition programs. While improved health and nutrition levels obviously are also shared by men, whose participation leads to increases in gross national productivity, women are the conduit to the family. Their understanding of the principles of improved health and nutrition, and their ability to access the services needed to raise their own health and nutrition levels, are critical to the effectiveness of INCAP's public sector work. In addition, women represent a high percentage of the professionals directly involved in planning, implementing and evaluating food and nutrition activities in Central America and Panama. These professionals are direct beneficiaries of INCAP's training, technical assistance, research and information dissemination activities, all aimed at improving their technical and managerial skills.

The only potential social issue raised in association with the IISP Project is related to INCAP staff. The proposal to discontinue A.I.D. core funding and to introduce a market responsiveness to INCAP's way of doing business is

Annexes

Annex A

PID Approval Message

DONORS AS WELL AS WITH AID/W. IN THIS REGARD, THE PP SHOULD ELABORATE ON ONGOING ACTIVITIES WITH S&T ON HOW THE CONTRACT MECHANISM IS WORKING AND STRATEGIES FOR FUTURE CONTRACTING ARRANGEMENTS.

C. POTENTIAL CONTRACTING PROBLEMS: GC ADVISES THAT THERE ARE NO STATUTES OR REGULATIONS PROHIBITING A.I.D. FROM CONTRACTING WITH A PUBLIC INTERNATIONAL ORGANIZATION (PIO) FOR SERVICES DURING THE SAME PERIOD THAT IT RECEIVES AN A.I.D. GRANT. GC AND MS/OP/OS/LAC ADVISE THAT CONTRACTING WITH PIOS SHOULD BE DONE CAREFULLY WITH THE FOLLOWING CONSIDERATIONS IN MIND: 1) THERE COULD BE POTENTIAL PROBLEMS OF DOUBLE PAYMENTS FOR OVERHEAD SUCH AS UTILITIES, SALARIES, ETC. IF INCAP'S ACCOUNTING SYSTEM IS NOT ORGANIZED SUFFICIENTLY TO SEPARATE THE ACCOUNTS. 2) IF INCAP RECEIVES A.I.D. DIRECT CONTRACTS, IT MUST COMPLY WITH THE FEDERAL ACQUISITION REGULATIONS (FAR) WHICH COULD CAUSE PROBLEMS FOR INCAP BECAUSE OF SUBSTANTIAL CHANGES REQUIRED IN ITS OPERATING PROCEDURES. EVEN AS A SUB-CONTRACTOR IT MUST COMPLY WITH THE FAR. 3) PRIME CONTRACTORS WHO WISH TO SUBMIT A BID WITH INCAP AS A SUBCONTRACTOR MUST DEMONSTRATE THAT SOME KIND OF COMPETITION HAS BEEN CONDUCTED. THEY MUST BE ABLE TO DEMONSTRATE THAT THE PRICES ARE REASONABLE, ETC. IT APPEARS AT THIS POINT THAT U.S. FIRMS VIEW INCAP AS A RESOURCE RATHER THAN A THREAT, AND THEREFORE, VIEW SUBCONTRACTING AND OTHER FORMS

OF COLLABORATION FAVORABLY. HOWEVER, IT IS POSSIBLE THAT AT SOME POINT PRIVATE FIRMS COULD RAISE CONCERNS ABOUT THE FAIRNESS OF COMPETING AGAINST ORGANIZATIONS WHO RECEIVE SUBSTANTIAL PUBLIC FINANCIAL SUPPORT. 4) SOURCE/ORIGIN/NATIONALITY COULD ALSO BE A CONCERN DEPENDING ON THE PARTICULAR PROGRAM REQUIREMENTS. AID/W REQUESTS THAT RCO REVIEW AND COMMENT ON THIS CABLE AND PROVIDE REASONS FOR THE RELUCTANCE TO PERMIT CONTRACTS WITH INCAP AT THIS TIME.

INCAP'S INSTITUTIONAL STRENGTHENING PROCESS SHOULD ENSURE THAT ADEQUATE SYSTEMS ARE IN PLACE TO PERMIT INCAP TO ADHERE TO THE FAR REGULATIONS. ASSUMING THAT INCAP CAN COMPLY WITH A.I.D. CONTRACTING REQUIREMENTS BASED ON RCO'S REVIEW AND APPROVAL, RCOAP SHOULD PUT ALL CONTRACTING OFFICES IN THE REGION ON NOTICE THAT INCAP CAN ACT AS PRIME AND/OR SUBCONTRACTOR.

D. STRENGTHENING SCIENTIFIC/TECHNICAL CAPACITY: SINCE THE PID WAS NOT SPECIFIC IN IDENTIFYING THE TECHNICAL AREAS WHICH WILL BE STRENGTHENED WITHIN INCAP WITH A.I.D. RESOURCES, THE PP SHOULD CLEARLY IDENTIFY THE AREAS OF SPECIALITIES THAT NEED STRENGTHENING IN ORDER FOR INCAP TO MARKET ITS SERVICES. LAC ALSO RECOMMENDS THAT INCAP'S COUNTRY TECHNICAL GROUPS PREPARE ANNUAL WORKPLANS IN ADDITION TO OVERALL INCAP WORKPLANS AND DISCUSS THESE PLANS WITH A.I.D. MISSIONS AND OTHER DONORS.

IN THE PROCESS OF STRENGTHENING INCAP'S TECHNICAL CAPABILITY, THE NEED FOR S&T AND/OR OTHER TECHNICAL ASSISTANCE SHOULD BE ADDRESSED

E. ENDOWMENT: ALTHOUGH THE PID DISCUSSES THE ESTABLISHMENT OF AN ENDOWMENT FUND IN GENERAL TERMS, IT PROPOSES TO EXPLORE THE ISSUES REGARDING SUCH A FUND AND TO WORK OUT THE MAJOR OBSTACLES TO THE FUND IN THE FIRST YEAR OF PROJECT IMPLEMENTATION. LAC SUPPORTS THE EXPLORATION OF AN ENDOWMENT FUND, BUT NOT A US DOLLAR ENDOWMENT USING APPROPRIATED DOLLARS WHICH REQUIRES SPECIAL CONGRESSIONAL ACTION (THIS IS RARELY DONE AND ONLY IN VERY UNIQUE CIRCUMSTANCES). LOCAL CURRENCY ENDOWMENTS ARE PERMITTED. SINCE THE ENDOWMENT FUND SEEMS TO BE SUCH A CRITICAL PART OF INCAP'S SUSTAINABILITY AFTER ROCAP TERMINATES ITS DIRECT SUPPORT AT THE END OF THIS PROJECT, THE

MISSION IS ENCOURAGED TO ADDRESS THE ISSUES EARLY ON IN PROJECT IMPLEMENTATION, PERHAPS THROUGH A MULTILATERAL FORUM. AT ANY RATE THE MISSION SHOULD MAKE IT VERY CLEAR TO INCAP THAT WITH OR WITHOUT AN ENDOWMENT FUND, THESE ARE THE LAST FUNDS TO BE PROVIDED BY ROCAP FOR DIRECT OR INSTITUTIONAL SUPPORT OF INCAP. FUTURE RELATIONSHIPS WITH A.I.D. WILL INVOLVE CONTRACTS AWARDED COMPETITIVELY FOR SERVICES OR GRANTS FOR SPECIFIC RESEARCH, EDUCATION OR TECHNICAL SUPPORT ACTIVITIES IN SUPPORT OF THEIR MEMBER COUNTRIES.

F. REGIONAL ORGANIZATION STRATEGY: ROCAP IS ENCOURAGED TO START PREPARING A STRATEGY WHICH DEALS WITH OWNERSHIP, RESPONSIBILITY AND BUDGET SUPPORT FOR REGIONAL INSTITUTIONS SUCH AS INCAP. THIS STRATEGY SHOULD PLACE THE DECISION MAKING ON THE FUTURE DEVELOPMENT OF THESE ORGANIZATIONS WITH THE CA COUNTRIES. BAKER

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CHRG: AID
DIST: ROCP
ADD:

AIDAC GUATEMALA FOR ROCAP

E.O. 12356: N/A

TAGS:

SUBJECT: INCAP INSTITUTIONAL STRENGTHENING PROJECT
(596-2169)

REF: A) STATE 104415; E) GUATEMALA 04889;
C) STATE 159235

1. LAC BUREAU HAS REVIEWED THE MISSION'S REQUEST TO INTEGRATE A CONGRESSIONAL EARMARK FOR VITAMIN A INTO NEW INCAP PP AND PROVIDES PROGRAM CONCURRENCE FOR THE MISSION TO INCREASE THE LOP BY DOLS. 422,000 FOR THE ACTIVITIES AS NOTED IN REFTEL, AND THE MISSION HAS APPROVAL TO MOVE FORWARD WITH THE DOLS. 4.4 MILLION PROJECT.

2. THE BUREAU ALSO PROVIDES AUTHORIZATION FOR THE MISSION TO PROCEED WITH FINAL DESIGN OF THE PROJECT ON THE BASIS OF THE AGREEMENT REACHED WITH AA/LAC DURING THE CA MISSION DIRECTORS CONFERENCE ON THE REGIONAL ACTIVITIES IN GUATEMALA DURING APRIL 1991.

3. THE CN FOR INCAP INSTITUTIONAL STRENGTHENING PROJECT IS IN CLEARANCE. BAKER

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Annex B

Logical Framework

Logical Framework

INCAP Institutional Strengthening Project
(596-0169)

Narrative Summary Objectively Verifiable Indicators Means of Verification Important Assumptions

OUTPUTS

1. Strategic Planning and Management Component: Strengthened Strategic Planning and Management Capabilities.

Suboutputs:

A. Effective Strategic Planning and Management System (SPM) in place.	A. SPM system designed, institutionalized and implemented, including annual operating plans and a monitoring and evaluation system.	A.-Annual Work Plans -Annual Reports -Mid-term Evaluation
B. Effective Financial Management System (FMS) in place.	B. FMS system designed, institutionalized and implemented that can account for a diversified funding mix and provide timely accurate information regarding financial resource allocation.	B.-Consultant Reports -Audits -Client Feedback Reports
C. Effective Information Management System (IMS) in place.	C. IMS meeting scientific/technical as well as management and financial needs for organizing, accessing, analyzing and communicating information.	C.-Annual Reports -Mid-term Evaluation

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Logical framework

INCAP Institutional Strengthening Project
(596-0169)

Narrative Summary Objectively Verifiable Indicators Means of Verification Important Assumptions

OUTPUTS (con't):

2. Technical and Technology Transfer Component: Strengthened Technical and Technology Transfer Capabilities.

Suboutputs:

A. High quality technical capabilities.	A. First class technical capabilities in: (1) food planning, economics and surveillance; (2) operations research; (3) applied anthropology; (4) health/nutrition communications; (5) and breastfeeding and infant feeding.	A.-Annual Reports -Strategic plans -Mid-term Evaluation -EOP Evaluation
B. High quality technology transfer capabilities.	B. Trained and proficient staff in methods of technology transfer; all country teams trained in technology transfer by 1994.	B.-Annual Reports -Client Feedback Reports -Training Records -Mid-term Evaluation
C. INCAP laboratory capabilities upgraded.	C. Laboratory capabilities meet basic institutional needs.	C.-Annual Reports -Mid-term Evaluation -EOP Evaluation
D. Vitamin A capabilities upgraded and and Vitmain A program expanded.	D. Regional Vitamin A strategy developed; studies completed; programmatic and lab capabilities upgraded; Vitamin A service provision increased.	D.-Strategies and studies -Training records -Annual Reports -Service provision records

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Annex C

Statutory Checklist

5C(2) - ASSISTANCE CHECKLIST

Listed below are statutory criteria applicable to the assistance resources themselves, rather than to the eligibility of a country to receive assistance. This section is divided into three parts. Part A includes criteria applicable to both Development Assistance and Economic Support Fund resources. Part B includes criteria applicable only to Development Assistance resources. Part C includes criteria applicable only to Economic Support Funds.

CROSS REFERENCE: IS COUNTRY CHECKLIST UP TO DATE?

A. CRITERIA APPLICABLE TO BOTH DEVELOPMENT ASSISTANCE AND ECONOMIC SUPPORT FUNDS

1. Host Country Development Efforts (FAA Sec. 601(a)): Information and conclusions on whether assistance will encourage efforts of the country to:
(a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions.

INCAP's technical efficiency will be improved; otherwise N/A.

2. U.S. Private Trade and Investment (FAA Sec. 601(b)): Information and conclusions on how assistance will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

The modest amount of U.S. technical assistance to be presented in the Project may lead to further U.S. private trade involvement after the Project.

3. Congressional Notification

a. **General requirement (FY 1991 Appropriations Act Secs. 523 and 591; FAA Sec. 634A):** If money is to be obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified (unless the notification requirement has been waived because of substantial risk to human health or welfare)?

Congress has been properly notified.

b. **Notice of new account obligation (FY 1991 Appropriations Act Sec. 514):** If funds are being obligated under an appropriation account to which they were not appropriated, has the President consulted with and provided a written justification to the House and Senate Appropriations Committees and has such obligation been subject to regular notification procedures?

N/A

c. **Cash transfers and nonproject sector assistance (FY 1991 Appropriations Act Sec. 575(b)(3)):** If funds are to be made available in the form of cash transfer or nonproject sector assistance, has the Congressional notice included a detailed description of how the funds will be used, with a discussion of U.S. interests to be served and a description of any economic policy reforms to be promoted?

N/A

4. **Engineering and Financial Plans (FAA Sec. 611(a)):** Prior to an obligation in excess of \$500,000, will there be: (a) engineering, financial or other plans necessary to carry out the assistance; and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

Financial plans and reasonably firm cost estimates have been prepared.

5. **Legislative Action (FAA Sec. 611(a)(2)):** If legislative action is required within recipient country with respect to an obligation in excess of \$500,000, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?

N/A

6. **Water Resources (FAA Sec. 611(b); FY 1991 Appropriations Act Sec. 501):** If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.)

N/A

7. **Cash Transfer and Sector Assistance (FY 1991 Appropriations Act Sec. 575(b)):** Will cash transfer or nonproject sector assistance be maintained in a separate account and not commingled with other funds (unless such requirements are waived by Congressional notice for nonproject sector assistance)?

N/A

8. **Capital Assistance (FAA Sec. 611(e)):** If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively?

N/A

9. **Multiple Country Objectives (FAA Sec. 601(a)):** Information and conclusions on whether projects will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

Over the long term general nutrition improvements enhance the efficiency of industry, agriculture, and commerce.

10. **U.S. Private Trade (FAA Sec. 601(b)):** Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

The modest amount of U.S. technical assistance to be procured in the Project may lead to future U.S. private trade after the Project.

11. Local Currencies

a. Recipient Contributions (FAA Secs. 612(b), 636(h)): Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

INCAP's member countries pay dues--annual local currency contributions.

b. U.S.-Owned Currency (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

N/A

c. Separate Account (FY 1991 Appropriations Act Sec. 575). If assistance is furnished to a foreign government under arrangements which result in the generation of local currencies:

N/A

(1) Has A.I.D. (a) required that local currencies be deposited in a separate account established by the recipient government, (b) entered into an agreement with that government providing the amount of local currencies to be generated and the terms and conditions under which the currencies so deposited may be utilized, and (c) established by agreement the responsibilities of A.I.D. and that government to monitor and account for deposits into and disbursements from the separate account?

(2) Will such local currencies, or an equivalent amount of local currencies, be used only to carry out the purposes of the DA or ESF chapters of the FAA (depending on which chapter is the source of the assistance) or for the administrative requirements of the United States Government?

(3) Has A.I.D. taken all appropriate steps to ensure that the equivalent of local currencies disbursed from the separate account are used for the agreed purposes?

(4) If assistance is terminated to a country, will any unencumbered balances of funds remaining in a separate account be disposed of for purposes agreed to by the recipient government and the United States Government?

12. Trade Restrictions

a. **Surplus Commodities (FY 1991 Appropriations Act Sec. 521(a)):** If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

N/A

b. **Textiles (Lautenberg Amendment) (FY 1991 Appropriations Act Sec. 521(c)):** Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel?

No.

13. Tropical Forests (FY 1991 Appropriations Act Sec. 533(c)(3)): Will funds be used for any program, project or activity which would (a) result in any significant loss of tropical forests, or (b) involve industrial timber extraction in primary tropical forest areas?

No.

14. **Sahel Accounting (FAA Sec. 121(d)):** If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)?

N/A

15. **PVO Assistance**

a. **Auditing and registration (FY 1991 Appropriations Act Sec. 537):** If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.?

N/A

b. **Funding sources (FY 1991 Appropriations Act, Title II, under heading "Private and Voluntary Organizations"):** If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government?

16. **Project Agreement Documentation (State Authorization Sec. 139 (as interpreted by conference report)):** Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision).

Will be done.

17. **Metric System (Omnibus Trade and Competitiveness Act of 1988 Sec. 5164, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy):** Does the assistance activity use the metric system of measurement in its procurements, grants, and other business-related activities, except to the

INCAP uses the metric system.

extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

18. Women in Development (FY 1991 Appropriations Act, Title II, under heading "Women in Development"): Will assistance be designed so that the percentage of women participants will be demonstrably increased?

Nutrition is a women-intensive sector, and INCAP has numerous female professionals.

19. Regional and Multilateral Assistance (FAA Sec. 209): Is assistance more efficiently and effectively provided through regional or multilateral organizations? If so, why is assistance not so provided? Information and conclusions on whether assistance will encourage developing countries to cooperate in regional development programs.

INCAP is a regional and multilateral organization.

20. Abortions (FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 525):

No.

a. Will assistance be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?

No.

b. Will any funds be used to lobby for abortion?

No.

21. Cooperatives (FAA Sec. 111): Will assistance help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life?

22. U.S.-Owned Foreign Currencies

a. Use of currencies (FAA Secs. 612(b), 636(h); FY 1991 Appropriations Act Secs. 507, 509): Describe steps taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. are utilized in lieu of dollars to meet the cost of contractual and other services. N/A

b. Release of currencies (FAA Sec. 612(d)): Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? No.

23. Procurement

a. Small business (FAA Sec. 602(a)): Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed? Yes.

b. U.S. procurement (FAA Sec. 604(a)): Will all procurement be from the U.S. except as otherwise determined by the President or determined under delegation from him? Yes.

c. Marine insurance (FAA Sec. 604(d)): If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company? Yes.

d. Non-U.S. agricultural procurement (FAA Sec. 604(e)): If non-U.S. procurement of agricultural commodity or product thereof is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.) N/A

e. Construction or engineering services (FAA Sec. 604(g)): Will construction or engineering services be procured from firms of advanced developing countries which are otherwise eligible N/A

under Code 941 and which have attained a competitive capability in international markets in one of these areas? (Exception for those countries which receive direct economic assistance under the FAA and permit United States firms to compete for construction or engineering services financed from assistance programs of these countries.)

f. **Cargo preference shipping** (FAA Sec. 603): Is the shipping excluded from compliance with the requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 percent of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates?

No.

g. **Technical assistance** (FAA Sec. 621(a)): If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? Will the facilities and resources of other Federal agencies be utilized, when they are particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

Yes.

h. **U.S. air carriers** (International Air Transportation Fair Competitive Practices Act, 1974): If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available?

Yes.

i. **Termination for convenience of U.S. Government** (FY 1991 Appropriations Act Sec. 504): If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States?

Yes.

j. Consulting services
(FY 1991 Appropriations Act Sec. 524): If assistance is for consulting service through procurement contract pursuant to 5 U.S.C. 3109, are contract expenditures a matter of public record and available for public inspection (unless otherwise provided by law or Executive order)?

Yes.

k. Metric conversion
(Omnibus Trade and Competitiveness Act of 1988, as interpreted by conference report, amending Metric Conversion Act of 1975 Sec. 2, and as implemented through A.I.D. policy): Does the assistance program use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms? Are bulk purchases usually to be made in metric, and are components, subassemblies, and semi-fabricated materials to be specified in metric units when economically available and technically adequate? Will A.I.D. specifications use metric units of measure from the earliest programmatic stages, and from the earliest documentation of the assistance processes (for example, project papers) involving quantifiable measurements (length, area, volume, capacity, mass and weight), through the implementation stage?

INCAP uses the metric system of measurement in its scientific and technical dealings, consistent with world practice.

l. Competitive Selection Procedures (FAA Sec. 601(e)): Will the assistance utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

Yes.

24. Construction

a. Capital project (FAA Sec. 601(d)): If capital (e.g., construction) project, will U.S. engineering and professional services be used?

N/A

b. Construction contract (FAA Sec. 611(c)): If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

N/A

c. Large projects, Congressional approval (FAA Sec. 620(k)): N/A
If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the Congressional Presentation), or does assistance have the express approval of Congress?

25. U.S. Audit Rights (FAA Sec. 301(d)): Yes.
If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights?

26. Communist Assistance (FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? No.

27. Narcotics

a. Cash reimbursements (FAA Sec. 483): Yes.
Will arrangements preclude use of financing to make reimbursements, in the form of cash payments, to persons whose illicit drug crops are eradicated?

b. Assistance to narcotics traffickers (FAA Sec. 487): Yes.
Will arrangements take "all reasonable steps" to preclude use of financing to or through individuals or entities which we know or have reason to believe have either: (1) been convicted of a violation of any law or regulation of the United States or a foreign country relating to narcotics (or other controlled substances); or (2) been an illicit trafficker in, or otherwise involved in the illicit trafficking of, any such controlled substance?

28. **Expropriation and Land Reform** (FAA Sec. 620(g)): Will assistance preclude use of financing to compensate owners for expropriated or nationalized property, except to compensate foreign nationals in accordance with a land reform program certified by the President? Yes.
29. **Police and Prisons** (FAA Sec. 660): Will assistance preclude use of financing to provide training, advice, or any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes.
30. **CIA Activities** (FAA Sec. 662): Will assistance preclude use of financing for CIA activities? Hard to tell.
31. **Motor Vehicles** (FAA Sec. 636(i)): Will assistance preclude use of financing for purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes.
32. **Military Personnel** (FY 1991 Appropriations Act Sec. 503): Will assistance preclude use of financing to pay pensions, annuities, retirement pay, or adjusted service compensation for prior or current military personnel? Yes.
33. **Payment of U.N. Assessments** (FY 1991 Appropriations Act Sec. 505): Will assistance preclude use of financing to pay U.N. assessments, arrearages or dues? Yes.
34. **Multilateral Organization Lending** (FY 1991 Appropriations Act Sec. 506): Will assistance preclude use of financing to carry out provisions of FAA section 209(d) (transfer of FAA funds to multilateral organizations for lending)? Yes.
35. **Export of Nuclear Resources** (FY 1991 Appropriations Act Sec. 510): Will assistance preclude use of financing to finance the export of nuclear equipment, fuel, or technology? Yes.

36. **Repression of Population** (FY 1991 Appropriations Act Sec. 511): Will assistance preclude use of financing for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights?

N/A

37. **Publicity or Propoganda** (FY 1991 Appropriations Act Sec. 516): Will assistance be used for publicity or propoganda purposes designed to support or defeat legislation pending before Congress, to influence in any way the outcome of a political election in the United States, or for any publicity or propoganda purposes not authorized by Congress?

38. **Marine Insurance** (FY 1991 Appropriations Act Sec. 563): Will any A.I.D. contract and solicitation, and subcontract entered into under such contract, include a clause requiring that U.S. marine insurance companies have a fair opportunity to bid for marine insurance when such insurance is necessary or appropriate?

Yes.

39. **Exchange for Prohibited Act** (FY 1991 Appropriations Act Sec. 569): Will any assistance be provided to any foreign government (including any instrumentality or agency thereof), foreign person, or United States person in exchange for that foreign government or person undertaking any action which is, if carried out by the United States Government, a United States official or employee, expressly prohibited by a provision of United States law?

No.

B. CRITERIA APPLICABLE TO DEVELOPMENT ASSISTANCE ONLY

1. Agricultural Exports (Bumpers Amendment) (FY 1991 Appropriations Act Sec. 521(b), as interpreted by conference report for original enactment): If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities: (1) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (2) in support of research that is intended primarily to benefit U.S. producers?

N/A

2. Tied Aid Credits (FY 1991 Appropriations Act, Title II, under heading "Economic Support Fund"): Will DA funds be used for tied aid credits?

N/A

3. Appropriate Technology (FAA Sec. 107): Is special emphasis placed on use of appropriate technology (defined as relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

N/A

4. Indigenous Needs and Resources (FAA Sec. 281(b)): Describe extent to which the activity recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.

The nutrition status of Central America is described in the PP; most of the TA provided by this Project will be provided by Central Americans.

5. Economic Development (FAA Sec. 101(a)): Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

Yes.

6. Special Development Emphases (FAA Secs. 102(b), 113, 281(a)): Describe extent to which activity will: (a) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (b) encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.

This Project includes a strong self-help effort by INCAP, an organization based on regional cooperation.

7. Recipient Country Contribution (FAA Secs. 110, 124(d)): Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?

Yes.

8. Benefit to Poor Majority (FAA Sec. 128(b)): If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?

Yes.

9. Abortions (FAA Sec. 104(f); FY 1991 Appropriations Act, Title II, under heading "Population, DA," and Sec. 535):

a. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions?

No.

b. Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations?

No.

c. Are any of the funds to be made available to any organization or program which, as determined by the President, supports or participates in the management of a program of coercive abortion or involuntary sterilization?

No.

d. Will funds be made available only to voluntary family planning projects which offer, either directly or through referral to, or information about access to, a broad range of family planning methods and services?

N/A

e. In awarding grants for natural family planning, will any applicant be discriminated against because of such applicant's religious or conscientious commitment to offer only natural family planning?

N/A

f. Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

No.

g. Are any of the funds to be made available to any organization if the President certifies that the use of these funds by such organization would violate any of the above provisions related to abortions and involuntary sterilization?

No.

10. **Contract Awards (FAA Sec. 601(e)):** Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

Yes.

11. **Disadvantaged Enterprises (FY 1991 Appropriations Act Sec. 567):** What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?

Given the small amount of U.S. TA to be procured, little if any, of these funds will go to disadvantaged enterprises.

12. **Biological Diversity (FAA Sec. 119(g)):** Will the assistance: (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas?

N/A

13. **Tropical Forests (FAA Sec. 118; FY 1991 Appropriations Act Sec. 533(c)-(e) & (g)):**

N/A

a. **A.I.D. Regulation 16:** Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16?

b. **Conservation:** Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent

feasible: (1) stress the importance of conserving and sustainably managing forest resources; (2) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (3) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (4) help end destructive slash-and-burn agriculture by supporting stable and productive farming practice; (5) help conserve forests which have not yet been degraded by helping to increase production on lands already cleared or degraded; (6) conserve forested watersheds and rehabilitate those which have been deforested; (7) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (8) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (9) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (10) seek to increase the awareness of U.S. Government agencies and other donors of the immediate and long-term value of tropical forests; (11) utilize the resources and abilities of all relevant U.S. government agencies; (12) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land; and (13) take full account of the environmental impacts of the proposed activities on biological diversity?

14. **Energy (FY 1991 Appropriations Act Sec. 533(c)):** If assistance relates to energy, will such assistance focus on: (a) end-use energy efficiency, least-cost energy planning, and renewable energy resources, and (b) the key countries where assistance would have the greatest impact on reducing emissions from greenhouse gases?

N/A

15. **Sub-Saharan Africa Assistance (FY 1991 Appropriations Act Sec. 562, adding a new FAA chapter 10 (FAA Sec. 496)):** If assistance will come from the Sub-Saharan Africa DA account, is it: (a) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant; (b) to be used to promote sustained economic growth, encourage private sector development, promote individual initiatives, and help to reduce the role of central governments in areas more appropriate for the private sector; (c) being provided in accordance with the policies contained in FAA section 102; (d) being provided in close consultation with African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in Sub-Saharan Africa; (e) being used to promote reform of sectoral economic policies, to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities, to bring about appropriate sectoral restructuring of the Sub-Saharan African economies, to support reform in public administration and finances and to establish a favorable environment for individual enterprise and self-sustaining development, and to take into account, in assisted policy reforms, the need to protect vulnerable groups; (f) being used to increase agricultural production in ways that protect and restore the natural resource base, especially food production, to maintain and improve basic transportation and communication networks,

N/A

to maintain and restore the renewable natural resource base in ways that increase agricultural production, to improve health conditions with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care, to provide increased access to voluntary family planning services, to improve basic literacy and mathematics especially to those outside the formal educational system and to improve primary education, and to develop income-generating opportunities for the unemployed and underemployed in urban and rural areas?

16. Debt-for-Nature Exchange (FAA Sec. 463): If project will finance a debt-for-nature exchange, describe how the exchange will support protection of: (a) the world's oceans and atmosphere, (b) animal and plant species, and (c) parks and reserves; or describe how the exchange will promote: (d) natural resource management, (e) local conservation programs, (f) conservation training programs, (g) public commitment to conservation, (h) land and ecosystem management, and (i) regenerative approaches in farming, forestry, fishing, and watershed management.

N/A

17. Deobligation/Reobligation (FY 1991 Appropriations Act Sec. 515): If decb/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same region as originally obligated, and have the House and Senate Appropriations Committees been properly notified?

N/A

18. Loans

a. Repayment capacity (FAA Sec. 122(b)): Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.

N/A

b. Long-range plans (FAA Sec. 122(b)): Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities? (Yes.)

c. Interest rate (FAA Sec. 122(b)): If development loan is repayable in dollars, is interest rate at least 2 percent per annum during a grace period which is not to exceed ten years, and at least 3 percent per annum thereafter? N/A

d. Exports to United States (FAA Sec. 620(d)): If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest? N/A

19. Development Objectives (FAA Secs. 102(a), 111, 113, 281(a)): Extent to which activity will: (1) effectively involve the poor in development, by expanding access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (2) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (3) support the self-help efforts of developing countries; (4) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (5) utilize and encourage regional cooperation by developing countries?

This Project is to a large extent an exercise in self-help by INCAP; it has a high involvement by women; and is an instance of regional cooperation.

20. Agriculture, Rural Development and Nutrition, and Agricultural Research (FAA Secs. 103 and 103A):

a. Rural poor and small farmers: If assistance is being made available for agriculture, rural development or nutrition, describe extent to which activity is specifically designed to increase productivity and income of rural poor; or if assistance is being made available for agricultural research, has account been taken of the needs of small farmers, and extensive use of field testing to adapt basic research to local conditions shall be made.

Improved nutrition leads to improved productivity, and the long-term benefits of INCAP's work are felt by all social levels.

b. Nutrition: Describe extent to which assistance is used in coordination with efforts carried out under FAA Section 104 (Population and Health) to help improve nutrition of the people of developing countries through encouragement of increased production of crops with greater nutritional value; improvement of planning, research, and education with respect to nutrition, particularly with reference to improvement and expanded use of indigenously produced foodstuffs; and the undertaking of pilot or demonstration programs explicitly addressing the problem of malnutrition of poor and vulnerable people.

INCAP is internationally respectful for its work in nutrition planning, research and education and for use of indigenous foodstuffs.

c. Food security: Describe extent to which activity increases national food security by improving food policies and management and by strengthening national food reserves, with particular concern for the needs of the poor, through measures encouraging domestic production, building national food reserves, expanding available storage facilities, reducing post harvest food losses, and improving food distribution.

INCAP's work touches on food policies and management through research, training, and dissemination of technical information.

21. Population and Health (FAA Secs. 104(b) and (c)): If assistance is being made available for population or health activities, describe extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family planning for the poorest people, with particular attention to the needs of

INCAP has several field sites testing low-cost delivery systems to the poorest.

mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems, and other modes of community outreach.

22. **Education and Human Resources Development (FAA Sec. 105):** If assistance is being made available for education, public administration, or human resource development, describe (a) extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, and strengthens management capability of institutions enabling the poor to participate in development; and (b) extent to which assistance provides advanced education and training of people of developing countries in such disciplines as are required for planning and implementation of public and private development activities.

N/A

23. **Energy, Private Voluntary Organizations, and Selected Development Activities (FAA Sec. 106):** If assistance is being made available for energy, private voluntary organizations, and selected development problems, describe extent to which activity is:

a. concerned with data collection and analysis, the training of skilled personnel, research on and development of suitable energy sources, and pilot projects to test new methods of energy production; and facilitative of research on and development and use of small-scale, decentralized, renewable energy sources for rural areas, emphasizing development of energy resources which are environmentally acceptable and require minimum capital investment;

N/A

b. concerned with technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations;

N/A

c. research into, and evaluation of, economic development processes and techniques; N/A

d. reconstruction after natural or manmade disaster and programs of disaster preparedness; N/A

e. for special development problems, and to enable proper utilization of infrastructure and related projects funded with earlier U.S. assistance; N/A

f. for urban development, especially small, labor-intensive enterprises, marketing systems for small producers, and financial or other institutions to help urban poor participate in economic and social development. N/A

24. Sahel Development (FAA Secs. 120-21). If assistance is being made available for the Sahelian region, describe: (a) extent to which there is international coordination in planning and implementation; participation and support by African countries and organizations in determining development priorities; and a long-term, multidonor development plan which calls for equitable burden-sharing with other donors; (b) whether a determination has been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of projects funds (dollars or local currency generated therefrom). N/A

Annex D

Borrower/Grantee Request for Assistance

INSTITUTO DE NUTRICION DE CENTRO AMERICA Y PANAMA

OFICINA SANITARIA PANAMERICANA
Oficina Regional de la
ORGANIZACION MUNDIAL DE LA SALUD

IN-IC-IJ-91-018

31 de mayo de 1991

Licda. Irenemaree Castillo
Directora
ROCAP/AID
8a. Calle 7-86, Zona 9
Guatemala, Ciudad

Estimada Licenciada Castillo:

Como es de su conocimiento, el Instituto ha estado trabajando colaborativamente con ROCAP/AID para elaborar una propuesta de Fortalecimiento Institucional, "INCAP Institutional Support Project (IISP)".

Por este medio le solicito formalmente que dicha propuesta sea considerada por ROCAP/AID para su financiamiento.

Agradeciendo su continuo apoyo me suscribo,

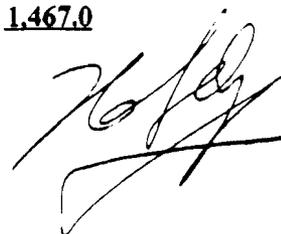
Atentamente,



Hernán L. Delgado
Director

**APOYO INCAP AL PROYECTO DE FORTALECIMIENTO
INSTITUCIONAL 1992 - 1994
(En miles de US\$)**

1. PERSONAL		1,175.0
Año 1	400.0	
Año 2	400.0	
Año 3	<u>375.0</u>	
2. COSTOS DE OPERACION		185.0
Año 1	60.0	
Año 2	65.0	
Año 3	<u>60.0</u>	
3. EQUIPAMIENTO		70.0
Año 1	30.0	
Año 2	20.0	
Año 3	<u>20.0</u>	
4. CAPACITACION		37.0
Año 1	15.0	
Año 2	12.0	
Año 3	<u>10.0</u>	
 TOTAL		 <u>1,467.0</u>



Annex E

Institutional, Administrative and Technical Analysis

- E.1 Financial Management Capabilities
- E.2 Technical Capacity for Sustainability
- E.3 Information Management for Sustainability
- E.4 Strategic Marketing and Business Planning for Sustainability
- E.5 Preliminary Survey, Foundation Funding Prospects
- E.6 Analysis of INCAP Financial Sustainability

INSTITUTIONAL, ADMINISTRATIVE AND TECHNICAL ANALYSIS

I. Introductory Summary

The INCAP Institutional Strengthening Project (IISP) is, by title and design Purpose, a project to strengthen INCAP as an institution so that it may be sustainable. Because of the close interrelationship and interdependence of the institutional, administrative, and technical features of the Project, a combined analysis is contained in this Annex.

This analysis is undertaken in the context of the Project's Purpose, which is:

"to strengthen INCAP so that it may be sustainable without further A.I.D. core support."

"Sustainability" is defined in terms of organizational effectiveness, viability (including financial), and relevance.

The institutional strengthening for INCAP's sustainability will be undertaken with Project outputs in three major components:

1. Strategic planning and management capabilities
2. Technical and technology transfer capabilities
3. Financial resource development capabilities

These outputs are strategically linked to achieve the Project's sustainability purpose by enabling INCAP to be an effective, viable, and relevant institution addressing the nutrition, child survival and food security needs of the Region.

The Sections of this Annex are organized as follows:

Concerning Project Purpose: Section II defines the "sustainability" objectives of this Project, and elaborates on the intention that sustainability be achieved by supporting INCAP's capacity to be a "relevant, effective, and viable" institution;

Concerning Project Outputs: Sections III and IV analyze the evolution of the current status of INCAP's capacities and needs in the three focus areas or components to be covered by the Project outputs;

Concerning Project Inputs: Section V identifies institutional strengthening objectives through the IISP, discussing the specific inputs to be financed through this

Project; and

Projection of Project Impact: Section VI analyzes the intended effect of the Project on INCAP's sustainability.

Separate studies were undertaken as part of Project preparation to analyze different aspects of INCAP's management/systems needs and institutional prospects for sustainability. These studies, referenced more fully in the text, are appended hereto as follows:

- Attachment E.1 Financial Management Capabilities
- Attachment E.2 Technical Capacity for Sustainability
- Attachment E.3 Information Management for Sustainability
- Attachment E.4 Strategic Marketing and Business Planning
for Sustainability
- Attachment E.5 Preliminary Survey, Foundation Funding
Prospects
- Attachment E.6 Analysis of INCAP Financial Sustainability

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II. Sustainability Objectives of the Project

A. Definition of "Sustainability"

INCAP sustainability is defined as follows:

"INCAP will be sustainable so long as its products and services are sufficiently valued by financial supporters and users of INCAP for them to continue supporting INCAP's provision of additional products and services."

The essence of the IISP Project is therefore to enable INCAP to link its technical program performance to its ability to secure and manage its financial resources.

B. Definitions of "Relevant, Effective, and Viable"

IISP will support improved management and systems at INCAP, including improved capacity to identify and secure financial resources. It will also provide support to strengthened technical capacity in nutrition, child survival and food security. These IISP outputs, taken together, are intended to enable INCAP capacity to be a more relevant and effective institution, and therefore to become more viable.

Thus, "sustainability" as used here implies "relevance", "effectiveness", and "viability". These terms are in turn defined for the purposes of the IISP Project as follows:

- "Relevance" is defined as INCAP's capacity to promote the dissemination and use of science-based information and technologies in areas of high potential applicability and demand;
- "Effectiveness" is defined as INCAP's capacity to provide the products and services within the scope of its institutional mission; and
- "Viability" is defined as INCAP's financial and managerial capacity to sustain a level of staffing, facilities and activities sufficient to provide the long-term stability of a science-based institution.

The PROPAG and TRO Projects have made a contribution to institutional strengthening of INCAP by their support of increased technical capacity of the organization. However, neither of these Projects has sought to address the issue of sustainability of INCAP. The two Projects will conclude in 1991 having assisted INCAP in proving its relevance and worth to the Region but without enabling INCAP fully to sustain its

programmatic advances.

INCAP and ROCAP have actively collaborated in the design of this proposed INCAP Institutional Strengthening Project. INCAP understands, and ROCAP intends, that this Project will represent the opportunity and means for INCAP to "graduate" from its financial dependence on ROCAP.

C. Institutional Capacity Requisite for INCAP's Sustainability

Based upon the INCAP and ROCAP studies prior to IISP Project design, and as elaborated during the design process, INCAP's capacity to achieve and sustain the level of institutional development required for long-term fulfillment of its Mission is severely constrained by following conditions:

- There is a high degree of uncertainty as to INCAP's continued accessibility to sufficient financial resources; INCAP's funding over the years has been predominantly from external sources (PAHO and, particularly in the 1980s, ROCAP); while INCAP does receive strong program and even financial support from the Health Ministries in the Region, Governments in the Isthmus lack resources to meet even the most pressing social needs (a condition heightened in the near term by structural adjustment programs);
- While INCAP's program and outreach is multisectoral (including health, agriculture, education, economics, etc.), INCAP is confined within its administrative and governance structure only to the Health field (PAHO and the Regional Ministers of Health), thereby inhibiting somewhat INCAP's multisectoral program aspirations and its attainment of financial viability;¹
- INCAP does not yet have the organizational and management systems and skills required for it to function independently of the administrative aegis of PAHO; in view of INCAP's traditional dependence on AID or PAHO funds, INCAP's management deficit extends to

¹ INCAP's current governance and non-AID financial constituency is dominated by the Health field. Yet it has long been recognized that nutrition, child survival, and certainly food security require multi-sectoral approaches. (See, e.g., A.I.D.'s Policy Paper on Nutrition, (Handbook 1, II.C), May 1982.

organizational skills and systems required
(i) to develop and (ii) to implement
strategies for long-term financial viability,
including those required to secure and
administer a diversified funding portfolio;

- There are some remaining gaps in INCAP's
technical capacity required to fulfill its
Mission, thereby limiting INCAP's
attractiveness to potential funders needed
for INCAP's long-term viability.

III. INCAP - Managing Institutional Change Over The Years

A. Background

INCAP was established in 1946 by an agreement between the Pan American Sanitary Bureau (now the Pan American Health Organization), the Kellogg Foundation, and the countries of the region (Belize subsequently subscribing as a member country). The ruling Executive Council is composed of delegates of each of the CA/P countries, traditionally represented by each country's Minister of Health, along with the Director of PAHO who serves as the President of the Council, while the Director of INCAP serves an ex officio member. The Council meets annually in one of the member countries to approve INCAP's budget, to receive and review audit reports, and review and establish major policies.

The Institute is headquartered in Guatemala City and employs 320 persons of whom 90 are professionals, 151 are technical and administrative support (including lab technicians, bookkeepers) and 79 are general service and maintenance.

INCAP has its own, independent legal standing ("personeria juridica"). Under the law of Guatemala and the region, INCAP is classified neither as "governmental" ("gubernamental") nor, in the common usage of the term, a "non-governmental" ("no gubernamental") organization. Rather, INCAP has the legal standing of an International Public Organization ("Derecho Internacional Publico"), separate and apart from the governments or organizations that form its Executive Council. With its legal standing, INCAP has capacity to enter into contracts and agreements in its own name. Under INCAP's governing agreement ("Convenio Basico") with the member countries and PAHO, PAHO serves as a legal representative for PAHO in major administrative matters. PAHO undertakes this role, however, in the capacity as agent for INCAP, with PAHO having no greater role in governance of INCAP than afforded through its membership on INCAP's Executive Council.

INCAP's purpose is to contribute to solving food and nutrition problems in the region, encourage practical application of these solutions, and strengthen the technical capabilities of the Member countries to resolve their food and nutrition problems. INCAP seeks to increase the effectiveness and broaden the transfer and application of technologies to address these problems in the region. Studies conducted on nutritional status and appropriate interventions have complemented other approaches in dealing with nutritional problems, such as land distribution, food fortification, complementary feeding, assistance to small farmers, and improving rural income generation opportunities.

When initially established, INCAP received most of its support from PAHO and its technical/professional staff were PAHO

employees. Currently (1991), only the Director and Administrative Officer are PAHO employees. In recent years PAHO contributions have declined to approximately 18% of the expenditures, while the Institute is responsible for generating other needed revenues. Currently these are largely from ROCAP's ORT and ProPag Projects.² INCAP and ROCAP both recognize that funding diversification and increased financial self-reliance for INCAP are essential for INCAP to continue to serve as a critically needed resource for the region.

B. Organizational Changes Over the Year

In its 45 years of existence, there are perhaps three distinct stages or phases in INCAP's institutional evolution and growth. The first covered some two decades (from the mid-40s through the late-60s), the second covered the 1970s, and the third covered the 1980s. These three stages are described below to illustrate how INCAP has evolved in response to changes in its external and internal environments.

1. 1946-1969: An Extension of PAHO

For the first 23 years of its existence, INCAP was largely supported by PAHO funds, which covered all staff expenses, administrative costs, and research activities. The Institute focused its efforts on scientific research in the region relating to food and nutrition. INCAP conducted national nutrition surveys on dietary intake which influenced regional health programs and policies. In the late 1960s, INCAP established the first regional training program in nutrition. The Institute was relatively independent of the external environment, i.e., the health ministries and related institutions in the region.

The organization was functionally structured in its initial years. Each project was independently managed and, due to the nature and specialization of research, it created an organizational culture with minimum contact with the region. Experts performed their research in laboratories at the headquarters, with little work done in the field.

2. 1970 - 1979: Multi-Sectoral Activities

In the 1970s, INCAP reduced its dependency on PAHO, receiving funds from other sources. This was as much a function of PAHO's choice (and fund limitations) as an INCAP initiative for independence. As a result of broadening of its funding

² ORT, or TRO: Control del Crecimiento y Educacion en Atencion Prima de Salue (ROCAP 596-0115); ProPAG: Proyecto de Asistencia Tecnica para Programas de Alimentacion a Grupos (ROCAP (596-0116)).

constituency, INCAP also broadened its activities to embrace a more multi-causal and multi-sectoral approach to nutrition. Its university-level training program was expanded to include other areas of public health and food technology. At the same time, the Central American health sector, through the INCAP member country health ministries, became more involved in outreach services in rural and marginally urban areas. These actions contributed to redefinition of INCAP's role, and resulted in a structural change: a horizontal organization that was arranged by divisions. This implied differentiation of work responsibilities and the introduction of new specializations.

3. 1980 - 1989: Adaptation and Application

In the 1980s, INCAP underwent major institutional changes, including (a) a shift in focus from the more theoretical to more practical applications of science-based nutrition technologies, (b) adaptation of a more flexible matrix mode of organization and operation, and (c) a conscious program of funding diversification.

(a) INCAP's shift to practical applications

The social, political and economic changes begun in the 1970s continued into the 1980s and influenced INCAP's role as a regional institution in food and nutrition. INCAP's relationship with member countries became more defined and more diverse with many other sectors - health, labor, agriculture, education, planning, and policy. There was a much greater emphasis on developing programs that met with the practical needs and health strategies of the member countries. Information and dissemination and food security issues were added to INCAP's existing function. Recent (1989) INCAP training activities included 659 professional and technical personnel from member countries for short-term courses, and 23 graduates from its university-level program.

(b) Adoption of a matrix organization form

In the 1980s, in furtherance of its shift to more practical applications of its scientific knowledge, INCAP adopted and has largely absorbed a matrix organizational form. This structure for INCAP increases its ability to promote the interplay between technical knowledge (INCAP's science) and application of that knowledge (through applied research and coordinating units promoting extension).

Thus, INCAP is organized into three functional or technical divisions:

- Agriculture and food sciences
- Nutrition and health

- Food and nutrition planning

At the same time, there are four cross-cutting coordinating units:

- Human resources formation and development
- Technical cooperation
- Research
- Information dissemination

Matrix organizations strive to (1) ensure the coordinated, practical, focused attention that operational projects require and (2) retain at the same time the benefits of specialized expertise and capabilities that functional departments provide. Critical factors for an effective matrix organization include a high level of employee acceptance and commitment, and strong institutional mission and leadership. The matrix structure is valuable for organizations such as INCAP engaged in multi-disciplinary activities and interdependent tasks. However, since employees in a matrix organization are responsible often to two departments and two supervisors, management in such an organizational structure is complex. If not managed properly, it can create conflict, stress and increase administrative costs.

INCAP has had sufficient time and experience with its matrix form to have achieved a reasonably high level of effectiveness under the form.

(c) Funding Diversification

While the ORT and ProPag Projects have not been institutional support projects as such, they have been the equivalent of institutional support because they pertain to those programs and services that are the very essence of INCAP. As intended in the Projects, INCAP has over their course commenced an effort at funding diversification. In 1988, ORT and ProPag constituted some 40% of INCAP's total funding, and 60% of its restricted (or so-called "fiduciary" funding). By 1990, the corresponding figures were reduced to 33.6% and 48.7%, and for 1991 they are projected at 32.1% and 44.4%. (For more on INCAP's financial resources, see below, Section VI.)

By 1990, INCAP's funding diversification included over 50 projects funded by the following:

- Four other bilateral programs (Sweden, Switzerland, France, Guatemala), representing 16 projects;
- Seven Universities (Stanford U., U. of Minnesota, Baylo U., Cornell U., Washington State U., IDRC/U. of Manitoba, Hebrew U. of Jerusalem), representing 10 projects;

- Eight NGOs/Foundations (Population Council, American Soy Bean Association, Asociacion Demografica El Salvador, NESTEC, General Foods Foundation, COGAAT, Firma F. Hoffman), representing 9 projects;
- Two private organizations (Roche, Molecular Biosystems), representing 2 projects; and
- Four UN-related organizations (UNICEF, WHO, PAHO, and Pan American Health and Education Fund), representing 15 projects.

In 1990, for the first time, INCAP's funding from non-AID projects (35.4% of total funds) exceeded its funding from AID projects (33.6%). (See Section VI.)

Changes in international economic development efforts resulted in INCAP changing its organizational structure to adapt to the changing external environment. INCAP's increased involvement in technical cooperation reflected a greater relationship with Central American health policies, and an adaptation and expansion in its clientele. Although health problems of the region remained a major focus, INCAP's work became more multi-functional in nature, with linkages established to education, development planning, labor, agriculture, science and technology, and NGOs.

IV. INCAP's Strategic Approach to Manage Future Change

Beginning in 1988 and running through 1989 and 1990, INCAP went through a series of planning and strategy sessions to capture lessons from the experiences of the prior decade and better position themselves for the challenges and needs of the 1990s. This was a conscious effort to define the Institute's future goals and new perspectives, to take into account changes in INCAP's internal and external environments. The effort was embodied in a formal Strategic Planning exercise, which has had a profound influence on INCAP's approach to and readiness for the additional institutional strengthening activities proposed for the IISP.

Over the past three years, INCAP has been significantly influenced by the following realizations:

1. The funding of ROCAP (in TRO and PROPAG) as well as other donors had oriented INCAP far more than before to applied research activities. This had resulted in an organization that was becoming heavily oriented along project lines. It also produced an institutional culture with somewhat isolated subdivisional environments. INCAP's increasing experience with the matrix form, with a structure aimed to meet strategic program guidelines, should help the organization address the variances in the different organizational subdivisions.
2. Changes in INCAP's external environment -- particularly interests and needs of INCAP's user institutions and INCAP's funding support -- affected INCAP's network and outreach strategies, and demonstrated need for new linkages with the governmental and non-governmental, public and private sector institutions that make up INCAP's clientele or constituency.
3. Internal movements within INCAP, brought about by changes in its external environment, influenced strategic initiatives in technology transfer, decentralization, and multi-sectoral/multi-causal approaches to food and nutrition problems.

These latter two factors -- changes in the external and internal environments -- directly contributed to INCAP's commencement of a strategic planning process which is to be furthered by the IISP. Consideration of a formal strategic planning approach was initiated informally at INCAP in 1988, through informal groups, largely by personnel from the technical divisions. Later that year, Dr. Angel (the previous INCAP Director) organized a three-day meeting for all staff to discuss the future of INCAP. Groups met formally and informally to discuss organizational changes and

strategies, particularly decentralization and formation of member country teams (the Grupos Tecnicos Basicos, or GTBs).

As a result of these discussions, three groups were formed in 1989 to begin to formulate INCAP's strategic plan. The three groups were concerned with food and nutrition issues (Group 1 - Situacion Alimentario Nutricional), social and political factors affecting nutrition and food security (Group 2 - Entorno Socioeconomico y Politico) and institutional and organizational factors that would be addressed in adhering to a new strategy (Group 3 - Estudio Institucional).

The groups received internal and external input for strategy formulation. Group 1 used input provided by INCAP staff, while Groups 2 and 3 received external assistance (CEPAL and ICAP). Group 3 eventually increased in size to integrate the recommendations produced by Groups 1 and 2. This last group then became the core group for working on INCAP's strategic plan.

Four work groups, consisting of 26 persons, presented the draft plan to external fellows and associates. In total, 80% of all professionals at INCAP participated in the formulation of the strategic plan. The draft of this document was completed in 1990 and was circulated to all professional staff for comments. The plan was then produced and distributed in final form in June 1990.³

³ INCAP. June 1990. INCAP Plan Estrategico, 1991-2000.

V. INCAP's Capacity for Sustainability Through IISP

It is intended that through this Project, INCAP will have (1) a strategic planning system oriented to needs/demands; (2) a strengthened technical capacity as called for by the strategic plan, particularly technical capacity may relate to achievement of INCAP's sustainability objectives, and 3) a financial resources development system and capacity for sustainability. These objectives are discussed in turn below.

A. Strategic Planning and Management

As discussed above in Section IV, INCAP's Strategic Planning System has been developed over the past two years through a highly participatory process within INCAP and with close collaboration and effective use of external consultations, principally funded by ROCAP.⁴ In June 1990 INCAP published its institutional Strategic Plan for the decade 1991-2000, and the principal aims and elements of the IISP have drawn heavily upon that Plan.

INCAP recognizes that in order to meet the sustainability objectives of this Project, INCAP will require a fully functional strategic planning process and system, to be reviewed and updated at regular intervals, including annual operational plans to give specific content to the generalized directions of the strategic plan. This will be an elaboration on INCAP's existing strategic planning process. When refined, INCAP will be better able to set institutional goals and priorities, define its core⁵ staff and facilities, and make program and budget decisions with reference to a strategy and plan for reconciling INCAP's substantive mission and its long-term financial viability.

Continuing the participatory and collaborative strategic planning process used to date, and with assistance available through IISP, INCAP intends to refine its strategic planning and management capacity in the following respects:

⁴ INCAP's participatory processes and the projected institutional development activities must be understood in the context of INCAP's organization (like many major research institution, science and technology groups) along matrix lines. See, above, Section III.B concerning INCAP's matrix structure.

⁵ For purposes of this Project, INCAP's "core" operations will be understood in the terms of institutional "relevance", "effectiveness", and "viability" as defined above on page 3. For further discussion of INCAP's "core", see below, Section V.B.

1. Strategic Planning and Management System (SPM)

Strategic planning, as such, can better enable INCAP to balance short-term needs and long-term needs and opportunities, managing change over time in face of internal and external pressures and in light of INCAP's mission and standards. INCAP will develop an integrated program planning and budget system that will enable it to set priorities and allocate resources (a) with reference to the strategic plan and the findings of resource development assessments, and (b) in light of the available and accessible resources.

2. Fiscal Management System (FMS)

Financial management and capacity at INCAP will be upgraded through IISP to improve the organization's capacity for stewardship and accountability of the diversified funding mix required for sustainability. This includes cost controls and integration of planning and budgeting systems.

Attachment E.1, a Price Waterhouse analysis prepared as part of IISP design, discusses INCAP's financial management systems and areas of improvement targeted by the Project. It should be noted that in the opinion of Price Waterhouse, INCAP's financial management systems and procedures are suitable for purposes of its management of the IISP grant.

With IISP technical assistance, INCAP will establish financial management and accounting policies and procedures suitable for INCAP as an independent organization with a multiplicity of funding sources. This calls for an efficient financial management and accounting system and capacity as required for administration and accountability of resources, and for informing management on such matters as allocation of resources and progress in implementing the financial resource development plan. To this end, the financial management system will be integrated with the management information system described in Subsection 3, below.

INCAP's improved accounting system will include a capacity for cost analysis sufficient to price INCAP products and services on a cost-recovery or net-of-cost basis, and a capacity for determining and justifying overhead charges (for A.I.D. and others). An improved cost control system will be determined and put in place, and will provide reports to management to enable analysis of uses of restricted and unrestricted funds.

3. Information Management System (IMS)

Attachment E.2 is an analysis of information management system capacities and needs with respect to INCAP's capacity for sustainability. INCAP will, with technical assistance and

capital equipment secured through IISP, design and establish the management and other information systems determined necessary for the various institutional development and strengthening activities to be supported by the Project.

This activity will include information systems capacity in such areas as financial management (e.g., timeliness, pertinence of financial information as needed for INCAP management decisions), analyses of national and regional food and nutrition states, INCAP market assessments, technology information and transfer systems, and information systems as required for INCAP's outreach activities (including financial resource development). INCAP's Information Management System will also link program evaluation information not only to program supervision but also to market development and promotion. INCAP will require an improved monitoring/evaluation system to isolate and demonstrate the impact of its products and services (see above).

INCAP will increase and improve its place within the networks of science and technology institutions relevant to INCAP's areas of work. Specific emphasis will be placed in this Project in enabling INCAP to go on-line with computer-based science and technology information networks and to develop a full CD-ROM capacity. INCAP, with external assistance, will assess its own needs and capacity including user training. INCAP will participate in relevant fora to be aware of and connected to state-of-the-art computer-based science and technology information programs in the scope of INCAP's Mission and Strategic Plan.

B. Technical and Technology Transfer Capabilities

Attachment E.3 is a detailed analysis of the technical capacity of INCAP to provide the services and products within its area of mission and which are sufficiently valued by funders to contribute to INCAP's sustainability. Over the course of IISP, INCAP will continue to inventory and assess its professional scientific and technical staff to determine whether there are specific gaps in light of other changes such as decentralization, increasing orientation to application of science-based technologies, and the Financial Resource Development activities described below.

Of the recent institutional changes at INCAP preceding IISP and most likely to influence IISP results, INCAP's decentralization initiatives must be cited. Based upon conclusions reached during the strategic planning process in the late 1990s, INCAP in 1990 established operational country-level representation teams known as "Grupos Tecnicos Basicos" (or "GTBs"). These are multi-disciplinary teams intended to be (1) the principal instrument for INCAP in transferring technology to the national and local level, (2) the link between INCAP's science-based research and

adapation and adoption of research findings, and (3) the means whereby INCAP can more effectively know and be known by national and local level users of INCAP's services and products.

INCAP's experience with the GTBs is scarcely more than one year old, but the experience has confirmed to INCAP and to ROCAP that the decentralization embodied in the GTB program is essential not only to INCAP's service delivery (its technology transfer) but, as well, to INCAP's capacity for program evaluation, for demand/needs assessment, and thus for financial resource development.

INCAP's processes for transfer of science and technology will be reexamined and revised, as necessary, to integrate with INCAP's attention to business development opportunities. This will involve assessment of needs and opportunities for transfer of technologies, and may include development of model technology transfer packages, including appropriate contracting instruments (with protection of INCAP's intellectual property rights, when applicable) and pricing mechanisms.

C. Financial Resource Development Capabilities (FRD)

Attachment E.4 is an analysis of INCAP's current capacities and recommended improvements in the areas of financial resource development. In this connection, see also Section 9.3 of the Project Paper and Annex G for a preliminary analysis of the current and potential public and private sector "clients" of INCAP. This "market" analysis helped in the determination of the technical capacities (Section B, above) and financial resource development skills required for INCAP to secure sustainability.

INCAP's institutional skills must be adequate for a multi-faceted financial resource development program, including the following elements. The IISP will enable INCAP to design and absorb a financial resource development strategy and program with the following principal elements:

1. Product/service-based resource development

This requires awareness of interests and demands of potential users of INCAP's services and products, plus negotiating capacity to secure opportunities to deliver the services and products at a level of quality to retain high value by allocators of resources.

A systematic program will be required for sensitizing and training INCAP staff in the art and practice of determining and seizing business development opportunities for INCAP within the framework of INCAP's program and Mission. There will be assessments and identification within INCAP of those offices, programs, and staff members relevant to INCAP's program-based business development opportunities, and staff training and

business promotion needs will be determined and met. Clear policies and procedures for pricing and contracting of INCAP business opportunities will need to be established.

2. INCAP "mission"-based resource development

This requires knowledge of donor interests in INCAP's services and products plus communication and negotiation skills required to generate financial support for INCAP activities. As discussed above in Section III.B, INCAP has in recent years achieved some measure of success in diversifying its funding base from essential dependence upon A.I.D. and PAHO. However, INCAP does not have a defined system, or organized staff structure, for an aggressive and effective financial resource development program.

While the analyses of INCAP's sustainability planning (Attachment E.4 to this Annex) and market potential (Annex G) suggest a generally positive outlook for INCAP's resource development, it would be deceptive to conclude that the task will be easy. For example, a preliminary analysis of United States foundation interests -- often a reasonably good barometer of the global social agenda, both public and private sectors -- indicates a relatively small range of interest in the areas covered by INCAP's work. (See Attachment E.5)

3. Non-restricted resource development

This requires capacity to identify, secure, and exercise stewardship over non-restricted funds, to supplement and balance them with the restricted resources mentioned above, and thereby give INCAP some measure of independence from donor imperatives through self-financing. (This includes a capacity to secure funds for an endowment fund, as discussed below.) Non-restricted fund development requires refinement and improvement of INCAP's current ability to draw upon the resources of constituent organizations (e.g., PAHO and Regional Ministries of Health) for long-term commitments to INCAP's core operations (and/or contributions to the proposed Endowment Fund). This will require development of a specific strategy and plan for broadening INCAP's general support constituency to include other governmental sources without diminishing the interest and commitments of organizations that have supported INCAP for over four decades. This broadening of INCAP's financial constituency would follow the increasingly multi-sectoral character of INCAP's program.

4. Exploration of an endowment fund

(a) The role of IISP in exploring endowment possibilities

At its September 1990 Directors' meeting, INCAP determined that its long-term financial stability included the need for an endowment fund of a sufficient amount to ensure INCAP ability, over time, to be able to ensure maintenance of essential staff and essential programs -- as defined by INCAP's mission statement -- in the face of possible gaps in donor interest.⁶ As INCAP goes to a more "market-oriented" approach for sustainability that includes project-specific funding by donors such as USAID Missions in the Region, INCAP will also need reserve funds for audit disallowances which befall virtually all operational organizations, however well managed.

The possibility of INCAP's active pursuit of endowment fund prospects has been a part of the INCAP-ROCAP discussions in connection with the IISP. INCAP has identified a number of "potential" sources for endowment funding (although it must be stressed that INCAP has not yet approached these sources in a formal way for endowment support). Among these sources are the following:

- Member country contributions to endowment (including a special contribution, over and above membership contributions). Through agreement with PAHO, these local currency endowment contributions could generate hard currencies following the same procedures used with member contributions. The dollars so generated might be in an endowment fund managed by PAHO on INCAP's behalf. Or they might be turned over by PAHO to INCAP's independent endowment fund (which might be managed by INCAP itself as a "fondo dotal" or, possibly, established as an independent "fideicomiso").
- PAHO contribution to endowment.
- Channelling to the endowment of unrestricted funds earned by INCAP through sales of services (generating unrestricted revenues). This could include "fee" assessments that could be included in costing mechanisms for INCAP participation as a sub-contractor.

⁶ As pointed out in Section II.A, there is not necessarily a full correlation between donor interest (with restricted funds) and the family health objectives of INCAP's "mission." Global experience confirms an undervaluation by resource allocators of public sector areas such as health and nutrition (as with education). Similarly, science-based institutions (including the renowned international research centers) find themselves stretched for long-term financial support for their long-term work. Virtually all international research centers, and major national centers, are aggressively seeking to establish endowment funds.

- Solicitation of direct endowment contributions from sources other than PAHO and members. (A.I.D. policy does not permit use of Development Assistance Fund for endowment purposes. However, A.I.D. coverage of costs normally allowable for DA money might displace use of unrestricted funds which could then become available for endowment purposes; there is precedent with the LAC Bureau of A.I.D. for this "displacement" approach.)

- Debt-swap transactions (either on a country-by-country basis or, possibly, on a regional basis such as currently being explored for natural resource management purposes by regional authorities -- with A.I.D. support through the centrally-funded Environmental Planning and Management Project). Funding sources possible for this might include the World Bank and the Inter-American Development Bank (both of which are actively considering such programs in the region as a part of their "social dimensions of adjustment" initiatives). A.I.D. funding for debt-swaps for endowment purposes might also be possible, including being channelled through U.S. NGO instrumentalities increasingly used by A.I.D. for such purposes (e.g., the Debt-for-Development Coalition, and the Foundation for Private Assistance In International Development (PAID)).

(b) Endowments In General

Since the concept of endowments is relatively new to the A.I.D. development assistance process, and because it is viewed as both strategically and financial important for INCAP's sustainability, this analysis will here go a bit more into depth on considerations and parameters for endowments in general. In the following subsection (c), the analysis discusses A.I.D. and endowments. These considerations will help guide in determining the feasibility and suitability of an endowment mechanism as part of INCAP's strategy and program for sustainability.

1. An endowment, loosely defined, is the body of long-term assets held by an individual, organization, or institution. In the U.S., for example, the term "endowment" usually refers to some form of trust or capital fund by which earnings are generated in favor of a particular individual, cause, or organization.

2. If the endowment is managed by someone or some body other than the beneficiary, the endowment might more accurately be referred to as a trust ("fideicomiso"). If, on the other hand, the beneficiary manages the endowment itself, the endowment is commonly called a capital fund (or, generally, a "fondo

dotal").

3. Endowments are normally intended to be "irrevocable", that is, the person(s) or donor(s) establishing the fund cannot normally revoke the endowment unilaterally. By the same token, the corpus or principal of the endowment is not to be invaded by the beneficiary or diverted for purposes contrary to those stipulated when the endowment was established (or the endowment contribution was made). Safeguards established to protect the corpus from invasion or diversion may be found in the instrument establishing the endowment (e.g., a will or conditions attached to a contribution), in legal codes, or in generally accepted professional codes of conduct for banks, accountants, and lawyers serving in trust capacities.⁷

4. The issue of control and assignment of responsibility is of utmost importance in endowment stewardship.

-- Most foundations divide the responsibility for (i) investment of the corpus, and (ii) allocation of funds generated by the endowment, into either two separate organizations or separate departments of the same organization.

-- When an organization manages its own endowment (as a "fondo dotal"), overall responsibility for management of the endowment is usually vested in a special committee of the Board of Directors, i.e., an investment committee or a finance committee. This committee plays the key role in determining an investment policy, selecting investment managers, monitoring the performance of those managers, and assisting in budget preparation and long-range financial planning. Such a committee would be appropriate for INCAP even if the actual management of the endowment (e.g., execution of transactions, selection from among investment choices within the range of the organization's investment goals and policies) is remitted to an independent "fideicomiso".

-- This responsible committee (perhaps with guidance from an external endowment "oversight" committee) should have responsibility for formulating policy guidelines regarding asset allocation and income generation, taking into account both expenditure requirements and the growth of the endowment. It is

⁷ In Guatemala there is an adequate body of trust laws and practices governing endowment arrangements, as well as established professional standards of conduct governing fiduciary relationships.

probably best to require this basic committee's approval (with subsequent Board ratification) of all investment decisions.

-- One of the critical responsibilities of the finance committee is likely to be the selection of a professional manager to actually execute the transactions pursuant to the general portfolio investment strategy. This manager may be "in-house" or external to the organization. Most literature on endowment management suggests that notwithstanding endowment investment guidelines, the manager(s) should be allowed discretion in his or her investment choices.⁸ As the size of the endowment corpus increases or becomes more complex, the organization may want to divide the portfolio among several professionals. Since the corpus may be held in both local and overseas investments, division among portfolio managers is likely.

5. Endowment fund management strategies will be based upon a number of conditions and variables. These will include the following:

-- The source and form of the resources obtained for the endowment (whether USAID, Government, or other donor) will in large part affect the organization's flexibility in use of its endowment funds. In some instances, specific conditions may be attached to the use of endowment funds (either for investment or program purposes). In addition, the form in which the resources are obtained, primarily whether in hard or local currency, will have a direct impact on the investment opportunities available.

-- Endowment management strategies will also be based on programmatic decisions and cash flow requirements. This includes the important variable of liquidity as required for access to endowment earnings when needed.

6. There are certain organizational characteristics typically required by a donor in considering contribution to an organization's endowment fund:

⁸ See the chapter on "Investment Strategies for Nonprofit Organizations," in Connors, Tracy D., The Nonprofit Organization Handbook, McGraw-Hill (New York 1988); and chapter on "Endowment Policy and Management", in Wacht, Richard F., Financial Management In NonProfit Organizations, Georgia State University (Atlanta 1984).

-- The organization must be seen as warranting (in terms of its program or mission) a more or less "permanent" existence (certainly a few decades or more).

-- The organization must have an acceptable level of competence and reliability (a) of the trustees to manage the endowment, and (b) of the organization's management team and systems (including program management), capital management, and fiscal controls;

-- There must be clear and reliable safeguards against dilution or diversion of endowment funds;

-- There must be some measure of assurance that the endowment corpus will be protected (as far as possible) from decapitalization through inflation or devaluation; and

-- Usually, there must be some program and likelihood of further endowment growth. This could be through recapitalization of earnings as well as "external" growth from other donor or other income sources.

7. An endowment strategy for INCAP should be an integral part of a much broader financial strategy and plan. It is not some disembodied grantsmanship tactic that operates as just another revenue stream.

8. An institutional endowment should be an integral part of an organization, both a symbol and source of its permanence, for which the Trustees and management are assuming a higher level of fiduciary responsibility than is usually the case for fundraising efforts. In short, there must be an unequivocal organizational commitment to the endowment strategy and implications.

(c) Endowments and A.I.D.

1. A.I.D. has funded various forms of endowments over the years,⁹ although use of appropriated dollars to establish endowments has usually followed specific Congressional approval. In the past four years, there has been a surge of interest by A.I.D. and USAIDs in endowment funding, mostly with local currencies (PL-480 and ESF), mostly in the LAC Region.

Most of the recent interest has centered on funding of non-governmental foundations involved in agriculture research, natural resource management, and education. (See "Terms of Endowment", Gary Hanson, A.I.D./PPC/CDIE, June 1990.) In 1989-1990, renewed interest in endowments has been shown in Africa (e.g., USAID/Kenya, USAID/Malawi, USAID/Pretoria, USAID/Senegal) and in Asia (e.g., USAID/Indonesia, USAID/Manila). Sectoral interest has expanded to health/nutrition (e.g., ROCAP/Guatemala, USAID/Ecuador), small enterprise promotion, and in the natural resources/environmental fields. The impetus for this latter has been the approval of use of debt-swaps approved under Section 462 of the Foreign Assistance Act, and Section 584 of the 1990 Appropriations Act. More recently (October 1990) was the passage of the "Enterprise for the Americas Initiative" legislation, with specific references to (and approval of) endowment mechanisms.

2. While A.I.D. has not yet set down guidelines for USAIDs concerning endowment funding, there are certain common elements in the endowment funds approved over the past several years:

- The funds were established after determination of acceptable levels of competence and reliability (a) of the trustees of the institution managing the endowment, and (b) of the institution's management team and systems, including program management and fiscal controls;
- Safeguards were established against dilution or diversion of endowment funds; however, these safeguards usually depend upon operation of law (e.g., local laws concerning trusts, or professional conduct) and do not involve some right (by USAID or by the host Government) to intervene in the management of the endowment or to exercise reversionary

⁹ A.I.D. has been instrumental in past years in establishing endowment funds to support bi-national foundations to replace or supplant direct A.I.D. programs in India, Israel, and Yugoslavia. There have also been trust funds, called "endowments", such as the USAID/Egypt fund to support the American University in Cairo.

rights to the endowment funds;

- While USAID does not involve itself directly in endowment management, typically there is some on-going USAID leverage through concurrent grant funding (usually through the first three to five years of the endowment);
- Usually there is a requirement of some level of further endowment growth through matching fund (or parallel endowment funding) mechanisms;
- Flexibility is allowed in endowment administration (currency convertibility or indexing) to try to avoid fund decapitalization through inflation. Bilateral experience with local currency endowments in LAC (including some reported to ROCAP in the USAIDs' comments on the IISP Project Identification Document) shows the vulnerability of local currency endowments to both to inflation and to monetization policies, including structural adjustment.

3. It is the position of A.I.D. through its General Counsel that endowment funds can not be established with appropriated dollars unless there is specific Congressional authorization. This theory derives from theories of Constitutional separation of powers: when Congress appropriates, it establishes the Executive Branch agencies' level of spending; the agencies are not supposed to "augment"¹⁰ the Congressional appropriations by generating interest on appropriated funds; "augmentation" is viewed as usurping the Congressional power of the purse by circuitously exceeding the amount of funds Congress has appropriated. While there are some disagreements among Government attorneys as to the correctness of this interpretation,¹¹ it is the prevailing view within A.I.D. at the

¹⁰ The increased, or "augmented", revenues from interest on an endowment fund (or any interest bearing account) are considered by A.I.D.'s General Counsel as "miscellaneous receipts" which must (under 31 U.S. Code Sec. 484) be paid over into the General Fund of the U.S. Treasury.

¹¹ 31 U.S. Code Sec. 628 restricts use of appropriated funds "to their intended purpose." Some argue that the intended purpose of an endowment fund is to provide sustainability to a development-related institution, and thus should be permitted. A.I.D. General Counsel (and LAC General Counsel) do not subscribe to this view.

present.

VI. Financial Sustainability Through IISP

Attachment E.6 is an analysis of INCAP's financial sustainability through the IISP Project.

While IISP is aimed primarily at increasing INCAP's capacity to secure and manage financial resources from sources other than AID, IISP will continue some support of technical staff and personnel currently funded through TRO and ProPag. This support of core INCAP staff will be phased out over the course of IISP.

INCAP will be severely pressed to secure funds to replace those currently available through TRO and ProPag. Based upon design analyses and discussed in Attachment E.6, INCAP should be able to secure alternative funding to replace the diminishing levels of AID support over the next three years. In addition, the levels of funding required to sustain INCAP as a viable institution beyond the period of IISP funding appear to be attainable.

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Annex E.1

Financial Management Capabilities

Price Waterhouse



June 3, 1991

Mr. Jeff Goodson
Projects Development Office (PDO)
ROCAP/Guatemala
Guatemala City

Dear Mr. Goodson:

INCAP Institutional Strengthening Project (IISP)
ROCAP/Guatemala Project No. 596-0169

We are pleased to submit herewith a summary of our preliminary impressions on the diagnosis of INCAP's present financial management and accounting systems and procedures including the entity's operating manuals.

A. EVALUATION FINDINGS -

1. INCAP is presently engaged in redesigning its financial systems, which were originally structured to comply with the Pan American Health Organization (PAHO) specific requirements. The results of our evaluation, however, indicate that the systems' conceptual design and accounting structure are sufficient to process data from several donors and/or activities as well as from different projects, with some adjustments which will be dealt with in our final report together with our more detailed recommendations. The structure of the entity's financial statements is oriented towards a disclosure accounting, as required by PAHO, a presentation not necessarily based on the application of generally accepted accounting principles.
2. The administrative policies and procedures are informally documented through memoranda and isolated instructions which offer room for improvement.

The procedure related to billings to donors (requests of expense reimbursements) and the related specific requirements, as an example, are not defined in writing and the functional responsibility is discharged by one single employee.

3. Projects are contracted and assigned on the basis of the Annual Project Budget (APB) mode, but no specific control on the mode's general data and financial and operating records is maintained.
4. Because INCAP is a research institution, it has not implemented a billings to third parties system to cover the commercial services to be eventually rendered as part of the entity's new emphasis on profitable activities.
5. INCAP has not implemented an internal audit function to ensure compliance of approved policies and procedures for a given project.
6. The entity's fixed assets are not accounted for in the entity's own records and no specific policy regarding depreciation has been established.
7. The overhead computation system was established in 1985 but no written procedures concerning the matter have been prepared to date. Also, INCAP's growth during the past five years has been so noticeable that it warrants a revision of its methods and/or procedures for allocating overhead.
8. The entity's financial reporting system does not provide for a cash flow report because PAHO has not requested it in the past.
9. The entity's current hardware configuration appears adequate to satisfy present and future management needs in the financial area. The results of our evaluation indicate that the entity's software seems capable of responding to the users' information needs, although there exists a great deal of data not properly defined because the user's training cycle has not yet been completed.

On the other hand, the systems implementation plans provide for the programs technical documentation which we believe will require more time than the one originally estimated for such purposes.

B. RECOMMENDATIONS -

We believe that prior to the IISP project implementation INCAP should comply with the following:

1. Design of a financial manual to encompass the budget and accounting functions to respond to the entity's present and future needs, including those of the IISP. The design of the manual would require that changes to established procedures be submitted to PAHO-Washington for approval.
2. Design of an administrative procedures manual to include all the policies and procedures required to support the entity's financial and administrative activities and to correct the control weaknesses noted in the past.
3. Establish a revised overhead computation system and submit it to the approval of ROCAP/Guatemala. This system, after its approval as part of the IISP grant agreement should also be applicable to future projects.

The following activities (4 to 6) are also considered necessary but could be performed during the IISP implementation:

4. Design a computer mode to facilitate the financial management control over all projects undertaken by INCAP. This mode's design should encompass general, statistical, budgetary and accounting data.
5. Define the procedures to be applied once the entity undertakes commercial and profitable activities.
6. Define integral and complete training plans for the information technology area, to cover general computation aspects for the systems' users, and also to train the area specialists and employees to take full advantage of the commercial software tools presently available in the local market.

7. It is quite possible that the design and implementation of INCAP's financial management systems presently under way may require the adoption of a proven systems development methodology and more formal (complete) documentation, which in turn may require more time and effort than originally budgeted. Therefore, it is recommended that these additional requirements be included in the IISP grant budget.

The above summary covers our preliminary evaluations, which will be confirmed or adjusted upon submission of our final draft report.

Yours very truly,


Axel F. Castellanos
Project Director

Annex E.2

Technical Capacity for Sustainability

**INCAP INSTITUTIONAL
STRENGTHENING PROJECT
(IISP)**

TECHNICAL ANALYSIS

Guatemala, May 30, 1991

INCAP INSTITUTIONAL STRENGTHENING PROJECT (IISP)

TECHNICAL ANALYSIS

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INCAP INSTITUTIONAL STRENGTHENING PROJECT (IISP)

TECHNICAL ANALYSIS

I. SCOPE OF WORK

The terms of reference for this analysis were discussed with Mrs. Sandra Callier, Health and Nutrition Advisor, and were established based on the ROCAP/AID requirements for the preparation of the Project Paper.

The terms of reference are:

- a) Evaluate INCAP's technical capacity in the areas of food and nutrition and according with its responsibilities in the Central American Region.
- b) Determine the institutional strengths and weaknesses in the areas of food and nutrition on the light of INCAP's responsibilities.
- c) Define the areas or technical gaps which should be supported by the IISP ROCAP/AID Project.
- d) Determine the inputs--technical assistance, training activities, economic support for staffing some priority areas, special studies to be financed, which must be included in the IISP Project.
- e) Work jointly with ROCAP/AID to complement the following chapters in the Project Paper:

Bilateral USAID Priorities and Strategies
Scientific and Technical Capacity
Monitoring and Evaluation

II. ASSESSMENT METHODOLOGY

Methodology was centered in the revision of basic documents and interviews with technical staff at INCAP and ROCAP/AID. Several meetings were held with INCAP'S Director, Coordinators and Division Chiefs. These meetings included technical reviews to determine the real capacity of INCAP in terms of knowledge, technologies and methodologies to address food and nutrition problems, and the identification of weaknesses in each one of the areas and sub-areas, with the purpose to define the most appropriate inputs from IISP/ROCAP Project.

On the other hand, ROCAP/AID organized a series of meetings to review analyses made by other consultants. A list of documents reviewed and staff interviewed are included in Annexes I and II.

III. INCAP's BACKGROUND

The Institute of Nutrition for Central America and Panama (INCAP) is a scientific-technological institution for Central American Integration, working under the administration of the Pan American Health Organization (PAHO) and the orientation of a Directive Board integrated by the Ministers of Health and Social Assistance of its seven Member Countries (Belize, Guatemala, El Salvador, Honduras, Costa Rica and Panama) and the PAHO/WHO Director.

Since its beginning in 1949, INCAP has been sought scientific and operational answers to improve the food and nutrition status in its Member Countries, and its activities for 1991-2000 are aimed to obtain, generate, transfer and implement technological knowledge and resources to solve food and nutrition problems found in the population.

INCAP carries out basic activities in research, technical cooperation, human resource development and information and communications in the area of food and nutrition.

INCAP has made a significant contribution to improving the health status of the Central American population. Such improvements are confirmed by the reduction of the prevalence of protein-energy malnutrition in children, the reduction of infant and child morbidity and mortality, and other health improvements mentioned in other papers related to this technical analysis (IISP/PID Document).

INCAP has worked with many institutions to promote the above-mentioned improvements: Ministries of Health, Agriculture and Education in Central American Region, Universities, United Nations agencies specialized in health, agriculture, science and technology and development, and many non-government organizations.

Historically, INCAP activities have received financial support from PAHO and AID. AID/ROCAP has financed approximately 40% of the total budget for INCAP during the last five years.

However, even though INCAP's scientific and technological evolution has been very positive, it has had great difficulties with its financial support and some weaknesses in the management and in some specific technological areas, which are identified in this technical analysis.

IV. BASIC CONCEPT OF INCAP'S TECHNICAL WORK (Figure 1)

INCAP has decided to organize its technical work during the decade of the nineties around the concept of food and nutrition security (see Figure 1). This is spelled out in its Strategic Plan for the Period 1992-2000 as well as in other recent documents. Using the concept of food and nutrition security to provide a common objective for a lot of different kinds of activities is a useful step for the organization to take. There are some pitfalls, however, that the institution needs to watch out for in the process of implementing this strategy.

INCAP defines food and nutrition security as a "state in which all people enjoy permanent access to food, in the quantity and quality needed for adequate consumption and biological utilization, in order to guarantee them a general state of well-being that is conducive to their development." This definition includes the two basic elements of food security that are in the definition popularized by the World Bank, that is sufficient food must be available in a country to ensure people an active and healthy life and people must have the ability to acquire it. These two elements are also included in the definition of food security used in the new U.S. Food Aid Legislation. Unlike the definitions used by these two organizations, INCAP's definition also includes specific reference to the biological utilization of food as an important component of guaranteeing people's well-being, which is not surprising given the nature of its work.

The model that INCAP is using to develop and organize its food and nutrition security work is the "food and nutrition chain." By this it means the sequence of events that occur in relation to food from the time of its production, to its consumption and biological utilization. Included in this concept are activities such as the post harvest handling of food; food storage and conservation; food processing and preparation; food marketing and distribution; and food consumption, with consumption including the biological utilization of food and the effects of food on human health, productivity and development.

a) Potential problems with the use of the concept

One problem that INCAP appears to be having in trying to use the concept of the food and nutrition chain to organize its work is that it offers encouragement to those among INCAP staff who believe that INCAP should have activities underway in all areas along the chain. In other words, using the concept of the food chain to organize its activities appears to make it more difficult for INCAP to limit its activities to those areas along the chain where other institutions are not working and where it has a comparative advantage. This tendency can be dealt with by management as part of the negotiations that should take place during the process of developing specific bench marks for each year's activities. Prior to this, however, management needs to implement a more thorough priority setting exercise in each of the three technical areas.

V. ORGANIZATION OF INCAP

INCAP'S technical work is carried out through three Technical Divisions:

Food and Nutrition Planning Division, Nutrition and Health Division and Food and Agriculture Sciences Division. The first Division approaches the problem of food security from a social sciences and multi-sectoral perspective, the second from a health sciences perspective and the third from a food sciences perspective.

These units are complemented by four Coordination Units for the basic functions of Research, Technical Cooperation, Development of Human Resources and Information and Communication.

At country level, INCAP has organized Basic Technical Groups as a strategy to decentralize INCAP, with the purpose to improve the benefits of technical cooperation.

An Administrative Division and a Planning and Development Unit support activities of research, training and technical cooperation. As Figure 2 shows, INCAP has a matrix structure with the purpose to ensure, through Coordinations, the inter-disciplinary participation, to promote the innovation and creativity in the solution of problems, and to coordinate the technical cooperation provided to Member countries.

VI. DIVISION OF FOOD AND NUTRITION PLANNING

a) Purpose

The stated purpose of this Division is to strengthen the capacity of Member Countries to develop, implement and evaluate food and nutrition policies, plans and projects, through the proper transference of knowledge, strategies, methodologies and techniques.

b) Organization and staffing

The organizational structure of this Division has been undergoing a revision process since September 1990. It includes a Chief, five sections and multi-disciplinary groups formed to work with specific projects (Figure 3).

The organization of this Division is following a matrix model similar to INCAP'S general structure.

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Sections integrating this Division are: Socio-economics and Food Culture; Food and Nutrition Surveillance; Food and Nutrition Policies, Plans and Programs; Development and Training of Human Resources in Food and Nutrition; and Education and Communication to Population Groups.

If present reorganization is approved, section coordinators will have a direct line of coordination with the Division Chief and with other Divisions and Coordinations of INCAP and with Basic Technical Groups in Member Countries.

This Division currently has 36 staff, 18 of which are professionals and 18 support staff. Disciplines represented include nutrition, dietetics, public health, hygiene, education, communication sciences, systems engineering, sociology, anthropology, business administration, psychology and medicine (Table 1).

It is very important to point out that seven professionals, (three in the area of food and nutrition surveillance, one in planning and three in education and communication) are paid by ROCAP/AID under the TRO and PROPAG projects, which will terminate on November 30, 1991. Besides, other professionals in Nutrition Education are being paid by the Government of France under the Food and Nutrition Education Project.

c. Activities

This Division undertakes social, economic and cultural studies related with food and nutrition problems, carries out analysis and disseminates information; develops methodologies for planning, implementation and evaluation of food and nutrition interventions; supports the development and training of human resources, designs and implements methodologies for popular education, and designs and promotes institutionalization of systems of food and nutrition surveillance.

Through its work during several years in the Central American region, this Division has developed the technical capacity for implementation of data bases on aspects and factors relevant to the availability, access and consumption of food and on the nutritional and health status of individuals and populations at national, regional and local disaggregation levels.

With the support of ROCAP, this Division has implemented a project to provide technical and administrative support to food aid programs in Central America and Panama. This support includes assistance in planning and coordination of national strategies and policies related to food aid; in-service training of officials in charge of programs; applied research designed to improve food aid and the development of an information system on food delivery and management logistics.

The staff of this Division also provided support to IFPRI on a research project designed to assess the impact of the development of non-traditional agricultural exports in the Guatemalan highlands on the incomes, food security, and nutrition of small-farm households. This work was completed, and a follow-on research project with funding from the University of Wisconsin is now underway. This latter project will look at many of the same issues covered in the Cuatro Pinos project but with a different group of farmers. It will also investigate the impact of non-traditional agricultural exports on land holdings in the highlands, the distribution of resources within the households and the impact on women's income and employment. Research is also underway on food prices and their relationship to minimum wages in Central America and Panama with the technical support provided by a research associate provided by ORSTOM.

Staff have also been working on the design and implementation of a nutritional surveillance system for countries in the region and have done some initial analyses assessing the effect of the structural adjustment programs being undertaken by the countries in the region on the food and nutritional status of their populations. Both topics are the subject of a proposal for additional financing recently developed by the Division.

In the education area, INCAP has supported the preparation of national food and nutrition education plans, training of personnel in education methodologies and the provision and use of technical messages covering specific food and nutritional topics; the promotion and support of organized community participation; and the development of education methodologies.

d) Strengths and Weaknesses

This Division has been working for several years in a direct way with Member Countries of INCAP and, therefore, has a group of experts who have had close contacts with PAHO and local authorities. Five professionals in the staff have been working with INCAP for more than 10 years, mainly in processes of diagnoses and analyses of the food and nutrition situations, planning, development and training of human resources and popular education.

In the area of development and training of human resources, this Division has performed an important job identifying deficiencies in knowledge and skills regarding food and nutrition in the personnel of local, regional and national levels of the education, agriculture and sectors.

Regarding popular education, it has developed several technologies and methodologies which have been implemented in various countries (achieving different degrees of success), especially through the Food and Nutrition Education Project supported by the French Government.

Table 2 shows the level of expertise of this Division, in each one of the pertinent areas.

In terms of weaknesses, this Division, as well as others in INCAP has shown a limited capacity for the transferring some technologies and methodologies to Member Countries.

This is particularly true in processes for systematic analysis of the food and nutrition situation, identification of institutional strengths and weaknesses in each sector, estimates of political and economical feasibility, and definition of plans and programs.

This also applies to the area of food and nutrition surveillance, where technically well-known methodologies have been used, even though they are too complex to be implemented in Member Countries. This affects the efficiency of GTB's which have to design technical assistance based on the specific problems of each country and the technical and economic resources available at INCAP.

A major weakness for many years has been the lack of a strong economics capability. This expertise is needed throughout the institution to help understand why households and firms behave the way they do as well as to assess whether new technologies and programs are cost effective. Understanding household food consumption behavior requires the insights of an economist as does identifying appropriate indicators for a food and nutritional surveillance system and providing realistic advice on food and nutrition policies and programs. Developing this capacity is also essential in the event that INCAP wants to do further work on the effects of structural adjustment on poor households in the region. INCAP's senior management is aware of this weakness. And, in fact, the Institution has made a number of attempts over the years to develop this capability beginning in the late seventies with the addition of a systems analyst and a masters degree level agricultural economist to its multi-sectoral nutrition planning program. For one reason or another, the people that INCAP has managed to hire have not worked out. Sometimes it was because they were not really economists; training in business administration or systems analysis is not really the same as training in economics. In other cases their training was weak or not as relevant as it should have been. In any event INCAP has not yet managed to hire an economist with the ability to develop an effective program of research and technical support in the Food and Nutrition Planning Division or to integrate an economics dimension into the work of the other Divisions.

The person selected for this position needs to be well-trained in economics and with sufficient experience to be able to provide the leadership required to develop an effective research program (INCAP's plans to assess the impacts of structural adjustment on the poor make sense if it concentrates on

assessing the impacts at the community and household level where it has a comparative advantage and leaves the analyses of the impacts of macro and sectoral policies on prices and national level income and employment variables to other institutions with which it might collaborate such as IICA or IFRPI). This person also has to have enough breadth and interpersonal skills to be able to identify the other areas in which INCAP works that need to be viewed from an economic perspective and to develop effective working relationships with the professionals in these program areas. This means that the person selected needs to be well-grounded in neo-classical micro- economics and have considerable experience in applied economic research. Training in agricultural economics would also be useful in that it would provide INCAP with someone who could relate more easily to the agricultural institutions in the region with which INCAP should be working more closely. The person selected should also be willing and able to spend considerable time providing on- the-job training for other INCAP staff.

INCAP's employment policies which favor hiring Central Americans and its salary scale which is considerably below the level of comparable regional institutions such as CATIE have made it difficult to hire qualified economists in the past. INCAP has submitted a proposal to PAHO for approval which would raise the salary scale to levels approaching that of CATIE and would establish separate career paths for scientific, technical and administrative personnel. If approved, this should make it easier for INCAP to attract well-trained economists in the future.

INCAP still has the reputation of being the main source of expertise on the food consumption patterns in Central America and on the social and cultural aspects of the food behavior of the Central American population. INCAP is looked to as the source of information on these topics. It is also looked to as a source of guidance on how to collect additional information on these topics and has often been contracted with to assist with the design and implementation of community and household surveys to include such information.

The demand for INCAP's services in this latter area, in particular, is likely to grow if INCAP can develop some cost effective methods for assessing the effects of policy reforms on the people in the region. AID, given its interests in development that is broad-based and involves the historically disadvantaged, should be particularly interested in the availability of cost effective methods for assessing changes in the incomes (estimating the expenditures made by poor households usually provides a better measure of their income than attempting to measure income directly) and employment of poor households. The development of rapid appraisal techniques that could be used to assess the effects of program and project interventions on households as part of an evaluation process is another area in which demand is likely to grow.

In reality, however, staff capabilities in this area of expertise are much weaker now than a decade ago. And if steps are not taken soon, INCAP could lose its preeminence in this area completely, even though it is hard to visualize an institution with INCAP's objectives not having strong capabilities in this area.

e) Recommendations

To solve problems in the methodology for the systematic analysis of food and nutrition status in the population, improve the process of identification of institutional strengths and weaknesses in Member Countries to address existing problems and define policies, plans and programs, it is recommended that technical assistance be provided by an expert with a broad experience in strategic planning applied to food and nutrition problems. Through this technical assistance, existing methodologies on food and nutrition planning and surveillance can be readjusted and strategies identified for implementation in Member countries through GTB's, who would be trained in its proper utilization.

The project should fund the costs of an agricultural economist who would have a function as a research associate over the life-of- the-project. INCAP needs a senior agricultural economist on board as soon as possible in order to have sufficient time to develop a program and to provide some on-the-job training for junior staff.

If INCAP is restricted to current salary levels, it may be unable to attract a high calibre economist; it may be preferable in this case, to hire the economist through the project and not directly by INCAP.

INCAP should be encouraged to hire a junior economist to work with the senior agricultural economist (The junior economist should have a good basic training in micro-economics, not necessarily agricultural economics, some knowledge of applied economics research and be likely to consider making his or her career with the institution). One economist is not sufficient to provide the critical mass needed in this important area. Furthermore, this person would then be available for the INCAP staff member, who is currently enrolled in a Ph.D program in agricultural economics at Mississippi State University, to work with when he returns.

INCAP should also be encouraged to hire two junior to mid- level professionals to work on issues related to household food consumption behavior and surveys of household incomes and expenditures and food consumption. If this step is taken, project funds should be made available for in-service training for these individuals. Funds should also be made available for INCAP to use to acquire some short-term technical advisory services in this important area. More specifically, INCAP would use these funds to obtain guidance on how best to up-grade its expertise in this area and to help design a strategy for developing and testing new indicators and data collection methods.

Finally, the Project should provide funds to hire an expert in food surveillance and other one in programs of food assistance/ The present

technical capacity at INCAP lies in two professionals paid through the ROCAP/PROPAG project, which is terminating in November 30, 1991. If INCAP cannot find the necessary resources to cover these salaries, it would not be able to assist Member Countries in a period in which the food assistance programs are increasing due to the economic crisis and structural adjustments which Member Countries are presently living.

VII. HEALTH AND NUTRITION DIVISION

a) Purpose

The stated purpose for this Division is to assist Member Countries in the reduction of prevalence of the main health and nutrition problems, through the improvement of the quality and efficiency of health services in the areas of nutrition and mother and child care.

This includes basic and applied research, development and training of human resources and transference of technology for the organization and delivery of health and nutrition services.

b) Structure and staffing

The Health and Nutrition Division includes a Chief and four sections, participating through a matrix scheme in seven specific areas of work. The Division structure is in Figure 4.

This Division currently has 127 staff members 30 of which are professionals, 23 technical and 74 field and office support staff. Six professionals have a Ph.D., nine an M.S. and MPH and 15 have a degree in nutrition. Table No. 3.

c) **Activities**

The main areas of work (Table 4) of this Division are related with:

- Nutrition, infection and immunology
- Metabolism and clinical nutrition
- Nutritional Biochemistry
- Nutritional anthropology and epidemiology
- Development of health and nutrition care systems, including nutritional surveillance
- Applied research

During its life time, INCAP has done excellent work in the various areas of human nutrition. This includes studies carried out to determine nutritional problems; the design and test of methodologies to address their solution; the training of human resources for health services for Central American and other countries in Latin America.

INCAP has made a great contribution to help reduce the prevalence of protein-energy malnutrition and specific nutritional deficiencies such as iodine, vitamin A, and iron. Research activities have also had a positive impact on the orientation and management of treatment of diarrhea and respiratory infectious diseases, and have been useful in the planning and implementation of national strategies and child survival plans, including immunization programs.

In addition, INCAP's work in the area of human nutrition has been supported by prestigious foreign donors, including many U.S. universities and Latin American teaching and research institutions.

Joint projects involving collaboration with other highly respected scientific groups has been a constant at INCAP. A number of candidates for university degrees (Master or Ph.D. degrees) in human nutrition and similar areas have done their thesis and research studies at INCAP.

The Pan American Health Organization (PAHO), --INCAP's main supporter-- recognized its significant technical capacity in maternal and child health care. Beginning this year, INCAP will be directly responsible for the provision of technical cooperation services in these areas in Member Countries. PAHO/WHO will not hire advisors instead, will transfer this responsibility to INCAP.

With the support of the TRO/ROCAP/AID and other donors, this Division has carried out many analyses and research studies in the areas of food and breastfeeding. For example, clinical tests to measure efficient and safe feeding methods using whole or diluted milk, and the development of vegetal blends for the management of acute diarrhea.

In case of persistent or chronic diarrhea, evaluations have been made on the use of antibiotics and on management of diarrhea with locally accepted common foods.

With respect to breastfeeding mothers, the effect of food supplements in malnourished mothers has been studied. Also, the impact of intestinal infections in levels of antibodies on breast milk production.

Studies have also been carried out to determine diseases and factors affecting the nutritional status of general population. For example, the fecal contamination of water and food ingested, the behavior of people being treated for diarrhea in communities with piped water has been assessed in relation to the incidence of diarrhea. Also, studies have been carried out on the effect of malnutrition during early stages of life on the status of health during adolescence and adulthood.

Many interventions or operations research projects have been or are being carried out by this Division. For example: using a prenatal risk approach to increase efficiency of health services; reducing of intra-partum, neonatal and

post natal mortality through a program to retrain midwives and the improvement of services provided by health technicians at the rural level in Guatemala.

These are just a few examples of a long list of activities performed by this Division.

d) Strengths and weaknesses

As it has been previously indicated, this Division is the technical unit of INCAP best equipped for the transference of technology to Member Countries.

Lately, as result of ROCAP projects (TRO/PROPAG), INCAP has been able to study, test, transfer and evaluate technical knowledge, methodology, and guides related to oral rehydration; management and treatment of ARI; growth monitoring and development; and immunization interventions.

INCAP's technical services are in high demand by Member Countries and by PAHO, mainly because it represents a source of knowledge on breastfeeding, pre-natal and peri-natal care, factors of risk, methods to identify groups of higher risk to be benefited by programs of child survival, primary care and maternal and child health.

In the area of infectious diseases, it has become a reference center in Central America for the diagnosis of poliomielielities and the control of quality of some vaccinations. This function is basic to epidemiological surveillance systems in various Ministries of Health and for the monitoring and evaluating vaccination interventions for mothers and children.

Through its laboratory activities in Biochemistry, INCAP performs the necessary tests to control and monitor programs of fortification of salt with iodine and sugar with vitamin A and expects to reinstantiate activities with

respect to iron. INCAP provides Member Countries, with services for the collection of blood samples and other human fluids to measure the effects of specific nutrient fortification. With the exception of Costa Rica and, occasionally Panama, some times, Member Countries do not have the laboratory equipment necessary to determine certain human levels of specific nutrients and to evaluate the real impact of interventions. Therefore, the bio-chemical laboratory at INCAP represents a technological service capacity needed by countries in the Central American region.

In training of human resources in Member Countries, INCAP has a great capability in tutorial and short and long-term training courses in the areas of clinical nutrition; nutrition in public health; anthropology applied to health; breastfeeding, etc.

In terms of this Division's weaknesses, it is important to mention that there are certain areas which need to be improved; these are:

a) Physiological tests on iron. It is important to mention that nutritional anemias, specially due to the deficiency of iron, are affecting 1/4 of the Central American population.

b) Analysis of carotenoids to identify substances that are precursors of Vitamine A. Their determination and metabolism should be studied in order to better fortified foods with vitamine A.

c) Analysis of amino-acids. There are new methods to determine these chemical compounds present in proteins and which determine their biological value. This knowledge can help improve programs to combat protein-energy malnutrition and related nutritional deficiencies.

d) Management of radioactive isotopes. INCAP needs to update its technical capacity related to iodine, iron and other minerals.

e) e) Quality Control in laboratories. This area is very important for INCAP as it has become a Reference Center for diagnosis of poliomyelitis and other infectious diseases and for fortification of foods programs in Central America.

Previous needs for training were determined by a very careful analysis done by the staff in this Division.

Other areas of some weaknesses include those related to analyzing qualitative data for applied programs in health and nutrition and for the operations testing of new models for the delivery of health and nutrition services.

As indicated by several INCAP's staff members, technical cooperation services sometimes are not successful because inadequate methods for the technology transference. These could be resolved through appropriate applied and operational research. INCAP requires technical assistance and short-term training in this area. Interviews carried out with staff in this Division, identified weakness in the ability to program cost and services or technologies which can be transferred.

INCAP needs to improve staff attitude and expertise in this area. INCAP's limited successes in transferring technology in the area of nutrition and health is often because cost and financial feasibility has not been adequately considered.

As previously indicated, the quality and efficiency of INCAP's work depends on its laboratories. However, the status of the equipment is getting worse every day: many instruments are slow, obsolete or about to break down.

Therefore, the purchase of certain minimum and basic equipment is necessary to support activities for eradication of hypovitaminosis A and substance precursors. Annex III shows a detailed list of equipment needed.

Finally, as in other Divisions, there are five (5) professionals and four technicians and auxiliaries in the Biochemistry laboratory who are being paid with funds provided by the TRO/ROCAP Project, ending on november 30, 1991.

If no other financial source is found to cover the salaries of personnel in the areas of biochemistry laboratory, operational research, anthropology, and program management in health and nutrition and mother and child health, INCAP would be losing its technical capacity in the above-mentioned areas.

Table 5 shows the level of expertise of this Division, in each one of the pertinent areas.

e) **Recommendations**

Based on the previous analysis, IISP/Project should provide financial support in the following areas:

- Training should be provided, through short and tutorial courses, preferably in the United States, on the physiological aspects of iron, in the areas of amino-acids and carotenoids analysis; management of radioactive isotopes; operations research, methodology of qualitative data analysis in health and nutrition program, and methods for estimating costs of programs and services.
- Provide assistance to determine areas for operations research and formulation of projects related to iron.
- Support the purchase of equipment for the biochemistry laboratory in the food area as included in Annex III.

VIII. AGRICULTURAL SCIENCES DIVISION

a) **Purpose** -- The stated purpose of this Division is to contribute to food and nutrition security by improving the availability, access and consumption of high quality foods through improvements in the production, storage, processing, transport and consumption of food.

b) **Structure and staff**

This Division consists of a Chief and six technical sections:

- . Food Chemistry and Biochemistry
- . Nutritional Technology
- . Agricultural Technology
- . Food Technology
- . Transference of Technology
- . Industrial microbiology (Figure 5)

Other resources available to and managed by the Division include: (1) an experimental farm which it uses to develop and test different production techniques, (2) a pilot plant which it uses to develop new food technologies, (3) an analytical laboratory which it uses for analyzing the chemical and nutrient composition of foods and for testing food quality; and (4) an animal lab which it uses to test the nutritional quality and biological utilization of foods on animals. In 1989, the Division had a budget of a little over U.S.\$ 599,000. Outside sources of project funding have included UNDP, AID, Washington State University, United Nations University, Nestle, the American Soybean Association, Kellogg Foundation. Over time, INCAP has collaborated with other food technology institutes in the region, including CENTA in El Salvador, CITA in Costa Rica, and the University of Leon in Nicaragua. INCAP staff have also collaborated with agricultural research institutes in the LAC region including ICTA and CATIE (activities are currently underway) and CIAT and CIMMYT.

The Division currently has 53 staff members, of which 17 are professionals, 17 technical, and 19 support staff (Table 6).

c) Activities

Division works in five major areas: (1) food production, (2) food processing, (3) the biological utilization of food, (4) the chemical and nutrient composition of foods and (5) technology transfer. Most of the work of the Division has been focussed on the basic foods -- basic grains, legumes, fruits and vegetables -- with some additional attention devoted to expanding the use of agricultural and agro-industrial by-products and animal nutrition. Current areas of interest include: integrated animal production systems; systems for reducing post harvest losses; improved utilization of indigenous foods; improved utilization of agricultural and agro-industrial by-products; development of foods with higher nutritional qualities; food fortification and food enrichment; the use of bio-technology in the production and processing of foods with higher nutritional qualities; development of technologies appropriate for the conservation of foods in the household; the development of improved systems for storing, conserving and preparing foods at the household level; improving the nutritional quality of diets at the community and household level; developing additional data on the nutrient composition of foods; and supporting the development of systems to improve/guarantee the quality and safety of foods.

Examples of the types of activities currently underway in the Division include the following:

- * Research designed to improve the availability and biological utilization of nutrients in beans,

- * Analyses of the feasibility of using locally produced products such as amaranth, corn, soybeans and cow peas in the production of bread and other wheat-based products and the identification and development of investment projects,

- * Analyses of the post harvest handling of foods in the Central American countries to decrease losses and the development and identification of investment projects,
- * Work with artisan bakeries to transfer the technology for producing a nutrient enriched cookie for use in school feeding programs.

Proposals have also been developed and submitted to donors on the following research topics:

- * Utilizing the leaves, seeds and other parts of the amaranth plant for human and animal consumption,
- * Improving the use of the by-products from municipal slaughter houses,
- * Developing additional information on the chemical and nutrient composition of roots and tubers and improving their use,
- * Testing the feasibility of extending the supply of milk using extracts from oil seeds, legumes and cereals,
- * Increasing the availability of fruits and vegetables in Central America through the development of improved methods of marketing, processing and conservation,
- * Modifying the genetics of the black bean to increase its protein value,
- * Testing the feasibility of fortifying tortillas made from corn and beans with iron and zinc,
- * Stimulating the production and consumption of indigenous vegetables in order to eradicate Vitamin A and other nutrition deficiencies in Central America.

d) **Strengths and weaknesses** -- Work in the food sciences area used to be one of INCAP's strengths. Some of the work that is most closely associated with INCAP was an output of the agricultural sciences area. Examples include Incaparina, the Food Composition Table for Use in Latin America and the Table of Nutrient Composition of Pastures and Forages for Central America and Panama. A number of senior scientists were active in this program in the past, and their work was well-known and respected in the region. These professionals were experienced, they developed many of the collaborative relationships with other institutions in the region, and their work was in demand.

Most of the better known senior staff have left or retired. Current staff are young, and bright, need more experience. Some also could use further advanced training. However, since there is currently little depth in the five program areas that the Division is trying to cover, the departure of any one person for several years of advanced training would, in the short-run, weaken the work in their specific area even further. The total resources available to the Division are much smaller than those in other two Divisions. In 1989, for example, the total resources available to this Division were less than twenty percent of the resources made available to the Nutrition and Health Division and less than thirty percent of the resources made available to the Food and Nutrition Planning Division.

Previous links with other institutions in the region also appear to have weakened. Some, such as the links with CIAT and CIMMYT, may have broken down completely. Many of these links appear to have been personal rather than institutional, a situation that has to be dealt with in the event that these links are reestablished. For example, it is not clear whether research currently underway designed to improve the availability and biological utilization of nutrients in beans is being undertaken in consultation with CIAT. Yet some consultation and collaboration would seem to be essential if INCAP expects the results of its research to be utilized by the plant breeders in CIAT.

Current staff appear to be trying to keep all the old lines of work on-going even though both the staff and the environment in which INCAP works have changed substantially. Current staff would also like to expand their work in the bio-technology area, including by adding another staff member. The Director indicated that he would like to see more concentration in food technology area, and in particular on the development of technologies that (1) can be used by the private sector, (2) make use of the products that do not meet the requirements of the export markets, and (3) enable farmers and others to make better use of farm residues. Staff also indicate that if they are going to be able to work effectively, funds need to be found to up-grade the farm, the pilot plant, and their laboratory. A proposal has already been developed and submitted to the Japanese Government for assistance in up-grading INCAP's pilot plant.

Current thinking within INCAP about future activities and priorities in the agricultural sciences area is an outgrowth of the strategic planning process that INCAP recently completed. These ideas appear to reflect the staff's perceptions of the needs in the region. However, sufficient attention does not appear to have been given to an analysis of: the current strengths and weaknesses of the Division; the likely effective demand for the results of INCAP's research particularly in the private sector; whether there are areas in which it can expand its services to the public and private sectors in its member countries; and what types of research and technical assistance activities are underway in other institutions in the region, whether INCAP has a comparative advantage vis-a-vis these institutions in certain areas of work and how and in what areas INCAP should work more closely with these other institutions.

d) Recommendations

The project should fund the costs of an outside review of INCAP's agricultural sciences program. This review should be undertaken in the first six months of the project. The project should also provide funds to enable

INCAP to identify one or two advisors for the agricultural sciences program and to bring these people to INCAP's headquarter for consultation with the staff for one week at least once a year during the life-of-the-project.

A more thorough and careful analysis needs to be made of the strengths and weaknesses of INCAP's work in the agricultural sciences area and its areas of comparative advantage identified before further decisions are made with respect to the future work program of this Division. This review should also be completed before any decisions are made with respect to up-grading the institution's farm, laboratory, pilot plant or animal room.

This review should be conducted by an outside team of senior professionals that have broad experience in the major areas of work of the Division. Members of the team should be knowledgeable about the state-of-the-art in these technical areas as well as be familiar with the needs of the region and the work that other institutions in the region are doing in related areas. The project design team does not have the time nor the expertise to undertake such a review.

The purpose of the review would be to help INCAP focus its work in the agricultural sciences more narrowly on those areas where it has a comparative advantage and where there is likely to be an effective demand for its work. This team would also provide INCAP leadership with guidance on how to implement its recommendations, including providing guidance on specific lines of research that should be pursued; what actions would need to be taken to increase staff capabilities, including recommendations with respect to staff training, hiring and firing; what types of facilities would be required to carry out the recommended work program, the types of up-grading that would be required and its expected cost.

Specific questions that need to be asked by the team include the following:

- * What activities, if any, should INCAP undertake related to the production of food on-farm? Should INCAP undertake research on crop

and livestock production systems on its own? Or should INCAP staff limit their activities to serving as a member of a team under the leadership of an institution whose primary responsibilities are on-farm research? Should INCAP have a role in on-farm agricultural research in the event that the agricultural research institutions in the region continue shifting their attention to non-traditional agricultural exports and away from basic foods? What is the likely future for indigenous food crops such as amaranth and what role should INCAP play with respect to these crops in the event they are being ignored by other agricultural research institutions in the region? What use should be made of INCAP's farm, if any?

- * What role can INCAP play with respect to the private sector? Is it reasonable to expect INCAP to be able to develop food products and technologies that would be in demand by the private sector and for which the private sector would be willing to pay? Or will INCAP's market for new food products and technologies be limited to the public sector as has been the case in the past (for example, Incaparina and the nutritionally improved cookie)? Are there services that INCAP could provide to the private sector (assistance in the area of food quality and safety, for example) for which the private sector might be willing and able to pay?

- * What are the types of activities in which INCAP should work more collaboratively with other institutions in the region? How should these relationships be developed and managed? As a result of discussions undertaken during the preparation of this project paper, INCAP and IICA staff plan to get together in the near future to brief each other on areas in which the two organizations have mutual interests and to identify specific areas where staff could work together. Six areas of potential collaboration have already been identified: the effects of structural adjustment on the poor; technology transfer; agro-industrial development; animal health; communications; data bases. Are there types of mechanisms that could

be developed to encourage and improve consultation and collaboration? Would it be useful if INCAP would invite senior staff from IICA and/or CATIE to the INCAP Board of Directors meetings, for example? Or would it make more sense to establish a technical advisory committee for the agricultural sciences program composed of scientists and technicians from CATIE, IICA, CIAT, CIMMYT as well as other outside experts?

- * What has been the experience elsewhere with composite flour programs and the use of Opaque Two corn and what are the implications of these experiences for INCAP's future programs?

- * Does INCAP's work on the nutrient composition of foods still have utility, and, if so, to whom? Are there options for financing this work other than relying on core funds?

The Food Chemistry and Bio-chemistry Section works closely with the Health and Nutrition Division, and is involved with the nutritional implications of fiber ingestion. This area is very important with respect to chronic diseases and colon cancer which have a high prevalence in Costa Rica and Panama; and to iron and zinc deficiency that affect the population of Honduras, Guatemala and El Salvador.

Technicians are hampered by obsolete equipment, and urgently need a filtration system for the analysis of dietetic fiber and an automatic oil extractor (Soxhlet).

As the chief of this section indicated, there is a great demand from the private sector for the laboratory tests performed by this section. If it had the necessary equipment, it could generate funds through the sale of services.

IX. DEVELOPMENT AND TRAINING OF HUMAN RESOURCES

a) Purposes

The purpose of this area is to improve food and nutrition in the Central American population, through the development of strategies, plans and projects with to develop excellent human resources, with the technical capabilities and skills to solve problems found.

INCAP has defined human resources development as the activity performed by those Institutes of Research and Teaching, Technical Schools, and High-School, Primary and Pre-Primary Schools, where education in food and nutrition is provided within an academic program. For INCAP, training includes introduction, updating and improvement in food and nutrition knowledge, for people from the health, agriculture, education, labor and other sectors. The educational objective is that the personnel (whether volunteer or with a salary), as well as people from government or non-government institutions related perform a better job. Usually, this training job is done at the local level.

INCAP has a Coordination of Training and Human Resources Development, whose main job is to design policies in this area and to coordinate and advise other central Technical Units and Basic Technical Groups in the formulation and development of plans, programs and projects for the development and training of human resources.

The professional staff in this Coordination include a Nutritionist with an MS in Educational Methods and Evaluations who is the head in this area and a Psychologist with an M.S. in Management of Human Resources. Support personnel includes two secretaries and an administrative assistant.

In addition, the Coordinator also obtains support from personnel located, administrative and physically in the Divisions of Food and Nutrition Planning, Nutrition and Health and Agricultural Sciences.

The Food and Nutrition Planning Division, is responsible for the training of human resources in the areas of health, education, labor, agriculture and other areas. This is done with the professional help of a Nutritionist specialized in Educational Technologies, a technical assistant and two secretaries.

A professional is in charge of these training and education activities in The Divisions of Nutrition and Health and Agricultural Sciences.

c) **Activities**

During 1988-1990, INCAP implemented educational activities and processes covering a total of 22724 persons in the sectors of agriculture, health , education sectors and educational centers in Member Countries.

Areas of activities included the determination of needs and priorities for human resources; development of food and nutrition components in academic programs in formation institutions and in training programs for in-service personnel in different sectors; and the development of specialized programs in food and nutrition.

Another important activity performed was a program of continuous education, through residencies or tutorial courses in the areas of clinical nutrition, food technology, development of new models of service delivery and others, depending on the priority areas established in each country.1

Presently, the program for development and training of human resources in Member Countries receives financial support from the Swiss Government thorough a Subregional Project, COSUDE. INCAP has submitted an application for the extension of this project which, if approved, would provide the necessary financial support to continue this activity.

The Post-degree program in food and nutrition at INCAP is presently undergoing revision. One alternative might be to offer a program for professionals from various disciplines and sectors. These professionals would follow a basic program in food and nutrition and then specialize in one of three areas: nutrition and health, education and food technology.

This revision is being analyzed by INCAP with assistance from PAHO/WHO. One of the objectives is to increase the future availability of inter-disciplinary specialists for Member Countries, who are able to apply food and nutrition perspective within the different development sectors.

d) **Strengths and weaknesses**

During 42 years, INCAP has been identified as a specialized center in the area of food and nutrition as well as an organization for the Central American integration. Its existence during this long period of time has been appreciated by different countries and its contribution to the training of most specialists working presently in this field, provide INCAP with the prestige of a very strong organization in the training and development of human resources in the Central American region.

Another strength is INCAP's technical capacity to determine the needs and priorities of human resources in the areas of food and nutrition, and its broad experience and technical knowledge to formulate, develop and evaluate academic programs as well as in-service training programs for personnel at different levels and within different sectors.

Even though the analysis on information management capabilities (see Annex E.3), identifies some weaknesses in this area, it is important to point out that INCAP's bibliographic sources and educational materials represent an important asset.

Another example of INCAP's strengths are the self-instruction modules for personnel in health services on the monitoring and evaluation of growth which were developed with the support of the ROCAP/AID Project. These make possible a system of long-distance education and have had a great acceptance and impact. Based on information provided by INCAP, approximately 500 doctors in the Region have already finished this course on this area.

Even though its current monitoring and evaluation methodologies for development and training activities are appropriate, INCAP could, with technical assistance improve and perform and strengthen its activities in this area.

Based on the list of strengths previously mentioned, the question is: Which are INCAP's weaknesses in this area? This has a very pragmatic answer: Its major weakness is a lack of financial resources to pay the salaries of the staff in charge of this work. Most of the personnel are financed with funds provided by projects having a short term duration. Therefore, when projects terminate, INCAP loses the professionals, technicians and support personnel financed by these projects.

Another important requirement at INCAP is the organization of Academic Advisory Committees, made up of experts in the region, who must support the analysis of educational programs (proposed and in operation), participate in its evaluation and determine priority areas of development and training of human resources.

INCAP should establish advisory committees for post-degree programs, in continuous education and for the training of human resources at country levels. These should be formed by experts from the Central American Region.

The work initiated by the Human Resources Coordination Human to build a basis of data to be used for the academic registry and assignment of certifications for trained persons in various programs (not only at the

Institute but also at the level of the Basic Technical Groups) has not been finished and requires to be incorporated as an element or activity to be strengthened by the information systems included in the IISP/Project.

c) **Recommendations**

As indicated in the description of strengths and weaknesses, the major problem in this area is the procurement of financial resources for payment of personnel salaries of those in charge of development and training of human resources.

It is recommended that the IISP/ROCAP provides funds to pay a professional in charge of the program of post-degree course in food and nutrition. Also, it should provide funds for the payment of some teachers and advisors for this program as well as to finance some operational expenses for this activity.

Teachers to be contracted would develop academic contents for specific areas of post-degree course.

Of course, support for the post-degree program requires that Member Countries and donor agencies provide the financial support for scholarships.

The IISP Project should provide necessary financing to perform the training of INCAP personnel through nine tutor courses in specific subjects related with operational research; methodologies for qualitative data analysis; analysis of amino-acids; physiological tests on iron, management of radioactive isotopes; analysis of carotenoids; and control quality in laboratories. Similarly, funds should be provided for the training of personnel at the Institute within the Basic Technical Groups in methodologies for food and nutrition planning and basic courses on food and nutrition.

Finally, the Project should provide funds to carry out educational activities for the Basic Technical Groups related to technology transfer through research studies and to complement or help correct gaps in technical

knowledge found during the monitoring, evaluation and supervision of INCAP staff in Member Countries.

X. COMMUNICATION AND INFORMATION AREA

a) Purpose

Since its foundation as a research organization, INCAP has recognized the importance of disseminating scientific and technical information especially through journals and publications to the scientific world, and mainly at the international level. Additionally, professionals have participated at meetings, conferences, and workshops, facilitating the exchange of information. However, it was not until 1985 that the Board of Directors recognized and established Dissemination of Information as one of its four basic areas.

b) Organization and staff

Presently, INCAP has a coordination office for this activity whose main purpose is to design communication and information policies, advise and coordinate technical units and Basic Technical Groups in the development, implementation and evaluation of programs and plans for scientific information dissemination.

The basic personnel for this Coordination includes a professional and two secretaries. This personnel is supported by two professionals who are located in the Food and Planning Division and are currently paid by the ROCAP/TRO project.

c) Activities

With the support of ROCAP/TRO and PROPAG Projects, emphasis was placed, during the last five years, on provide information mainly in the areas of child survival and food and nutrition programs, providing

newsletters, technical documents, translations, support meetings, and to a lesser degree producing educational materials as well as supporting some documentation centers in the Region.

d) Strengths and weaknesses

From the scientific perspective, INCAP has one of the best libraries in the Central American Region. In the area of food and nutrition, it is probably the most complete in Latin America.

Besides generating scientific information from research studies and other activities performed by INCAP which is later disseminated, this library is very large and permanent.

However, a technical analysis showed that INCAP has various limitations to perform efficiently work in this area.

Probably, the major weakness is the limitation in human resources, especially when the two professionals working in this area finish their contracts on November 30, as a result of the termination of the ROCAP/TRO Project.

On the other hand, there is a great amount of very important scientific material which was not designed for dissemination.

Even with continual efforts are made permanently, in the area of communications, the institutionalization of the creation of inter-disciplinary work groups is very weak and building appropriate of a team work attitude and skills is difficult. Finally, there are inadequate material produced especially for the radio, television and other mass media.

e) Recommendations

Based on consultation with the Coordinator of this Unit, it is

considered important that the IISP/ROCAP project finance the addition of a professional in communications who can and also support and training headquarters and GTB personnel. The project should also finance the purchase of certain basic equipment to be used for communication and training.

Training would be addressed to improving knowledge of communications among INCAP seniors managers and members of GTB's. Also educational activities would promote team work and better internal communication at INCAP.

In addition, it is recommended that the Project support the production of summaries and bibliographic packets, translation of scientific material and the purchase of basic books in food and nutrition. Finally it should finance a short course in communications for an INCAP professional.

XI. SUMMARY OF INCAP CAPABILITIES AND PROGRAM PROFESSIONAL NEEDS

Methodology for Analysis

In previous discussions, we have analyzed INCAP strengths and weaknesses using INCAP's technical divisions as our frame of reference. However, it is still necessary to integrate the information on INCAP skills presented in previous sections to present an institutional picture of strengths and weaknesses, and compare them to the professional training, experience and/or areas of specialization needed to carry out INCAP's Food and Nutrition Security Program as contemplated in its Strategic Plan and other related documentation. Accordingly, the following analysis was designed to integrate skills information and compare INCAP skills to Program needs.

In its strategic plan and other planning documentation, INCAP had divided its food security program into four components: Institutional Development; Strengthening Food and Nutrition Policies, Plans and Projects; Increasing the Availability, Access and Consumption of Food; and Improved Health and Nutrition. Each of these components were further broken down into six or seven activity focus areas. In Tables 7A, 7B and 7C, the Project Paper team

took the last three components, broke them down into their individual focus areas (excluding Technology Transfer as a focus area because of its being nearly everyone's responsibility) and, from a list of 26 professions or areas of specialization and/or experience, determined which of these professions/specializations were needed as a minimum to carry out the probable activities of each focus area. The team then matched INCAP individual staff experience and professional training to the needs of the focus areas, and developed the three tables.

Results

The following were the results:

1. In most areas, INCAP already has most or all of the requisite capabilities. There are, however, areas where one of the needed capabilities is lacking, or where INCAP has someone with the required training and/or experience, but who is not specifically assigned to the focus areas and question, or would be overloaded if he/she were.

2. In the component Strengthening Food and Nutrition Policies, Plans and Projects, nearly all of which will be carried out by the Food and Nutrition Planning Division, INCAP has the required capabilities in the following focus areas:

- a. Human Resource Development at Headquarters.
- b. Human Resource Development in the Countries.
- c. Production and dissemination of Information on Food and Nutrition Directed to Different Population Group.

In the latter, however, while INCAP has anthropologists, none appears to be specifically assigned to this area.

INCAP lacks the following capabilities in the indicated focus areas:

a. Food and Nutrition Planning - microeconomist, food marketing specialist.

b. Food and Nutrition Surveillance--microeconomist.

c. Monitoring and Evaluating Food and Nutrition Interventions--microeconomist, evaluation specialist.

3. In the component Increasing the Availability, Access and Consumption of Food, which Food and Nutrition Planning and Agricultural Sciences will share, INCAP has the required capabilities in two of the focus areas: Post Harvest Food Handling, Storage; and Food Processing. They lack the following capabilities in the indicated focus area:

a. Food Production--microeconomist.

b. Food Marketing--microeconomist, macroeconomist, food marketing specialist.

c. Effects of Different Programs and Projects of the Access to, and Consumption of Food-microeconomist, macroeconomist, evaluation specialist.

d. Nutrition/Consumer Education--microeconomist.

4. In the component, " Improving the Biological Utilization of Food and its Contribution to Improved Health and Nutrition", which will be largely implemented by the Nutrition and Health Division, INCAP has all the capabilities needed in all of the focus areas excepted one: Aspects of Nutrition and Health Associated with Pregnancy, Prenatal Care and (the team suggests) Maternal and Child care. INCAP would need an evaluation specialist to complete this core technical group. In addition, the anthropological,

public health administration and operations research capabilities are considered weak because capable individuals now on staff who could fill these roles are either not specifically assigned to this focus area or are so busy with other activities that they would be overloaded if required to become involved in activities in this focus area. This is especially true for the one Operations Research Specialist who serves the entire Institute.

In addition, in four of the focus areas, while INCAP has all of the needed capabilities, a few areas considered weak for various reasons, as follows:

a. Infectious Diseases and Nutrition--The microbiology capability is considered weak largely because the laboratory needs strengthening, both in equipment and procedures.

b. Specific Nutritional Deficiencies--INCAP has the food technology capability, but no one with this specialization appears to be assigned to this area. INCAP also has biochemists, but they appear to be quite busy with other activities, and are working with lab equipment and procedures that need strengthening.

c. Problems of Nutrition and Health Associated with Changes in Life Styles--The anthropological capability is perceived by the team as being weak because, as discussed above in relation to another area, qualified anthropologists are on staff, but are extremely busy with other activities, and are not specifically assigned to those under this focus area.

d. Nutritional Quality of Food--Qualified microbiologists are on staff, but as discussed previously, are working with laboratory equipment and procedures that need strengthening.

Conclusion

INCAP currently lacks a microeconomist, a macroeconomist, an evaluation specialist and a food marketing specialist. The lack of these economists affects three of the six focus areas in the component Strengthening Food and

Nutrition Policies, Plans and Projects; and four of the six focus areas in Increasing the Availability, Access and Consumption of Food. However, only five of the total nineteen focus areas analyzed are affected by the lack of the evaluation and food marketing specialists. Consequently, it appears that economics is a vital area to strengthen, whereas the other two specializations may not be as critical at this time.

XII. RECOMMENDATIONS FOR THE ALLOCATION OF AID/ROCAP INPUTS

Based on the previous analysis, and especially the weaknesses identified in INCAP's technical capacity, the following are suggestions for allocating inputs for the IISP/ROCAP project:

A. TECHNICAL ASSISTANCE

Planning and Decentralization

- Methodologies for assessing the food and nutrition status, institutional strengths and weaknesses in the countries, and processes for technical cooperation.

2 months

- Implementing the above methodologies at the country level.

1.5 months

- Evaluation of the results using the new methodologies and of the processes of supervision, monitoring and evaluation of technical cooperation.

1 month

Health and Nutrition Area

- Operations research methodology, including a determination of research areas and formulation of projects in the

area of iron.

3 months

Agricultural Sciences Area

- Determination of strengths and weaknesses at INCAP in this area; identification of priorities and formulation of an action plan.

2 months

Information and Communications Area

- Design of material for mass media and for the development of training courses on the area of communications technology.

1 month

Area of Development and Training of Human Resources

- Integration of Advisory Academic Committees - Three committees composed of six members each one (will meet three days during each year - estimated in men-months)

2 months

B. TRAINING

- One course with a duration of five days on the methodologies of planning and programming, reviewed in Technical Assistance) (15 people from the central level and 24 BTG).
- Three seminars with a duration of five days (one/year) to update of knowledge of the GTB's, and evaluate of decentralized management
- One course with a duration of five days on the basic food and nutrition for GTB's (25 people)

- Training for nine members of the Food and Nutrition Division, through short courses with a duration up to six weeks, in the following areas: amino-acids analysis, carotenoids analysis, physiological tests of iron, isotopes radioactivity, quality control of laboratories, operations research, methodologies for qualitative data analysis and cost analysis of programs and services.
- Training in communication techniques for decision makers at INCAP (Coordinators, Division Chief)(a three-day course during the first year)
- Training, abroad, of a member of INCAP, in communication and mass media areas. (Short course with a duration of one month).

C. PAYMENT OF SALARIES OF PRIORITY PERSONNEL

Food and Nutrition Planning

- An agricultural economist
- An expert in food surveillance
- An expert in food assistance programs
- Two scholarships in the area of food consumption (first year, scholarship complementation; 2 and 3 year, salary complementation)

Health and Nutrition

- An expert in bio-chemistry (fortification of iron, etc.)
- An expert in operational research
- En expert in anthropology applied to health and nutrition
- An expert in health and nutrition programs and services
- Two assistants for the laboratory

Agricultural Sciences

- A technician for the laboratory - one year
(bio-technology of iron, fiber and lipids)

Communications and Information

- One communications specialist

Development and Training of Human Resources

- One professional to supervise the post-degree course
- Some Professors for specific areas
(per diem, transportation, salary)

Strengthening of technical cooperation, at country level

- 7 Coordinators, BTG
- 7 Technicians in priority areas
- Operational, expenses and office supplies

A phasing-out strategy for support of above personnel and operating expenses should be strongly recommended.

D. LABORATORY EQUIPMENT

See Annex III

E. PRODUCTION OF EDUCATIONAL MATERIAL

To update central staff and GTB

F. OTHERS

Procurement of bibliographic material and
audiovisual equipment for post-graduate
course

Procurement of materials and equipment for
communication technology courses

G. TECHNICAL ASSISTANCE FOR THE ADMINISTRATIVE SUPPORT IN TECHNICAL AREAS

The Project should also support the following activities, through
technical assistance:

- Design and implementation of a maintenance system for bio-medical
equipment, laboratory equipment, and procurement and management of
laboratory reactive and other materials

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FIGURE 1
THE ORGANIZATION OF INCAP'S WORK PROGRAM
USING FOOD SECURITY AS AN OBJECTIVE

<u>COMPONENTS</u>	<u>WORK AREAS</u>
Institutional development	<ol style="list-style-type: none"> 1. Leadership and administration 2. Planning and programming 3. General coordination for the development of the program 4. Monitoring and evaluation
Strengthening food and nutrition policies, plans and policies	<ol style="list-style-type: none"> 1. Food and nutrition planning 2. Food and nutrition surveillance 3. Monitoring and evaluating food and nutrition interventions 4. Technology transfer 5. Human resource development at headquarters 6. Human resource development in the countries 7. Production and dissemination of information on food and nutrition directed to different population groups
Increasing the availability, access and consumption of foods	<ol style="list-style-type: none"> 1. Food production 2. Post harvest food handling, storage 3. Food processing 4. Food marketing 5. Effects of different programs and projects on the access to and consumption of food 6. Nutrition/consumer education
Improving the biological utilization of food and its contribution to improve health and nutrition	<ol style="list-style-type: none"> 1. Protein-energy malnutrition 2. Infectious diseases and nutrition 3. Specific nutritional deficiencies (Iron, Vitamin A, Iodine, Fluoride) 4. Aspects of nutrition and health associated with pregnancy and prenatal care. 5. Problems of nutrition and health associated with changes in life styles 6. Nutritional quality of foods

FIGURE 2
INCAP STRUCTURE

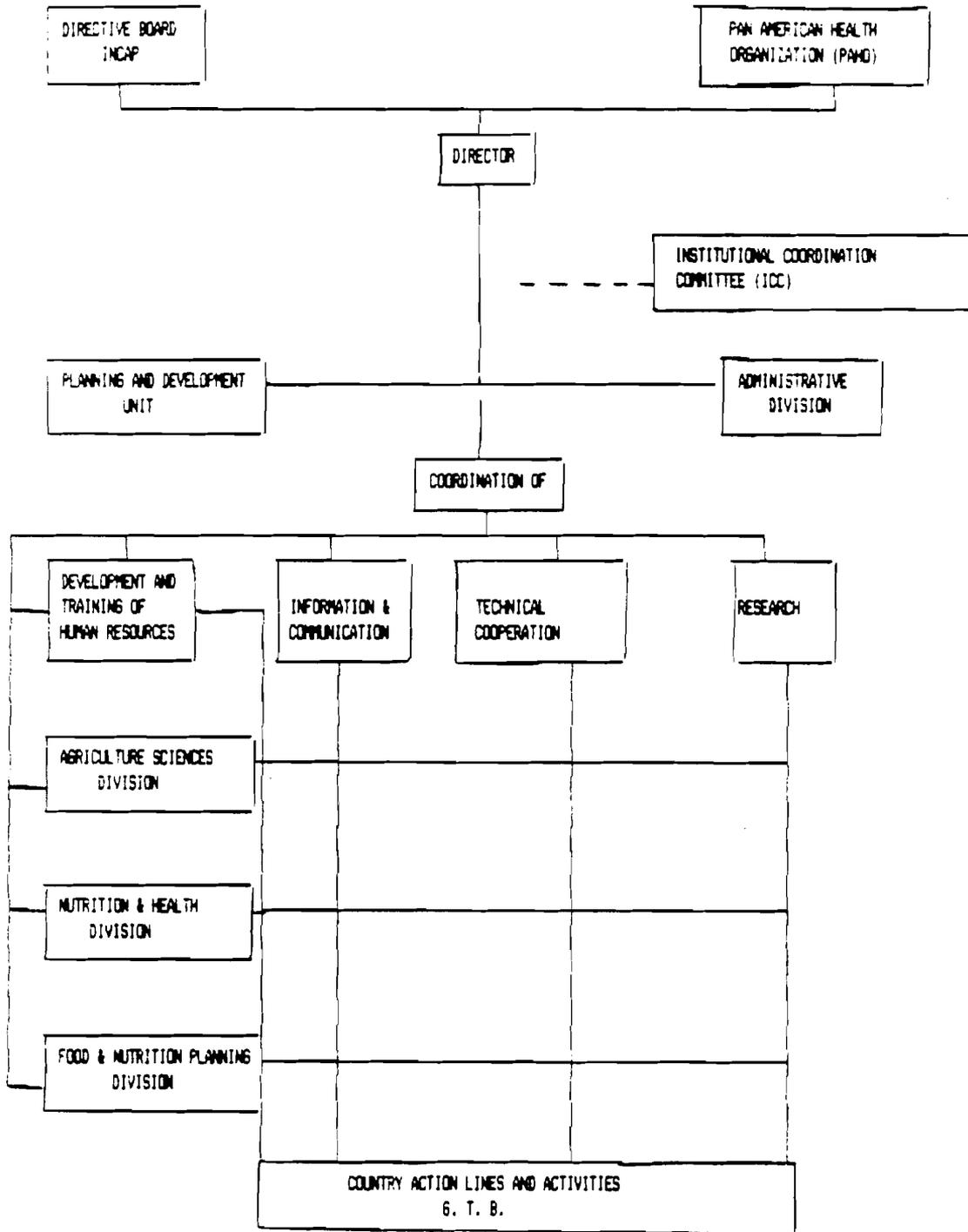


FIGURE 2

FOOD AND NUTRITION PLANNING DIVISION

STRUCTURE

ENCAP
DIRECTOR

DIVISION
CHIEF

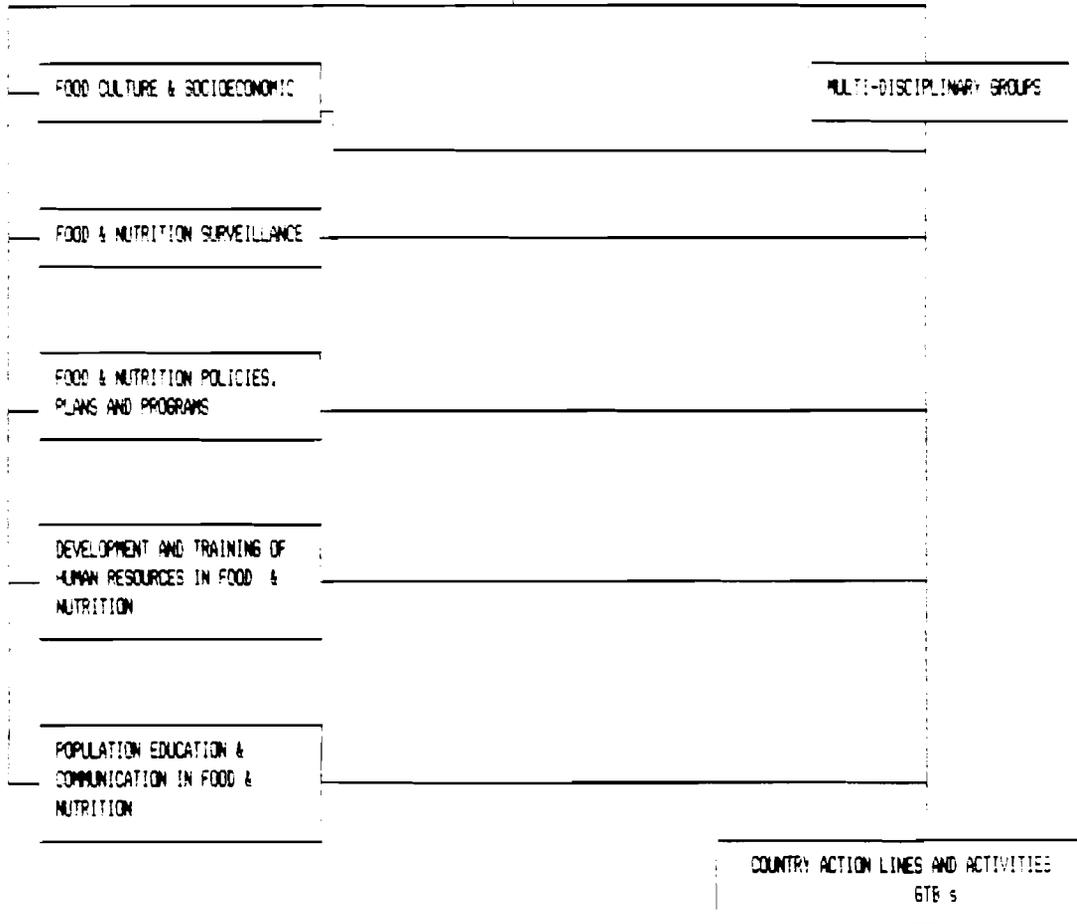
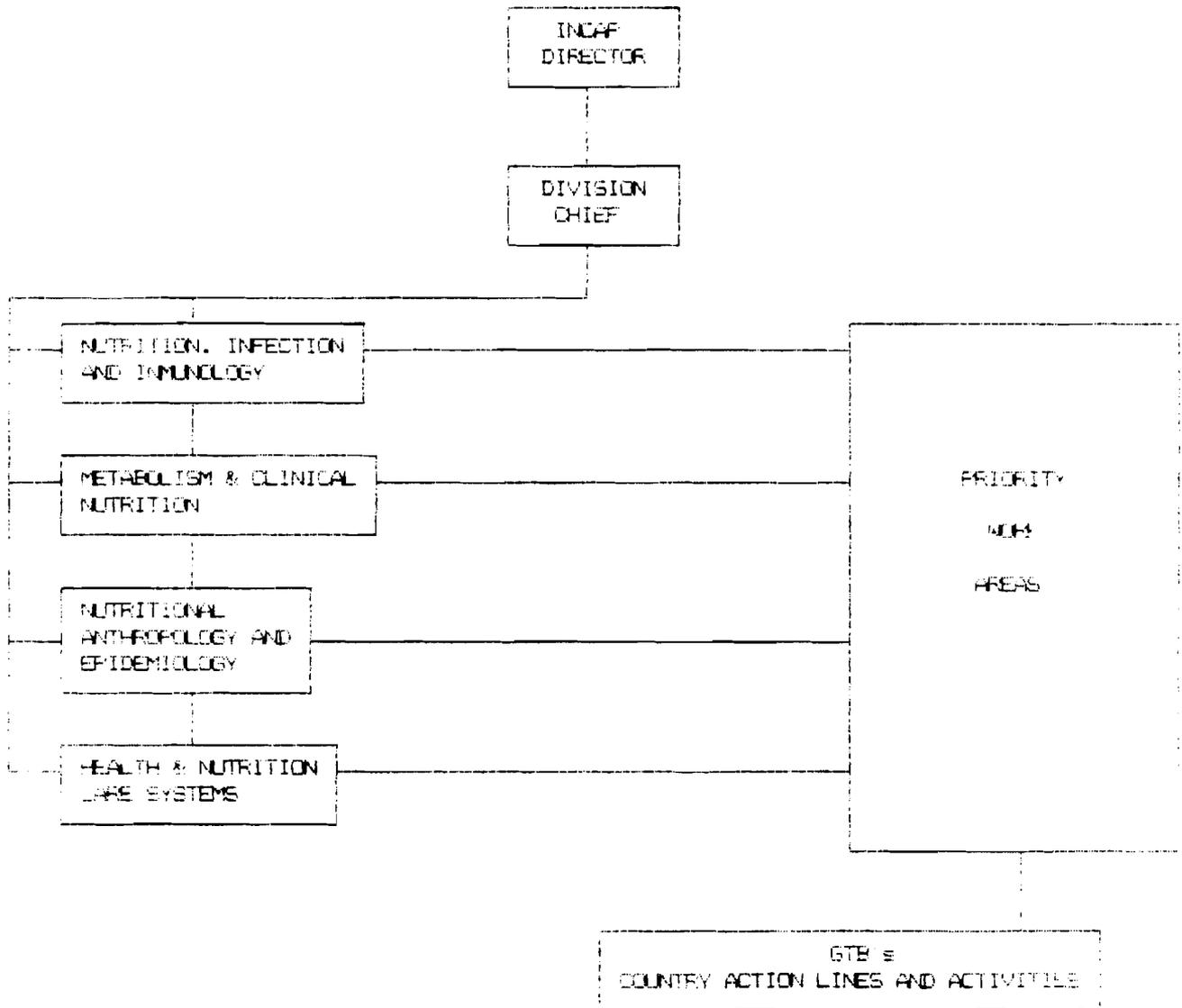


FIGURE 4

Nutrition & Health Division Structure



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1980-1981

FIGURE 5

Agricultural and Food Sciences Division Structure

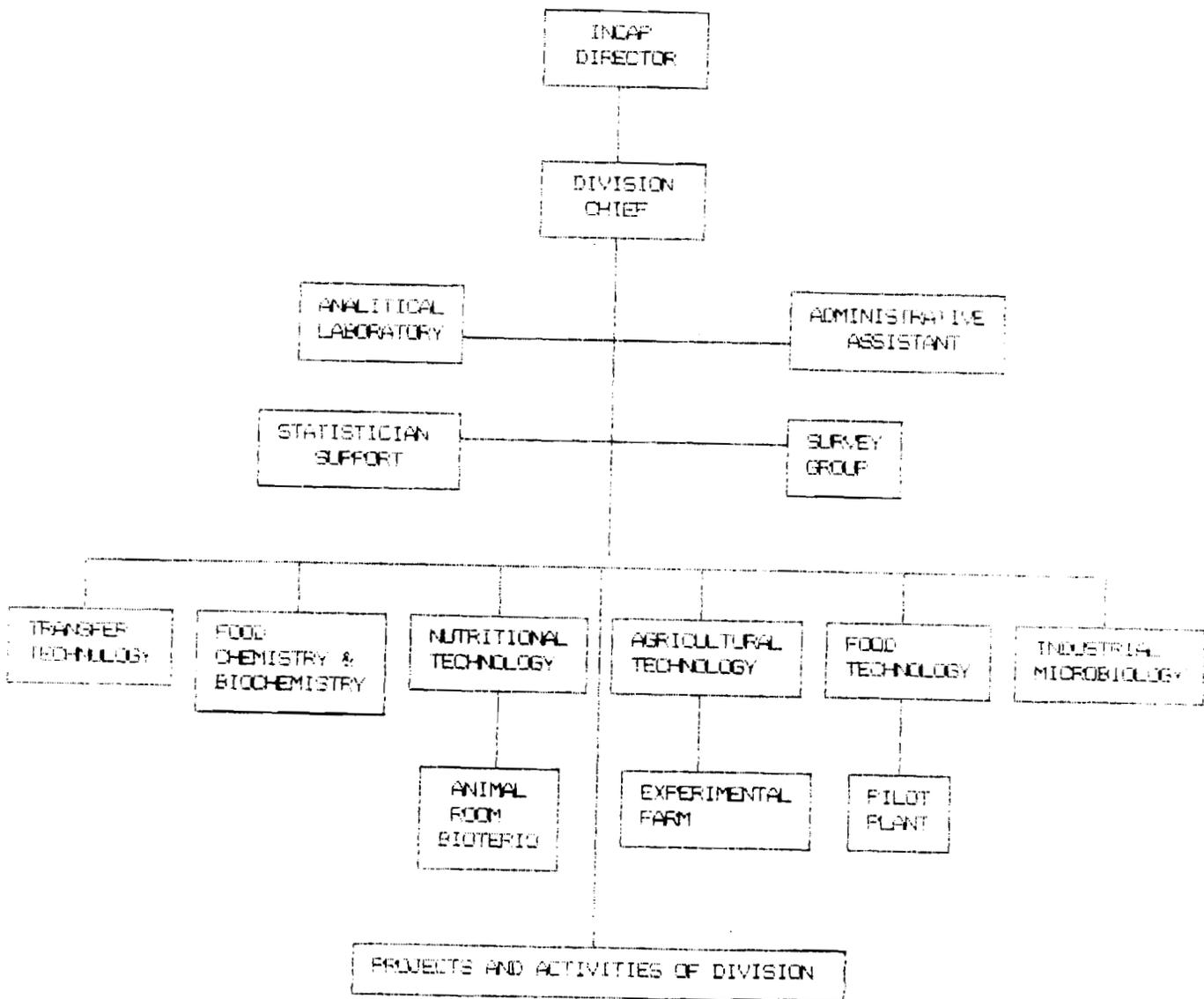


TABLE 1
FOOD & NUTRITION PLANNING DIVISION STAFF BY AREAS OF WORK

TYPE OF PERSONNEL	DIRECTION & ADMINISTRATION	FOOD CULTURE & SOCIO-ECONOMY	FOOD & NUTRITION SURVEILLANCE	FOOD & NUTRITION POLICIES, PLANS & PROGRAMS	DEVELOPMENT & TRAINING OF HUMAN RESOURCES	POPULATION EDUCATION & COMMUNICATION	TOTAL
M.D. WITH MSc. IN PUBLIC HEALTH NUTRITION	1			1			2
NUTRITIONIST WITH MSc IN PUBLIC HEALTH NUTRITION		1			1	1	3
NUTRITIONIST		2				2	4
ECONOMIST		1		1			2
EPIDEMIOLOGIST			1				1
SYSTEMS ENGINEER			1				1
SYSTEMS AND PROGRAMMING			1				1
ANTHROPOLOGIST				1			1
COMMUNICATION EXPERT						2	2
STATISTICIAN	1						1
SUPPORT PERSONNEL (BILINGUAL SECRET, ADMINISTRATIVE ASST AND OTHERS)	6	-	1	3	2	5	18
TOTAL	8	4	4	6	4	10	36

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TABLE 2
LEVEL OF EXPERTISE
FOOD AND NUTRITION PLANNING DIVISION

AREAS AND COMPONENTS	STRONG	LEVEL OF EXPERTISE MEDIUM	WEAK
I. ACCESS AND CONSUMPTION OF FOODS			
. Diagnosis on patterns & factors affecting access and consumption		X	
. Methodologies to measure the effect of interventions on access and consumption		X	
. Methodologies to formulate and implement programs on education and orientation for consumers		X	
. Methodologies to carry out transference of technology		X	
. Staffing (number and stability) (1)		X	
II. FOOD ASSISTANCE PROGRAMS			
. Development of strategies and policies	X		
. Design of programs	X		
. Organization and management programs			
. Information systems	X		
. Evaluation for MCH feeding programs		X	
. Cost-effectiveness studies of programs			X
. Methodologies for transference of knowledge and technologies	X		
. Staffing (number and stability) (2)		X	
III. FOOD AID NUTRITION PLANNING (Policies, Plans and Programs)			
. Knowledge for multisectoral national strategies and policies		X	

TABLE 2
LEVEL OF EXPERTISE
FOOD AND NUTRITION PLANNING DIVISION

AREAS AND COMPONENTS	LEVEL OF EXPERTISE		
	STRONG	MEDIUM	WEAK
. Design of multisectoral programs			x
. Organization and management of multisectoral programs			x
. Methodologies for transference of knowledge and technologies			x
. Staffing (number and stability) ⁽²⁾		x	
IV. FOOD AND NUTRITION SURVEILLANCE			
. Design of information and surveillance systems		x	
. Implementation of information and surveillance systems			x
. Methodologies for transference of knowledge and technologies			x
Staffing (number and stability) ⁽²⁾		x	
. Food and nutrition surveillance		x	

(1) Problem of limited number in economy

(2) Present staff paid by ROCAP/PROPAG Project

TABLE 3

Nutrition and Health Division Staff By Sections

Type of Personnel	Direction and Administration	Nutrition Infection & Immunology	Metabolism & Clinical Nutrition	Nutritional Anthropology & Epidemiology	Health and Nutrition Services	TOTAL
M.D. Specialist	1	1	2	2	4	10
M.D. General Practitioner	--	--	1	4	2	7
Nutritionist Ph.D.	--	--	1	1	--	2
M.D. Public Health Spec.	--	--	--	--	1	1
Biochemistry Specialist	--	--	1	--	1	2
Laboratory Technician	--	4	5	--	--	9
Laboratory Auxiliary	--	5	2	--	--	7
Anthropologist	--	--	--	3	--	3
Auxiliary Nurse	--	--	1	3	--	4
Assistant Researcher	--	--	--	1	--	1
Microbiologist	--	2	--	--	--	2
virologyst	--	2	--	--	--	2
Statistician	1	--	--	--	--	1
Office Support Personnel	3	--	1	5	5	14
Field Support Personnel	--	--	8	40	13	61
Administrative Assistant	1	--	--	--	--	1
TOTAL	6	14	22	59	26	127

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TABLE 4
SECTIONS IN THE FOOD AND NUTRITION DIVISION

AREAS OF WORK	NUTRITION, INFECTION & IMMUNOLOGY	METABOLISM & CLINICAL NUTRITION (BG)	NUTRITIONAL ANTHROPOLOGY & EPIDEMIOLOGY	HEALTH AND NUTRITION CARE SYSTEMS
I. PROTEIN-ENERGY MALNUTRITION (PEM)				
A. FEEDING AND BREASTFEEDING	x	xxx	xx	x
B. DISEASES WITH NUTRI- TIONAL EFFECTS	xxx	xx	xx	
C. GROWTH AND EVALUATION OF THE NUTRITIONAL STATUS			xxx	
D. LOW WEIGHT AT BIRTH, PERINATAL AND NEONATAL MORTALITY			xxx	
E. TREATMENT FOR SEVERE MALNUTRITION	x			
G. EFFECTS OF PEM			xx	
II. SPECIFIC NUTRITIONAL DEFICIENCIES		x	x	x
III. NUTRITION AND HEALTH IN THE SCHOOL CHILD, ADOLESCENCE AND ADULTHOOD			x	
A. MOTHER AND CHILD NUTRI- TION AND HEALTH	x		xx	
B. EVALUATION OF NUTRI- TIONAL STATUS		x	x	
IV. NUTRITION AND HEALTH IN TRANSITION _____ (FENOMENOS)		x		
V. NUTRITION AND HEALTH IN		x		xxx
VI. NUTRITIONAL SURVEILLANCE				x
VII. TEACHING	x	x	x	x

LEVELS OF EFFORT

HIGH xxx

MEDIUM xx

LOW x

TABLE 5
LEVEL OF EXPERTISE
NUTRITION AND HEALTH DIVISION

AREAS AND COMPONENTS	LEVEL OF EXPERTISE		
	STRONG	MEDIUM	WEAK
I. DISEASES AFFECTING NUTRITIONAL STATUS			
a. Diarrhea-infectious diseases			
. Diagnosis on problems and determinant factors	X		
. Formulation of solutions	X		
. System of service delivery		Y	
b. Chronic and treatment diseases			
. Diagnosis of problems and determinant factors			X
. Formulation of solutions			Y
. System of service delivery			Y
II. PROTEIN-ENERGY MALNUTRITION			
. Diagnosis on problems and determinant factors	X		
. Formulation of solutions	X		
. System of service delivery	X		
III. SPECIFIC NUTRITIONAL DEFICIENCIES			
a. Vitamin A and iodine			Y
. Diagnosis on problems and determinant factors	X		
. Formulation of solutions	X		
. System of service delivery	X		
b. Iron			
. Diagnosis on problems and determinant factors			X
. Formulation of solutions			X
. System of service delivery			Y

TABLE 5
LEVEL OF EXPERTISE
NUTRITION AND HEALTH DIVISION

AREAS AND COMPONENTS	LEVEL OF EXPERTISE		
	STRONG	MEDIUM	WEAK
IV. CHILD FEEDING AND BREASTFEEDING			
. Diagnosis on problems and determinant factors	x		
. Formulation of solutions	x		
. System of service delivery	x		
V. NUTRITION AND HEALTH IN THE SCHOOL CHILD, ADOLESCENCE AND ADULTHOOD			
. Diagnosis on problems and determinant factors		x	
. Formulation of solutions			x
. System of service delivery			x
VI. NUTRITION AND HEALTH SERVICES--MCH and PHS			
Maternal and child			
. Definition and organization--functional and structural		x	
. Design and implementation of management systems selected		x	
. Cost-effectivity analysis			x
. Use of operational research for it strengthening			x
VII. STAFFING--AMOUNT AND STABILITY			
. Nutrition, infections and immunology		x	
. Clinical nutrition		x	
. Nutritional anthropology and epidemiology			x
. Organization and management of MCH and nutrition services			x
. Applied research to orient programs and services			x

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TABLE 6
Agricultural and Food Sciences Division Staff
by Sections

Type of Personnel	Transference of Technology	Chemistry & Biochemistry	Nutritional Technology	Agricultural Technology	Food Technology	Industrial Microbiology	TOTAL
Food Technologist Specialist	--	--	1	2	2	1	6
Chemical Engineers	5	--	--	--	2	--	7
Chemical Specialist	--	2	1	--	--	--	3
Technicians	2	3	7	2	2	--	16
Farm Workers	--	--	--	14	--	--	14
Secretarial Support	1	1	1	1	1	--	5
TOTAL	8	6	10	19	7	1	51

One statistician and one administrative assistant give support to all sections

TABLE 7: INCAP CAPABILITIES AND PROGRAM PROFESSIONAL NEEDS

X-Needed for Activity Area

Y-IN/AF has. Minus (-) weak area.

::Improving the biological utilization of food and its contribution to improved health and nutrition

Profession/Specialization	Protein Energy Malnutrition	Infectious Diseases & Nutrition	Specific Nutritional Deficiencies	Aspects of Nut: & Hlth.rel.to Pregnancy, Pren: Care & MDI	Probs.of Nut. & Hlth: rel.to Changes in Life Styles	Nutritl. Quality of Foods
Public Health/Epidemiology	::X Y	X Y	X Y	X Y	X Y	X Y
Nutrition/Health Education Specialist	::	:	:	X Y	:	:
Consumer Education/Information Specialist	::	:	:	:	:	:
Nutritionist	::X Y	X Y	X Y	X Y	X Y	X Y
Micro-Economist	::	:	:	:	:	:
Macro-Economist	::	:	:	:	:	:
Systems Analyst/Engineer	::	:	:	:	:	:
Computer Programmer	::	:	:	:	:	:
Anthropologist/Sociologist	::	:	:	X Y	X Y-	:
Communications Specialist	::	:	:	:	:	:
Statistician	::	:	:	:	:	:
Food Handling/Management Specialist	::	:	:	:	:	:
Food and Nutrition Planner	::	:	:	:	:	:
Public Health Administrator	::	:	:	X Y	:	:
Microbiologist	::	X Y	:	:	:	X Y-
Food Technologist	::	:	X Y	:	:	:
Biochemist	::X Y	X Y	X Y-	:	X Y	X Y
Medical Doctor/Specialist	::X Y	X Y	X Y	X Y	X Y	:
Agronomist	::	:	:	:	:	:
Evaluation Specialist	::	:	:	X	:	:
Training Specialist	::	:	:	:	:	:
Educational/Training Materials Specialist	::	:	:	:	:	:
Food Marketing Specialist	::	:	:	:	:	:
Food Chemist/Engineer	::	:	X Y	:	:	X Y
Operations Research Specialist	::	:	:	X Y	:	:

**INCAP INSTITUTIONAL
STRENGTHENING PROJECT
(IISP)**

TECHNICAL ANALYSIS

ANNEX I

LIST OF DOCUMENTS

ANNEX I

LIST OF THE DOCUMENTS

1. INCAP Institutional Strengthening Project. PID.
2. INCAP Administrative Analysis.
3. INCAP Strategic Marketing and Business Planning.
4. Plan Estrategico Institucional 1991-2000 del INCAP.
5. Technical Support for Food Assistance Programs. PROPAG/Project.
6. Quehacer del INCAP en la Formación y Capacitación de Recursos Humanos en Alimentación y Nutrición. INCAP, 1990.
7. Avance en la Ejecución de Acciones de Formación y Capacitación de Recursos Humanos en Alimentación y Nutrición. INCAP, 1990.
8. Educación Popular, Formación de Escolares, Técnicos y Universitarios y Capacitación en Servicio de Alimentación y Nutrición. INCAP, abril de 1991.
9. La Gestión Descentralizada de la Cooperación Técnica del INCAP.
10. Condiciones de la Reestructuración de la División de Planificación Alimentaria Nutricional. INCAP, septiembre de 1990.
11. Propuesta para racionalizar los Equipos de Cómputo de la División de Planificación Alimentaria Nutricional.
12. INCAP - Information Management Capabilities Analysis.
13. Seminario Taller sobre Grado de Avance del Proceso de Implementación de la Estrategia de Descentralización. Guatemala 23-25 de mayo de 1991. INCAP.
14. Programas del Proyecto sobre Alimentación y Nutrición del INCAP. Mayo de 1991.

15. INCAP Family Health and Nutrition Strategy. Putney, J. Pamela and Griffiths, Marcia.
16. Resumen Ejecutivo. XII Reunión Consejo Ejecutivo del INCAP. Septiembre de 1990.
17. informe Anual 1989 del INCAP.
18. Política de Información y Comunicación del INCAP, 1990.
19. La Investigación de operaciones a nivel Estratégico. INCAP, Guatemala, junio de 1990.
20. Plan de Organización y desarrollo de la División de Planificación Alimentaria y Nutricional.
21. Guías Metodológicas para Investigación de Operaciones en Programas de Alimentación a Grupos. INCAP, 1989.
22. La Evaluación de Dos Proyectos del INCAP/ROCAP: TRO, Control de Crecimiento y Educación en Atención Primaria de Salud (596-0115). y Proyecto de Asistencia Técnica para Programas de alimentación a Grupos (596-0115) JSI. ROCAP/Guatemala.

**INCAP INSTITUTIONAL
STRENGTHENING PROJECT
(IISP)**

TECHNICAL ANALYSIS

ANNEX II

LIST OF INTERVIEWED PERSONS

ANNEX II

LIST OF INTERVIEWED PERSONS

ROCAP/AID

1. Sandra Collier. Health and Nutrition Advisor.
2. Joseph B. Coblentz. Program Technical Advisor for Food Assistance Programs.
3. Jeffrey Goodson. Project Development Officer.
4. Jack Galloway. Nutrition Advisor.
5. Jude Penzini. Marketing Advisor.
6. John Rigby. Financial Advisor.
7. Roberta Van Haftan. Food Security Advisor.

INCAP

1. Dr. Hernán Delgado, Director
2. Dr. Rafael Flores. Research Coordinator.
3. Lic. Ernestina Ardón. Training Coordinator.
4. Lic. Maggie Fisher. Information and Communication Coordinator.
5. Dr. Enrique Rodríguez. Technical Cooperation Coordinator.
6. Dr. Arnulfo Noguera. Food and Nutrition Planning Division Chief.
7. Dr. Juan A. Rivera. Nutrition and Health Division Chief.
8. Dr. Luiz Elías. Agriculture Sciences Division Chief.

FOOD AND NUTRITION PLANNING DIVISION:

9. Lic. Alexandra Praun.
10. Lic. Hedi Deman.
11. Lic. Verónica de Palma.

12. Lic. Isabel de Nieves.

13. Dr. Edmundo Alvarez.

NUTRITION AND HEALTH DIVISION:

14. Dr. Francisco Chew.

15. Dr. José Cruz.

16. Dr. Carlos Samayoa.

17. Dr. Omar Dary.

18. Dr. Alfred Bartleth.

19. Lic. Elena Hurtado.

20. Lic. América de Fernández

21. Lic. Amilcar Beltetón.

AGRICULTURE SCIENCE DIVISION:

22. Ing. Arnoldo García.

23. Ing. Roberto Cuevas.

24. Ing. Enrique Acevedo.

OTHER PROFESSIONALS:

25. Lic. Myriam Ruiz. Planning Coordination Unit.

26. Lic. Luis Estrada. Planning and Development Unit.

**INCAP INSTITUTIONAL
STRENGTHENING PROJECT
(I I S P)**

TECHNICAL ANALYSIS

ANNEX III

LIST OF LABORATORY EQUIPMENT TO BE FINANCED

STRENGTHENING OF THE LABORATORIES OF CHEMISTRY AND BIOCHEMISTRY
OF INCAP FOR IMPROVING THEIR FUNCTIONS AS CENTERS OF
REFERENCE, RESEARCH, AND TEACHING IN THE CONTROL
OF MICRONUTRIENTS DEFICIENCY

Many of the activities of research, formation of human resources, and food and nutritional interventions that the Institute of Nutrition of Central America and Panama (INCAP) has performed during its life have been originated from activities carried out in its laboratories. Among the achievements is worth to mention the invention of the vegetable mixture with high nutritive value named as INCAPARINA; the implementation of salt and sugar fortification with iodate and vitamin A, respectively; the improving in the production and nutritional value of corn and bean through genetics and good practices of processing and storage; the introduction of the use of oral rehydration salts; and the biochemical support for national surveys in nutrition.

The laboratories of Chemistry and Biochemistry of INCAP are playing a decisive role in the control of nutritional specific deficiencies, such as vitamin A, iodine, iron, zinc and others. It is foreseen that their work will continue having impact in improving the life quality of the Central American people (including Belize and Dominican Republic). These laboratories are the places where human resources are formed, and where advice is looked for with the purpose of performing supplementation and fortification programs, quality control of fortified food, search for new natural products, and the nutritional evaluation of the implemented measures.

The fulfillment of all the activities included in the previous paragraph depends on the accuracy and efficiency of the work accomplished in the laboratories of INCAP. However, those attributes are being very difficult to attain because most of the actual equipment is obsolete, slow, close to reach the end of the useful life and with very small probabilities of being fixed. Therefore, the acquisition of new equipment is an urgent need to be satisfied.

The equipment that is requested is indispensable to continue and extend the work actually done in the control of micronutrient and other deficiencies in the Central American region. The equipment will be utilized in analysis of biological fluids (spectrophotometer, fluorometer, lipid extractors, e.g.), in studies of association between micronutrients and pathological manifestations (microplate reader, microscopy, respirometer, cell counter, e.g.), analysis of food quality (amounts of fiber, macro- and micronutrients), and the preparation of samples and reagents (balances, pH-meters, stirring machines, mixer devices, ice-makers, etc.).

TYPE OF EQUIPMENT	BUDGET	
	APPROX. COST (\$ U.S.)	RATIONALE
Magnetic Stirrer (2)	400.00	For preparation of all type of solutions.
Analytical Balance **	3,000.00	For preparation of reagents and samples . Balances in use are in very bad conditions.
Single plate Balance	1,500.00	For preparation of reagents and samples when high precision is not required.
Vacuum Pump	1,700.00	Useful for performing filtrations and extractions.
Extraction Pump	5,000.00	Needed for working with substances that have toxic vapors. The laboratory lacks this kind of device.
Effendorf Centrifuge *	2,000.00	For assays with microsamples.
Computer and Printer **	3,000.00	Useful for analysis, storage and report of results.
Conductivimeter *	1,500.00	For measuring of conductivity for water quality control and determination of salts during purification experiments.
Cell Counter **	30,000.00	For automatization of hematological analysis. Required for epidemiological studies in nutritional and infectious disease surveys.
Chronometer	250.00	Useful for experiments that require strict control of time

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TYPE OF EQUIPMENT	APPROX. COST (\$ U.S.)	RATIONALE
Ladder.	300.00	Useful in the laboratory and store-room.
Spectrophotometer ** (including recorder and circulating-bath)	24,000.00	This is the apparatus most useful in clinical chemistry and in other chemical and biochemical applications. It will substitute old equipment for the analysis of enzymes, and chromogenic assays of vitamins and metabolites.
Fluorometer **	15,000.00	Useful for the determination of certain metabolites such as vitamin A and protoporphyrins.
Power Source *	2,000.00	Useful for electrophoresis and blotting.
Microplate reader **	20,000.00	Useful for immunological tests, and very practical for chromogenic assays of metabolites and enzymes. The laboratories do not have this apparatus.
Blender (2)	300.00	Useful for the preparation of homogenates of all types.
Horizontal Shaker	1,000.00	For continuous shaking in certain assays.
Microscope	5,000.00	For improving the analytical capacity of the Microbiology and Infection-Disease Section.
Ice-Maker Machine (2)	1,000.00	For the production of ice in cubes and crushed. There is not an ice-maker machine in INCAP.
Osmometer	4,000.00	For research with diets and their digestive effects.
Multiple-tip Pipettes.	1,200.00	Required for assays performed in microplates. The sections of Nutritional Biochemistry and Food Chemistry lack of this instrument.

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TYPE OF EQUIPMENT	APPROX. COST (\$ U.S.)	RATIONALE
pH-meter* (2)	2,000.00	Determination of pH, ions, y preparation of buffers. The equipment in use is in bad conditions.
Respirometer (2)	8,000.00	For physiological studies associated with nutritional deficiencies.
Large Rotor for Sorval Centrifuge	1,000.00	To complete the capacity of the Sorval centrifuge.
Fiber Analyzer	10,000.00	To study association among micronutrients, chronic diseases, and fiber.
Aminoacid Analyzer	50,000.00	To study of essential amino acids in the Central American diets, and the requirements associated with micronutrients deficiencies and malnutrition.
Lipid Extractor *	20,000.00	Isolation and study of fatty vitamins and other liposoluble nutrients.
Ultrafiltration System.	500.00	For sterilization and concentration of solutions.
Vortex Mixer (4)	400.00	Shaking of test tubes. Curret apparatus are in very bad conditions.
* Electric Protector (5)	500.00	Protection of electronic equipment against abrupt changes in the electrical current.
** Voltage Regulator (8)	4,000.00	Secure good performance of electronic equipment.
TOTAL	218,550.00	

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It will be convenient to add \$10,000 to the Total amount indicated above, for the purpose of repairing the equipment that might be use for additional years such as Atomic Absorption Spectrophotomer, Gas Chromatographs, High Performance Liquid Chromatograph (HPLC), Preparative Centrifuges, and minor equipment.

**INCAP INSTITUTIONAL
STRENGTHENING PROJECT
(IISP)**

TECHNICAL ANALYSIS

ANNEX IV

LIST OF INCAP PROJECT AREAS

-INCAP PROJECT AREAS

1. 0014-670/PM ORT Research for PHC Applications
2. 0014-670/PM Growth Monitoring for PCH Applications
3. 0014-670/PM Health Ed. for PHC Applications
4. 0029- Comparative Research for Assessing Incidence of Morbidity
 in Children 6 to 36 Months. Re: Vit. A Therapy
5. 0050-930 PN Shigelosis Research
6. 0070-025 PN Diarrhea Morbidity Research; Impact of Piped Water in Rural
 areas for Behaviour Modification
7. 0071- Food Security/Diarrhea Research
8. 0075-095 PN Relationship of Breastfeeding and Infections Disease
9. 0085-120 PN Relationship of Food Supplements to Malnourished Lactating
 Women and Amt of Milk Produced
10. 0087-150 PM Design and Implementation of Project to Prevent Princ
 Courses of Pre, Neo and Post Natal Morbidity and Mortality
11. 0088-205 PN Feeding Practices and Food Therapy During Diarrhea Episodes
12. 0088-205 PN Design of Health Ed. (rel. to above)
13. 0088-205 PN Evaluation of Effects of Food Therapy
14. 0089-170 PN Research on Mgt. of Severe Diarrhea
15. 0091-210 PM Research on Maternal and Neonatal Health
16. 0099 R&D: Design of HC for Mgt. of High Risk OB and Neonatal
 Cases in Health Centers and Hospitals and by Midwives
17. 0099 Development of Diagnostic Criteria (for above)
18. 0099 Development Midwife Training Program for OB cases
19. 0099 Development of Research Methodology for Project
 Implementation process and Evaluation
20. 0087-210 PM Prevalance and Risks Asso. & Oxitoxim Use by Midwives

21. 0096-135-PN Effects of Reversing Policy of Free Formula
22. Proj. HOPE Serum Retinol Level Analysis/Guatemala
23. VITAL Serum Retinol Level
24. SIMAP Software Development
25. MAP MAKER Software Development
Research in School-age Health and Nutrition needs.
(Theoretical)
26. 022-823 PN Early Malnutrition and Effects in Adolescence
27. 0043-811 PN Long Study: Duration of Amenorrheal Lactation/Impact
28. 0101-225 PN Material and Cultural Determinants of Water Usage for
Personal and Domestic Hygiene
29. 0095-185 PN Effects of Food Supplements to Mothers on Birth Weight of
Succeeding Generations of Children
30. 0111- Immuno Analysis/CJA cells in Mother's Milk
31. 0002 Secondary Analysis: Maternal Anthropometric Data
32. 0004-670 PN Risk Indicators for Retarded Fetal Growth
33. 372-PN Bean Research: Effects of Polifenols and Other
Anti-nutritional factors for digestibility of Bean Proteins
34. Effects of Nutritional Feeds for Increasing Animal Milk
Production
35. 0001- Impact of Non-traditional for-X crops on Highlanders
36. 0019-710 PN Mgt. and TA for food development and assistance
0067 Macro Eco. Review of Food, Demographic and Socio Ec.
Variables
0103-710 PN Effects on Comm. Participation with MCH Food Supplement

(0049g)

Annex E.3

Information Management for Sustainability

TASK CODE	PARTICIPANTS	PLACE	No. OF DAYS	PREPARATORY ACTIVITIES	COSTS	
					CONSULTANTS AND PARTICIPANTS	OTHER
5.14	<u>Pilot Workshop to Secretaries and Others on Office Automation</u>	Guatemala	5 half days	Systems Analyst and consultant and Human Resources Division or Personnel Office prepare agenda and bibliography; pool computers.	\$2000 - Consultant travel and per diem fee one week.	\$500
9.6	<u>Workshop on Bibliographical Searching on New Systems</u>	Guatemala	5 half days	IDEM	IDEM	IDEM
1.6	<u>Workshop to Evaluate and Update INCAP information strategy</u>	Guatemala	One day each year	Consultant and information specialists prepare agenda and bibliography.	Costs of each of each of two workshops: IDEM	IDEM

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The big organizational cost of marketing information products and using this equipment is the distraction of the small group of information specialists in INCAP from their tasks in implementing the rest of the institutional information strategy. The idea is that the executive information strategy workshops become permanent annual affairs, and that means a recurrent cost. Participation of INCAP professionals in state-of-the-art working groups would also become permanent, and at least half the associations are likely to insist on continuing to charge membership fees. Some are amenable to an institutional appeal for an exception to membership fees, once serious participation by INCAP is observed.

All the data bases imply maintenance costs, substantial use of papers and printer ribbons, diskettes and time in updating the indexing and retrieval vocabulary (specialized classification). Much depends on adequate cost control, for example, avoiding excessive use of laser printers.

VIII. TRAINING PLAN

See chart.

YR. MNTH. TASK

1-4 DESIGN OF MIS FOR GTB AND INSTITUTIONAL
COMMUNICATION SCHEMES AT NATIONAL LEVEL

This would be a six week study encompassing all of the member countries, by a consultant with considerable knowledge of public institutions, universities and NGOs in the region, with a background in communication theory and preferably experience with teleprocessing and participative research methodologies. The results of these analyses will be key inputs into the design of the technological and institutional aspects of the regional network and the Headquarters' MIS.

1.4 REVIEW OF LAN/WAN BIDS IN TERMS OF REAL
COSTS TO THE ORGANIZATION

This is a one week study (which should coincide with part of the previously mentioned technical assistance) of an ample number of bids which INCAP should obtain, and a drawing up of cost elements pertinent to the organization with regard to each bid but not included in the bid itself. The Administrative Division would need to help the consultant come up with cost estimates for the cost elements. This consultant must have considerable direct experience and knowledge of large-scale office networks of various types, as well as WAN.

1-4 RECOMMENDATIONS FOR EQUIPMENT, FILE AND DATA
SECURITY

This must be a very high calibre expert on security matters. The mission is for two weeks, and should overlap the previously mentioned two consultancies. There may be a qualified person in Guatemala.

1-8 STUDY OF USER REACTIONS TO OPTIONAL DSI MODES

This should be a local person with user study experience, making controlled experiments over a three month period with regard to user reactions to references and document delivery generated through different modes. Among the variables to control are those highlighted in the task 5.17.

1-9 CONSULTANCY ON LIBRARY ACQUISITION SOFTWARE

After INCAP technicians have reviewed the large number of possibilities, and inquiries have been made about the feasibility of them in Guatemala, an expert on this subject should opionate on the preferences in INCAP and justify his or her own conclusions. This would be a two day mission. There appear to be suitable experts in Costa Rica and Mexico.

YR. MNTH. TASK

1-11 DESIGN AND IMPLEMENTATION OF PROJECT MONITORING
SYSTEM

A non-conventional cost-effective approach is needed on this, as is noted in this document (EOP Scenario #4). There are lots of consultants offering rather conventional information-heavy systems, not geared to real decision-making capabilities, so one has to be careful. This consists of two missions, the first a week and the other six weeks, including field testing of the new system.

1.4 CONVERTING THE ADMINISTRATIVE SUPPORT DATA INTO
MANAGEMENT DATA

This should be discussed rather exhaustively with INCAP officials and the definition of four final candidate subjects should be recommended by the previous consultants on tasks 8.1, 5.4, 1.1 and 1.2. Very specialized experts, or persons known to have imaginative appropriate techniques, for dealing with this problem should be considered for this. Each subject would be submitted to 2-3 weeks work by the expert, who leaves guidelines to a locally contracted systems analysts-programmer and does at least one follow up mission.

1-12 CHECK ON LAN/WAN DEVELOPMENT

About half way through installation, an independent consultant should do an evaluation. This is a one week mission. This could be the same consultant as that for task 5.11.

2-2 MARKET STUDY FOR INCAP INFORMATION PRODUCTS

This is a three week study, including visits to all member countries. Possible products to be studied are indicated in . This must definitely be a Central American firm with ample experience in doing market studies for information products in the region, including an in-depth knowledge of potential competitors or collaborators with INCAP's marketing efforts.

2-5, 2-11 TWO STAGE WORKSHOP ON CASE-4GE-ISPE TOOLS

This must be a well versed and experienced expert on these tools, who can advise the systems' analysts on the selection of tools for their work. This would be a rather informal workshop with the analysts and programmers, interspersed with some lectures and demonstrations. The expert should adopt a

strict opportunity cost approach to the subject, considering the pressures on the analysts' time. Each visit would be three days. They should be preceded by sending a bibliography to be studied by the analysts ahead of time.

YR. MNTH. TASK

2-10 DESIGN AND IMPLEMENTATION OF MARKETING DATA BASE

This could be a very expensive and elaborate operation. Fortunately, AID has financed something similar to INCAP's needs in ICAITI, and if an agreement can be made to transfer this technology, it would be of great economic advantage. The target figure is for a contract against product. Specific files will be different between the two systems, but the structure could largely be the same.

(00792)

INFORMATION MANAGEMENT CAPABILITIES

This analysis covers INCAP's capacity and need for improvements in information technologies, systems and services required during the IISP.

The focus of this analysis is on strengthening required by INCAP, including technical assistance, to have an appropriate information strategy and supporting systems.

I. Existing Information Systems and Capacity

INCAP's information strategy has undergone an intensive process of development over the last two years. Management has defined priorities for information systems and services. A diagnosis of problems, and solutions for developing necessary systems and services, was undertaken with external consultancy help. There was a high level of INCAP staff participation at all organizational levels, and staff follow-up has been good.

There is at present a great variety of computer-based information functions and applications at INCAP. There have been important skills and systems development within the organization, including some original computer programming demonstrated in laboratory controls, statistical analyses, and administrative support functions. In addition some innovative work has been done at INCAP on software for graphic map presentations, surveillance systems, and in the manual control of key documents produced by and for specific projects.

Work is currently underway on user-oriented studies and experiments which will give precise indications for new library acquisition, reference and dissemination policies. INCAP has a protocol procedure for new research projects which involves a quality control of data handling and analysis. A number of steps have been taken to increase the effectiveness of INCAP's data analysis in the specialized Micro-Center dedicated to this task.

INCAP's administrative support system, which will eventually have 21 modules, is in full development, and for the core modules on programming and accounting the parallel use of the old system is about to terminate.

There has been a reduction in the core group of information specialists, including systems analysts, statisticians and librarians, to a dozen posts. There is a smaller number of computer programmers. Productivity in data and systems analysis has been maintained to a large extent by specializing this

staff according to their talents and upgrading equipment. (Note: due to reduced staff, there does not seem to be within INCAP staff the specialized skills required for in-depth analysis of information technology options, leading to the danger of mistaken presumptions in making purchase and policy decisions.)

The separation of system developments, most markedly the separation between the administrative support system and the other institutional systems, has permitted observable work progress. However, this is now presenting the danger of duplicate or bureaucratic systems, with possible difficulties for efficient user interface.

Overall, information planning and policy responsibilities have been concentrated in a core group of executives and technicians instead of the prior rather unmanageable large advisory group. Executive responsibilities for implementing the institutional informational strategies have been centralized in the Communication and Information Coordinator. This new decision structure is demonstrating the frankness, application, and well-intendedness required to face the deficiencies in INCAP's information management system.

INCAP is aware at this important time of institutional transformation of the value of outside assistance in developing the institution's information system to the point where it can meet INCAP's future needs, particularly to meet the sustainability objectives of the IISP Project.

II. INCAP Information System Deficiencies

There are a number of defects and challenges to INCAP's capacity to have and maintain a fully functional information management system. These are as follows:

1. Increasing in-house (Headquarters) and regional COMMUNICATION DIFFICULTIES, given the inadequate structures (both too rigid and disorganized) or competence for office handling of the information technologies and volumes which already exist, and given the tendency (reinforced if attention is only given to the telematic or other transmission segment of the communication chain) to greatly overload key points of information generation, flows and use;

2. The deficiency of INFORMATION SKILLS OF MANY USERS in the organization, especially in using software packages and data base searching, and of user-friendly technology;

3. Very poor facilities to integrate, retrieve and disseminate information, and the LACK OF EXPERIENCE WITH RELEVANCE-ORIENTED DATA BASE DEVELOPMENT, in sharp contrast to the strong emphasis given to data operations in research projects and administrative support systems;

4. The lack of an effective selection and presentation of information that would ENABLE SPECIFIC EXECUTIVE DECISIONS TO TARGET on management deficiencies especially in project negotiating (marketing) and implementation and on such organizational deficiencies as the costly information handling crises which actually occur frequently;

5. The very SMALL NUMBER OF INFORMATION TECHNICIANS in computing and librarianship and the need to reinforce the capabilities of these persons especially with integrative methodologies and relevant state-of-the-art knowledge, while maintaining the relatively effective individualization of responsibilities for system and service developments; and

6. The need for the management to receive sound estimates of the REAL COSTS TO THE ORGANIZATION (beyond appearances or the stated transaction price) of policy and purchase options regarding information technologies, systems and services.

As long as these problems exist, they will be very serious constraints on the ability to strengthen the three kinds of capabilities mentioned above.

III. END OF PROJECT SCENARIO IN 1994

On finishing the three year institutional strengthening project, the work program for the institutional information strategy should have contributed substantially to:

1. Awareness by INCAP executives of the technical logic of the information strategy, so that they can intervene in an opportune and rational way in its implementation, and can help assure that the systems and services respond to their requirements and that the technology is compatible with the way the work can and will be organized in their projects, divisions or offices.

2. The INCAP executives counting on effective information systems support for their own activities, including their own agenda, institutional and personal directories, follow-up on decisions, and report preparation and aggregation.

3. A regular and opportune delivery to executives of vital management information, mostly based on a reworking of administrative support data, such as cost elements for negotiating new project budgets, the estimated resources

still available to a project which is being implemented, financial data for strategic planning, or assimilation of financial reports for the different donors according to their respective requirements.

4. The effective updating of information during project formulation and implementation on three levels, but minimizing demands of data generation by project managers; the three levels are: (1) a general project inventory with control of reports and document products; (2) information by exception for key executive decisions; and (3) programming and budgetary accounting controls. The first level of information is to be stored as a data base in the Research Coordination, and this could include the periodic summarizing of project progress reports. The second level of information is mostly a spinoff from the third level, adding some data elements and algorithms to make timely estimates. This means that the third level should be as accurate as possible, but given some practical problems (like the inevitable discrepancy between an obligation and the real cost and the time lag in knowing the latter), it should not be expected to do the impossible.

5. Efficient communication flows between Headquarters and the countries, by means of rapid and economic complete displacement (not just 'transmission') of scientific, policy, marketing, programming, budgetary accounting, project monitoring, surveillance, raw data and statistical analyses, and other messages, from the original source to the final user, taking advantage of scale economies in telematics and realistic institutional arrangements in the countries for assuring these flows.

6. The Local Working Groups (GTBs), including the coordinator, having and using appropriate tools for understanding the enormous demands and expectations regarding their work, setting priorities among their programmed responsibilities and tasks, with an institutionalized yet flexible programming and monitoring of their activities.

7. The implementation in successive stages of a LAN/WAN installation plan (in no case to connect more than half of the PCs used for scientific work), data base administration software, and complementary hardware, file and data security measures (which must cover all equipment), with a technology which minimizes overall costs to the organization while providing efficient electronic mail, data base access, backup controls, data security, multiple user and other functions and is appropriate for user habits in this environment.

8. Upgrading the personnel in all levels of the organization with regard to the efficient use of the information and communication technologies, consistent with institutional norms regarding equipment use, file development, access and security precautions, and data base administration, and to the observable improvement of their information user habits.

9. Institutional support for on-going user groups each organized to exchange experiences with regard to one or more software packages, and for designated consulting hours by the systems analysts, emphasizing these as efficient support mechanisms resulting in improved capabilities of using software.
10. A standardized records management of all substantive document production, including correspondence and primary research data, with regard to all projects (starting with project ideas and extending through implementation and operation), these standards being reflected in institutional information standards and the Secretaries' Manual, being used by every INCAP in-house and regional office and greatly enhancing retrievability of this information.
11. Greater clarity regarding the relative attractiveness and contribution to productivity of dissemination (DSI) services and retrieval capabilities for INCAP researchers, project staff and administrators; and knowledge by most INCAP potential users of access to BITNET, on-line interactive access to local data bases, CD-ROM, and other reference and full text document delivery modes, and how to use these in a rational way in retrieving information; as well as sustained dissemination services which have proven effective.
12. Reassign library acquisition resources in a more cost-effective manner, based on user searching habits and demonstrated interests (thus placing much more emphasis on references to pre-publishing activities by other researchers) and feasible and acceptable ways to improve these habits (for example, to obtain the most updated materials and go beyond discipline boundaries in covering a subject). The conventional sources and modes of acquisition appear to be of increasingly secondary importance, and it is of utmost importance to access conference and unedited papers, training materials, laboratory protocols, etc.
13. Redirect library functions more to question negotiation and helping users do their own interactive searching, and in helping professionals and other office staff to resolve particular records management problems.
14. Effective social communication and technology transfer to target populations.
15. A working plan for the marketing of information and information services.
16. A publications policy which is being implemented.
17. New international linkages among scientific colleagues of INCAP researchers and other project staff, and of the information technicians (statisticians, computer scientists, librarians and communication specialists), in their respective specializations or areas of concern, using an experts' data base.

18. Participation by INCAP professionals in all fields, including the social sciences and information sciences, in international state-of-the-art working groups of professional associations, with an evaluation of the utility of this participation and an attempt to assure at least one INCAP member in working groups in subjects of particular importance to the organization.

19. The creation of at least three data bases, on such subject matters as bibliographic references, references to statistical indicators in INCAP research, INCAP personnel, project monitoring (including follow-up of initial negotiations), surveillance, and marketing, this latter including technologies and methodologies in food and nutrition, experts in these subjects, institutional contacts and counterparts, staff ideas for projects, and potential sources of financing.

20. The creation and maintenance of a basic list of descriptors for key facets, value definitions for specific indicators and rules for entering data in other data fields which are identical among two or more data bases, assuring the base for integration, data exchange or comparisons of values among data bases, facilitating management decisions in marketing and project control, and facilitating data or bibliographical searching by researchers and other project members.

21. Computer support for INCAP's educational programs, including the post-Graduate level education.

22. A selection of a few CASE or fourth generation (4GE) and IPSE tools and an evaluation of the real utility in making the systems' analysts and programmers' work in INCAP more efficient.

IV. RECOMMENDATIONS FOR AID SUPPORT: WHAT IS NEEDED

This section summarizes the requirements of technical assistance, training, regional meetings, on-site follow-up and commodities, with external funding, in order for INCAP to progress substantially in terms of the EOP Scenario outlined above. That is to say, it is a list of the external inputs required in order for INCAP to undertake adequately the tasks in its institutional information strategy.

Almost all technical assistance also involves training within the country, as is evident from the Implementation Schedule and Training Plan. The former proposes a target figure for each activity, and the latter distinguishes the estimated costs regarding the consultancy and the other expenses. The

Implementation Schedule also mentions the tasks which do not require external inputs, but the opportune completion of them is necessary for the overall coherence of this program. The work program has a lot more detail on each of the tasks.

A. ILLUSTRATIVE IMPLEMENTATION SCHEDULE AND OVERALL ESTIMATED COSTS

<u>YEAR/ MONTH</u>	<u>TYPE OF INPUT</u>	<u>TASK</u>	<u>COST (U.S.\$)</u>
<u>Year 1</u>			
1-0		Inventory of regional communication system requirements	
1-0		Cost comparison of telecommunication options for regional messages	
1-0		Finalize Institutional Information Norms and Secretary's Manual	
1-0		Basic computational organization	
1-0		Add-on list of information technology requirements	
1-2	TA/TRG	Regional meeting of documentation, statistical and telecommunication networks	7,000

<u>YEAR/ MONTH</u>	<u>TYPE OF INPUT</u>	<u>TASK</u>	<u>COST (U.S.\$)</u>
1-2	TA	Tabulate and analyze citation data on sources used in INCAP scientific work	1,500
1-3	TA/TRG	Workshops on data bases and specialized classification, and advice to commission on classification	9,500
1-4	Commodities	Applications to participate in international state-of-the-art working groups	2,000
1-4	TA	Design of MIS for GTB and institutional communication schemes at national level	13,000
1-4	TA	Review of LAN/WAN bids in terms of real costs to organization	5,000
1-4	TA	Recommendations for equipment, file and data security	6,000
1-5		Bibliographic data base design and implementation	
1-5	TA/TRG	MIS workshop for INCAP executives	2,500
1-5		Workshop for design of statistical reference data base	

YEAR/ MONTH	TYPE OF INPUT	TASK	COST (U.S.\$)
1-6	TA/TRG	Workshop on design of regional communication system	12,000
1-6	TA	Conceptualization of project monitoring system in 3 levels	6,000
1-7	Commodities	<u>Purchase</u> report generation software	5,000
1-7	Commodities	<u>Purchase</u> records management software	5,000
1-7	TA/Com	Design and implementation of MIS, including software	32,000
1-8	TA	Study of user reactions to optional DSI modes	4,000
1-9	TA	Consultancy on library acquisition software	1,500
1-9	Commodities	Communication equipment (see list)	29,000
1-9	Commodities	LAN/WAN	220,000
1-9	Commodities	BITNET	2,000
1-9	Commodities	Library Acquisition Software	1000
1-9		Design and implementation of Data Base on Institutional Contacts and Counterparts	
1-9		Design and implementation of Data Base on Experts in Food and Nutrition	

<u>YEAR/ MONTH</u>	<u>TYPE OF INPUT</u>	<u>TASK</u>	<u>COST (U.S.\$)</u>
1-9		Design and implementation of networking to other researchers	
1-10	Operating Costs (e.g. travel and per diem)	Negotiation of institutional arrangements in regional network, including scientific communication circles	3,500
1-11	TA	Design and implementation project monitoring system	24,000
1-11	TA	Module of project balances for MIS	11,000
1-12	TA	Check on LAN/WAN development	5,000
<u>Year 2</u>			
2-1		Design and implementation of Data Base on Food and Nutrition Methods and Techniques	
2-2	TA	Market study for INCAP information products	7,000
2-3	TRG	Workshops in each country on use of regional communication system	10,000
2-3	TA-TRG	Pilot workshop for secretaries and others on new office automation norms	2,500

YEAR/ MONTH	TYPE OF INPUT	TASK	COST (U.S.\$)
2-4	Commodities	Participation in international state-of-the-art working groups	2,000
2-4	TA-COM	Workshop on bibliographic searching on new systems and tools	2,500
2-4		Repeat office automation workshop	
2-4		Organization of user groups and office for consultation on information technology problems.	
2-5	TA	First workshop on CASE-4GE-ISPE tools	2,500
2-6		Fusion of SISVAN-SIMAP-Country Profile projects	
2-7	Commodities	Graphics presentation technology for marketing	13,500
2-7	Commodities	Compensation fund for time of systems' analysts in marketing	10,000
2-8	TA-COM	Workshop on INCAP information strategy	2,500
2-9	Operating Costs (travel and per diem)	Follow-up on regional communication system	3,000
2-10	TA	Design and implementation of marketing data base	8,000

<u>YEAR/ MONTH</u>	<u>TYPE OF INPUT</u>	<u>TASK</u>	<u>COST (U.S.\$)</u>
2-11	TA-TRG	Second CASE-4GE-ISPE workshop	2,500
<u>Year 3</u>			
3-1	TA	Conversion of administra- support data to MIS data	11,000
3-1		Packaging of SISVAN-SIMAP- Country Profile for marketing	
3-1		Formulation of publica- tions policy	
3-3	Operating Costs	Evaluation and guidance to countries on internal food and nutrition communication	3,500
3-4	Commodities	Participation in international state- of-the-art working groups	2,000
3-4	TA	Conversion of administra- support data to MIS data	11,000
3-7	TA	Conversion of administra- support data to MIS data	11,000
3-7		Evaluation of experience of participation in international state-of- the-art working groups	
3-8	TA-COM	Workshop on evaluation and adjustments of institutional information estategy	2,500

V. INCAP INFORMATION PRODUCTS

The following is a suggested initial list of salable products of INCAP with regard to information, information systems, consultancy, etc.

1. Packages like SISVAN-SIMAP-Country Profile.
2. Publications, perhaps to bookstores and bookfairs through an agent who would create an attractive common catalogue for Central American regional organizations (INCAE, ICAP, INCAP, SIECA, BCIE, etc.).
3. Bibliographic searching in the health field for doctors and patients, and in related fields for corporations and individuals.
4. Formulation and implementation of information support strategies for projects undertaken by other agencies in Central America.
5. Design and implementation of information systems.

INCAP has had experience with the internal and external problems and costs of transferring each of these types of products, and those should certainly be taken into account in making proposals for a larger scale activity in this area.

VI. PRIORITIES

Since the tasks are grouped into subsystems and categories, and they are strongly interrelated, the priorities are given here by category:

Strategic Management
Project Control and Evaluation
Regional Communication Network
Office Automation
Data Base Capabilities
Marketing Data Base and
Information Markets
Technology Transfer
Scientific Research Support
Systems
More Efficient and Effective
Information Specialists

VII. RECURRENT COSTS

Most software to be purchased should reduce overall operating costs to INCAP, for example, the software of report generation, records management, library acquisition and dedicated lines in the regional communication network.

As to the LAN/WAN investment, the overall recurrent costs, which can be quite high, are precisely what the consultant would have to estimate.

BITNET recurrent costs will be estimated.

The graphic presentation equipment for marketing and editing will imply considerable recurrent costs, but the idea is that this equipment helps to produce income.

TASK CODE	PARTICIPANTS	PLACE	No. OF DAYS	PREPARATORY ACTIVITIES	COSTS	
					CONSULTANTS AND PARTICIPANTS	OTHER
5.3	<u>Regional Meeting of Networks</u>					
	10 outside participants Central American network representatives, 3 INCAP, 3 active focal points (Agri- culture, Health, Women or population), consultant.	Guatemala or Costa Rica	2 full days	Consultant prepares agenda and bibliog- raphy; joint coordination with Director Infor/Commun.	\$3500 - 6 persons travel and per diem \$2000 - Fee, per diem and travel consultant one-week.	* \$1500 - including meeting place.
9.1	<u>Simultaneous Workshops on Data Bases and Specialized Classification</u>					
9.2	20 participants of INCAP. Systems analysts and key users of each data base, consultant.	Guatemala	5 half days	Idem; bring computers together.	\$8000 - travel per diem, two consultants one-week, fee for one.	\$1000
9.3	<u>Operative Workshop on Microisis</u>					
	7 INCAP participants, consultant	Guatemala	5 half days	Consultant prepares agenda and bibliog- raphy, coordinates workshop, bring computers together.	\$500 - marginal cost per diems for above consultant.	\$500

* Folders, invitations, reproduction, coffee break, logistic materials, local transportation.

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TASK CODE	PARTICIPANTS	PLACE	No. OF DAYS	PREPARATORY ACTIVITIES	COSTS	
					CONSULTANTS AND PARTICIPANTS	OTHER
1.1	<u>MIS Workshop for INCAP executives</u>					
	10 headquarters' executives of INCAP, consultant	Guatemala	One full day	IDEM	\$200 - travel per diem, fee consultant one-week.	\$500
5.6	<u>Network Design Workshop</u>					
	5 participants - INCAP executives, 2 regional consultants, outside consultant.	Guatemala	Two full days	CT Directors 2 consultant prepare agenda bibliography; some computers for demonstration.	\$7500 14 persons travel per diem fee 2 weeks.	\$500
5.8	<u>Workshop on Communication System in Each Country</u>					
	Coordinator of GTB GTB Administrative Analyst secretaries	Each Country	2 full day, each country	Systems analysts, does material prepara- tion, coordinator of GTB coordinates workshop.	\$7000 - travel and per diem for system analyst.	\$ 3000

Annex E.4

Strategic Marketing and Business Planning for Sustainability

Strategic Marketing and Business Planning for Sustainability

[This analysis was prepared in conjunction with Annex G.]

I. Introductory Summary

A. Background

The Institute for Nutrition of Central America and Panama (INCAP) is the largest organization administered by the Pan American Health Organization (PAHO/OPS). INCAP has 87 professional staff and approximately 300 support staff working in Central America. INCAP is organized on a matrix basis with coordinating units and technical divisions. It has recently formalized its decentralization process which now includes field staff in all the countries of Central America and Panama. (Refer to attached Organization Chart) INCAP has a Directing Council (similar to a Board of Directors) made up of the Ministers of Health of the seven member countries, the Director of PAHO and the Director of INCAP.

The INCAP headquarters staff in Guatemala operates relatively independently of PAHO while the country teams are integrated into each PAHO country team. Most INCAP country teams consist of three professionals except Guatemala which has seven and Belize which has only one.

Founded in 1949, INCAP's original objective was to determine the nutritional problems of the region in order that solutions for those problems might be learned through research. The results were to be shared with others in the scientific, development, planning and educational communities, particularly with those in the ministries and public universities of member countries.

INCAP's view of the nutritional problems in the region has expanded during the course of its forty-two years. Its concern with human nutrition now includes the full range of Maternal and Child Health issues and related research activities. This has given INCAP a decidedly applied orientation to much of its research, something which is not widely known.

Technology transfer, while acknowledged by INCAP spokespersons and others to be of unequal quality, is something which INCAP has done from its very beginning as a natural complement to its research activities. Activities aimed at technology transfer have included traditional means of scientific and technical publications, technical assistance, conferences, seminars,

workshops and collaboration with the region's ministries of health, agriculture, education, and planning; with its national universities; and with a wide range of national and international PVO/NGOs.

In spite of this, misgivings were noted by several clients regarding INCAP's ability to transfer its research findings to the more practical level of the community where it will result in direct benefits to the population. A general perception exists that INCAP is too theoretical. In fact, INCAP's work in applied research is significant but INCAP has not effectively communicated its involvement and its results. Decentralization of INCAP has strengthened its applied service orientation.

B. Summary of Recommendations

In the analysis and recommendations that follow, the team has taken into account a number of factors that distinguish INCAP from a typical company or organization that relies exclusively on selling its services to survive.

INCAP is first and foremost a social service organization with a mission to assist the governments in the region to improve the nutritional and health status of the people in greatest need. INCAP's primary clients, Ministries of Health, Education and Agriculture, have great need for INCAP's services but have no money to pay for them.

The emphasis or priority given to diversifying and/or expanding INCAP's client base to include "paying customers" must be developed with the above in mind and should not be to the detriment of INCAP's primary client, the Public Sector.

Other important factors to consider in recommending a marketing strategy are the philosophy of the organization and the attitudes of the employees. In the case of INCAP, the philosophy and attitudes do not lend themselves to a major refocus of priorities from the public sector to the private sector. Nor do most of their services.

INCAP needs to expand its client base, with private business as a minor but important part of that new base. INCAP employees must understand that "marketing" does not refer just to private sector clients, and that promotion and business development or marketing do not diminish their services but do enhance the possibilities of accomplishing the mission of the organization.

INCAP's primary marketing task is to convince donors and collaborating organizations to finance INCAP's involvement in the delivery of priority services to the public sector institutions and PVO's with which INCAP works.

A secondary, but important, task of INCAP is to strengthen its capability to provide services on a fee-for-service basis in order to expand its financial base and increase its resources and ultimately its long-term sustainability. This diversification will improve INCAP's ability to survive, to service its primary clients and to accomplish its goals and objectives.

II. INCAP MARKETING/PROMOTION CAPABILITITES

A. INCAP Services Over the Past Five Years

A frequently voiced concern during this market assessment was INCAP's absence of clear priorities. It was held that INCAP had a tendency to work in too many technical areas, in some of which it did not have a comparative advantage. Informants identified these areas as Agricultural Sciences, Maternal and Child Health, Oral Rehydration Therapy, Acute Respiratory Infections, Immunization programs. While all generally agreed that INCAP's principal strength was "nutrition", there was little agreement about what nutrition research should, and should not, include. The team, therefore, decided to list INCAP activities in order to determine which areas INCAP was working in, and the human resources it was investing in them.

According to INCAP's March 1991 Boletin Informativo de la Coordinacion de Investigacion, INCAP is currently undertaking twenty-nine "research" projects within its three technical divisions of Nutrition and Health (23 projects), Agriculture and Food Sciences (2 projects), and Food and Nutrition Planning (4 projects.)¹

While most of these projects were begun since 1990 and will conclude by 1993 at the latest, two were begun in 1981 (research on beans), and others in infant diahrrea, maternal/child health related research, and primary health education as early as 1984. In spite of this, several informants held the mistaken impression that INCAP only recently became interested in maternal/child health, and child survival as a means to obtain funds. INCAP was, thus, not regarded as being up to speed on such interventions as ORT, EPI, ARI, etc.

B. Current Projects and Services

1. Within Technical Divisions

Research, program and/or project interests of organizations are

¹ Numerous of the listed research projects have several research components, each identified with the same project identification number (PIN.)

evidenced by the objectives they set for themselves in the projects they are currently undertaking. These interests may or may not coincide with past or future interests. In the case of INCAP, many of the projects listed reflect INCAP's early interests in theoretical research, e.g., the impact of early malnutrition in adolescence

However, an analysis of INCAP's present research load shows a primarily applied orientation.²

2. Other Products and Services

(a) Incaparina and Other Food Products

Incaparina was INCAP's first and best known effort to introduce a low cost highly nutritious product into the marketplace. There is little question that Incaparina is a successful, and relatively well known product from a technical point of view. There appears to be a consensus, however, that given its relatively high price, the product has not benefitted that population segment for whom it was primarily intended -- the poor. It is also generally admitted, that Incaparina has not financially benefitted INCAP. Several informants believed that INCAP was not adequately compensated by agreed upon royalty payments, attributing this to INCAP's inability to negotiate a business deal.

Incaparina was the first in a line of INCAP products. More recently INCAP developed the nutritional cookie, currently being distributed by Guatemala's Ministry of Education to primary grade students at the rate of some 1.3 million daily; Panacrema, a nutritional drink developed for Panamanian school children to be taken along with another INCAP developed nutritional cookie made according to a formula utilizing flour mixtures available in Panama. Other countries of the region are discussing these and other products, e.g., an atole (thick liquid) drink for those countries where atole is a traditional food.

²The writers are well aware that the distinction between theoretical and applied research is not a clear one. Strictly theoretical research has had dramatic impacts on the quality of human life: the Green Revolutions of India and China are examples of the impact of applied implications of theoretical research for greatly increasing food production. At INCAP INCAPARINA resulted from its theoretical research projects.

(b) SIMAP and MAP MAKER Software Programs

Both programs were developed by INCAP with the assistance of the USAID funded Futures Group. The SIMAP program was developed for micro computers. It allows the organization and presentation of data from numerous and diverse data bases. It facilitates a wide range of projections relative to health sector, health planning and demographic analyses. The MAP MAKER program allows health and population data obtained through the SIMAP software to be illustrated for any region of the globe. While SIMAP and MAP MAKER are different programs, they have been so designed to complement each other and to be used in tandem.

(c) Service Products

INCAP's fundamental mandate, one which was brought to the team's attention several times, is the provision of service to national ministries (health, agriculture, education, planning), universities, technical schools, and PVO/NGOs. These represent INCAP's principal market segments. Estimates of how much time each market segment requires from several GTB teams did not vary greatly:

- o 65-80 percent for the ministries;
- o 15-25 percent for universities;
- o about 5 percent for PVO/NGOs.

The principal service which INCAP/GTB staff provide to member country institutions is technology transfer. This is essentially the "raison d'etre" for the GTB's. Some means for effecting technology transfer are technical assistance, program and intervention design, local level collaborative implementation, courses, seminars, workshops, and via publications in scientific and popular/paraprofessional journals. Required preconditions for success in any of these consists of at least the following:

- o appropriate expertise;
- o good consulting and training skills;
- o a solid understanding of the culture in which the technology is to be transferred;
- o an understanding of the probable consequences of transferring the technology;
- o the ability to evaluate outcomes, i.e., follow-up.

C. Past and Current Funding Sources

For a great part of its history, INCAP has had a multifaceted funding picture. However, for the past few years, that picture has been dominated by USAID/ROCAP funds for project support. In 1988 the USAID/ROCAP share of INCAP's total funding was 44 percent. ROCAP project support remains roughly the same at the present time, but will be largely eliminated by the end of 1991.

A much discussed (and controversial, within bilateral missions) new three-year sustainability project will attempt to place INCAP on a more solid financial and managerial footing by the EOP at which time ROCAP funding will be phased out. It is not expected that INCAP will be self-sufficient at that time but that it will have expanded its funding base and developed a capability to promote and market its services.

Donors following USAID/ROCAP in the level of funding for INCAP are the following:

- o EEC Countries: 25 percent of total INCAP funding in 1989. Three countries (Sweden, Switzerland and France) contributed over 1.6 million dollars;
- o PAHO provides core funding of approximately 1.2 million annually. PAHO also provides in-country GTBs with a significant in-kind contribution of office space and equipment in the Region's PAHO offices (except Guatemala). PAHO also provides INCAP/GTB teams with telephone, secretarial support, dollar salaries (for all INCAP professional staff), and a line of credit in dollars;
- o U.S. universities provided US\$454,631 for the support of ten joint INCAP-US University projects. That amount represented approximately 7% of the total INCAP budget for 1989;
- o In 1989, nine international NGOs contributed US\$385,450 for 6 percent of the annual budget;
- o In 1988, income from sales (including royalties from Incaparina and the nutritional cookies) amounted to US\$341,937;
- o INCAP member countries make an annual contribution. The amounts actually received varies from year to year, due to the problem of no- or partial-payments by member governments: \$315,415 was received in 1988, but only \$246,221 in 1989;
- o Private corporations contributed \$9,350 in 1989, in support of two projects.

D. INCAP's Approach To Marketing

INCAP has had a relatively passive approach to marketing, partly because that has been the "personality" of the organization and partly because donors, Universities, foundations, etc. have pursued INCAP as it was the pre-eminent (and only comprehensive) nutrition resource in Central America. Until very recently

INCAP's marketing plan or strategy was to develop proposals for presentation to donors or collaborate on proposals developed by others.

1. INCAP staffing, consultants

The professional services which any organization is capable of delivering to its clients and beneficiaries is directly related to the knowledge and experience of its current professional and support staff. A well designed nutritional or MCH intervention, for example, is ineffective if staff are incapable of, or ill-disposed to, carrying out assignments. While the traditions of an organization are important for orienting and motivating succeeding generations of staff, the state-of-the-art expertise of an organization is in the regularly updated minds of its staff rather than in past accomplishments. INCAP must keep this in mind and begin to focus more on its current expertise rather than its past accomplishments.

One of the most attractive prospects that the IISP project offers INCAP is the possibility of attracting new, top quality talent, and of upgrading the skills of existing staff. This is something which INCAP has traditionally done in a wide variety of ways, including local seminars and workshops, international conferences, and by sending its people off for advanced degrees to U.S. and European universities. The latter practice continues. At the present time three INCAP staff are pursuing doctoral degrees at US universities.

2. Overview of Current Situation

INCAP continues to be regarded as the pre-eminent nutrition authority in the Central America/Panama Region, containing the most comprehensive package of nutrition-related services. The organization, however, is believed to be in a critical period because of the following factors:

- (a) INCAP's principal donor, AID/ROCAP, is phasing out its funding. By 1995 AID/ROCAP's assistance to INCAP will end;
- (b) Poor communication -- the single most important component of a good marketing attitude. Many informants were not knowledgeable about INCAP's current activities and capabilities. Actively promoting INCAP services and capabilities was not part of the mindset of the in-country GTB teams. INCAP is not being promoted/marketed either by word of mouth, good brochures or other types of promotion;
- (c) INCAP is, according to some informants, out of touch with the current needs of the region;

- (d) What appears to be a reputation for not completing work in a timely fashion; for not following up on initial meetings; for promising to do more than it can deliver;
- (e) Poor proposal preparation (which is especially critical vis a vis AID);
- (f) Because competition in the region has increased as INCAP graduates and former employees have established their own technical assistance firms or nutrition institutes within the Universities of the region. In addition, traditional AID contractors have developed nutrition capabilities that are available to the region.

In order to cope with the new situation, INCAP has begun to implement critical changes. INCAP has decentralized its capability to all the countries of the region. This decentralization process has created new challenges, problems, and opportunities for the organization. Attitudes regarding promotion and business development are changing among some of the key senior staff. The management of the decentralization process is being analyzed. A team-building training program is being implemented, in order that in-country GTB teams function as such rather than as individuals. Awareness is growing of the importance of communicating INCAP activities.

This team's review of INCAP confirmed many of the institutional weaknesses that have been identified previously by AID and others. The team also noted that these administrative, organizational and technical weaknesses are being acknowledged by INCAP and a willingness demonstrated by senior INCAP staff to address them. Another important change underway is INCAP's move from the theoretical (basic research) to the practical (applied research) and from the lab to the community: i.e., whereby the design and implementation of project interventions are based on research results.

In all of the administrative, organizational and attitudinal areas there is still much to be done, especially with regard to marketing, promotion, and business development. This analysis indicates that there is a significant gap between the current INCAP strategy, approach, and programs, and the perception that many people have developed of INCAP over the years.

E. Institutional Marketing Strengths and Weaknesses

1. Strengths

INCAP's strengths are both tangible (as listed below) and intangible, as in the well known dedication and determination of INCAP people to improve the health and well-being of the Central

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American population. INCAP's strengths, combined with its overall philosophy of service, **should** enable it to effectively promote and market its services to both existing and new clients.

(a) Continuity

INCAP's **regional and local presence** provides continuity for many government ministries. Given the tendency of many governments of the region to name political appointees to key ministry posts, INCAP's presence in those ministry's acts as a bridge between outgoing and incoming administrations. INCAP also is capable of providing continuity to major donor programming. The regular occurrence of major donor staff turnover can have negative policy and program impacts on funded projects.

(b) Social Distance

With few exceptions, INCAP staff are local to the countries in which they work. As such they are native bearers of those cultures. The importance of social distance is well known to development workers and social scientists around the world. The mistakes made by culturally insensitive development "experts" are legion. (European-made national boundary decisions for the Middle East and Africa which cross-cut traditional ethnic boundaries is a most glaring example.) Yet the notion was dismissed as an important consideration on several occasions during the course of the interviews. The view that "one cannot be a prophet in his own land" is held by many. INCAP, with its local and regional capability, and access to international experts should be able to benefit from both of these attitudes.

(c) Quality Service

INCAP's technical work is of high quality. In spite of numerous concerns about INCAP's delivery and management of services, expressed in the interviews, the teams impression is that clients and donors believe INCAP has a generally solid reputation for quality.

(d) Decentralization

INCAP's **decentralization** decision was seen to provide the Region with the following:

- o a greater number of local technicians;
- o easier access to INCAP technology;
- o a greatly improved response time to requests for technical assistance;
- o in-place potential to provide INCAP with a promotion/marketing capability

(e) Access

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INCAP's close relationship to PAHO opens many doors, increases its access to the ministries, and enables it to influence policies related to nutrition. PAHO, through its annual core funding and line of credit provides INCAP a degree of financial stability. PAHO in its effort to strengthen INCAP is expanding its use of INCAP services in areas such as Maternal-Child Health and food security.

(f) Ministry Contacts

A strong connection to Ministries in all countries of the Region (Ministries of Health, Agriculture, Education, Planning) and a commitment to meeting the countries needs enables INCAP to collaborate in the development and implementation of Ministry objectives and priorities in the areas of nutrition and food security.

(g) University Contacts

INCAP has excellent relations with the universities of Central America and Panama, and with numerous universities in the U.S. Without exception, all U.S. universities contacted during the course of this market analysis enthusiastically welcomed the opportunity of collaborating on projects with INCAP.

(h) Staff Dedication

INCAP staff people have gained the reputation of being doggedly dedicated to INCAP's mission of public service ultimately oriented to the service of the poor, even in those cases which are widely believed to have failed in that purpose, e.g., Incaparina. One concern of INCAP staff and others is that over-emphasizing the private for-profit sector may deflect from INCAP's mission and be destructive of its purpose.

(i) Well Positioned for Joint Projects

INCAP is well-positioned to collaborate and develop joint projects with other institutions; contractors, NGO's, Universities, Agricultural schools, etc.

(j) Comprehensive Range of Skills

INCAP has developed a broad range of complementary skills which enable it to offer its clients a comprehensive capability. These include:

- o theoretical and applied research methodologies
- o food analysis methodologies
- o food technology/food sciences

- * product development & testing
- * fortification/enrichment
- * food handling/storage/logistics
- * quality control
- * food safety
- o food security
- o food surveillance
- o operations research
- o technical assistance
- o information dissemination
- o technology transfer
- o materials development
- o formal education (master's degree program)
- o training
- o curriculum development
- o continuing and in-service education
- o survey design and implementation
- o project planning
- o monitoring and evaluation
- o policy analysis
- o design of nutrition strategies
- o information systems and computer services

In the area of Maternal & Child Health, INCAP has developed a significant capability in:

- o nutrition policy
- o micronutrients (vitamin A, iron, iodine)
- o growth monitoring
- o infant feeding
- o diarrhea treatment/dietary management
- o low birth weight infants
- o breast-feeding
- o nutritional needs of high-risk pregnant women
- o maternal/neo-natal mortality

(k) Technical & Financial Assistance

INCAP is able to offer its principal clients, (regional ministries and universities) both technical and financial assistance.

(1) Alumni Network

INCAP has an excellent alumni network throughout Latin America and the U.S. These networks can be used as resources for a wide range of needs, including promotion, business development and collaboration opportunities.

2. Weaknesses

All of the weaknesses listed below directly affect INCAP's

ability to market and promote its services and products. The weaknesses are the result of deficiencies in the organizational structure, management systems, administrative and managerial skills; gaps in technical capacity, and an insufficient concern for financial sustainability; all of which are targeted in the Institutional Strengthening Project.

(a) Deadlines

INCAP often does not meet deadlines.

(b) Response Time

INCAP headquarters responds slowly to requests for assistance.

(c) Incomplete Service Products

INCAP does not always complete the tasks and projects it has agreed to carry out.

(d) Communication

INCAP communication skills need improvement in the following contexts:

- o with clients and potential clients;
(This is especially true with AID bi-lateral missions. Most AID missions have little knowledge of current INCAP activities and as a result do not think of INCAP when looking for TA.)
- o internally at the central level;
- o between the central level and the GTB's;
- o between GTB's of different countries;

(e) Promotion

There is minimal promotion of the organization, and of its activities and successes. The following factors are at play:

- o a negative attitude toward the need for promotion and marketing among numerous INCAP staff;
- o lack of appreciation for promotion and marketing;
- o INCAP has not assigned responsibility for promotion and marketing to any particular unit of the organization.
- o promotion is not considered a responsibility or task of specific individuals -- especially of GTB staff;

- o no time is allocated for promotion.

(f) Management & Administration

- o Management/administrative policies of the decentralization process need clarification;
- o Policies and procedures related to contracting, the pursuit of new opportunities, and the provision of technical assistance do not appear to be consistent for all GTBs with respect to proposal development, reporting, the utilization and commitment of headquarters personnel, and planning and communication between GTB's and headquarters.

(Examples include incidents which were pointed out by clients and/or potential clients. These include GTZ in Honduras, Nabisco and OR Project in Nicaragua, U of Costa Rica/CITA in Costa Rica, and Univ.of Panama/Nutrition;)

In addition, INCAP procedures for developing and approving contracts with collaborating institutions is cumbersome and slow. (Most universities and consulting firms expressed this view.)

- o reporting requirements of GTB's are too cumbersome and do not meet the needs of the organization -- especially with regard to marketing and communication;
- o lines of authority, supervisory responsibilities and reporting between GTB's and headquarters need definition and clarification;

(g) Interpersonal/Organizational Relations

INCAP has poor relations with some USAID missions. These appear to be strongly interpersonal. INCAP criticism of USAID in those countries where relations are strained, is that USAID staff persons have shown "disrespect" for INCAP staff. USAID criticisms of INCAP were basically that:

- INCAP makes no effort to communicate with the Mission;
- INCAP does not support USAID health and nutrition policies.

(h) Perceived as Too Theoretical

It was widely perceived that INCAP has placed too little emphasis on the application of research results, i.e., many informants still viewed INCAP as a fundamentally academic research

organization that is too esoteric and theoretical. This was often the view even though most of INCAP's current research is of a clearly applied nature, concerned with community and maternal/child care health issues such as diarrhea control, potable water, respiratory infections, immunizations, nutrition education, growth monitoring, food security, etc.

(i) Project Cost Estimates

INCAP appears to be weak in its ability to correctly cost and price its services.

(j) Proposal Development

INCAP's proposal development process is deficient, especially with respect to USAID proposal requirements. AID (and other organizations with funding from AID, e.g., NGO's and private consulting firms) criticisms of INCAP's proposal capabilities have included inadequate and unclear project descriptions, failure to meet proposal deadlines, and poorly estimated budgets.

F. INCAP Marketing and Promotion Capabilities

1. In General

Most individuals attracted to technical service institutes like INCAP cannot be expected to have either interest or skills in marketing. They are for the most part highly trained technicians with great interest in their specialties. This appears to be the case at INCAP

There are, however, some individuals within INCAP (at headquarters and in local country offices) who have excellent interpersonal skills that will enable them to be very effective in marketing/promoting INCAP. These individuals are easily trainable to undertake promotion and marketing activities in the course of their normal work responsibilities.

Given appropriate time and training, and professional marketing support, some of these individuals can assume additional marketing responsibilities, such as brochure, advertising and PSA write-ups/designs, market segment surveys, promotion lectures, and business development calls to potential clients. Such an effort, requires the support of senior management, and a professional marketing support/training staff at the headquarters office. Promotion of the organization should be a clearly defined responsibility of senior staff.

2. Marketing Attitudes At INCAP

On the basis of what appeared to be a disregard for any form of

marketing at the operational level ³, including active promotion and public relations, and the comments of INCAP staff, the team believes that such an absence is the result of a negative attitude within INCAP about marketing and promotion. One INCAP informant associated marketing with the private sector whose singular purpose was the maximization of profit rather than public service and never the twain could meet.

Marketing within INCAP appears to be viewed as something that there is no time for. Everything else is more important. There also appears to be a notion that high quality work sells itself. INCAP professionals, as professionals in many technical organizations, feel that "marketing" is beneath them and that to market one's services somehow cheapens the service, the employees doing it, and the institution. Albeit difficult and slow, such an attitude needs to be changed and can be.

INCAP has already taken steps to change this "organizational" attitude about marketing. The challenge that lies ahead is institutionalizing the attitudinal change. This will come about by changing individual attitudes via on-going education. A large part of the problem is employee perception of marketing. In many institutions, marketing is seen in terms of a hard sell to make money rather than as a way to promote the strengths of the organization in order that costs be recovered when and from whom they can be recovered; and as a way to achieve the organizations objectives.

3. Quality Control

To a large extent, technicians are correct in thinking that high quality work sells itself: certainly to the client/recipient of the specific service or product. At this time, however, the teams' analysis indicates that the quality of INCAPs services is often overshadowed by the weaknesses listed above which directly affect the clients perception of INCAP's performance. Until those weaknesses and/or the clients perception of weaknesses are significantly reduced, it is unrealistic to assume that the services will sell themselves.

Quality service requires clear lines of authority and responsibility, effective communication, timely response, and follow-up. The service must be useful to the end user and appropriate to the situation. The value of the product produced can be greatly diminished by a failure to provide the "full service". It is this comprehensive service that INCAP must learn to deliver if it hopes to successfully market its products and services.

4. Changes implemented or planned

³ Not at the executive level, however. Since assuming the directorship of INCAP, Doctor Delgado has spent a significant part of his time in promotion and marketing activities.

It is clear from reviewing recently developed INCAP plans and strategies that key individuals in the organization are aware of many of the things that need to be done in order to enable INCAP to respond effectively to regional needs and opportunities.

INCAP has taken steps to change the organizational attitude toward marketing and expand INCAP's client portfolio. The decentralization process that began years ago and in the past two years took on an institutional commitment, has, in selected instances, greatly improved INCAP's responsiveness to clients needs. The Director has personally made a major effort to promote INCAP to key donors and other organizations. INCAP has made a major effort to define its goals and to develop strategies to meet those goals.

INCAP's current situation is influenced by both the weaknesses identified above and a perception that many people have of INCAP based on attitudes and activities of the past. Although there is still much to be done to improve INCAP's "marketability, much can be accomplished simply by making people aware of the changes and the recent experiences/activities of INCAP.

IV. Recommended Activities To Be Carried Out During The Three Year Implementation Of The Project To Become Competitive and Self-Sustaining

A. Development of a Marketing Strategy & Plan

1. Rationale and purpose

The marketing plan should include at least the organization mission; objectives; strategy, i.e., target market, competitive position, marketing/service mix; time frame; assignment of responsibilities, all by country and/or region. The strategic thinking and planning that has been done by the Coordinating Committee needs to be further refined and translated into a specific marketing strategy.

INCAP must decide what kind of organization it wants to be, i.e., how many services and in what areas; how many employees; and what clients and donors it wants/needs to work with to accomplish its goals. For example, working with AID implies more involved contracting, accounting and proposal development than working with European donors; working in the private sector implies a different, perhaps more sophisticated marketing approach than working in the public sector (and perhaps a change in organizational philosophy).

Whatever institutional marketing plan is finally accepted and implemented by INCAP, and in whatever organizational context it is located, there are a number of key marketing/development related functions that must be carried out. These should include, at least, integration and coordination, data base collection and management, market needs analysis & product design, staff training, communication, regional & local strategy development, public relations/advertising, literature development, proposal development, policy analysis and formulation,

(a) Integration and coordination

The marketing activity needs to include the integration and coordination of all components agreed upon in the marketing plan. The work load of the marketing staff needs to be coordinated in an efficient manner, so that job responsibilities clearly complement each other and that tasks are accomplished in a timely manner. New INCAP project opportunities and proposal development require the coordination of in-house clearances, persons to be contacted, the timely input of proposal writers, technical and other specialists, in order that significant numbers of proposals reach funders on time and according to their specifications and instructions.

(b) Data Base Collection and Management

There will be need for numerous data bases. These will be directly related to INCAP's marketing needs. One of the most important and frequently used data bases will be for proposal development, and will include files on actual and potential donors. If fundraising becomes a major activity, the number of donor files can number from a few hundred foundations to thousands, including files on individual philanthropists, known to be the most significant donors. These files need to be regularly updated as the funding policies of donors and their board and staff members are regularly being revised and/or changed. Another critical data base is the staff and consultant registry.

Other data bases may include:

- list of current projects and revenue from each
- revenue by division
- program to follow-up on new business development and coordinate activities of headquarters and country offices.
- control and follow-up of proposals
- boiler plate capability statements
- boiler plate administrative/financial data

(c) On-Going Market Needs Analysis & Product Design

An essential function of any marketing effort is to continually assess new opportunities for a company's products. In the case of INCAP these will be primarily service products. This will require frequent contacts with potential clients to better understand their current and future needs and how INCAP might be able to respond to those needs. For example: 1) the USAID/Panama mission has no immediate plans to fund health and nutrition projects. But it would like to develop a contingency plan for a health program intervention in the event of a cholera breakout. They asked if INCAP could provide input into such a plan; 2) GTZ, of the German Government, contacted INCAP about its interest in the nutrition field; 3) a health and nutrition committee of the Univ. of Panama asked for assistance in fundraising, etc. A marketing conscious INCAP will look for, and develop such opportunities into traditional or new service products which are consistent with INCAP's mandate.

(d) Staff Training

An important function of the Marketing/Development office will be the conduct of well planned training/sensitizing programs in the "how to" and the rationale/need for promotion and marketing, on a regularly scheduled basis for in-country GTB teams, and for headquarters staff. This training needs to be sensitive to the

needs and cultural patterns of the individual countries, and of INCAP staff members. A major objective of the staff training efforts is to attempt to alter negative attitudes about marketing and promotion functions. INCAP staff need to understand that marketing and promotion is not intrinsically profit seeking.

(e) Communication

A major marketing and promotion function needs to be communication, and in a wide range of contexts including the following:

- between GTB and OPS staffs (Guatemala only);
- between GTB and USAID bilateral missions;
- between GTB staffs and some university faculties;
- between Headquarters staff on missions to member countries and GTB staffs in those countries;
- between Headquarters and GTB staffs;
- between INCAP staff and all other clients and potential clients.

Poor communication will negatively affect any marketing strategy that is implemented.

(f) Regional & local Strategies

Marketing and promotion cannot be done without planning, direction, and the allocation of appropriate time. Albeit flexible, a marketing and promotion plan needs to be developed for the institution as a whole (including attitudinal issues) and for each GTB in conformity to the needs of each country. For GTB's, marketing goals, objectives and activities need to be included as part of annual work plans. One example might be the following: goal, to establish contact with the private sector; objective, to assess potential needs of 10 private sector companies during the year which INCAP might address; activity, identify and visit 10 companies with potential for INCAP.

(g) Public Relations/Advertising

A problem found in all countries was a lack of knowledge about specific INCAP projects, i.e., what areas INCAP is currently involved in and overall INCAP capabilities. Public relations is a way to expand knowledge and create awareness of INCAP. INCAP staff should pursue and take advantage of public speaking, panel discussion, and lecture opportunities to address health and nutrition issues as INCAP professionals. They should also take advantage of public media opportunities: newspapers, journals, TV for PSAs (public service announcements) etc. It is imperative that INCAP learn how to take due credit for its work and accomplishments.

(h) Marketing Literature Development

INCAP needs to develop a line of promotional materials that are geared for technicians on the one hand, and for executives, bureaucrats, and administrators, many of whom are not technical people. These should be addressed to actual and potential clients in several sectors: government, university, NGOs, major contractors, government agencies, private sector (both agricultural and other.) Also needed are country-specific brochures describing INCAP activities in the different countries of the Region.

(i) Proposal Development

Proposal development is one of the most important means to develop relations with potential donors. The team's view of INCAP's proposal development capability comes exclusively from USAID and USAID subcontractors, and included the following criticisms:

- project descriptions are not well done;
- budgets are poorly calculated;
- deadlines are not met.

INCAP needs to learn to conform to USAID proposal preparation requirements whether as a prime or subcontractor. Given the potential of direct and indirect funding from USAID (at the bi-lateral, regional and Washington levels), it is important that INCAP greatly improve its proposal development capability, including the employment of a USAID-savvy proposal writer as a member of the INCAP marketing team. (see below for more details)

(j) Policy

Given the direct impact of executive level policy on any marketing program, the marketing office needs to function as a sounding board for proposed policy formulations relating to the agency's marketing and promotion program. This is another reason why the marketing office needs to be in a direct line of communication with the INCAP Director's office.

2. Define marketing roles of HQ and GTBs

For each marketing activity, the roles of headquarters and the local GTB's must be clearly delineated. For example:

- Executive Director markets INCAP (presents proposals) to European donor, GTZ at its headquarters in Frankfurt;
- GTB's promote INCAP to local GTZ country representatives.

(Because we know that one of the first things GTZ, Germany will do when reviewing the proposal is contact the Central American GTZ representatives to get their opinion of INCAP.)

3. Select priority work/technical areas

In order to establish priority services, one of the initial activities of the marketing plan should be a more in-depth analysis of 1) INCAP's technical capabilities/human resources; 2) needs and priorities of clients and potential clients; and 3) expenses and revenues by Division or technical area, in order to establish priorities, strengthen technical capabilities, determine staffing needs and cost savings.

The establishment of priority work areas is complicated because it must take into account:

- the priorities of the governments and the needs of the people in the region;
- the existing technical capabilities of INCAP; i.e. INCAP's ability to provide high quality services;
- the interests of donors/clients;
- the administrative capability of INCAP; i.e. INCAP's ability to provide services in a timely, cost-effective manner;
- Regional priorities as well as local country government priorities.

(The team recommends that the three above-mentioned analyses be done by INCAP staff in collaboration with a marketing consultant. INCAP is familiar with its human resources and its accounting systems. The client needs analysis creates a reason for INCAP personnel to initiate their marketing/promotion activities and to visit clients and potential clients that are identified in this analysis.)

4. Expand promotional activities

(a) The organizations capabilities must be documented

INCAP's marketing materials must be of high quality and tell the "real" story of INCAP. They should document INCAP's accomplishments and activities in a succinct fashion that clearly lets the client know what INCAP can do. Materials developed should have a standard/consistent design, logo, color, etc. so that people identify the documents with INCAP. An INCAP folder with individual sheets for each type of service should be considered as that would enable INCAP to target the materials to

different clients.

- (b) The Executive Director must take on the key role of promoting INCAP

The Director is the ideal person at INCAP to undertake this activity. Because of the changing situation at INCAP, the lack of current information about INCAP (and in some cases negative views of the organization), it is essential to make a maximum effort (for a limited period at least) as soon as possible. His job description should be revised, if necessary, and the organization structure analyzed to determine the delegation of authority in the absence of the Director and the assignment of responsibilities removed from the Director's job description.

- (c) PAHO should be enlisted to help promote INCAP

PAHO must become more proactive in its support for INCAP and specifically INCAP's funding needs.

At the country level, PAHO's influence with Ministries, international donors, Universities, etc. is considerable and should be utilized however possible to promote and develop funding sources for INCAP. INCAP's name should be added to the signs identifying the PAHO/INCAP offices.

At the central level in Washington PAHO has developed excellent relations with numerous donors in Europe and should use these contacts to help INCAP market its services to these donors.

5. Improve communication at all levels

INCAP must take a proactive approach to marketing and promotion, and not expect clients and potential clients to take the initiative or to receive information about INCAP from third parties. Being proactive can increase INCAP's choices about its work and therefore the prospects of achieving its' mission.

INCAP must keep in regular contact with its' key clients in order to exchange information, develop better working relationships, and obtain information about new opportunities.

- Headquarters should send information updates/newsletters/reports on a regular basis.
- GTB's should call on clients on a regular basis.
- INCAP should develop a mechanism and procedures for regular communication between GTB's in different countries to exchange ideas, contacts, experiences, etc.

6. Strengthen the decentralization process

- At the country level, analyze the technical capabilities of country teams and the priorities/opportunities of the countries in order to determine staffing needs. The first phase of the decentralization, i.e., strengthening relations with INCAP's principal clients, has succeeded. It is time to focus on developing GTB teams that can deliver quality services.
- At the headquarters level, develop policies and procedures that will facilitate the GTB's activities. The policies and procedures should cover; 1) contracting, 2) report writing, 3) development of new business, 4) use of headquarters personnel, and 5) annual planning (to allow flexibility for new business development).
- Upgrade the administrative/management skills of the GTB's in each country
- Simplify and revise the GTB quarterly reports. They should be in a form that is easily utilized for monitoring and marketing and does not require an excessive amount of time to prepare. They should provide information on 1) key activities during the period, 2) people and organizations met with, 3) accomplishments, 4) new business opportunities, 5) problems encountered, and 6) specific support required from Guatemala.
- The GTB's should develop a brief country report/newsletter that can be sent to local INCAP clients (and to headquarters and other GTB's as well).
- Review the overall INCAP organization structure in order to design a structure that facilitates an effective decentralization process, better communication, better project management and that assures effective organizational management in the absence of the Director.

7. Develop a client oriented philosophy

INCAP must continue to move from an approach of "this is what we have" to one of "what do you need". The GTB's appear to be much more effective at this than the headquarters. GTB's are developing annual work plans in collaboration with their principal client, the MOH.

8. Expand INCAP's capability to respond in a timely fashion to requests for technical assistance and proposals
 - Develop and maintain a staff/consultant registry (with required input and updating forms). It should distinguish between headquarters and country staff, and should identify Regional and International experts in INCAP priority technical areas by country of residence.
 - Assign responsibility for handling and responding to requests for proposals and technical assistance to a particular unit in the organization, and be sure clients and potential clients know who to contact.
 - Develop procedures and "boiler plate" materials that will facilitate prompt responses to the requests.
 - Develop capability statements for the priority services INCAP wants to promote, e.g., Operations Research (See appendix _____, Outline of OR Capability developed for INCAP by PRICOR).
 - Develop the accounting systems and procedures required for preparing proposal budgets.
9. Develop a marketing/business development unit

The review team believes that a logical step would be the expansion of one of the existing units to include a marketing/promotion/business development capability. The initial staff should initially include two professionals, Marketing Director and proposal writer, (see qualifications below) and one support person. The unit's functions should include the following:

- (a) Assure communication with donors, clients, etc.
- (b) Assist GTB's to promote INCAP in each country.
- (c) Oversee the development of promotional materials.
- (d) Assist the Director to expand/better target his promotional activities.
- (e) Oversee the preparation of proposals.
- (f) Participate in the selection of projects to bid on--keeping INCAP focused on its priorities (and minimizing divisional efforts to expand beyond their capabilities).

- (g) Develop and manage the staff/consultant registry including regional and international experts in the INCAP "focus" areas.
- (h) Develop and assure a capability to respond quickly and effeciently to requests for technical assistance.

The INCAP Marketing Director should be a well trained, experienced marketing and business development professional. He/she should be from Central America and have as many of the following qualifications/skills as possible:

- o management and administrative
- o strategic planning (design and implementation)
- o brochure and business literature development
- o teaching and training (excellent platform skills)
- o grantsmanship and fundraising
- o public relations
- o business negotiation skills
- o good writing skills
- o experience with USAID contracting
- o excellent inter-personal skills
- o capable of frequent travel throughout the region
- o financial management/analysis and budget preparation

The proposal writer should also be highly qualified with good English language skills. He/she will ideally be knowledgeable of USAID proposal requirements with a proven track record in the submission of proposals to USAID and other major donors; in the development of joint proposals with major USAID contracators, and in the development of proposals for major U.S. foundations.

Regardless of the final organization structure selected for the marketing capability, the new unit should report directly to the Executive Director.

10. Expand INCAP's Skills-Upgrade and Continuing Education Program for Headquarters Staff and GTBs

A logical location for this activity is the Training and Resource Development Unit.

The component of the new AID Project that focuses on upgrading technical and administrative skills should be coordinated by this same unit.

Priority skill areas to be upgraded should include the following:

(a) Technical Areas

Identification of these areas is being done in another

Technical Analysis to this Project Paper. However, based on demand expressed (areas of opportunity) in our meetings, the team believes the following technical areas should be carefully reviewed with the goal of upgrading if necessary:

- operations research
- maternal child health
- food security/quality control
- food processing technology
- communications (including media/graphic design)

(b) Administrative Areas

- promotion/business development
- proposal writing
- negotiation
- budgeting (costing & pricing)

B. USAID/ROCAP INPUTS

USAID's principal inputs will be in the following areas:

- technical assistance
- training
- salaries of 2-3 marketing and development (proposal writing/fundraising) professionals and 1 support staff
- equipment and supplies
- materials development
- information system development
- utilities
- travel and per diem
- special studies identified during the initial six months of project implementation
- legal and audit/accounting costs

Responsibilities of the new professional staff will be: establishing a marketing and promotion office, developing a marketing/promotion capability, providing training support, proposal writing/fundraising, materials development, public relations and communication.

1. Salary Requirements

- Director of Marketing..full-time..3 years
- Proposal Manager/writer..full-time..3 years
- Administrative Asst..full-time...3 years

Beginning in the second or third year, a second proposal writer will likely be needed.

2. Technical Assistance

- Short-term Consultant(s)..12 months

Technical assistance will be divided into three components:

- **component 1** (6 months) should begin in month two or three (after the Director of Marketing has been hired) and continue for 12-15 months. It should focus on the following activities:
 - o Development of a Marketing Plan & Strategy
 - o Organization of the Marketing Department
 - o Development of required data bases
 - o Definition of the marketing roles of the marketing department and the country offices
 - o Proposal development
- **component 2** (3 person months) will occur between months 18-36 and will provide follow-up TA in marketing/development as required by the project
- **component 3** (3 person months) will focus on specific market studies, to be identified.

3. Training

- Headquarters staff....5 persons for 4 weeks
- GTB staff....Approx. 25 in 7 countries for 4 weeks

Training will be conducted throughout the life of the project and focus on the following areas:

- o Marketing/Promotion
- o Proposal writing
- o Negotiation
- o Budget development
- o Development and delivery of presentations
- o Information systems

4. Travel

Travel requirements are projected to be as follows:

- o eight trips (U.S.-Guatemala) during the course of the three years; three for initial project planning and implementation; three subsequently for special studies to be determined.
- o Travel by the Marketing Director to all GTB teams for coordination and training in marketing and promotion (two days each); 8 trips to each country during the first year; 6 trips to each country annually during final two years.
- o Travel by Proposal Coordinator: 4 trips a year to each member country to facilitate proposal development. This to be done in close coordination with GTBs who will be involved in project implementation.
- o Per diem:
TA consultant(s)...360 days @ _____/day
INCAP staff...312 days @ _____/day

5. Equipment

- o desk-top computers with appropriate software (2)
- o laptop computers with modem (7)
- o office furniture and files
- o computer video projector for presentations (7)
- o slide printer (from computer) (1)
- o high resolution color printer (1)
- o high definition scanner (1)
- o plotter (1)
- o color copier (1)
- o software

6. Development of Materials and Publications

- o materials and printing costs (3 years)

7. Other Costs

- o telephone and fax
- o utilities
- o supplies
- o miscellaneous

C. Additional Recommendations for Sustainability

1. In order to continue providing quality services (in the quantity demanded) to its primary clients, i.e., the Ministries of Health, Education and Agriculture, INCAP must determine how to finance those services. The following activities should be pursued:

- INCAP, in collaboration with PAHO should attempt to increase the annual quotas paid by the member countries.
- INCAP should explore the possibility of exchanging Guatemala's membership dues arrearages for ownership to the government land occupied by INCAP.
- INCAP should also attempt to bring the other arrears into a current status, perhaps suggesting that the monies contribute to INCAP's endowment.
- INCAP should develop institutional or centrally funded contracts with selected European donors, Japanese and the World Bank.

In order to develop large institutional contracts, INCAP must develop a comprehensive marketing approach to each potential client. The following provides two examples of how this might be done:

- (a) GTZ...sets central funds aside for regional projects and for strengthening regional institutions. The size of these projects is usually \$1-2M over three years, which is normally just the first phase of a longer project. To access these funds, INCAP must promote its services (and its mission) professionally in Germany and in each individual country. To do this, INCAP should collaborate with PAHO in Washington which has been cultivating a relationship with GTZ and will lend more weight to the proposal.

At GTZ's headquarters in Frankfurt, INCAP should visit:

- the regional person responsible for C.A.
- the technical person in health/nutrition

INCAP should also visit the Ministry of Economic Cooperation in Bonn. A key person from Frankfurt or Bonn should be invited to visit INCAP.

On the local level, INCAP should visit the appropriate person in each Embassy and of course the GTZ offices in the countries where they have field teams.

- (b) World Bank/IDB. Again the marketing emphasis must be at both the local and central levels. GTB's or headquarters staff should meet with local bank representatives in each country. For the Washington staff, INCAP should arrange presentations to key people in health/nutrition and people with regional responsibilities. Bank people should be invited to visit INCAP and meet the professionals.

INCAP's marketing to the World Bank and IDB should focus on:

- the effects of structural adjustment on health, nutrition and food security
- assistance in the design and development of social programs focused on minimizing the impact of structural adjustments on the most vulnerable populations.
- INCAP should continue to expand the services it provides for PAHO in exchange for increased core funding.
- The ROCAP Institutional Strengthening Project should have a ceiling that allows buy-ins from the bi-lateral missions. This will encourage the missions to buy the services of INCAP and at the same time become more familiar with INCAP and its ability to provide quality services.
- INCAP should explore the feasibility of establishing a 501 C-3 organization in the U.S. for fundraising.

Annex E.5

Preliminary Survey, Foundation Funding Prospects

Preliminary Survey, Foundation Funding Prospects

These notes are from preliminary research in April 1991 at the Foundation Center Library in Washington, D.C. by Management Systems International, Inc. (MSI). The research covered mostly grants through 1989, with a few into 1990.

The research covered foundations with some international interests, preferably Latin (and even Central) America, under four principal categories:

1. Foundations with mixed interest of health, nutrition, family and child care
2. Family planning without other health interests
3. Agriculture, food production (with some indication or at least hint of interest in nutrition)
4. Essentially Latin (Central) America, without demonstrated interest in INCAP's sectoral areas

These preliminary notes are suggestive of the apparently limited range of U.S. foundation interests relevant to INCAP.

1. HEALTH AND NUTRITION
FAMILY AND CHILD CARE (including family planning and population issues)

-- ATKINSON FOUNDATION (California). Primarily gives to California organizations (including to Native American/minority projects), but international grantmaking extends to "technical assistance, relief, population issues, social services." Nothing on record to Central America, but past grants to Africa include small business loans, grants administered through International Institute of Rural Reconstruction, IVS, and through the Near East Foundation (grant for a nutrition project in Botswana).

-- EDNA McCONNELL CLARK FOUNDATION (New York). Interest in developing countries with emphasis on disease control and children's welfare. Past grants to African countries (administered through US/UK/Australian universities), i.e., for parasitology research to a Kenyan Primate Institute. Grants to the Ashoka Society to train public service entrepreneurs in developing countries./

-- FORD FOUNDATION (New York). Includes endowment and matching grant funds, plus program-related-investments (PRIs). Extensive

possibilities, particularly through "Rural Poverty and Resources" program. Latin American involvement in Peru and Brazil, including to Cayetano Heredia, Peruvian University for research on fertility and child mortality; Latin American Center for Technical and Rural Education, Peru, for training of non-governmental organizations. Emphasis (in health) on training of health care workers. Warrants closer study because of wide range of Ford interests.

-- HENRY J. KAISER FAMILY FOUNDATION (California). Primarily in the U.S. and South Africa, some through Christian networks. Some parallels to INCAP include (in S. Afr.) regional center to fight malnutrition and provide community health care, and funds to train health care workers in gathering data and evaluating projects in epidemiological research.

-- W.K. KELLOGG (Michigan). (An old INCAP friend, instrumental in its founding but little contact over recent years.) Primarily in U.S./Latin America/Caribbean/S.Africa, including interest in indigenous communities (e.g., in Costa Rica, an agricultural extension community for indigenas. Some grants made through PAHO and U.S. organizations such as Foundation for Agricultural Development; Ministries of Health in Cost Rica and Paraguay. State U. of Rio de Janeiro to improve health services and train personnel (\$515,000 over 3 years); working Boys Center in Quito, for education and health of working children; CIAT in Colombia; 4-H Clubs of Jamaica, various smaller grants (but totalling over \$400,000) to projects dealing with chronic problems in food production, sanitation, and health care. Other grants for public health work in Venezuela and Brazil.

-- KRESGE FOUNDATION (Michigan). Includes challenge grants for updating equipment, laboratories. General interest in health projects, past grants include facility construction funds in Caribbean and technological equipment.

-- JOHN D and CATHERINE T. MacARTHUR (Illinois). No endowments yet (although may be part of Synergos Institute group to consider endowments for Southern Africa and (through Grupo Esquel) for Latin America. Past grants to Latin America include Centro de Orientacion Para Adolescentes, Mexico City (sex education); Centros de Estudios Cientificos de Santiago, Chile (\$225,000 over 3 years for student fellowships, research, and international collaborations; through Duke University, for the International Commission on Central American Recovery and Development. Some interest in Caribbean sustainable agriculture activities.

-- MELLON (New York). No specific, obvious relevant grants, but lots of money to big, established organizations like Planned Parenthood and International Women's Health. Policy oriented, with emphasis on family health and planning. Worth further exploration.

-- PEW CHARITABLE TRUSTS (Pennsylvania) Many references to "Pew International Health Policy Program." Largely through U.S. non-governmental organizations like IIE, Panos Institute, World Resources Institute. Stated interest in health and human services and strengthening indigenous policies in developing countries, including grant (through PANOS) to build information and media capacities of NGOs in Caribbean.

-- PUBLIC WELFARE FUND, INC. (District of Columbia). No endowments and supposedly not for research or technical assistance. Prefers addressing short-term needs (specific projects and expansion), and projects must serve low-income populations. Some grants through both small and big U.S. organizations. Past grants include: Centro Para los Adolescentes de San Miguel de Allende, Mexico, sex education; children's health project in rural Bolivia; through Johns Hopkins, AIDS information for Latin America; through Planned Parenthood, to El Camino Adolesc. Ctr. in Guatemala City; through La Leche League, Intl, for breast-feeding programs in Mexico and Guatemala.

-- ROCKEFELLER BROTHERS FUND (New York). No endowments. Have given money for equipment acquisition. Previous grants include to Instituto nacional de la Nutriciain, Mexico Cityu, for research studies in contraception, and family planning program in Chile. In addition, program called "One World" on sustainable resource use, but (possibly) health as well.

-- ROCKEFELLER FOUNDATION (New York). (Hernan Delgado already has contact.) Grants to Latin America have included Instituto de Investigacion Nutricional, Lima, for study on how health information is transferred; Centro de Pesquisas e Contgrole das Doencas Maternos-Infantis de Capinas, Brazil, for study of effect of breast-feeding on fertility. Other relevant grants to Mazingira University, Nairobi, for educational program in schools on animal husbandry and health; National Research Institute of Health, Addis Ababa, study on HI-V straining. In Asia, interests in rice and animal biotechnology, protein research, and sustainable crops programs.

-- THRASHER RESEARCH FUND (Utah). Interested in international children's health research, largely through US/UK universities. Past grant (\$130,000) to Instituto de Invest. Nutricional, Lima, for study on diarrhea, yoghurt.

{Other in mix of health, nutrition, family planning: May be worth finding out more on

-- AT&T Foundation, grants through large US organizations for health care programs with international slant;

-- Educational Foundation of America (Conn.), primarily in U.S., but some grants through large U.S. organizations

(Center for Rural Affairs, Pesticide Education and Action Project, Audobon) intersted in medical education, Native Americans, population issues and children;

- Pacific Telesis Foundation (California), health programs for Latinos in U.S., minority and child/youth health projects;
- General Electric Foundation, support for hospitals, including in Mexico, although interest seems more academic (through medical schools).

2. FAMILY PLANNING (i.e., exclusively, no apparent interest in "health" per se)

-- S.H. COWELL FOUNDATION (California). A few grants to Central America, including: Centro de Orientacion Para Adolescentes, Mexico City, to expand sexual and reproductive info program to young people of rural communities; Population Council, Regional Office for Latin America and Caribbean, Mexico City, intervention program and teenage pregnancies; additional grants in Mexico for information programs on family planning, interests in demography, policy and rural health.

-- WILLIAM and FLORA HEWLETT FOUNDATION (California). Supposedly not for health, but support for family planning programs, including a grant to World Neighbors for programs in agriculture development and reproductive health care. Interests in environment, higher education and regional grants.

-- DAVID and LUCILLE PACKARD FOUNDATION (California). International giving for population issues and the environment through organizations for Global Fund for Women, Center for Development and Population Activities, Planned Parenthood, Population Council. Some work in Caribbean and Latin America.

-- PROSPECT HILL (New York). Active in Central America family planning and youth agencies through International Projects Assistance Services, for investigating new population planning initiatives in Latin America; Center for Population Options, support pregnancy prevention in Latin America.

[May also be useful to look into GANNETT (Virginia), primarily active in U.S. and only support medical/research projects if related to journalism, literacy or volunteerism; but could include family planning - literacy campaigns.]

3. **AGRICULTURE** (may be stretching, but could be connected to nutrition, food security, food safety; have included if prior connections with Guatemala or Central America Region)

-- **C.S. FUND** (California). No endowments. Support through agricultural missions and U.S. organizations (Rural Advancement fund International) on biotechnology, livestock conservation, pesticide alternatives, preservation of biological diversity. Previous involvement in Guatemala with support for Peace Brigades, monitoring human rights.

-- **GENERAL SERVICE FOUNDATION** (Colorado). No endowments. Interest in population and resources, support for "experimental demonstration or research projects on national/international level, especially in Latin America, Mexico and Caribbean." Rural development/livestock programs and family planning, grant to Guatemala project through Heifer Project International and through International Projects Assistance Services.

-- **JOYCE MERTZ-GILMORE FOUNDATION** (New York). No endowments. Interest more in environment/conservation, but including grants through U.S. botanical gardens for fellowships for students from Latin America to study tropical ecology, and for identification of plants/underused resources. Have also supported programs in South Africa to train Black health professionals and Central American refugees in U.S., and to Conservation International for projects in ecosystem conservation in Central/South America.

-- **JESSE SMITH NOYES FOUNDATION** (New York). No endowments. Extensive support of projects in Central and South American through International projects Association Services or direct to institutes, universities; Assoc. Nacional para la Conservacion de la Naturaleza Panama, for development of new funding sources; Colegio de Postgraduados, Chapingo, Mexico, on traditional/sustainable agriculture and agroecology; Comision de Invest., en Agricultura Alterantiva, Chile; and through World Resources Institue, Comm. on Agricultural Sustainability for Developing Countries. Stated interests in tropical ecology and water resources. Additional grants in women's and rural health and family planning and reproductive rights, including to Salvadoran Assoc. for Rural Health (ASAPROSAR), Santa Ana, El S., and to Cambridge, Mass. group "Nucleus for Indigenous Rights."

-- **TINKER FOUNDATION** (New York). Grants to Latin America, Spain, Portugal for environmental studies and expansion of facilities, many through U.S. universities and Overseas Development Council, Conservation Foundation, for project on sustainable agriculture in Latin America; University of Wisconsin for research on Guatemala export strategies; World Env. Center, to establish affiliate in Sao Paulo; projects with the Peruvian Regional Agricultural University.

4. GENERAL POLICY ON
LATIN AMERICA

-- ARCO, through big U.S. groups, support for "sustainable growth programs" (Intl Institute for Environment and Development), and ODC's US-Mexico Project.

-- CARNEGIE ENDOWMENT, limited to U.S. and ex-British colonies (conceivably could include Belize).

-- LILLY ENDOWMENT (Indiana). International giving to disaster relief and public policy programs, primarily in the Americas. Prior grant in Guatemala through Ammericares to the San Lucas Taliman parish.

-- CHASE MANHATTAN FOUNDATION (New York). Giving limited to countries where CM has offices. No endowments. Previous grants in C.A. region through US PVOs (Heifer Project and Pan American Development Foundation for literacy campaigns).

-- J. RODERICK MacARTHUR FOUNDATION, primarily in U.S. and primarily legal issues; have worked with Guatemala refugees.

-- CHARLES STEWART MOTT FOUNDATION (Michigan). No endowments until Synergos/Grupo Esquel, likely to contribute to NGO endowment program in Ecuador, consider elsewhere in Latin America. Generally contributions through big US organizations (e.g., CIDE of World Resources Institute) to strengthen capacity of development country NGOs and indigenous groups. Interests in community education. (Check also into RUTH MOTT FUND, apparent interest in environment, alternative/sustainable agriculture.)

-- TEXACO, INC. FOUNDATION (New York). No endowments. Support for national organizations that serve large segment of population. largely through big US organizations (Executive Service Corps, Pan American Development Foundation).

Annex E.6

Analysis of INCAP Financial Sustainability

Analysis of INCAP Financial Sustainability

I. Introductory Summary

The IISP Project is intended, over the coming three years, to provide means for institutional strengthening whereby INCAP can continue to function as a credible and effective institution without AID institutional support funding.

While IISP is aimed primarily at increasing INCAP's capacity to secure and manage financial resources from sources other than AID, IISP will continue ~~some~~ support of technical staff and personnel currently funded through TRO and PROPAG. This support of core INCAP staff will be phased out over the course of IISP, with the expectation that IISP in its third year will cover no more than 10% of INCAP's costs overall.¹ After IISP, AID will provide no additional institutional support for ROCAP.

INCAP will be pressed to its limits even during the course of IISP to secure the necessary funds to replace those available through TRO and PROPAG and, at the same time, enable INCAP to respond to the anticipated increased demand for its services in the region. Based upon IISP design analyses, and particularly with the capacity building support and technical assistance available through IISP, INCAP should be able to secure alternative funding to replace the diminishing levels of AID support over the next three years. In addition, the levels of funding required to sustain INCAP as a viable institution beyond the period of IISP funding appear to be attainable.

II. IISP and INCAP's Current Funding Base

The current distribution of INCAP's funding sources (AID and other) is detailed in Table 3-1 of the Project Paper, attached here for ease of reference as Figure No. 1. In 1990, PROPAG and TRO funding amounted to exactly 33.3% of INCAP's total funding for the year.

¹ The 10% estimate, drawn from Table 2 on p. 2, assumes a very optimistic estimate of total INCAP budget for the year 1994. As discussed further in Section III.B, the projections upon which the assessment of INCAP's sustainability is predicated assume less optimistic resource mobilization for INCAP.

AID funding of INCAP in the years prior to and during IISP is reflected in the following table:

Table 1. AID Funding of INCAP
(\\$000)

	<u>1988</u>	<u>1990</u>	<u>1991</u> ²	<u>1992</u> ³	<u>1993</u>	<u>1994</u>
ORT	1,355	1,281	1,500	-	-	-
PrPg	821	750	923	-	-	-
IISP	-	-	-	2,189	1,391	820
Other	153	80	295	200	250	300
Tot.AID	2,309	2,112	2,718	2,388	1,641	1,120

The relationship of AID funding of INCAP to the support of other funders is reflected in the following table:

Table 2. Participation of INCAP Funders (%)⁴

	<u>1988</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
AID	42	33.6	32.1	26.5	16.4	10
Oth Prj	28	35.4	40.3	42.5	49.6	54
PAHO	18	21.3	17.8	20	22	22
Gds/Svc	6.2	4.3	5.3	6	6	8
Members	5.7	5.4	4.5	5	6	6
Total						
Budget: (\$000)	5,492	6,295	8,469	9,000	10,000	11,000

The PROPAG and TRO projects are not designed as institutional support projects in the usual sense of that label. However, because of their dominant role in sustaining INCAP (albeit for project specific activities), the PROPAG and TRO grants essentially undergird the institution. This is particularly true

² 1991 budget figures.

³ 1992-1993 IISP as per Project Paper budget. (See Project Paper, Section 4, and Annex F.) "Other" AID estimated based on market survey, Annex G.

⁴ Total INCAP budget amounts reflect modest expansion from 1991 levels, based on market survey (Annex G) and consultations with INCAP. The projected levels do not, however, represent approved budget figures for INCAP for 1992 and beyond.

since PROPAG and TRO go directly to the core of INCAP's basic mission.

INCAP's funding sources in 1990 (Figure No. 1) and budgeted for 1991 (Figure No. 2) are broken out between "ordinary" and "restricted". These terms are regularly used by INCAP to distinguish, respectively, between their core staff and activities and those for which specific project funding is granted. However, the "ordinary" funding -- coming mostly from PAHO and member contributions -- is scarcely unrestricted funding in the usual sense of that word. These "ordinary" funds are made available on the basis (and expectation) of substantial responsiveness and availability of INCAP personnel and services at the request of the member nations and PAHO. Thus, INCAP has very little in the way of unrestricted funds.

II. INCAP's Track Record For Funding Diversification

As intended in the TRO and ProPag Projects, INCAP has over the course of those two projects begun a serious effort at funding diversification. As shown in Figure No. 1, in 1988 ORT and ProPag constituted almost 40% of INCAP's total funding, and 60% of its restricted (or so-called "fiduciary" funding). By 1990, the corresponding figures were reduced to 33.6% and 48.7%. For 1991 (see Figure No. 2), TRO and ProPag are projected to be 33.3% of INCAP's total funding (or 39.4% of the "fiduciary" funding).

By 1990, INCAP's funding diversification included over 50 projects funded by the following:

- Four other bilateral programs (Sweden, Switzerland, France, Guatemala), representing 16 projects;
- Seven Universities (Stanford U., U. of Minnesota, Baylo U., Cornell U., Washington State U., IDRC/U. of Manitoba, Hebrew U. of Jerusalem), representing 10 projects;
- Eight NGOs/Foundations (Population Council, American Soy Bean Association, Asociacion Demografica El Salvador, NESTEC, General Foods Foundation, COGAAT, Firma F. Hoffman), representing 9 projects;
- Two private organizations (Roche, Molecular Biosystems), representing 2 projects; and
- Four UN-related organizations (UNICEF, WHO, PAHO, and Pan American Health and Education Fund), representing 15 projects.

In 1990, for the first time, INCAP's funding from non-AID projects (35.4% of total funds) exceeded its funding from AID

projects (33.6%).

While INCAP shows some capacity already for funding diversification, IISP design analysis shows that INCAP requires substantial improvement both in its attitude and in its approaches to widening its base of support. As discussed in Attachment E.4 to Annex E, INCAP employees must come to understand that resource development activities do not diminish the quality or value of their services but instead enhance the possibilities of accomplishing the mission of the organization. This analysis shows that INCAP requires improved skills within its own staff in identifying resource development opportunities and, then, in communicating INCAP's capacity and in negotiating favorable financial arrangements.

III. Prospects for INCAP's Sustainability

A. INCAP's Threshold Challenge - During IISP

At the end of 1991, with the conclusion of the PROPAG and TRO projects, INCAP would -- absent funding from IISP -- lose some one-third of its total funding. IISP funding itself, in its third and last year, is expected to account for no more than 10% of INCAP funding. Even in anticipation that IISP will be approved generally in the range covered by this Project Paper, INCAP expects that by the end of calendar year 1991 it will have to reduce its staff complement by approximately 30% because of anticipated funding limitations post-TRO and ProPag.

A major initial challenge for INCAP will be to secure sufficient funds over the course of IISP to make up for the drop in AID support with the conclusion of PROPAG and TRO. According to budgets for 1991, the PROPAG and TRO funding will be 28.6% of total INCAP funding. (1991 budget figures are attached here as Figure No. 2) For the first year of IISP⁵, the AID funding of INCAP costs (exclusive of commodities and technical assistance) will be in the range of \$1.4 million. AID funding of these costs will drop by 31% (to \$953,438) in Year 2 of IISP and by another 37% (to \$599,624) in Year 3.

In the first year of IISP, even at projected modest levels of overall program growth by INCAP (Table 2, above), INCAP should be able to achieve the relatively small increase (approximately 5%) in non-AID funding required to meet the 1992 revenue needs. For the second and third years of IISP, however, as the AID support funding (including recurrent costs) steadily decreases, INCAP

⁵ For purposes of this discussion, IISP is treated as going on stream January 1, 1992, although Project review and implementation schedules now call for the Project to go on stream in the last quarter of calendar year 1991.

will be severely pressed to accelerate its pace of identifying and securing non-AID project funding.

For example, assuming that there is program demand for INCAP services by 1994 at a level of \$11,000,000 as indicated in Table No. 2, non-AID project funding under the assumptions there would have to be in the range of \$6 million. Resource mobilization at that level would represent an increase of some 160% in the four years since 1990, when INCAP raised \$2.23 million in non-AID project funding.

While Annex G to the Project Paper indicates that the regional demand for INCAP's services far exceeds INCAP's ability to supply the services, the market analysis also distinguishes between "demand" from user clients and willingness by financial sources to fund INCAP to meet the demand.

In summary, even before looking at the prospects for INCAP to sustain itself after the IISP Project, it must be concluded that INCAP will be stretched to the limit of its resource development capacity during IISP simply to keep pace with the diminished rate of AID funding over the coming three years. While trial by fire may be character building, it can also burn.

B. INCAP Sustainability Prospects Beyond IISP

The following factors have been taken into account in seeking to project the prospects for INCAP's sustainability after -- and as a result of -- the IISP Project.

(1) There are several basic approaches that might be followed in projecting the sustainability prospects of INCAP beyond the period of the IISP Project. One approach would be to estimate the lowest level of predictable costs that might be incurred in 1995 and subsequent years with INCAP operating at the minimum level required in order for it to be relevant and effective (as defined in the Project Paper and Annex E with respect to INCAP's sustainability). However, future cost levels for INCAP will be a function of user demand which, at this point, are not susceptible of credible quantification. In addition, a cost-based approach to projecting sustainability assumes that there is a discernible point (and cost) below which INCAP cannot fall and remain viable in terms of its institutional mission. Thus, a cost-based approach to projecting sustainability -- that is, projection of the costs required to be covered by revenues -- is grossly speculative.

An alternative approach to projecting sustainability is used here. It has two basic elements:

- First, estimating those levels of resource mobilization that are reasonably attainable by INCAP, assuming its

satisfactory absorption of the IISP Project outputs;
and

- Secondly, judging whether INCAP, with assistance through IISP, will be sufficiently able to adjust its program level to correspond with available resources.

At this stage, it is more reasonable to project the level of funding that INCAP can attain than try to identify some future level of funding that INCAP would need in order to continue to be a center of excellence that is responsive to regional needs and demands for improved food security and nutrition.

(2) The suggested approach to predicting sustainability also represents a management approach that INCAP might pursue in balancing between what INCAP believes is its essential mission and what its funding constituency is prepared to support. Under this alternative approach, INCAP management -- supported in major part by the strategic planning, information management, and more "client"-oriented approaches and techniques to be fostered by IISP -- would be charged with scaling its level of operations (hence, its costs) to the level of revenues that are reasonably attainable. INCAP management would also have to rely upon its "user" and "client" contacts, together with its independent judgment based upon decades of experience in its field, in determining whether there is a level of effort below which INCAP cannot go and be deemed capable of fulfillment of its mission at least a minimum level. Certainly the strategic planning capacity of INCAP supported by IISP should enable INCAP better to make difficult program and staffing choices when pressed to do so by the realities of limited funding.

(3) Finally, the complex problem faced by INCAP in balancing between desired level of operation and available level of financial support argues strongly in favor of concerted effort by INCAP to establish some form of endowment fund as a means of having unrestricted income. Because of the flexibility of endowment income -- to fill funding gaps generated by such factors as donor fatigue -- it can have a qualitative value exceeding the monetary quantity. Global experience confirms an undervaluation by resource allocators of public sector areas such as health and nutrition. Thus, many of the world's public sector science-based institutions (including the renowned agriculture research centers) find themselves stretched for the long-term financial support needed to maintain necessary continuity in professional staff and research/application activities. Thus, virtually all international research centers, and major national centers, are currently actively seeking to establish endowment funds.

With these factors in mind, alternative projections of INCAP sustainability beyond the life of IISP are presented below:

1. Minimalist Level for Resource Attainment

While INCAP has strong aspirations for qualitative and quantitative expansion, it is certainly the case that INCAP considers itself, at present, a relevant and effective institution in tis field. If INCAP could do not more than continue to operate at its present level (say, that projected for January 1, 1992), neither INCAP nor its user/client constituency would propose termination for failure of a critical mass. A minimalist approach to projecting INCAP's sustainability would be, then, to project whether post-IISP maintenance of INCAP at essentially current levels is attainable for INCAP. Clearly the answer is in the affirmative.

Table 3 projects INCAP's operational level for 1995 through 2,000, under a minimalist approach, as follows:

Table 3. INCAP Sustainability to 2,000
Minimalist Approach

	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
	(\$000)					
Funding:						
AID	425	450	475	500	525	550
Oth Prj	4,500	4,750	5,000	5,250	5,500	5,750
PAHO	2,100	2,250	2,400	2,550	2,700	2,850
Gds/Svc	650	700	750	800	850	900
Members	475	500	525	550	575	600
Endowment	-	300	350	400	450	500
Total	8,150	8,950	9,500	10,050	10,600	11,150

The assumptions underlying this "Minimalist" projection are as follows:

- Assumes constant dollars. INCAP will relate its revenues to costs incurred both in hard currencies and regional currencies. Constant dollar assumes reasonably responsible monetization policies addressing inflation and exchange. Alternative (predicting inflation and exchange prospects for seven countries) unworkable.
- AID funding: assumes INCAP budgeted (and expected) 1991 levels (\$295,000, exclusive of TRO and ProPag), increased by \$25,000 annually.
- Other Projects: assumes budgeted 1991 levels (\$3,500,000), increased by \$250,000 annually.
- PAHO: assumes budgeted 1991 levels (\$1,500,000),

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increased by \$150,000 annually.

- Goods/services: assumes budgeted 1991 levels (\$450,000), increased by \$50,000 annually.
- Member contributions: assumes budgeted 1991 levels (\$375,000), increased by \$25,000 annually.
- Endowment: dollar denominated endowment of \$3,000,000 by 1995, initial distribution in 1996, yielding 10% annually above transaction costs; capital increases by \$500,000 each year (by new contributions or retained earnings).

The funding levels presented here should be deemed comfortably attainable by INCAP taking into account current resource mobilization capacity, the perceived demand/market for INCAP services, and the increased mobilization and management capacity of INCAP through IISP. While the revenue levels suggest a level of operations that is below INCAP's current aspirations, it does represent 1995 operations some 30% higher than in 1990. Expressed in terms of AID funding proposed under IISP, the scenario's projected 1995 funding level would be almost six times the amount of 1992 IISP funds budgeted for INCAP costs (exclusive of commodities and technical assistance). Giving effect to likely inflation, this scenario would have to be seen as a retrenchment. (INCAP's 1991 budget is \$8.5 million, or more than the "Minimalist" projects for 1995.) However, INCAP operations at the indicated level, however, constraining, would clearly not bring the institution below the minimum level required to be viable in terms of its institutional mission.

2. Optimistic Level for Resource Attainment

Table 4 projects INCAP's operational level for 1995 through 2,000 under a more optimistic approach, as follows:

Table 4. INCAP Sustainability to 2,000
Optimistic Approach
((\$000))

	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>
Funding:						
AID	675	750	825	900	975	1,050
Oth Prj	5,500	6,000	6,500	7,000	7,500	8,000
PAHO	2,300	2,500	2,700	2,900	3,100	3,300
Gds/Svc	750	825	900	975	1,050	1,125
Members	475	500	525	550	575	600
Endowment	-	500	550	600	650	700

Total 9,700 11,075 12,000 12,925 13,850 14,775

The assumptions underlying this "Optimistic" projection are as follows:

- As with "Minimalist" approach, assumes constant dollars.
- AID funding: 1991 budget, increased by \$75,000 annually.
- Other Projects: 1991 budget, increased by \$500,000 annually.
- PAHO: 1991 budget, increased by \$200,000 annually. This is not much more than the amount (\$150,000) projected for PAHO increase annually under the "Minimalist" scenario. This is because it is assumed that PAHO may prove more valuable for leveraging to secure "other project" funding than for increased direct PAHO funding support.
- Goods/services: 1991 budget, increased by \$75,000 annually. The assumption is that there is not a particularly large market here. The figures used here are meant to be net-of-cost. Even these amounts assume efficient pricing and cost controls by INCAP.
- Member contributions: assumes same as for "Minimalist" approach. To the extent that the member countries may be able to provide additional support, the effort should be placed on getting their support to the endowment rather than operating costs.
- Endowment: Assumes \$5,000,000 in dollar denominated endowment by 1995, first payout in 1996, with 10% yield. Annual increase of \$500,000 annually, as in "Minimalist" scenario assumes that this amount may be both a floor and a ceiling. The real potential for the endowment is a matter to be explored in the early stages of the IISP Project.

The "Optimistic" scenario quite possibly represents a projection somewhere near the upper edge of any zone of reasonableness in expectations for resource development for INCAP attributable to IISP.

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Table 3-1

Change in INCAP Funding by Source 1988-1990
(US\$)

Source	Ordinary Funds				"Fiduciary Funds"				Total			
	Amount		Percent		Amount		Percent		Amount		Percent	
	1988	1990	1988	1990	1988	1990	1988	1990	1988	1990	1988	1990
PAHQ	942,000	1,341,793	58.9	68.6	47,000	0	1.2	0	989,000	1,341,793	18.0	21.3
Members	315,000	339,111	19.7	17.3					315,000	339,111	5.7	5.4
Non-AID Projects					1,537,000	2,228,101	39.5	51.3	1,537,000	2,228,101	28.0	35.4
Goods/Services	342,000	274,009	21.4	14.0					342,000	274,009	6.2	4.3
<u>Subtotal</u>	<u>1,599,000</u>	<u>1,954,913</u>	<u>100.0</u>	<u>100.0</u>	<u>3,940,000</u>	<u>2,228,101</u>	<u>40.7</u>	<u>51.3</u>	<u>3,183,000</u>	<u>4,183,014</u>	<u>57.9</u>	<u>66.4</u>
<hr/>												
A.I.D.												
ORT					1,335,000	1,281,307	34.3	29.5	1,335,000	1,281,307	24.3	20.4
PROPAG					821,000	750,591	21.1	17.3	821,000	750,591	14.9	11.9
Other					153,000	80,333	3.9	1.9	153,000	80,333	2.8	1.3
<u>Subtotal</u>					<u>2,309,000</u>	<u>2,112,231</u>	<u>59.3</u>	<u>48.7</u>	<u>2,309,000</u>	<u>2,112,231</u>	<u>42.0</u>	<u>33.6</u>
<hr/>												
TOTAL:	1,600,000	1,954,913	100.0	100.0	3,893,000	4,340,332	100.0	100.0	5,492,000	6,292,245	100.0	100.0

Figure No. 1
For Attachment E.6

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Table 9-1
PRESUPUESTO: ADCS

INCAP FUNDING BY SOURCE (1991)
(US\$/Z)

Source	Ordinary Funds		"Fiduciary" Funds		Total	
	Amount	Percent	Amount	Percent	Amount	Percent
NON - PAND						
AID:						
DRT Project			1,500,000	24.4	1,500,000	17.7
PREPAG Project			923,000	15.0	923,000	10.9
Other			295,000	5.0	295,000	3.5
Subtotal:			2,718,000	44.4	2,718,000	32.1
Non - AID Projects						
Goods/Services	450,000	54.3			450,000	5.3
Member Contrib's	578,700	45.7			578,700	6.8
Subtotal:	828,700	100.0	3,413,670	55.6	4,242,370	50.1
Total:	828,700	100.0	6,131,670	100.0	6,960,037	82.2
PAND:						
	1,509,000	100.0			1,509,000	17.8
Totals:	1,509,000	100.0			1,509,000	17.8
Grand Total	2,337,700		6,131,670		8,469,430	100.0

Figure No. 2
For Attachment E.6

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Annex F
(Reserved)

Annex G

Preliminary Market Analysis

Annex G

Preliminary Market Analysis

1.0 INTRODUCTION

In the analysis and recommendations that follow, the Market Analysis Team has taken into account a number of factors that distinguish INCAP from a typical company or organization that relies exclusively on selling its services to survive. INCAP is first and foremost a social service organization with a mission to assist the governments in the region to improve the nutritional and health status of the people in greatest need. INCAP's primary clients, Ministries of Health, Education and Agriculture, have great need for INCAP's services but have no money to pay for them.

The emphasis or priority given to diversifying and/or expanding INCAP's client base to include "paying customers" must be developed with the above in mind and should not be to the detriment of INCAP's primary client, the Public Sector. Other important factors to consider in recommending a marketing strategy are the philosophy of the organization and the attitudes of the employees. In the case of INCAP, the philosophy and attitudes do not lend themselves to a major refocus of priorities from the public sector to the private sector. Nor do most of their services.

INCAP needs to expand its client base, with private business as a minor but important part of that new base. INCAP employees must understand that "marketing" does not refer just to private sector clients, and that promotion and business development or marketing do not diminish their services but do enhance the possibilities of accomplishing the mission of the organization.

INCAP's primary marketing task is to convince donors and collaborating organizations to finance INCAP's involvement in the delivery of priority services to the public sector institutions and PVO's with which INCAP works.

A secondary, but important, task of INCAP is to strengthen its capability to provide services on a fee-for-service basis in order to expand its financial base and increase its resources and ultimately its long-term sustainability. This diversification will improve INCAP's ability to survive, to service its primary clients and to accomplish its goals and objectives.

2.0 INCAP CLIENTS, MARKETS AND FUNDING SOURCES

Ministries of Health are by far INCAP's largest client group. The large majority of INCAP's work is for or in collaboration with the Ministries of Health, which have primary responsibility for nutrition activities in most countries and very limited budgets. The need for INCAP technical (and financial) support is great. INCAP's close collaboration with PAHO in the individual countries provides INCAP both entre and influence in the Ministries of Health and creates a greater responsibility on the part of INCAP to serve the needs of the Ministries of Health.

Ministries of Education and Agriculture are also important clients. Both Ministries have nutrition programs or nutrition-related programs and depend heavily on INCAP. School feeding programs, the development of fortified foods, etc., are of great interest to the Ministries of Education, and food production, testing, quality and security are of interest to the Ministries of Agriculture. The quotas paid by the INCAP "member" countries is far less than the cost of the services provided by INCAP to the government ministries, however, and only by obtaining significant funding from other donors can INCAP meet the demand for services from the Ministries.

USAID is by far the largest financial donor to INCAP, providing approximately 45% of INCAP's total operating budget. Over 90% of that funding comes from two projects that end in 1991. PAHO, as INCAP's parent organization, provides significant funding to INCAP and is therefore included in this list of funding sources. European donors (Sweden, Switzerland, France, etc.) have been relatively minor clients up to now.

NGOs and Foundations have also been important clients for INCAP. In 1989, nine projects were funded. Universities, especially U.S. universities, have represented an important source of funds and collaboration for INCAP in the development of research projects. UN Organizations funded 15 projects in 1989, but private corporations have been a very small source of revenues for INCAP largely because INCAP has not pursued this market.

3.0 CLIENT PERCEPTION OF INCAP

Overall, INCAP is perceived positively by most of its major clients. On the other hand, all of INCAP's clients described significant weaknesses that may change the perception if not corrected soon. The Ministries of Health, U.S. Universities and U.S. consulting firms (AID contractors) are by far the most positive and USAID bilateral missions are the most negative.

INCAP is perceived as an important resource for technical assistance, training, materials, and funding by Ministries, NGO's, local universities, research centers and even selected businesses. When asked if they would "buy" services from INCAP, most (except the businesses) indicated they would not be financially able. INCAP is perceived as an excellent collaborating institution by U.S. universities and U.S. consulting firms.

4.0 DEMAND FOR INCAP SERVICES AND PRODUCTS

Throughout Central America there is tremendous demand for INCAP's services and products. The greatest demand by far for these services is from client organizations without funds, i.e., Ministries, local universities and research organizations. There is also great need within these organizations for INCAP's assistance. Local NGOs in the region are very interested in the services of INCAP, both technical and financial. In most cases, however, they were in no position to pay for INCAP's services. U.S. Universities and consulting firms also expressed great interest in collaborating and buying services from INCAP. They represent a tremendous opportunity for INCAP as they have, in many cases, already identified specific services they would like to buy from INCAP.

USAID and other international donors indicated interest in INCAP's potential but for the most part lacked adequate information about INCAP's current services and products.

Private corporations do not appear to represent a large potential market for INCAP with the possible exception of (1) cookie manufacturers who can produce the nutritional cookie; (2) agro-industries who might be interested in conversion of agricultural waste or recycling of rejected export fruits and vegetables; and (3) food processors, who require assistance in quality control and/or the development of new food processing technology and formulas. Of the companies interviewed, there was not much awareness of INCAP and consequently not much interest expressed. Private sector needs and opportunities, however, should be explored in greater depth during the first year of the IISP Project.

In short, demand for INCAP's services far exceeds INCAP's ability to supply the services, even if financial resources are found to fund the services. INCAP faces a difficult task of balancing the demand from "non-paying" clients with its potential ability to supply the services and to find donors to pay for them. INCAP must be careful not to create demand it cannot meet, because it will result in poor quality services and failure to deliver what it promises.

5.0 POTENTIAL NEW PROJECTS/FUNDING IDENTIFIED

Potential funding was identified in this analysis from all types of donors and collaborating organizations. Where possible, it is listed below by country, source, and type of service. Otherwise, it is in a general category by source and type of service or product. The team suggests that INCAP begin to explore these opportunities, if not already doing so.

5.1 POTENTIAL COUNTRY-SPECIFIC PROJECTS

5.1.1 Guatemala

The following potential Guatemala-specific projects or activities were identified during the consultancy period.

FUTURES/Rapid III. A study of the characteristics of high-risk pregnancies for Guatemalan Social Security.

CARE. CARE does 3-5 evaluations or studies per year and would like to contract with INCAP. Two studies are forthcoming, on food rationing and child survival.

DIGESA/MOA & CACYKE, S.A. These organizations want to collaborate with INCAP in the promotion of soya as a nutritious component of the daily Guatemalan diet.

USAID/Guatemala. Three projects are planned with components that are appropriate for INCAP on a sub-contract basis. These are (1) the Population, Family Planning and Safe Motherhood Project in 1992; (2) the Water and Sanitation Project in 1991; and (3) the DHS Project in 1993.

World Bank & Institute Nacional de Salud. These organizations are developing a nutrition/child survival project with a budget of approximately \$62M over 5-10 years.

COPASA/MOE. INCAP should explore the possibility of increasing its cookie royalty with these organizations.

5.1.2 El Salvador

The following potential El Salvador-specific projects or activities were identified during the consultancy period.

PROSAMI. An AID-funded PVO coordination project, this activity has need for training and technical assistance in nutrition and growth monitoring throughout the 7-year project.

ABSISA. An AID-funded institutional strengthening project will soon be rebid and INCAP could be included as a sub-contractor or collaborating organization.

World Bank. Funding for the Ministry of Health has significant nutrition and MCH components.

Food Stamps. A study on targeting the most vulnerable populations for a potential food stamp program.

MOH/European Donors. 30% of the projects that the MOH is presenting to Madrid III are related to nutrition.

VITAL/USAID. Supporting a Vitamin A promotion project.

CALMA/WELLSTART. Undertaking a joint nutrition venture.

5.1.3 Honduras

The following potential Honduras-specific projects or activities were identified during the consultancy period.

GTZ. GTZ would like to contract with INCAP for technical assistance and training in a variety of areas including food security, nutrition and development, epidemiology information, etc.

Sweden, Finland and Holland. All are expanding their funding for health sector projects.

Save the Children (Britain). Has expressed interest in further collaboration with INCAP in training of health workers and nurses, and production of soya "frijol".

MOH. The MOH has a new project in food production technology transfer in marginal rural areas.

Management Sciences For Health (MSH). Interested in collaborating with INCAP on a maternal mortality intervention.

AID/Honduras. Suggested that INCAP and the MOH Department of Nutrition submit a proposal to be funded from the Health Sector II Project which has \$200,000 available for nutrition activities. AID suggested (1) development of a national nutrition strategy and (2) institutional strengthening of the Department of Nutrition.

Health/NutriCom. Offers a possible collaboration on a breastfeeding/infant feeding project.

5.1.4 Nicaragua

The following potential Nicaragua-specific projects or activities were identified during the consultancy period.

AID/Nicaragua. (1) A new 5-year PVO Project with \$6M for health that may have a role for INCAP; (2) Possible collaboration with PRAGMA on a food needs assessment; and (3) Other nutrition/MCH projects as they develop.

World Bank and BID. The World Bank and BID are looking for projects in Nicaragua.

ADRA, Project Hope and Project Concern. Beginning new child-survival/MCH projects with AID/W funds. There may be components for INCAP collaboration or sub-contracting.

Holland. Has a "Medicos en Frontera" project that may have need of INCAP's capabilities.

Centro de Investigacion y Estudios de Salud (CIES). Interested in collaborating on research projects.

Nabisco. Would like to collaborate with INCAP in production and marketing of the nutritional cookie. INCAP and Nabisco (60% U.S. owned) should consider submitting a proposal to AID for funding to the Ministry of Education to pay for the production and distribution of the cookie. This project would meet many of AID's primary criteria, i.e., support for a priority Ministry activity, involvement of the private sector, support for a U.S. investment in Nicaragua.

Other. New funds are coming into Nicaragua from Norway, Spain, Finland, Denmark and Canada.

5.1.5 Costa Rica

The following potential Costa Rica-specific projects or activities were identified during the consultancy period.

INCIENSA. Interested in collaborating and submitting joint proposals on projects related to chronic diseases, food analysis, food quality control, and food supplements (vitamin A, iron, etc.).

World Bank/RUTA/IMAS. Jointly developing food coupon project to offset structural adjustment and are interested in collaboration with INCAP on project management, development of a beneficiary register, quality control, and planning, monitoring and evaluation. IMAS would like assistance from INCAP in school feeding programs and home day care programs (funding must be identified from a third party).

5.1.6 Panama

The only potential Panama-specific activity identified during the consultancy period was possible collaboration with USAID on a cholera activity.

5.1.7 Belize

The following potential Belize-specific projects or activities were identified during the consultancy period.

EEC. Belize offers INCAP an entre into EEC's Lome III and IV funds (designated for Africa, Caribbean and South Pacific countries). Major current activity is a hospital project of approximately \$10M. There are also non-programmed funds for "emergency" activities identified by the MOH.

USAID. USAID/Belize is phasing out of health, but the new AID Director has a strong health background. Contact should be increased.

UNICEF. Priority in Belize is child-survival/PHC, and will be looking for assistance in developing and implementing the programs.

Ministry of Health. Relies heavily on nurses and community health workers for PHC activities, but they are not well trained in nutrition. On-the-job training for them and nutrition training in the nursing school are opportunities to pursue (funding source must be identified).

5.2 POTENTIAL PROJECTS BY SOURCE ONLY

5.2.1 Universities

Kansas State University. Exchange of faculty and students.

Univ. of Wisconsin-Madison. Follow-up project to look at nutritional status changes over time in villages currently being studied by the university.

Johns Hopkins University. Projects in interaction between nutrition and infections, and vitamin A deficiencies.

Cornell/Stanford/UC Davis. Follow-up projects to nutritional intervention activity undertaken years ago in Guatemala (funding from NIH).

Cornell. Collaboration on a metabolic study on maternal energy consumption (funding from NIH).

5.2.2 U.S. Consulting Firms/AID-funded Projects

VITAL. Hopes to collaborate with INCAP on country assessments of breast-feeding and cross-country assessments of the implementation of Vitamin A distribution.

URC/ISTI Health & Nutrition Sustainability. Has identified the following areas for collaboration with INCAP: (1) Breast-feeding assessments; (2) S&T technical assistance in nutrition, child survival, evaluation, Info. systems and applied research; (3) Information Monitoring/Tracking; (4) Information dissemination; and (5) oral rehydration (OR) in child survival/PHC.

ISTI. Interested in collaboration with INCAP on breast-feeding in the Dominican Republic, food nutrition monitoring, and training in nutrition-related areas.

URC/PRICOR/Quality Assurance. Would like to collaborate with INCAP on the following activities: (1) Review and revise OR studies carried out in the region; (2) Development of training courses in OR/applied research for the GTB's; (3) OR study on iron supplementation; (4) Methodology studies of the Quality Assurance Project; (5) Information exchange in the areas of OR, applied research and quality assurance (including translation and dissemination); and (6) Evaluation of a manual for Service Quality Assessment/Simplified Systems Analysis Manual.

WASH Project (Water, Sanitation & Health). Interested in collaborating or sub-contracting with INCAP to look at nutrition/health issues related to water and sanitation.

AED/Healthcom. Interested in providing technical assistance and training in communications.

MSH/PRITECH. Would like to sub-contract with INCAP to provide TA to PRITECH country projects in Central and South America, and serve as a conduit for country funds (i.e., PRITECH would channel funds to INCAP and INCAP would then provide a grant to the host country institution and would support the host country project with ongoing technical assistance). Could begin as early as the Fall, 1991.

CDC (Centers For Disease Control)/Nutrition Division. Would like to collaborate with INCAP on providing technical assistance to iodine deficiency intervention projects (i.e., strengthening iodine deficiency control programs in the Ministries of Health) that CDC is trying to develop in Peru and Bolivia. The initial activity involves the training of MOH staff at CDC and CDC would like INCAP experts to participate in the training before going on joint TA missions. CDC has UNICEF funding for the iodine deficiency activities. INCAP could be paid out of UNICEF funds or with funds from Carlos Daza's office at PAHO. (The activities are to begin during the summer of 1991.)

5.2.3 Other Sources

USAID/Washington. The centrally-funded breast feeding project, and funding to U.S. Universities to develop joint programs with C.A. Universities and Regional Institutes like INCAP, both represent potential opportunities for INCAP.

European Community/Madrid III. Approximately \$350M of new funds for health for Central America are expected to be available over the next five years. INCAP has discussed the following potential projects with the respective donors: (1) an MCH project worth \$8.5M; (2) \$2.5M from Italy for nutrition education; (3) a food security project to be funded by Switzerland; and (4) a food and nutrition project to be funded by Holland.

UNICEF. UNICEF will begin a new regional Primary Health Care Project in 1992 with a large nutrition component.

World Bank. The World Bank wants to do a regional study of the impact of structural adjustment on nutrition.

5.3 MOST PROMISING MARKETS FOR INCAP

5.3.1 Short-Term Emphasis (1-3 years)

The short-term period coincides with the timing of ROCAP's INCAP Institutional Strengthening Project (IISP). During those three years, INCAP should focus on marketing its services to donors and collaborating organizations who will provide funding for the priority activity of INCAP, i.e., serving the needs of the C.A. government Ministries, universities and local PVOs/NGOs. This includes European donors, U.S. consulting firms, U.S. Universities, USAID bilateral missions, NGO's, the Japanese, the World Bank, and CIDA (Canada). It should also expand its services to PAHO (which hopefully will result in increased funding from PAHO); expand marketing of its two existing products (the nutritional cookie and other nutritious blended food products); and expand marketing of lab services and services related to micro nutrients, infectious diseases and food analysis/food quality. INCAP should also strengthen its capability to promote its services; write proposals; cost out and price its services; prepare realistic, competitive budgets; and respond to requests for assistance and proposals.

Other areas of important foci for INCAP include:

- Analyzing the needs of the private commercial sector in areas consistent with INCAP's mission and capabilities, i.e., food processors, food producers/farmers, agro-industry and food exporters, in collaboration with U.S. Universities;

- Developing agricultural and food science capabilities that can be sold to the private sector in collaboration with U.S. Universities; and

- Testing potential new products and services, including (1) conferences and conference planning; (2) development of a training center; (3) publications (for sale); (4) technical translations; (5) media/graphics design; (6) logistical and information support for regional TA activities of other organizations; and (7) bibliographic searches.

5.3.2 Medium-Term Emphasis (3-5 years)

After three years of the IISP project, it is expected that INCAP will have significantly improved its management systems and marketing capability and, stabilized its financial situation. Hopefully it will also have upgraded its laboratory facilities. With these improvements in place, it should begin to focus more on expanding its activities in the private sector relative to its public service mandate, perhaps in collaboration with U.S. Universities, to: (1) food exporters (use of rejected food exports including fishing industry wastes; (2) farmers (use of agricultural wastes); and (3) food processors (transfer of new food processing technology). INCAP should also focus on developing modified services and products in response to changing needs that were successfully tested and analyzed during the previous three years.

6.0 COMPETITION

Organizations/clients interviewed that rely on essentially free services from INCAP, i.e., ministries, local research institutions, local universities, and local NGOs, indicated that INCAP had very little competition in Central America. In addition, the demand for services from these clients is so great that competition would be welcomed. Organizations/clients that tend to pay for INCAP's services mentioned a number of important competitors with the caveat that most have a limited capability in one or more of INCAP's priority technical areas. These included:

- DATAPRO, Guatemala (Surveys)
- INCIENSA, Costa Rica (Surveys, Food testing)
- INISA, Costa Rica (Breast-feeding, Nutrition related to infectious diseases)
- CESSIAM, Guatemala (Vitamin A deficiencies)
- Wellstart, San Diego
- NutritionCom/AED/Manoff, Wash. D.C (Nutrition education)
- Health & Nutrition Sustainability, Wash. D.C.
- FLACSO, Costa Rica & Guatemala (Agricultural sciences)
- IFPRI, Wash. D.C.
- U.S. consulting firms (MCH and Operations Research)
- VITAL, Wash. D.C. (Vitamin A)

- Central American Universities and their research institutes
- U.S. Universities
- NGOs
- Independent consultants (especially C.A.residents)

It is important to note that almost all of the above competitors are also actual and potential collaborators on many projects and have expressed strong interest in collaborative efforts.

7.0 MISCELLANEOUS RECOMMENDATIONS RELATED TO INCREASING MARKET SHARE AND IMPROVING FINANCIAL SUSTAINABILITY

In order to continue providing quality services (in the quantity demanded) to its primary clients, i.e., the Ministries of Health, Education and Agriculture, INCAP must figure out how to finance those services. The following activities should be pursued:

- INCAP, in collaboration with PAHO, should attempt to increase the annual quotas paid by the member countries;
- INCAP should explore the possibility of exchanging Guatemala's arrears for ownership to the government land occupied by INCAP;
- INCAP should attempt to bring the other arrears into a current status, perhaps suggesting that the monies contribute to INCAP's endowment.
- INCAP should develop institutional or centrally funded contracts with selected European donors, the Japanese and the World Bank.

In order to develop large institutional contracts, INCAP must develop a comprehensive marketing approach to each potential client. Two examples of how this might be done are as follows.

GTZ sets central funds aside for regional projects and for strengthening regional institutions. The size of these projects is usually \$1-2M over three years, which is normally just the first phase of a longer project. To access these funds, INCAP must promote its services (and its mission) professionally in Germany and in each individual country. To do this, INCAP should collaborate with PAHO in Washington which has been cultivating a relationship with GTZ and will lend more weight to the proposal. At GTZ's headquarters in Frankfurt, INCAP should visit the regional person responsible for C.A., and the technical person in health/nutrition. INCAP should also visit the Ministry of Economic Cooperation in Bonn. A key person from Frankfurt or Bonn should be invited to visit INCAP. On the local level, INCAP should visit the appropriate person in each Embassy and of course the GTZ offices in the countries where they have field teams.

With the World Bank and IDB, the marketing emphasis must again be at both the local and central levels. GTB or headquarters staff should meet with local bank representatives in each country. For the Washington staff, INCAP should arrange presentations to key people in health/nutrition and people with regional responsibilities. Bank people should be invited to visit INCAP and meet the professionals. INCAP's marketing to the World Bank and IDB should focus on: (1) the effects of structural adjustment on health, nutrition and food security; and (2) assistance in the design and development of social programs focused on minimizing the impact of structural adjustments on the most vulnerable populations.

INCAP should continue to expand the services it provides for PAHO in exchange for increased core funding. The IISP Project should have a mechanism that allows add-ons from the bilateral missions. This will encourage the missions to buy the services of INCAP and at the same time become more familiar with INCAP and its ability to provide quality services. Finally, INCAP should explore the feasibility of establishing a 501 C-3 organization in the U.S. for fundraising purposes.

Annex H
Economic Analysis

Annex H

Economic Analysis

Standard project cost-benefit analytical methods cannot meaningfully be applied to this type of institutional strengthening project. The ultimate economic benefits of INCAP programs materialize only indirectly --at the end of long chains of events, and as "joint products" with the public health efforts of national governments and participating institutions. In AID's previous grants to INCAP (Regional Nutrition and Technical Outreach, 1981; ORT, Growth Monitoring and Education, 1984 amended 1987; Technical Support for Food Assistance Programs, 1985 amended 1987), the Project Paper economic analyses were consistent with this thesis and concluded that the application of standard benefit-cost tests had limited utility since many of the project benefits were unquantifiable.

The greatest benefits of INCAP's work in child survival and the overall nutrition status of the region are reduced morbidity and mortality, and improved performance in school and in the workplace. The economist's dilemma is--given that INCAP's interventions take place within the context of established national systems and in the presence of other donors and actors in the health sector--how to isolate and evaluate the benefits properly attributable to the AID-funded interventions. Nevertheless, sooner or later each analyst of previous INCAP support projects came to the conclusion that these investments offer high, if not precisely definable, rates of return and that they are developmentally sound.

Economic analysis of the IISP Project is even more speculative than for earlier INCAP support projects. This is because IISP does not include nutrition interventions per se--immediate benefit generators--but rather is designed to enhance INCAP's ability to implement such interventions. The IISP Project is an investment in an institution, with its return to be determined by what the institution makes of subsequent investments. It will therefore have no immediate return except for the effects of certain technical interventions (e.g. the Vitamin A program) carried out as part of the Scientific and Technical Strengthening Component.

From the regional perspective, the total Project cost of US\$ 4.4 million amounts to about 18 US cents per capita of the C.A. population, or about 6 US cents per capita per year. If annual INCAP expenditures should stabilize, e.g. at US\$ 5 million per year, that 20 cents per capita would still be a minuscule fraction of the total resources used annually for health and nutrition in Central America. There are, however, five aspects of the Project which support the expectation of substantial future economic return on

investment: (1) least-cost execution; (2) indirect returns from improved human productivity; (3) lower cost resolution of future health problems; (4) improved attitudinal changes with respect to market awareness; and (5) improved institutional sustainability.

Least-Cost Execution. As in previous projects with INCAP, the IISP Project will minimize costs by supplanting duplicative bilateral efforts on the part of A.I.D. with an approach that takes advantage of regional economies of scale. In addition, the Project will encourage continued INCAP reliance on predominantly local staff; this approach maximizes the advantages of local knowledge, connections and permanence, and minimizes expatriate costs. Finally, the operational improvements to be achieved through the Strategic Planning and Management Component will lead to improved efficiency and productivity--i.e. lower costs--in the delivery of subsequent interventions by INCAP.

Indirect Returns from Improved Human Productivity. Because of the accompanying value of improved performance in school and work productivity, even a minute percentage reduction in regional illness and mortality rates as a result of INCAP's participation would offer an economic return dwarfing Project costs. This is in addition, of course, to fundamentally immeasurable benefits to human well-being.

Lower Cost Resolution of Future Health Problems. A major focus of INCAP has been and will continue to be the search for technical solutions to regional health problems. In moving towards providing more operational technical assistance in the planning and management of health interventions, however, INCAP will increasingly be forced to deal with cost/benefit and least-cost considerations. INCAP will therefore be in a unique position to take the lead in finding economically attractive means to confront regional health problems, and to demonstrate these tradeoffs in their policy/advisory and operational assistance activities.

The enormity of regional food, nutrition and health problems relative to the scarcity of financial and technical resources available for program interventions calls for careful research and analysis to determine how to get the maximum benefit out of health interventions. A key area where the Project will strengthen INCAP institutionally is in the Institute's capacity to plan, organize, direct and implement studies assessing:

- (1) Least cost analysis of alternative health and nutrition improvements in terms of unit or per capita cost;
- (2) The implications of those costs and benefits for country and INCAP program strategies and priorities; and
- (3) The types of data collection and analytical methods best suited to tracking program results and benefits.

The potential economic benefit of improved cost-effectiveness is considerable. Even a small overall percentage reduction in the cost of health and nutrition programs in the region would mean saving the equivalent of millions of dollars that could be used to expand and improve facilities and programs, and help convince policy makers that health and nutrition programs are worth their cost. This search for methods to improve the cost-effectiveness of health sector interventions will become one of INCAP's most important functions.

Attitudinal Changes and Marketing. The Marketing Component of the IISP Project, by increasing INCAP's market awareness, will improve the institution's ability to identify and create demand for its services and convert this demand into increased donations and/or pay-for-service contracts.

Institutional Sustainability. The Scientific and Technical Strengthening Component of IISP will leave INCAP with greater technical capabilities, which will in turn enable it to offer a greater range of services and thereby attract an expanded donor and customer base. Market feedback to management will shape the course of further technical and marketing expansion, and the grounds for sustained scientific and financial viability will be established. The attainment, by a regional development organization nurtured by ROCAP, of financial viability without further AID institutional support, will also be a breakthrough. The long-term effects of this will include a continuing stream of productivity benefits not subject to the foibles of recurrent AID appropriations, and the possibility of other such institutions shaking off their dependence on AID.

In summary, while the IISP Project is not amenable to standard cost-benefit economic analysis, economic return on Project investment is expected to be substantial due to (1) least cost execution; (2) indirect returns from improved human productivity; (3) lower cost resolution of future health problems; (4) improved attitudinal changes with respect to market awareness; and (5) improved institutional sustainability.

Annex I

Social Soundness Analysis

Annex I

Social Soundness Analysis

1.0 INTRODUCTION

The ability of Central Americans to contribute to their own development depends heavily on their access to sufficient nutrition and adequate health care. Donors, governments and private agencies recognize this and have spent millions of dollars to improve health and nutrition in Central America. In spite of significant improvements, however, many people still lack food security, adequate health care and proper nutrition. The causes are numerous: cultural isolation of indigenous ethnic groups, physical isolation of rural populations, low levels of basic literacy, limited instruction in health and hygiene, limited financial and technical resources of governments and private institutions, and a widespread lack of health and sanitation facilities.

There remains, moreover, inadequate understanding of the problems and of the best and most economical ways to apply available knowledge to solving these problems. While political will and economic capacity are obviously major contributors to the problem, technical issues are also crucial elements. In the struggle for scarce resources, proponents of health and nutrition interventions must demonstrate the importance, feasibility and impact of the interventions--especially since the health/nutrition sector does not claim as much of the attention of government and the public at large as some other sectors do.

These issues notwithstanding, experience has shown that regional investment in technology development and transfer can significantly strengthen country-level efforts to solve health/nutrition problems through both cross-fertilization and economies of scale. INCAP is one of the few institutions with the technical capacity to select, generate and transfer the technologies, methodologies and guidelines required to address the major nutrition-related problems of Central America on a regional basis. And in the development and transfer of technologies addressing major regional health/nutrition problems--child protein/energy malnutrition, diarrheal diseases and acute respiratory infections for example--INCAP has demonstrably succeeded.

The IISP Project deals with the evolution of INCAP as a technically sound organization able to support itself without further "core" institutional subsidy from A.I.D. The ultimate beneficiaries of the Project--Central Americans of poor nutritional status--will be affected indirectly and gradually by achievement of the Project's purpose. From the social soundness perspective, customary analysis of factors such as the characteristics of the

target beneficiaries and possible broad social impediments to project success are not particularly relevant. There are, however, several social aspects of the proposal, however, worth noting.

2.0 CULTURAL ACCEPTABILITY WITHIN INCAP

The proposal to discontinue A.I.D. core funding and to introduce a market responsiveness to INCAP's way of doing business is likely to be viewed by INCAP staffers at all levels as disruptive and possibly threatening. The preparation of this Project has featured an unusual level of detailed discussion and negotiation between INCAP and ROCAP, and both parties wish for this pattern of close communication and coordination to continue throughout the three years of Project execution. Nevertheless, the Project will create anxieties within INCAP and some staff resistance must be anticipated.

3.0 THE BENEFICIARY SEQUENCE

The immediate beneficiary of the Project will be INCAP itself, which--assuming Project success--will begin to be supported by a wide range of donors and service procurers and will cease to be substantially dependent upon the vagaries of A.I.D. appropriations. The immediate beneficiaries will also include INCAP's staff, who will be better trained, more market oriented, and presumably better able to produce and earn more within INCAP or elsewhere in business or public service.

Secondary Project beneficiaries will include all of the public and private entities which use INCAP goods and services. These will include Ministries of Health and Ministries of Education, PVOs, NGOs, private health practitioners, nutritionists, pharmacists, professional associations in the health sector and Universities, as well as paramedical and informal health practitioners such as auxiliary nurses, health promoters, midwives and small commercial retail outlets. This second stage represents a dispersal of benefits, and will improve the channels for delivery of Project-funded benefits to the tertiary or ultimate beneficiary group.

Tertiary Project beneficiaries will be all of those Central Americans whose health and nutritional status will improve through better access to more effective and efficient services and nutritionally improved processed foods. These include mothers and children targeted by food, nutrition and MCH programs; needy families most affected by economic and structural adjustment programs; and all those who lack the mental and physical energy needed to contribute to their own development. No adverse social impact is anticipated for any group as a result of the Project.

4.0 THE ROLE OF WOMEN

Women as mothers and homemakers--and especially as single-parent heads of families--and their children are the principal beneficiaries of public health and nutrition programs. While improved health and nutrition levels obviously are also shared by men, whose participation leads to increases in gross national productivity, women are the conduit to the family. Their understanding of the principles of improved health and nutrition, and their ability to access the services needed to raise their own health and nutrition levels, are critical to the effectiveness of INCAP's public sector work. In addition, women represent a high percentage of the professionals directly involved in planning, managing and evaluating food assistance activities in Central America and Panama. These professionals are direct beneficiaries of INCAP's training, technical assistance, research and information dissemination activities, all aimed at improving their technical and managerial skills.

Annex J
Training Plan

Annex J

Training Plan

<u>Training Objective</u>	<u>Trainees</u>	<u>Type of Training</u>	<u>Duration</u>	<u>Location</u>	<u>US\$ Cost</u>
A. <u>STRATEGIC PLANNING/MANAGEMENT</u>					
1. <u>Strategic Planning</u>	Senior Staff	Annual Workshops	3-5 days/	Guatemala & CA	15,000
2. <u>Fiscal Management</u>					
Specialized Fin. Mgt.	3 Fin. Mgt. staff	Short courses	2-3 weeks/	U.S.	9,000
FM & MIS for Executives	15-20 INCAP managers	Workshop	3-4 days	Guatemala	2,500
3. <u>Information Management</u>					
Computer Networking	Up to 25 INCAP staff and Regional Reps.	2 Workshops	2 days/	Guatemala or C.R.	13,000
Communications Systems for Country Officers	Country Teams	7 Workshops	2 days/	Each member country	10,000
Data Bases, Classification Microsis & Library systs.	INCAP Library staff systems analysts & research.	3 Workshops	2.5 days/	Guatemala	10,000
Office Automation	INCAP secretarial and Admin staff	1 Workshop	2.5 days	Guatemala	2,500
Evaluation & Updating Info Strategy	INCAP Senior Staff & Info specialists	2 Workshops	1 day/	Guatemala	2,500
<u>Subtotal</u>					<u>\$ 64,500</u>

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Annex J

Training Plan

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<u>Training Objective</u>	<u>Trainees</u>	<u>Type of Training</u>	<u>Duration</u>	<u>Location</u>	<u>US\$ Cost</u>
B. TECHNICAL AND TECHNOLOGY TRANSFER CAPABILITIES					
1. Needs Assessment, Planning & Technology Transfer	15 HQ and 24 GTB Staff	In-service short courses	1 week	Guatemala	20,000
2. Annual State of the Art Technical Seminars	GTB Staff	Annual Workshops	3-5 days/	Guatemala	56,000
3. Basic Food and Nutrition	25 INCAP Staff	In-service short courses	1 week	Guatemala	18,000
4. Specific Technical Courses Amino Acids analysis; carotenoid analysis; lab quality control; qualitative data collection and cost analysis of health programs and services; communications.	INCAP staff	Short courses	Up to 6 weeks/	U.S.	45,000
5. Vitamin A	INCAP staff, CA Govt. & PVO Staff	Regional & National seminars	3-5 days/	Member countries	20,000
<u>Subtotal</u>					<u>\$159,000</u>

Annex J

Training Plan

(Page 3)

<u>Training Objective</u>	<u>Trainees</u>	<u>Type of Training</u>	<u>Duration</u>	<u>Location</u>	<u>US\$ Cost</u>
C. FINANCIAL RESOURCES DEVELOPMENT					
1. Marketing/Promotion Plans & Strategies	INCAP HQ & GTB Staff	Action Planning and Training Workshops	3-5 days/	Guatemala & Region	20,000
2. Skill Development in: proposal writing & dev.; negotiations; presentation & communications; budgeting.	INCAP HQ & GTB Staff	Workshops and Short Courses	1 week/	Guatemala & Region	35,000
3. Endowment Options Analysis	Senior INCAP Staff	Action Planning Workshops	3-5 days/	Guatemala	10,000
					<u>Subtotal \$ 65,000</u>
					<u>GRAND TOTAL \$ 288,500</u>

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Annex K

Illustrative Commodity Procurement Lists

Annex K

Illustrative Commodity Procurement Lists

(Page 2)

<u>Description</u>	<u>Total Estimated Cost (US\$)</u>	<u>No. Units</u>	<u>Project Year/Month</u>
Horizontal Shaker	1,000	1	1-3
Microscope	5,000	1	1-3
Ice-making machine	1,000	2	1-3
Osmometer	4,000	1	1-3
Multiple tip pipettes	1,200		1-3
pH Meter	1,800	2	1-3
Respirometer	8,000	2	1-3
Large Rotor for Sorval Centrifuge	1,000	1	1-3
Fiber Analyzer	10,000	1	1-3
Amino Acid Analyzer	30,000	1	1-3
Lipid Extractor	20,000	1	1-3
Ultrafiltration System	500	1	1-3
Vortex Mixer	400	4	1-3
Electric Protector	500	5	1-3
Voltage Regulator	1,000	2	1-3
<u>Subtotal Laboratory</u>	<u>\$195,000</u>		
<u>GRAND TOTAL</u>	<u>\$499,000</u>		

Annex K

Illustrative Commodity Procurement Lists

<u>Description</u>	<u>Total Estimated Cost (US\$)</u>	<u>No. Units</u>	<u>Project Year/Month</u>
<u>Computer, Video and Audio Equipment</u>			
Networking Software	2,000		1-4
Records Management Software	5,000		1-7
Dedicated Line to permit 9600 (instead of 1200b) with gateway cord and software	20,000	1	1-7
Internal connectors with modems	4,000	7	1-9
Work stations	5,000	7	1-9
LAN/WAN	220,000	1	1-9
BITNET	2,000		1-9
Library Acquisition Software	1,000		1-9
VGA Computer to Projector	14,000	7	2-2
	(2,000 c/w)		
Slide Printer	4,000	1	2-2
Color Printer	7,000	7	2-2
	(2,000 c/w)		
VGA Laptop coputer w/modem	20,000	10	1-12
	(2,000 c/w)		
<u>Subtotal C, V & A</u>	<u>\$304,000</u>		

Laboratory Equipment

Magnetic Stirrer	400	2	1-3
Analytical Balance	3,000	1	1-3
Single Plate Balance	1,500	1	1-3
Vacuum Pump	1,700	1	1-3
Extraction Pump	5,000	1	1-3
Effendorf Centrifuge	2,000	1	1-3
Computer and Printer	3,000	1	1-3
Conductivimeter	1,500	1	1-3
Cell Counter	30,000	1	2-1
Chronometer	250	1	1-3
Ladder	100	1	1-3
Spectrophotometer, including recorder and circulating bath	24,000	1	1-3
Flourometer	15,000	1	2-1
Power Source	2,000	1	1-3
Microplate reader	20,000	1	1-3
Blender	100	2	1-3

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Annex L

Initial Environmental Examination

Annex L

Initial Environmental Examination
or
Categorical Exclusion

Project Country: Central America (Regional)
Project Title: INCAP Institutional Strengthening Project (596-0169)
Funding: FY(s): 1992-1994. US\$: 4.0 million.

IEE Prepared By: Jeffrey W. Goodson
Regional Project Development Officer
Regional Office for Central American Programs (ROCAP)

JWG

Environmental Action Recommended: Categorical Exclusion

Summary of Findings:

The INCAP Institutional Strengthening Project (IISP) is a three year, US\$ 4.0 million institutional strengthening activity that will enable the Institute of Nutrition of Central America and Panama (INCAP) to (1) improve its ability to provide nutrition, child survival and food security services most efficiently provided at the regional level; and (2) improve the outlook for long-term sustainability of the institution. The IISP Project will effect these changes through provision of technical assistance, training and commodities in support of institutional planning, research, marketing and operations. No construction or other activities directly affecting the environment will be funded under the Project. This activity is eligible and recommended for Categorical Exclusion pursuant to the provisions of 22 CFR 216.2(c)(1)(i) and 22 CFR 216.2(c)(2)(viii).

Clearance:

Mission Director: Ronald H. Nicholson Date: 19 Dec. 1990

Concurrence:

Bureau Environmental Officer: Approved: _____
Disapproved: _____
Date: _____

Clearance:

GC/LAC Bureau: _____ Date: _____