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INCAP AND THE PRIVATE SECTOR:
COLLABORATION IN THE FIELD OF
ORAL REHYDRATION THERAPY

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During The Period:
July 12-19, 1986

TECHNOLOGIES FOR PRIMARY HEALTH CARE (PRITECH) PROJECT
Supported By The:
U.S. Agency For International Development
AID/DPE-5927-C-00-3083-00

AUTHORIZATION:
AID/S&T/HEA: 10/27/86
ASSGN. NO: DC 206

The Institute of Nutrition of
Central America and Panama (INCAP) and the Private Sector:
Collaboration in the Field of Oral Rehydration Therapy

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Guatemala City, Guatemala, C.A.
July 18, 1986

Table of Contents

	<u>Page</u>
1. Introduction and Scope of Work	1
2. The Institute of Nutrition of Central America and Panama (INCAP)	1
a. Charter	1
b. Purposes	2
c. Administrative Headquarters, Personnel, and Current Operating Budget	3
d. Organizational Structure	3
e. Rationale for Fostering Contact with the Private Sector	4
f. Involvement in Oral Rehydration Therapy Programs	6
3. INCAP Experience with the Private Sector	7
4. Services Needed by the Private Sector	8
5. Constraints to Effective Collaboration Between INCAP and the Private Sector	10
6. Conclusions and Recommendations	11

Attachments

1. Scope of Work	1
2. INCAP Organizational Structure: 1984	3
3. Bibliography	4
4. List of Contacts	5

The Institute of Nutrition of
Central America and Panama (INCAP) and the Private Sector:
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1. Introduction and Scope of Work. During the period July 10 through July 18, 1986 Dr. John B. Tomaro and Mr. Rodrigo Arce from PATH, the Program for Appropriate Technology in Health, visited Guatemala City to assess briefly the capacity and interest of the Institute of Nutrition of Central America and Panama (INCAP) to work with the private sector in the region on programs in oral rehydration therapy (ORT). In addition to reviewing selected materials summarizing the programs and defining the operating authority of INCAP, the consultants met with personnel of INCAP, the Regional Office of Central America and Panama, the Office of Health, Population and Nutrition of the Agency for International Development, and private sector firms to suggest and discuss activities that would be appropriate for INCAP to conduct with the private sector (see Attachment 1).

2. The Institute of Nutrition of Central America and Panama (INCAP).
 - a. Charter. According to its Basic Agreement, which went into effect on January 1, 1955, INCAP was founded on February 20, 1946 by the Republics of Costa Rica, El Salvador, Guatemala, Honduras and Panama, and the Pan American Sanitary Bureau (later the Pan American Health Organization) as a technical body responsible for promoting and encouraging the development of the science of

nutrition and its practical application in the Republics of Central American and Panama. This was to be accomplished by means of scientific investigations relating to the analysis of foodstuffs, nutrition surveys, clinical and biochemical studies, training of technical personnel, and collaboration with universities and agricultural institutions in the region, and other scientific groups in this field of work.¹

- b. Purpose. In its more than 35 years of operation, INCAP has conducted research and formal training programs and provided technical assistance on matters of food and nutrition to the governments of the member countries. In keeping with its initial mandate, as well as the program statement defined at its 32nd Meeting held in Managua, Nicaragua in 1981, INCAP has: 1) studied and suggested solutions to the food and nutrition problems of the region, 2) proposed plans, programs, and policies designed to resolve these problems, and 3) assisted in the implementation of the programs suggested. While much of the research and training conducted by INCAP has had a traditional, formal, academic orientation, the programs and policies they have proposed have been defined in practical terms and designed to be applied by the authorities of the member countries.

1. The Basic Agreement was accepted by Nicaragua on August 4, 1954.

- c. Administrative Headquarters, Personnel, and Current Operating Budget. The Government of Guatemala provides land and buildings that house the administrative offices and laboratories of the Institute. As of 1986 more than 200 persons constitute the technical and administrative staff of INCAP. Approximately 95% are stationed in Guatemala; the remainder are located throughout the region.

The member countries defray a portion of INCAP's operating expenses. In addition to annual contributions from the member countries, INCAP receives support from international and bilateral organizations and private foundations. The budget for 1986 is US \$5,149,152, of which US \$500,000 represents contributions from the member countries. PAHO's current annual contribution is US \$1,224,250. The amount remaining (US \$3,424,902) is projected to come from 11 different international or bilateral organizations or private corporations.

- d. Organizational Structure. Since 1984 INCAP has been organized as illustrated in Attachment 2. Of particular significance relative to the prospect of establishing effective collaboration between INCAP and the private sector of the region is the role of the newly established Planning and Development Unit. Headed by Lic. Solomon Cohen, this department reports directly to Dr. Luis Octavo Angel, the Director of INCAP, and is responsible for coordinating the marketing of the services available through, and the transfer of the technologies developed by, INCAP to

international, governmental, and private sector organizations. Since the Basic Agreement empowers INCAP to sell services and technologies, as long as it does not take ownership positions in the projects or corporations (i.e., become a shareholder), the Institute established the Planning and Development Unit to promote the capacities of INCAP and to generate the income needed to support current programs and to expand operations. This Unit is actively fostering the establishment of links between INCAP and the private sector, as authorized and directed by the member countries, and is assessing the Institute's capacity to be responsive to private sector objectives and manner of doing business.

- e. Rationale for Fostering Contacts with the Private Sector. A cursory analysis of economic activity in the region suggests that more than 80% is in the private sector. In the field of food and nutrition the private sector plays a central role in production, processing, marketing, and distribution. Over the years the private sector has benefited from the work of INCAP. Until recently, however, the results of much of INCAP's research and training activities have been promulgated and made available to the private sector through government programs and agencies. INCAP has developed and maintained contacts with private sector firms in past decades. The degree of contact has been at a rather low level.

In the last decade several governments of the region have begun to realize that, inspite of significant investments in food and nutrition programs, certain target populations--chiefly mothers, children under five years of age--and marginal groups continue to have inadequate nutritional status. Confronting a grave economic situation in the Central American region and yet eager to initiate or expand measures to ameliorate nutritional inadequacies in certain segments of the population, the governments have begun to foster the active participation of private sector firms and organizations in public sector health and nutrition programs.

INCAP has become increasingly aware that government programs alone are unable to redress nutritional problems. In addition, INCAP has recognized that the resources needed to continue its own programs are not readily available from public sector sources. The Institute has, therefore, played a role--perhaps haltingly and reluctantly--in advocating the adoption of a new policy that encourages the member governments to give emphasis and opportunity to private sector initiatives. At the same time, INCAP has put in place a mechanism by which the Institute itself can benefit from associations with the private sector. Current policy suggests that the effective involvement of the private sector can foster the fulfillment of the objectives of the Institute and provide INCAP with the financial resources needed to continue and expand its operations.

Since the current economic difficulties in the member countries make it difficult for private sector firms to export and import products and parts, to purchase services from outside the region, and to have access to new technologies, these firms are increasingly willing to work with the local governments and research institutes like INCAP. In their eyes, the governments offer markets for goods and services; INCAP offers technical services, and new technologies and processes. On the part of the governments, the firms, and INCAP, therefore, there is interest in increasing the degree of collaboration.

- f. Involvement in Oral Rehydration Therapy (ORT) Programs. The onset of diarrhea in infants and young children is in part the result of a nutritional imbalance (see the work of Drs. Jon Rohde and Norbert Hirschhorn). The frequency with which diarrhea episodes occur is often related to sanitary conditions and dietary practices. In addition, one effect of diarrhea, especially a severe episode, is to reduce the ability of the gastrointestinal system to absorb nutrients and to resist debilitating and life-threatening illnesses.

A comprehensive ORT program, one that contains the information and supplies needed to respond properly to the dehydrating effects of diarrhea, can prevent the onset of more serious illnesses (e.g., pneumonia) and speed recovery to good health. A comprehensive ORT program also offers health workers an opportunity to encourage proper feeding and nutritional practices

that can prevent the recurrence of the diarrhea. An ORT program is, therefore, an important adjunct to any food and nutrition intervention.

3. INCAP Experience with the Private Sector. While giving primary attention to defining, supporting, and evaluating public sector food and nutrition policies and programs, INCAP has, when invited by the member countries, worked with private sector firms to develop and promote products and processes beneficial to the inhabitants of the region. INCAPERINA, a cottonseed, flour-based food produced by Alimentos, S.A. of Guatemala and known throughout the region, is the best known example of the adoption and promotion by the private sector of a product that was formulated and evaluated by INCAP.

Recently, as part of its effort to market its technical expertise in nutrition to the private sector and to enhance its institutional capacity, INCAP has: 1) worked with a private sector firm in Guatemala on the development of ORS formulations, 2) begun to formulate a maize-soy food for private sector production and distribution in Honduras, and 3) participated with a development bank in the conduct of a study to assess the feasibility of establishing a privately owned food dehydrating plant for Central America. These initiatives have been carried out with the endorsement of the governments of the member countries and with the involvement of private sector production, marketing, and financial institutions.

The level of activity with the private sector has been relatively modest. The three ventures noted above fall within the mandate of INCAP and represent a heightened interest in establishing effective cooperation with the private sector. These new ventures have been assessed according to the extent to which any given product, technology, or project is determined to be economically and financially viable. This approach differs significantly from past activities with the private sector. For example, the production of INCAPERINA is heavily subsidized by Alimentos, S.A. Given INCAP's current method of assessing products, INCAPERINA would probably not be selected for development, production, and distribution today.

4. Services Needed by the Private Sector. INCAP has the ability to contract the services of its scientific staff and laboratories to provide technical and technology transfer services to the private sector. INCAP could also facilitate the involvement of private sector companies in oral rehydration programs in the region. Several companies have indicated an interest in producing salts and are actively seeking assistance in formulation, raw material validation, and final product testing.

INCAP could contract with the private sector to provide the following technical services:

- a. Quality Control services to private industry including analysis of raw materials (e.g., glucose, sucrose, trisodium citrate,

potassium chloride, sodium chloride), validation of manufacturing processes, and testing of finished goods (ORS sachets);

- b. Development of protocols of analysis of new and existing formulations required for Board of Health (BOH) registration;
- c. Assistance in the development of new and improved formulations of oral rehydration salts (e.g., "super ORS," ORS tablets, flavored and colored presentations);
- d. Serving as an official pharmaceutical "reference" laboratory for the Central American region in cases where there are disputes or discrepancies between the testing results of the public sector laboratory and the private sector quality control departments; and
- e. Assistance in the conduct and evaluation of clinical and acceptability trials of existing and new ORS formulations.

Through joint venture arrangements with development banks and pharmaceutical or food processing firms, INCAP could play a pivotal role in facilitating the development and/or evaluation of new technologies and their adoption in the region. INCAP could work with private industry to design products and processes that are cost-effective and appropriate for the region, and can replace existing, costly technologies.

In addition, INCAP could join with financial institutions and pharmaceutical producers to conduct studies on the feasibility of establishing plants in the region that could produce the raw materials used in the manufacture of ORS. A study of the feasibility of producing anhydrous glucose, the largest single component of ORS, is badly needed. Studies assessing the feasibility of producing other ingredients or the packaging materials used in ORS would be of interest to the banks interested in fostering economic growth in the region, and to the private sector producers interested in new products and procedures, as well as utilizing fully existing equipment and facilities.

5. Constraints to Effective Collaboration Between INCAP and the Private Sector. While there is increasing interest on the part of INCAP and private sector firms in working together, certain perceptions need to be removed before collaboration can be effectively achieved. INCAP acknowledges the need to diversify its revenue sources. Private sector firms are logical customers for INCAP services. However, INCAP fears that the private sector is not interested in obtaining expertise but in acquiring credibility or prestige for products and processes. Many of the staff of the institute, who see themselves as researchers and academicians, are reluctant to embrace the private sector. The commercialism of the private sector represents a threat to the integrity of the quasi-academic program.

The private sector also has reservations about associating with INCAP. While acknowledging that INCAP has valuable technical

expertise and a high degree of credibility in the region, the private sector charges that the services of INCAP are "too expensive," that the studies proposed are too long, and that the results are without practical application. The private sector is interested in establishing links with groups that can conduct applied research quickly and cost-effectively. INCAP is considered nonresponsive to the needs and objectives of some private sector firms.

6. Conclusions and Recommendations. Evidence suggests that INCAP and private sector firms can benefit from collaboration. INCAP offers the private sector badly needed expertise and a more thorough involvement in regional programs in food and nutrition. The private sector offers INCAP fees for services and the opportunity to expand its influence in the region beyond the public sector. While acknowledging a mutual need, constraints to cooperation (different perceptions and operating styles) need to be overcome.

The field of oral rehydration therapy may offer an opportunity to establish effective collaboration between INCAP and private sector producers. Private pharmaceutical and food processing firms are interested in acquiring new products and in increasing market penetration. A social product like ORS represents an opportunity for a company to increase brand recognition among consumers. Access to firms with the capacity to produce and distribute the required salts offers INCAP and the governments of the member countries the opportunity to mount and maintain effective ORT programs.

Given the degree of interest in working together, it is recommended that INCAP approach private sector firms (nationally owned firms) in the region and assess the extent to which each has an interest in manufacturing ORS or in having access to the raw materials used in ORS.² In the course of contacting the firms INCAP should define and estimate the cost of the services it is willing to make available. Since INCAP has experience in working with one private sector firm on oral rehydration salt production, this effort is a continuation of an existing activity. If developed systematically, this effort could succeed in: 1) fostering the further implementation of oral rehydration programs in the region, 2) leveraging the resources of the private sector to heighten the impact of public health programs, and 3) enhancing the organizational effectiveness of INCAP.

2. Before approaching the firms INCAP will probably need to secure the approval of the governments of the member countries.

Attachment 1: Scope of Work

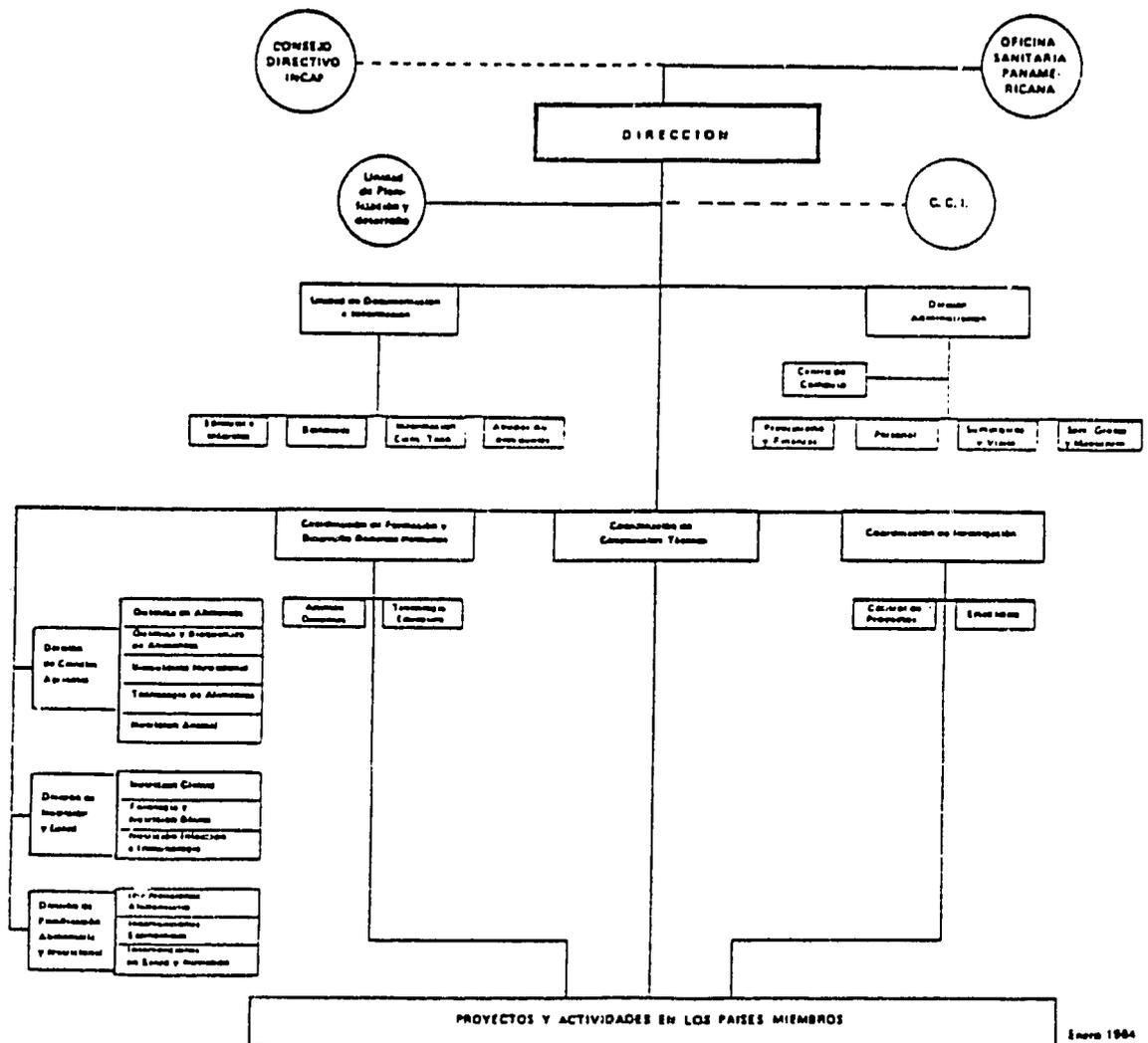
The Institute of Nutrition of
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Outline

- a. PRITECH consultants and the term of the assignment in Guatemala:
John B. Tomaro (July 14-18, 1986) and Rodrigo Arce (July 10-11, 14-16, 1986) from PATH.
- b. Tasks defined by Dr. Polly Harrison of PRITECH:
 1. Review literature on INCAP with special emphasis on materials empowering INCAP to work with the private sector, e.g., Proyecto de programa y Presupuesto para el Año 1986.
 2. Define areas of INCAP involvement with the private sector in Oral Rehydration Therapy (ORT) programs.
 3. Review suggested areas of association with:
 - a. INCAP personnel: Dr. Hernan Delgado, Lic. Solomon Cohen, Lcda. Mirella Palmieri.
 - b. AID and ROCAP personnel: Ms. Liliana Ayalde, Ms. Elizabeth Burleigh.

- c. Representatives from several private sector pharmaceutical and food processing firms: Alimentos, S.A., Lancasco, S.A., Adamed, S.A.
4. Prepare a brief paper incorporating the findings and recommendations that can be used to develop an ORT project involving INCAP and the private sector.

Attachment 2: INCAP Organizational Structure: 1984



Enero 1984

Attachment 3: Bibliography

Basic Agreement of the Institute of Nutrition of Central America and Panama.

The Institute of Nutrition of Central America and Panama, Guatemala, C.A., 1978.

Institute de Nutricion de Centro America y Panama, Proyecto de Programa y Presupuesto para el ano 1986, XXXVI Reunion del Consejo, San Salvador, El Salvador, Agosto, 1985.

Instituto de Nutricion de Centro America y Panama, Tecnologia Para El Desarrollo, Unidad de Planificación y Desarrollo, Guatemala, 1984.

Attachment 4: List of Contacts

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