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I. PROJECT IDENTIFICATION

1. PROJECT TITLE

AGRICULTURE AND NATURAL RESOURCES
TECHNICAL SUPPORT

APPENDIX ATTACHED

YES NO

41p.

2. PROJECT NO. (M.O. 1025.2)

515-11-199-122

3. RECIPIENT (specify)

COUNTRY - COSTA RICA

REGIONAL INTERREGIONAL

4. LIFE OF PROJECT

BEGINS FY 75

ENDS FY 78

5. SUBMISSION

ORIGINAL **May 23, 1978**
DATE

REV. NO. _____ DATE _____

CONTR./PASA NO. _____

II. FUNDING (\$000) AND MAN MONTHS (MM) REQUIREMENTS

A. FUNDING BY FISCAL YEAR	B. TOTAL \$	C. PERSONNEL		D. PARTICIPANTS		E. COMMODITIES \$	F. OTHER COSTS \$	G. PASA/CONTR.		H. LOCAL EXCHANGE CURRENCY RATE: \$ US (U.S. OWNED)			
		(1) \$	(2) MM	(1) \$	(2) MM			(1) \$	(2) MM	(1) U.S. GRANT LOAN	(2) COOP COUNTRY		
										(A) JOINT	(B) BUDGET		
1. PRIOR THRU ACTUAL FY													
2. OPRN FY 76	300			20	21	17	5	258	122				
3. BUDGET FY 76		NOTE: A PROP revision will be											
4. BUDGET +1 FY 77		submitted for future year											
5. BUDGET +2 FY 78		funding											
6. BUDGET +3 FY													
7. ALL SUBQ. FY													
8. GRAND TOTAL													

9. OTHER DONOR CONTRIBUTIONS

(A) NAME OF DONOR	(B) KIND OF GOODS/SERVICES	(C) AMOUNT
N/A	N/A	N/A

III. ORIGINATING OFFICE CLEARANCE

1. DRAFTER TAMcKee/ASayagués/MWLau	TITLE Chief Institutional Dev. Division Program Officer	DATE
2. CLEARANCE OFFICER Joe J. Sconce	TITLE Rural Development Officer A. I. D. Affairs Officer	DATE

IV. PROJECT AUTHORIZATION

1. CONDITIONS OF APPROVAL

2. CLEARANCES

BUR/OFF.	SIGNATURE	DATE	BUR/OFF.	SIGNATURE	DATE

3. APPROVAL AAs OR OFFICE DIRECTORS

SIGNATURE	DATE
TITLE	

4. APPROVAL A/AID (See M.O. 1025.1 VI C)

SIGNATURE	DATE
ADMINISTRATOR, AGENCY FOR INTERNATIONAL DEVELOPMENT	

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The purpose of this document is twofold:

1. To initiate PROP documentation for project 515-11-199-122 (Agriculture and Natural Resources - Technical Support). This new project is established pursuant to instructions contained in STATE 20951 of January 29, 1975. (See FY76 Congressional Presentation).
2. To obtain the allotment of the remaining \$83,000 for FY75 whose approval had been deferred pending clarification of the use of these funds for evaluation and studies of the agricultural sector and to request an additional \$20,000 now needed to complete funding requirement for nutrition sector assessment.

Pursuant to the above, this new project contains the activities which had been approved under revision No. 5 to the PROP for project 515-11-140-038 (Agricultural Development).

Due to the time constraint with the upcoming termination of fiscal year 1975, the USAID at this time is submitting this document for the purpose of obtaining the \$83,000 ^{1/} required to do the agricultural sector studies defined herein and the additional \$20,000 indicated above. The USAID will present to AID/W in the month of August a PROP revision outlining the funding requirements and proposed activities to be covered over the period FY76-78.

The following is a description of the two activities the USAID proposes to finance with the FY75 funds requested herein:

PART A - Agricultural Information Package

During recent Merrill/Anschel TDY, the Mission was able to establish a total package of its information needs in the areas of evaluation/research using grant, loan and other funding sources. This package (detailed below) will provide AID/CR with the information it needs for the evaluation and planning of its present and future program activities. Each of the components is independent of the others in the sense that, with minor modifications in design, each could be carried out without undertaking the others. They are inter-dependent, however, in the sense that the total value of a given component depends on whether or not other components are completed. In other words, completion of a second component does more than just add to the first component's value; it multiplies the value of previously obtained information.

^{1/} For breakdown of this figure see Input Section in attached Appendix A.

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The four major components are:

- I. Target Man Profile
- II. Rural Development Program Evaluation
- III. Progress Measurement Data
- IV. Special Studies

Each of these components requires its own type of input. In terms of sequencing the Mission will first focus on the "target man profile" questions and utilize this information in answering "program impact" questions and developing more responsive programs. This does not imply, however, that one component of the package has to be completed before starting another.

I. Target Man Profile

The target group here in Costa Rica has not yet been precisely defined, nor is there good quantified information about this group available to USAID and GOCR in order to measure the impact of development programs. The recent (1973) Census, especially the Agricultural Census, contains a wealth of information about the poor in Costa Rica, but only a small part of the information has been published. The remainder can be obtained through special tabulations. There is an unusual opportunity to build an extremely comprehensive profile of the census characteristics of the target group. The 1973 Census can be compared with the 1963 Census to determine how the situation of the target group has changed and to provide a basis for projecting future changes.

The Mission proposes to carry out this work beginning as soon as possible with the \$83,000 in FY 1975 funds remaining under the evaluation section of the Agricultural and Natural Resources Technical Support Project (515-11-199-122). The work would be completed in two phases. The first phase, that of computer tabulations of the 1963 and 1973 Census Data, would be done by the University of Florida at their Latin American Data Center where the C.R. Census data is already on tapes. Cost of this phase is estimated at \$50,000 - work to be completed within 9-12 months. The second phase would be a review and analysis of raw data output of first phase to be carried out by local consulting group within 3-6 months for \$33,000.

Attached is a draft of the Target Man Profile study being proposed. (See Appendix A.)

II. Rural Development Program Evaluation/Assessment

Rural development program evaluation encompasses the assessment of the impact of the rural development programs in which AID is directly involved, i.e. loans O22 and O25. There have already been several evaluations of O22 loan and specific components of the loan and CAN/AID are currently gearing up for a termination evaluation

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of this activity. However, many elements of loan 022 were closely related and make it difficult to measure the impact of specific components on the target group and, in the existing situation, either impossible or extremely costly given the lack of baseline data and the "institutional building" emphasis of many of the loan components. Similarly Loan 025 includes a heavy institution building emphasis and much of it does not have direct impact on the target group. This increases the difficulty of measuring program impact. The USAID and the involved institutions are, however, attempting to devise techniques to measure this impact while they continue direct evaluation of stated project purposes. Evaluative activities under this section will be loan funded, out of the \$200,000 available under 025 and will be carried out during the next three years.

III. Progress Measurement Data

The possibilities of using area frame sample techniques to obtain better estimates of annual agricultural production is being considered by the GOGR based on a proposal by ROCAP/USDA/PASA to provide technical assistance in this area. These techniques also can be used (a) to periodically up-date the rural poor profile, (b) to provide part of the information required for the rural development program assessment, and (c) to obtain data needed for special studies. In other words, area frame sampling can be used to provide new information (on an annual basis) which would not only add to but would also increase the value of the other information components. The progress measurement data which could be obtained from area frame sampling would especially complement the rural development program assessment.

Area frame sampling is a methodology by which randomly selected areas are sampled to provide estimates of the total national (or regional) production. The first step is to classify land into strata according to land use or physical characteristics. This can be done using topographic maps prepared from aerial photos. Once the land strata are defined, each stratum is divided into count units. Count units are simply contiguous areas of land, usually less than 20 square kilometers, within one stratum. Sample units are then defined, usually less than 2 square kilometers, within the count units and an appropriate number of sample units are then selected randomly. The exact sample design depends on the degree of accuracy desired and the characteristics of the stratum being sampled. Contact photographs of the selected sample units are then prepared in order to more precisely define their boundaries to help field enumerators in locating them from the ground. The results of the field surveys are then expanded to provide national estimates. The use of a systematic replicated sample makes it possible to estimate the reliability of the information obtained.

Area frame sampling is a low cost technique which can be used to obtain many types of information in addition to production data. The information which one wants to obtain determines how land strata are defined and how the sample areas are selected.

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The progress of a rural development program can be measured by the changes in the well being of rural residents. These changes may be measured in physical terms such as (a) more real income, (b) higher crop yields, (c) more land in production, (d) improved housing facilities OR in terms of opinions of rural residents as to whether or not they are better or worse off this year than last. It also should be possible to obtain information on why certain changes are taking place. Higher crop yields may be due to better weather, the use of more fertilizer, improved seed, advice from extension agents, etc. Field questionnaires can be used to determine if farmers received credit from a government agency, were visited by an extension agent, had received medical assistance from a new health facility, etc.

Properly designed the area frame sample could be used (a) to monitor the progress being made by the target group, (b) to determine the target group awareness to specific government programs, and (c) to assess how the various government programs are affecting the target group decisions or welfare.

What is proposed here is to design an area frame sample and questionnaire in such a way as to obtain reliable information on the rural poor each year in order to assess the progress being made by rural development programs in general. This information component is not intended to provide information for complete evaluations of specific programs or to measure the impact of AID supported activities specifically. It should, however, provide some extremely useful information concerning the rural poor's level of awareness of various types of programs and policies the rural poor are most aware of and how these programs are affecting their well being.

Funding for this activity (a ROCAP/USDA/PASA proposal) is contemplated from the GOCR and possible TAB and/or ROCAP assistance. It is estimated that this package could be institutionalized within 18 to 24 months. The initial work of designing the area frame sample and associated questionnaires should take about a year at a cost of \$10,000 from the above-mentioned sources.

IV. Special Studies

The USAID has developed a series of questions of interest to all entities working in development in Costa Rica. For example the following, which may not be fully answered by the information gathered in Sections I, II and III.

- a. What role do women play in Costa Rica's rural development?
- b. What effect do land titles have on small farmers' welfare?
- c. What impact did the rural credit program have on small farmers' production decisions?
- d. How do government price policies affect small farmers income?
- e. What are the most important factors affecting farmers' decisions to utilize modern inputs and adopt new production technologies?
- f. What is the national status of selected sub-populations?

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A substantial amount of flexibility is needed in the funding and scheduling of special studies. Additional questions may arise during the implementation of the O25 loan or as the information components discussed previously are undertaken. The priorities which AID/CR and the GOOCR assign to specific studies is likely to change over time. The opportunities for effectively carrying out some of the studies depends to a large extent on the availability of data and the specific talent required to do the studies. The need for some of the studies will also change as more information about the rural poor becomes available and as GOOCR rural development programs change.

USAID is trying to interest the U.N. group here, the local IDB and OAS representatives, TAB, PVOs through OFGs, and the GOOCR in carrying out some of these studies. However, in those cases where no other alternative is available, the USAID will request grant funding over the next 2-3 years at a total cost of approximately \$100,000.

Action Requested:

USAID requests AID/W reaction to total information package concept. Since Section I, Target Man Profile Phases one and two, requires quick approval in order to obligate FY 1975 funds request decision on this section ASAP.

PART B - Nutrition Sector Assessment

During the past two weeks a team of AID/W, Mission and GOOCR personnel have prepared a scope of work for the nutrition sector assessment to be undertaken during the months of June to September 1975. Based on the results of the draft scope of work, it is now estimated that the assessment will cost \$50,000. The USAID has already obligated \$30,000 for this purpose. An additional \$20,000 are therefore required to perform entire assessment.

Attached is the scope of work in which a budget breakdown is included. The assessment work described in the attached document will focus on the analysis and interpretation of available information from surveys, government and private sector programs and health and nutrition research.

Action Requested:

USAID requests increase in FY75 allotment to this project in the amount of \$20,000 for a new total of \$300,000.

AID/W is requested to respond quickly in order to enable obligation of these additional funds before end of fiscal year.

PART A
APPENDIX A
A PROFILE OF THE TARGET MAN
OBJECTIVES

Goal

To strengthen rural development program planning, implementation and evaluation strategies in the GOCR and AID/CR.

Purpose

To increase the understanding and knowledge of the needs, characteristics, and resources of the rural poor in Costa Rica.

Outputs

Phase A

1. An analysis of the 1973 Census of Population to determine the characteristics of the rural poor and to delineate sub-groups among the poor.
2. An analysis of changes in the characteristics, conditions, and resources of the poor, 1963-1973.
3. A description and analysis of the economic and agricultural activities of the poor.
4. Projection of the number, income, and resource base of the poor in 1983.

Phase B

5. Description and analysis of some conditions, characteristics and activities of the poor which the data utilized in Phase A does not permit.
6. Description and analysis of developmentally related components of rural poor's attitudes, aspirations and voluntary organization participation.

7. Description and analysis of the communication networks between the rural poor and government agencies and authorities in Costa Rica.

RATIONALE

AID program objectives as specified by the Congressional Mandate are to assist the poor to obtain a sufficient and adequate diet, necessary health care, a practical education and productive work. In this manner it is hypothesized that the poor majority will be drawn into the development of their own countries, distribution of wealth will be broadened and growth rates will be increased in a manner consistent with greater social justice and improved quality of life. The Congressional Mandate and the objectives of the government of Costa Rica are consistent. Through such diverse programs as agricultural credit, rural infrastructure development, rural industrialization, rural electrification, agricultural research, and revised grain price policies, GOCR is making a significant effort to reach the poor and the rural poor.

AID/CR's and GOCR's efforts to meet the challenges of reaching the rural poor are substantially hampered by the need for more concrete and detailed knowledge of the target population. Effective programming requires knowledge of their needs, conditions, economic activities, social organization, political role, and attitudes and aspirations. Armed with this knowledge effective and efficient programs can be designed that provide appropriate outputs which assist the target population to achieve its goals.

Much of the necessary information already exists in Costa Rica, some of it well analyzed and broadly distributed. But it is diffused in numerous data sets, books, studies, research reports, and dissertations. A portion is available in English only. The literature has yet to be brought together and analyzed from the perspective of aiding the rural poor. In addition a new source of information, the 1973 Censuses of Population, Housing, and Agriculture have not been analyzed for their information about the target population. This excellent data base provides an unique opportunity for improved understanding of the target population. By analyzing it and integrating it with other informational sources a broad and accurate picture of the rural poor can be created. The information about the rural poor which will be organized and analyzed in this study can be classified in five categories:

- (1) Demographic characteristics
- (2) Economic activities and status
- (3) Voluntary organizations, aspirations and attitudes
- (4) Communication processes between the poor and the government
- (5) Levels of consumption and living

This information will permit AID/CR and GOCR to:

- (a) more accurately assess the conditions characteristics, and resource base of the rural poor so that programs can be tailored to the needs of the target population,

- (b) design their programs in a manner consonant with the target population's objectives, knowledge, attitudes, geographic distribution, and social patterns,
- (c) adjust the content of existing programs, and
- (d) utilize the profile for constructing base-line data for program evaluation.

Aside from AID/CR and GOOCR, others including regional development planners, extension agents, researchers, commercial credit managers, local government agencies, health and nutrition planners, marketing and input suppliers in the private sector, and cooperative managers will find this study to be an invaluable source of information.

This project can be carried out in two phases. The first, Phase A, will utilize available Census data to provide analyses of the demographic and economic characteristics of the rural poor (outputs 1-4). After completion of Phase A, the results of this effort will be integrated with other existing economic, political, and social data sets to provide an overview of the totality of the rural poor situation.

METHODS

Phase A

Definitions

The rural poor, as defined by AID, are those persons who live in rural areas whose family's per capita income is less than \$150 per annum in 1969 dollars.

This definition may not be the most useful one for Costa Rica. The contractor will develop an appropriate definition after discussions with GOCR agencies, AID/CR, and an analysis of the Census classifications.

Data

Primary data sources are the Censuses of 1963, and 1973. These will be supplemented as appropriate with such information as soil classification, distribution of government services such as extension agents, and credit cooperatives, and data from the baseline credit study. The linked form of the 1973 Census of Population, Housing, and Agriculture should be utilized.

Description

The profile of the rural population to be developed in Phase A will include the following major components: demographic characteristics, consumption levels, economic status, employment and unemployment, and agricultural activities. In order to permit assessment of change in the rural sector, trends over the two censuses - 1963, and 1973 will be presented. Descriptive data will be presented for at least three levels of aggregation. It is proposed that these be nation, region, and canton. Final determination of the levels of aggregation will be based on discussions between the contractor, AID/CR and GOCR. Criteria will include the informational needs for planning of the GOCR, the degree of homogeneity over space, and relative cost.

An illustrative content outline is appended to provide greater detail about the study. It is not intended as a final outline but only as a working document.

Analysis

The analysis to be undertaken in this project phase will result in better understanding of the rural population's conditions, levels of living, and behavioral patterns. It will also provide some insights into activities which will contribute to the achievement of GOCR and AID goals of greater social equity and a more productive and dignified life for the rural poor.

Although the primary analytical tools will be cross-tabulation, and trend analysis, some questions may require the use of analysis of variance, correlation analysis, and other statistical techniques.

Questions to be answered by this analysis will include:

(a) To what extent do the rural poor have income sources outside agriculture, and how much? What characteristics of the target population increase the probability of off-farm employment? Where are off-farm employment opportunities greatest, in which industries?

(b) Are there major sub-groups of the rural poor which can be identified such as small farmers, tenants, sharecroppers, and landless laborers? How do these groups differ in characteristics, income, location, etc.? Have their number increased or decreased?

(c) What are the major crops of the poor farmer and tenant? What resources do they utilize-land, irrigation, machinery, fertilizer? How are yields related to farm size, fertilization, irrigation location, tenancy mechanization, education, family size, off-farm employment, literacy? How does farm size relate to tenancy classifications, mechanization, location? How have farm size, production patterns, and fertilizer use changed over time?

(d) What is the income of rural people? What is the relationship between income and farm size, off-farm employment, tenancy, education, access to public utilities, quality of housing, ownership of consumer durables, hours worked per week, schooling, literacy? How has income changed over time?

(e) How do the recipients of agricultural credit differ from the general population of farmers in terms of farm size, characteristics, farm tenure, crops, production, education, etc.? Are credit sources located in areas of high small farmer concentrations?

(f) Are the MAG extension offices located in areas of small farmer concentration? What evidence does the Census provide that small farmers are responding to MAG educational programs? What does this data imply about the emphasis in MAG extension programs?

Undoubtedly numerous other questions can be answered by the Census data. The contractor after discussions with MAG and other offices of GOCR, AID/CR and study of the Census will supplement the above prior to initiation of analysis. The extent to which this study will provide useful and meaningful information depends on the skill, initiative, and imagination of the contractor.

Projections

As a source of further understanding of Costa Rican rural development priorities, projections to 1983 of key variables will be made. These include:

- (a) Rural population by region based upon population growth rates, and migration patterns.
- (b) Rural poor population by region and by sub-group based on population growth rates, and migration patterns.
- (c) Rural incomes by region and by income source based on income trends.
- (d) Number of farms by region based on trend data.
- (e) Mean farm size by region based on available arable land, farm number projections.
- (f) And others to be specified by AID/CR and GOCR to be specified prior to initiation of the study.

Phase B

Data

Phase B will entail a review and integration of existing data, public documents and studies related to the rural poor in order to supplement the Census analysis. Major existing data include recent studies by IFAM, and the Ministry of Health. In addition, research available from the University of Costa Rica, MAG, IICA, and other appropriate studies and data will be utilized. Records of Costa Rican ministries and public agencies will be utilized. No attempt will be made to collect primary data.

In addition to the Census the following are a few examples of available information sources:

John A. Booth, "Characteristics of the Target-Man in the Peripheral Regions of Costa Rica," prepared for the Instituto de Fomento y Asesoría Municipal de Costa Rica by AITEC, a division of ACCION International, March 1974.

AITEC, ACCION International Técnica, Tipología de Comunidades (San José: DINADECO, 1973). (Tres Volúmenes).

AITEC y IFAM, Estudio de Servicios Básicos en 30 Cantones, Departamento de Planificación, San José, 1974.

Academia de Centro América, "Primera Evaluación Programa de Desarrollo Agropecuario Nacional," DOC-CAN-110 Mayo de 1972.

ATAC, "Programa de Desarrollo Agropecuario", Ministerio de Agricultura y Ganadería, CAN-205, 1973, (dos volúmenes).

Anonymous, Preliminary Results Survey of Clients of the National Banking System, November 1973.

Analysis

The economic dimensions of the rural poor profile unavailable in the Census include:

- (a) quantity and cost of agricultural inputs, particularly labor, insecticides, and seeds used by small farmers;
- (b) regional variations in costs and returns of selected farm enterprises;

- (c) seasonal and disguised employment in rural areas;
- (d) all aspects of input and product markets including access, efficiency, and structure, and
- (e) incomes of the self-employed.

Information about these categories and others which may become apparent in Phase A will be sought and analysis of them will be carried out for their implications for rural development activities.

The Census provides an excellent source of information about rural housing and some detail on the availability of public utilities and ownership of consumer durables. Additional information which are available from other sources are food consumption and access to medical services. These will be described and analyzed in conjunction with the Census data.

The mechanisms for interaction between the rural poor and various government agencies and authorities are of major importance. Information and resource flow moves in two directions, from government to citizen and vice versa. This portion of the study will describe how government policy and planning is influenced by the target population. This will be considered at several levels of aggregation: local, regional, and national. Understanding of the process by which the needs and preferences of the rural poor are communicated to the government will result.

Similarly, the structures and organizations through which resources and information flow from government to the rural population will be detailed. To the degree that such information is accessible the number of contacts will be reported. Much of this data is public and available from ministry files. No attempt will be made in this context to access the quality of such interactions.

Phase A provides very little information about those aspects of social organization of the rural poor which are of substantial interest for rural development project design and implementation. In Phase B the following will be analyzed: rural voluntary organizations, aspirations and goals of the rural poor, and attitudes of the rural poor.

To the extent they exist, voluntary organizations afford an entry point for governmental educational programs. Phase B of this study will review the number and types of social organizations, their membership, leadership, purposes, activities, and structure to assess their potential as vehicles for rural development outreach programs.

Ultimately motivations and aspirations dictate the impact of any intervention among the rural poor. Only those efforts which permit the rural poor to achieve their goals will be successful. Moreover understanding of the aspirations of the poor must be considered when designing program processes as well as outputs. Program mechanisms must be consistent with the aspirations of the poor and the traditional social mechanisms for achieving those aspirations.

Sociological, psychological and anthropological literatures and studies of the rural population of Costa Rica will be reviewed and integrated for an understanding of aspirations and mechanisms for achieving status within society. Implications for rural development efforts will be assessed.

Finally literature on attitudes of the poor will be reviewed. Of obvious interest are attitudes toward:

- (a) The role of children
- (b) Contraceptive and birth control
- (c) Fatalism and optimism
- (d) Modernism
- (e) The government land and agriculture
- (f) Credit
- (g) Men toward women and vice versa

The contractor will review the existing literature and summarize and evaluate its implications.

IMPLEMENTATION PLAN

Phase A

1. During first three months of the project the contractor will plan the details of the study. Discussions with GOCCR and AID/CR will provide him an understanding of the uses for the study results, the areas of analysis requiring greatest emphasis, and the forms in which the results should be presented. Data will be assembled and specific plans made for its analysis and release. A detailed work plan will be prepared specifying:

- (a) Use of the results as anticipated by GOCR, AID/CR, others
- (b) Data
- (c) Analysis
- (d) Publication plans including outlines
- (e) Components of the profile which will not be obtained in the census

data

See Appendix B for a more detailed outline

The project manager will review the work plan and provide comments within ten (10) days of its receipt.

2. Analysis will require five to six months. At the end of four months a brief progress report will be submitted simply reporting the extent to which the analysis has been completed.
3. The remaining three to four months will be utilized to prepare reports of the findings. The contractor will prepare a final report suggesting topics for further study. Drafts of the reports of findings will be submitted to AID/CR for review and will be returned with comments within 15 days. The contractor will submit final copies within 30 days.

Phase B

1. This phase can be initiated as Phase A nears completion. It must await completion of the basic computer runs because the investigators will need to incorporate this data into their analysis. The first three months will be utilized

to search out sources of information and plan the analysis. At the end of three months a progress report will be submitted for approval detailing data sources and outlining reports to be prepared. Comments on the work plan will be provided the contractor within ten (10) days.

2. Draft manuscripts of the results of the study will be submitted for approval to AID/CR. Comments will be provided within fifteen (15) days. All study reports should be completed within four months.

INPUTS

Phase A

Economists - Analysts

Project planning	4.5 man-months
Analysis	9 man-months
Report preparation	4.5 man-months

Computer programmer (1/4 time planning- 1/2 time analysis)	4 man-months
Editor (full time report preparation)	3 man-months
Clerk (1/2 time)	6 man-months
Secretary (1/2 time)	6 man-months

Computer time and tapes
Supplies and Telephone
Office Rent and Utilities
Travel
Books, Reports, Xeroxing

Phase B

Economist - Analyst	7 man-months
Social Scientist - Analyst (Sociologist or Anthropologist)	7 man-months
Secretary (1/2 time)	3.5 man-months
Editor	4 man-months

Rent and Utilities
Supplies and Telephone
Travel
Books, Reports, Xeroxing

APPENDIX B

PLAN OF WORK - PHASE A

A. Informational Needs of GOCR and AID/CR

1. Content
2. Form

B. Definitions

1. Rural
2. Poor
3. Small farmer
4. Tenant
5. Sharecropper

C. Data Base

1. Censuses
 - Reliability
 - Comparability
 - Completeness for this purpose
2. Credit Baseline Survey
 - Reliability
 - Comparability with Census data
 - Completeness for these purposes
3. Other

D. Analysis

1. Methods
2. Limitations for Hypothesis Testing

E. Publication Plans

1. Form
2. Outlines

APPENDIX C

The following is an outline of the major subject matter components to be studied in Phase A of this project. It is not intended to outline a final report which must be presented in a form useable to GOCR and AID/CR

I. Who Are the Rural Poor?

A. The Rural Poor - Characteristics

1. Population distribution in Costa Rica

- a. Rural vs urban - 1963-1973
- b. By region - 1963-1973
- c. By canton - 1963-1973

2. The Rural Poor in Costa Rica - 1963, 1973

- a. National by age, sex, income, marital status, family size
- b. Regional by age, sex, income, marital status, family size
- c. Canton by age, sex, income, marital status, family size

3. Education in 1963 and 1973 by National, Regional, Canton for total population and rural poor

- a. School years completed - adult population by age, sex
- b. Literacy of adult population by age and sex
- c. School enrollments of school age population by age (or grade) and sex
- d. Special school enrollments by type

4. Population growth and mortality - total population, rural poor 1963 and 1973

- a. Crude birth rates by nation, region, canton
- b. Crude death rates by nation, region, canton
- c. Life expectancy by nation, region, canton
- d. Total fertility rate by nation, region, canton
- e. Infant mortality rate by nation, region, canton

5. Migration - total, rural poor populations -1963 and 1973
 - a. Population living in region, canton other than one of birth
 - b. Population having moved last 5 years
- B. Consumption and level of living - total and rural poor population 1963 and 1973
 1. Housing by nation, region, canton
 - a. Construction materials - roof, walls, floor
 - b. Number of rooms by family size
 - c. Number of bedrooms by family size
 2. Water supplies and sewage systems by geographic units
 - a. Piped - private, group
 - b. Well
 - c. Fountain
 - d. Other
 3. Public utilities
 4. Consumer durables
- C. Groups Within the Poor - Small farmers, tenants, sharecroppers, other - 1963 and 1973
 1. Location
 2. Income
 3. Age, sex, marital status, family size by nation, region, canton
 4. Education
 5. Population growth rate
 6. Migration
 7. Consumption

II. Income and Employment

- A. Sources of Income, 1963 and 1973
 1. Occupation by nation, region, canton, education, sex, age
 2. Industry by nation, region, canton, education, sex, age

B. Unemployment, 1963-1973

1. By geographic units, age, sex, occupation, education

C. Wage rates, 1963-1973

1. By nation, region, industry, occupation, age, sex, education

III. The Rural Poor in Agriculture 1963-1973

- A. Tenancy status by geographic units, age, soil type, education, family size

- B. Size of farms, by tenancy, geographic units, soil type

- C. Land use by geographic units, tenancy

- D. Crop acreage and production by geographic units, tenancy

- E. Use of machinery by tenure patterns, farm size, geographic units, age, education, sex

- F. Use of fertilizers by farm size, tenure, geographic

- G. Access to credit - credit users vs. entire population for total production, other employment, size of farm, crops, education, geographic distribution, use of fertilizer

- H. Access to credit - distribution of credit banks and coops in relationship to distribution of the poor farmer

- I. Yields by crop and by geographic unit, size of farm, education, fertilizer use, soil type, family size, tenancy

PART B
SCOPE OF WORK

I. Purpose and Overview of the Assessment

A. Purpose

The proposed nutrition assessment will serve several purposes:

1. As a vehicle for examination of existing and planned government policies and programs which relate directly or indirectly to nutrition goals, and as a basis for possible re-orientation of these policies and programs.
2. As a basis for improved project design and/or project modification.
3. As a nutrition planning case study for use in nutrition assessment activities in other countries.

B. Overview of the Assessment

The assessment will take place during the period from June to September, 1975. Assessment activities proper should be complete by the end of August to allow several weeks for the writing of the assessment paper.

No major assessment activities to gather primary data will be required. Costa Rica has a rather rich data base, and many of the information elements needed in the assessment are available from recent studies and surveys. There are, however, a number of information elements which will require obtention of data from the institution which collected the data, and in some cases the data may be stored in different locations. Data processing services for compilation of data will also be necessary in some instances.

It is estimated that 24-30 man-months of professional staff involvement will be required, in addition to necessary administrative, clerical and secretarial support. Three categories of participation are envisioned:

1. A nucleus of full-time personnel, including Ana Sayagués of AID; Ana Cecilia Fernández and Olga Chacón of OFIPLAN; Dr. Alberto Pradilla of INCAP; and Pat Kelly, PCV.

2. A group who participate on a regular and at least half-time basis, including Ronny Badilla and Richard Kreitman of AID; and one or two others, either hired under contract or assigned by the government.

3. A third group consisting of ad hoc participants whose participation is for the completion of specific tasks determined by the groups above, and deriving from various institutions or government agencies, such as the Ministry of Health, the Ministry of Agriculture, IFAM, SNAA, DINADECO, the Dirección General de Estadística y Censos, the Central Bank, CARE, etc.

The assessment will contain three major phases of activity:

1. An analysis of nutritional status and of those factors affecting nutritional status, to allow specification of the target group to be addressed, and to provide information concerning geographic location, economic status, access to health services, etc. of that target group.

2. An evaluation of on-going and proposed programs, considering their relevance to the nutritional problems of the target group; their cost

and effectiveness; and suggested alternative and/or complementary program elements where gaps or problems of relevance or effectiveness are determined to exist.

3. Identification of future needs for analysis, planning, evaluation, research, and training.

II. Outline of Assessment Activities

Phase 1. Analysis of Nutritional Status, Causal Factors

1. Measurement of Nutritional Status

Data on both direct and indirect indicators of nutritional status are available from several sources.

a. Direct Measurement

- MOH/INCAP Nutrition Survey. This survey was done in 1966 for 31 localities, and expanded in 1975 to include those and an additional 10. The population surveyed is largely urban and semi-urban. Cross-tabulations of importance for the assessment are being done under contract, for the 1975 data. The same tables should be provided for the 1966 data. Covers children 0-5 and pregnant women, breast feeding.

- A nutrition survey for 6 areas of Costa Rica was done in 1972. See Valverde, J., and Quirós, J. "Encuestas Nutricionales en Costa Rica", Instituto Interamericano de Ciencias Agrícolas de la OEA, 1972. The areas covered were Pital, Santa Ana, Carrillo, Guanacaste and Grifo Alto. The survey includes food consumption and anthropometry for children 7-14.

- The 90 health posts of the Rural Health Program maintain age, height and weight records on a large rural population, as well as a wealth of other information, such as data on water supply, latrines, etc. The task here requires collection of the data from the regional offices of the program or from the posts themselves.

- Data from Nutrition Center records. MOH or CARE.

The above data sources should allow nutritional status to be mapped for a fairly large sample of the population, urban and rural, and covering most areas of the country.

b. Indirect Indicators

- Statistics on mortality appear in the publication Estadística Vital - 1972, Dirección General de Estadística y Censos.

- Health post records include mortality and morbidity figures for the rural areas they cover.

- MOH statistics on morbidity.

2. Demography

Costa Rica has Censuses of Population, Housing and Agriculture taken in 1973. Special tabulations of target group population and other characteristics can be obtained by special request, both for data discussed in this and other sections.

a. Population of 0-5 year age group by single years: 0-1; 1-2; 2-3; 3-4; 4-5, urban and rural, by regions. (See note below).

NOTE: Several different region definitions are used in Costa Rica. The planning office regions seem most appropriate for the purposes of this assessment.

- b. Population in school age (6-12), by region, urban and rural.
- c. Estimates of school enrollment by region, urban and rural.
- d. Female population in age group 15-45 by region, urban and rural.
- e. Map of Population Density.
- f. Population projections to 1980 by region, urban-rural.

3. Access to Health Services

- a. Estimates of existing and planned coverage of nutrition centers, health posts, etc. Data from MOH, IFAM/DINADECO studies, MOP/INCAP study, CARE.
- b. Map of coverage.
- c. Estimates of effective radius of coverage for Nutrition Centers.

4. Water Supply and Sanitary Conditions

- a. Potable water: safe wells, piped water, etc. From IFAM/DINADECO, SNAA, Census. Emphasis on rural population.
- b. Waste disposal: sewage, latrines. Data from Census, DINADECO studies, health post records, SNAA.
- c. Type and condition of housing: floors, doors, roofs, etc. IFAM/DINADECO studies, MOP/INCAP study, Census.

5. Income

a. Impacts of inflation on purchasing power among urban/rural poor. Must use different weightings of consumption data than used in typical cost-of-living index. Central Bank Income and Expenditure Study, 1974.

b. Income levels and distribution by region. Census, IFAM/DINADECO studies.

c. Seasonal variations of income in rural areas.

6. Food Supply

a. Actual vs. potential land use, land tenure patterns, by region. IFAM/PIMA studies, Ag Census, CAN.

b. Food production, staple food prices, on-farm consumption, by region. Ag Census, CAN, IFAM/DINADECO.

c. Seasonality of food supply, by region.

d. Food processing, preservation, by region.

e. Transport and storage of basic grains. CAN/CNP.

f. Food habits by region: Consumption, breast feeding, etc. Nutritional lacks. INCAP Survey, IICA Survey.

7. Education

a. Educational levels of population by region, urban-rural. Census data, IFAM/AITEC, DINADECO/AITEC studies.

b. Analysis of nutrition education in educational programs of MOH, MED, MAG, Desarrollo Comunal, CARE. ^{1/}

c. Map of school locations.

8. Mass Communications

a. Coverage of radio and other mass media. Special programs in agriculture, etc. Schedules of programs by region.

b. Analysis of existing resources and capacity for the use of mass media for nutritional and health purposes. Costs of program development, and operating costs.

Phase 2. Evaluation of On-Going and Proposed Programs

1. The information gathered in Phase 1 above will aid in the evaluation of on-going and planned programs for their relevance to existing nutrition problems, their effectiveness, and the potential cost of expanding existing programs or implementing new ones.

a. Projects proposed under "Asignaciones Familiares" program. Ministry of the Presidency.

b. Basic grain projects.

c. Consumer protection law.

d. School feeding program. ^{2/}

^{1/} AID/W has developed a preliminary methodology for the evaluation of education programs, which is available for evaluation of on-going programs to be built into new programs.

^{2/} Methodology for quantitative evaluation of on-going feeding programs available through Nutrition Office, AID/W.

- e. Nutrition Centers.
- f. Planned Nutrition Institute.
- g. Other pertinent programs: e.g. family planning.
- h. Proposed 2-meal feeding program,^{1/}
- i. Rural health program.
- j. Guanacaste irrigation project.

2. Identification of alternative programs to improve relevance or effectiveness in meeting nutrition goals.

3. Identification of needs not covered by present or planned programs. Suggestions of possible program elements to cover these needs.

- a. Possible private sector development projects.
- b. Projects for AID or other international agency.

Phase 3. Identification of Future Analysis, Planning and Evaluation Needs.

1. Analyze the need for, and possible structure of, a planning and evaluation group in the Ministry of the Presidency, to integrate and coordinate nutritional program at high level.

2. Identify key indicators which could be maintained using data already collected as part of on-going programs. Some examples:

^{1/} Methodology for quantitative evaluation of on-going feeding programs available through Nutrition Office, AID/W.

- a. Indicators of demand for food crops, by region, income group.
 - b. Indicators of supply of food, by region, with prices.
 - c. A cost of living index for the lowest third of the population in income.
 - d. Maintenance of height/weight statistics by age and grade in schools.
 - e. Regular reporting of data from Rural Health Program, at level of MOH.
 - f. Critical path study of information provided in each sector which bears on nutritional status.
3. Identification of needs for basic research and applied research.
 - a. Basic research needs and role of Nutrition Institute.
 - b. Relationship between INCAP research program and Costa Rica's needs.
 - c. Intermediate-level technology as a possible vehicle for eliminating bottlenecks. Low-cost water filters, food preservation, etc.
 - d. Ways to facilitate computer utilization in analysis, planning and evaluation.

4. Training needs

a. Professional level. Role of Nutrition Institute, INCAP.

b. Short-term courses for professionals in other areas, such as agriculture, health, etc., to acquaint them with the nature of nutrition problems.

ANNEX I

OUTLINE OF ASSESSMENT COSTS

1.	Personnel	\$15,000
	a.	INCAP
	b.	Local Contracts
2.	Data Processing	14,000
	a.	1975 Survey
	b.	1966 Survey
	c.	Rural Health Data
	d.	Census Data
3.	Data Compilation	11,000
	a.	Rural Health Data
	b.	Nutrition Center Data
4.	Contingencies	10,000
	<u>TOTAL</u>	<u>\$50,000</u>

ANNEX II
BIBLIOGRAPHY

1. Censos Nacionales de 1973
Ministerio de Economía, Industria y Comercio - Dirección General de Estadística y Censos.
 - (a) Población, en dos tomos
 - (b) Vivienda
 - (c) Agropecuario

2. IFAM-AITEC Studies of Basic Services in 453 Communities in 30 Cantones.
 - (a) Part I Summary of Data by Canton, District, and Community, and Community Leaders' Perception of Problems.
 - (b) Part II Community Profiles (one volume for each canton)
 - (c) Also available:
 - (1) Agricultural Production, Activity of Labor Force, Employment, and Migration (one volume for each canton)
 - (2) Industries (one volume for each canton)
 - (3) Summaries of Studies on Agricultural Production, Employment, Income, and Migration. (Draft paper for each of three regions: Pacífico Norte, Pacífico Sur, and Vertiente Atlántica)

3. Costa Rica: La Distribución del Ingreso y El Consumo de Algunos Alimentos - U. of C.R., Escuela de Ciencias Económicas y Sociales - 1973

4. DINADECO-AITEC Studies 1973.
 - (a) Tipología de Comunidades
Tomo I - Documentos prácticos de una investigación social
Tomo II - Estudio para una tipología de Comunidades
 - (b) Seis Comunidades Costarricenses

5. Informe Final Encuestas Nutricionales en Costa Rica - Sept. 1972
Prepared by IICA and Interamerican program for rural youth with collaboration of Ministry of Agr. and Ministry of Public Health
(Study of three rural communities)

6. Estadística Vital - 1972 No. 39
(Births, deaths, marriages, divorces and migration by province, cantón and districts).

7. Programas para Mejorar el Sistema de Mercadeo Agropecuario en Costa Rica - Versión Preliminar, 1973. IFAM-PIMA
8. Manual de Costos Básicos de Actividades Agropecuarias. 1973. Banco Crédito Agrícola de Cartago.
9. Estudio Sobre el Mercadeo de Alimentos, La Remodelación del Mercado Municipal y La Terminal de Autobuses en el Cantón de Naranjo. 1974. IFAM-PIMA
10. Food Grain Drying, Storage, Handling and Transportation - Report No. 37, April 1973. Development of a Simple Grain Storage Unit and Method Applicable to Humid Areas. Kansas State University.
11. Programa Nacional de Granos Básicos, 1975-1978
Oficina Sectorial de Planificación Agropecuaria - Enero, 1975.
12. Indices Estacionales de los Precios al Mayor y al Por Menor de 18 Frutas y Hortalizas en Costa Rica. IFAM-PIMA. Serie: Investigaciones 210. 1973
13. Consumo Industrial de Frutas y Hortalizas en Costa Rica Durante 1972. IFAM-PIMA Serie: Investigaciones 211 - 1973.
14. Identificación de Zonas Productoras y Epocas de Cosecha de las Principales Hortalizas y Frutas que se Producen en Costa Rica
IFAM-PIMA Serie: Investigaciones 212 - 1973.
15. Presentación de los Resultados Preliminares del Estudio de Comercialización de Ganado y Carne Bovina
Comisión Interinstitucional de Mercadeo de Carnes - 1974.
16. Reunión Técnica Nacional de Mercadeo Problemas y Políticas
 - a. Documento RTC/C.1 Políticas de Estabilización de Precios a Nivel de Productos
 - b. Documento RTC/B.1 La Estabilización de Precios al Consumidor a Través de Expendios
Comisión de Mercadeo del Consejo Agropecuario Nacional-IICA, 1974

17. Programa de Salud para Comunidades Rurales
Ministerio de Salud - 1974
18. Información Básica de las Areas de Salud Rural - Enero 1975
(Summary information collected from all operating rural health posts -
90 included in January Report)
19. Administración de Servicios de Salud - Informe No. ASS-429-74 Noviembre
1974 - Ministerio de Salud
20. Lista Parcial de Precios Máximos de Venta - Septiembre 1974
Ministerio de Economía, Industria y Comercio - Dirección General de
Comercio Interior
21. Encuesta de Ingresos y Gastos Familiares en el Area Metropolitana y las
Zonas Urbanas de Costa Rica - 1974
Ministerio de Economía, Industria y Comercio - Dirección General de
Estadísticas y Censos
22. Evaluación Nutricional de la Población de Centro América y Panamá -
Costa Rica
(INCAP Survey conducted in 1966 - Published 1969)
23. Series of Papers from Study in San Ramón, C.R. - Ian Rawson and
Víctor Valverde - 1974
 - (a) Evaluación Nutricional del Cantón de San Ramón, Costa Rica.
 - (b) The Etiology of Malnutrition Among Pre-School Children in Rural
Costa Rica.
 - (c) Revisión del Aporte Calórico y Proteínico de las Dietas de Poblaciones de Bajo Nivel Socio-Económico en Centro América. Existe un Problema de Proteínas?
24. Country Profiles - Costa Rica
By Miguel Gómez B. and Vera V. Bermúdez M. Publication of the Population Council - April 1974
25. Characteristics of the Target-Man in the Peripheral Regions of Costa Rica
By John A. Booth - AITEC for IFAM

26. Sistema Hospitalario Nacional, Unidades Sanitarias y Otros Programas de Salud - Informaciones Estadísticas - Anuario de 1973
Departamento de Estadística, Ministerio de Salud - Agosto, 1974.
27. Programa Nacional de Salud 1975-1978
 - (a) Documento Básico
 - (b) Anexo 1 Programas de Servicio (Primera Parte)
 - (c) Anexo 2 Programas de Servicio (Segunda Parte)
 - (d) Anexo 3 Programas de Infraestructura
28. Política Nacional de Alimentación y Nutrición. Ministerio de la Presidencia y INCAP.
29. William Vargas, La Desnutrición Proteica-Calórica y su Impacto Como Causa de Muerte en el Niño.
30. Guidelines for Nutrition Assessment, AID/W.

ACRONYMS

1. AITEC Acción Internacional Técnica
2. CAN Consejo Agropecuario Nacional
3. CNP Consejo Nacional de Producción
4. DINADECO Dirección Nacional de Desarrollo de la Comunidad
5. IFAM Instituto de Fomento y Asesoría Municipal
6. INA Instituto Nacional de Aprendizaje
7. MAG Ministerio de Agricultura y Ganadería
8. MED Ministerio de Educación Pública
9. MSP/MOH Ministerio de Salud
10. OFIPLAN Oficina de Planificación Nacional y Política Económica
11. PIMA Programa Integral de Mercadeo Agropecuario
12. SNAA Servicio Nacional de Acueductos y Alcantarillado