

PDWAE 484

Project Paper

CONSUMPTION EFFECTS OF AGRICULTURAL POLICIES  
(Phase II)

Office of Nutrition  
Science and Technology Bureau

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## I. RECOMMENDATION

S & T/N recommends that, subject to the availability of funds, funding in the amount of \$1.488 million be authorized to support the second phase of this project as follows:

|  |                    |
|--|--------------------|
| FY 1982                                  | 400,000            |
| FY 1983                                  | 400,000            |
| FY 1984                                  | 400,000            |
| FY 1985                                  | 288,000            |
|  | <u>\$1,488,000</u> |
| Plus funds obligated in FY 1980 and 1981 | 1,312,000          |
| Total Project Funding Authorization      | <u>\$2,800,000</u> |

The "Consumption Effects of Agricultural Policies" (CEAP) project was initiated in FY80 by the Office of Nutrition (S & T/N) as a major element of the Agency's strategy to help meet the basic needs of the poor and to improve the quality of life in the developing countries. The specific purpose of the project is to encourage developing countries to develop national agricultural planning systems that are conducive to improved national levels of consumption and nutrition.

One million eighty five thousand dollars in AID funds was obligated in FY80 and \$227,000 in FY81 to fund activities scheduled to begin during the project's first year. Over 50 percent of these funds was used to finance the first series of short-term policy impact evaluations designed for countries in Africa and Latin America. The remainder was used to finance a longer-term sub-project in Honduras designed to test and demonstrate the feasibility and utility of undertaking consumption/nutrition impact analyses in an on-going planning system in a developing country. These funds were authorized with the understanding that no additional funds would be authorized until this present document, a revised Project Paper (PP), could be prepared which incorporated the suggestions made by AID's Regional Bureaus during their review of the original PP (issued in September 1978).

In keeping with the needs expressed by the Regional Bureaus, the second phase of this project is designed to finance a variety of activities which more directly support individual USAID country programs. Forty-five percent of the remaining \$1.488 million budgeted for Phase II (or \$665 thousand, see Table 3, page 36) will be used to provide technical assistance in response to USAID and developing country requests. Thirty-three percent (or \$488 thousand) of the Phase II budget is earmarked for a second series of four short-term policy impact evaluations in countries in Asia and Latin America. An additional \$200 thousand in Phase II is set aside for other outreach activities which will involve USAID and host country personnel, including workshops, seminars and an information network.

## II. SUMMARY PROJECT DESCRIPTION

### A. Background

The Agency for International Development is committed to helping meet the basic needs of the poor and to improving the quality of life in developing countries. Among the most basic of human needs is the need for a nutritionally adequate diet. The degree to which populations have access to such diets is significantly affected by agricultural production and land use policies, by price and trade policies, and by other food and agricultural policies and programs; therefore, one of the more important actions that can be taken by countries wishing to improve the diets of their people is to improve the consumption or nutrition benefits of such programs and policies.

Most government economic policies, even agricultural policies, are formulated, implemented and changed with little consideration for their ultimate impact on people's consumption and nutrition. Often this occurs through ignorance or neglect rather than design. Country plans may include nutrition objectives, for example, but planners and analysts lack understanding of how economic policies and programs affect people's consumption patterns and nutrient intakes. More often than not, economic policies are adopted to achieve a given economic or political goal with little explicit consideration given to the consumption consequences of such policies. For example, agricultural policies may have the objective of maximizing foreign exchange earnings or gaining self-sufficiency in a given crop. Programs are implemented to achieve these goals with little thought about how they affect the diets of the population.

This is changing, however, and development planners are becoming more aware that government economic policies do have major consumption/nutrition effects. For example, research on the nutrition effects of government policies was identified as one of twenty priority research areas by the 1977 National Academy of Sciences' (NAS) "World Food and Nutrition Study." The study specifically recommended that comparative studies be undertaken of the experiences of different countries with different policies. Simple models, the study concluded, also need to be developed for predicting and evaluating the effects of program and policy interventions.

AID too has expressed a concern that the nutritional status of the urban and rural poor may be more affected by the range of government policies and programs than by direct nutrition interventions. A paper entitled "AID's Responsibility in

Nutrition," approved by the Deputy Administrator in April 1977, described this concern and recommended that the Agency devote more attention to improving the consumption/nutrition benefits of development programs, particularly those in the agricultural sector. The NAS study identified this area of policy improvement as a research priority. "AID's Responsibility in Nutrition" presented it as an "operational initiative." Research to gain more understanding about the consumption/nutrition effects of agricultural policies is only a first step. AID's objective is to develop and make operational within AID and developing country planning units techniques for taking what is known about a policy's effects on incomes and prices and predicting what will happen to people's consumption patterns and nutritional intakes. This project is designed to further this operational emphasis.

This initiative is consistent with the Office of Agriculture's (S & T/AGR) interests in improving agricultural planning and policy analysis. Adding consumption considerations to agricultural planning logically is an integral part of its objective to help countries "clarify the consequences of existing development patterns and identify feasible and consistent strategies and policies for assisting target groups." This initiative is also consistent with AID's "Agricultural Development Policy" strategy paper which makes a link between the goal of increasing food supplies and the goal of raising individual incomes. The twin objectives expressed in this strategy paper are not just to grow more food but "to get more food into the hands of hungry and malnourished people." The number and range of intervening factors--prices, jobs, physical accessibility to markets, food habits, social systems, health, policies--make the task of achieving these two goals a more difficult one. The CEAP initiative also complements the Office of Rural Development's (S & T/RAD) interest in looking at the backward and forward linkages of the agricultural sector and how development in the agricultural sector affects other dimensions of rural development and the well-being of rural people.

USAID and country interest in the project also appears strong. Sixteen USAIDs in three geographic regions responded favorably to the initial cable asking countries/USAIDs whether they were interested in participating in the short-term policy impact evaluations. Actual evaluations were initiated in four African and two Latin American countries. (See pages 10-14 for further details.)

This project is also part of a broader strategy for encouraging countries to incorporate consumption/nutrition goals into their agricultural development planning.

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## B. Project Concept

### 1. Goal and purpose

The project goal is to improve the nutritional well-being of the poor in developing countries. Achievement of the goal is predicated on the assumption that some governments will be willing and able to integrate the data collection and analysis methods developed under this project into their agricultural planning systems and that they will be willing to implement the substantive policy findings that result from their utilization.

The purpose of this project is to encourage developing countries to develop national agricultural planning systems that are conducive to improved national levels of consumption and nutrition. Achievement of this purpose is predicated on the assumption that most developing countries already have some type of agricultural planning system whose scope of activities can, with guidance and minimal amounts of technical assistance, be expanded to include consumption/nutrition concerns.

Some countries are expected to be more receptive to using the analytical methods and substantive policy findings resulting from this project, however. For example, some countries give much greater recognition than others to the fact that they have a food and nutrition problem and provide more evidence of willingness to take steps to deal with this problem. Some countries also appear more willing to make adjustments in their policy formulation and planning processes to deal more effectively with their problems. Countries exhibiting these characteristics are judged more likely to be receptive to project outputs. Therefore, these are among the criteria used to select participating countries (see pages 6-7).

### 2. Strategy and overview of activities

Developing country policy makers and planners need to be encouraged to start thinking of improved consumption and nutrition as legitimate goals of their agricultural sectors and ones which need to be considered when evaluating policy alternatives. Developing country planners also need to be helped in obtaining the means for incorporating consumption and nutrition goals into their planning processes by gaining better analytical methods, data, and the knowledge of how to use both.

Most developing countries have already established some type of agricultural planning system which focuses on objectives such as increasing production, foreign exchange, income and employment. What is needed to make these systems more effective in combating malnutrition is for developing country planners and policy makers to add (1) nutrition variables to on-going planning and policy analyses; (2) nutritional observations to existing agricultural data collection systems; and (3) staff (or train

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existing staff) with training in nutrition planning and/or consumption economics to their agricultural planning establishments. This project is designed to provide assistance in all three areas.

More specifically, the Consumption Effects of Agricultural Policies (CEAP) project is designed to:

- (1) develop better methods for determining in advance the probable effects that various economic policy choices will have on people's food consumption patterns and nutrient intakes;
- (2) test and demonstrate the validity and utility of these methods by observing them at work in several developing countries;
- (3) disseminate information concerning these methods to developing country planners;
- (4) encourage planners to adopt and use these methods in formulating economic policies that give careful consideration to nutrition/food consumption effects; and
- (5) provide technical assistance to help countries incorporate these methods into their agricultural planning systems.

The project is designed to develop analytical methods relatively quickly. This is being done through a series of short-term policy impact evaluations undertaken in selected developing countries. These evaluations began during the first phase of the project to explore and systematically analyze the linkages between agricultural policies and consumption and nutrition. In the process of carrying out these evaluations, analytical methods are being developed/adapted and refined.

This reflects the basic strategy which is to develop/adapt the methods needed to determine the consumption/nutrition impacts of agricultural policies in developing countries as well as test them there. To ensure that the planning methods developed as a result of the project will be relevant to and capable of being replicated in a broad range of developing countries, project activities are located in a number of countries selected to represent a range of planning and policy needs and levels of planning capacity.

Methods development is only the first step, however. Equally important to project success is evidence that these methods can be adapted to the policy formulation needs of developing country planning systems and evidence that they can and will be utilized. Working with planners and analysts in several developing countries to test these methods--i.e. to demonstrate their utility and the feasibility of tying them into on-going planning systems--is the next step. Approximately 45 percent of project funds are earmarked during Phase II for technical assistance to

countries wishing to undertake consumption impact analyses themselves and in the process test the methods developed during the short-term policy impact evaluation stage. Success in this second stage is less certain, however, since developing the necessary collaborative relationships to test these methods in developing country planning systems requires a greater interest on the part of governments in determining the consumption/nutrition impacts of their policies and a greater commitment of their resources.

Policy issues for evaluation are selected in consultation with government planners and analysts to insure relevancy and encourage country receptivity to the resulting policy guidance. Countries participating in these evaluations, however, have no prior commitment to utilizing the results or the analytical methods developed. Nor are sufficient time or resources built into these evaluations to institutionalize the analytical methods developed into participating country planning systems or to strengthen participating country planning systems.

Contractors, however, are expected to interact to the maximum extent possible with the USAIDs, host government planning units and research institutions in the countries selected for case studies to maintain their interest and receptivity. Seminars will be held in each participating country to discuss the policy implications of the evaluations with planners and decision makers and the data collection and analysis methods used with planners and analysts. Country planners and analysts will be encouraged during the seminars to plan for follow-up activities. Countries and USAIDs will be informed during these seminars and in letters and cables about the availability of technical assistance if they are interested in gaining additional knowledge about, or assistance in using, the analytical and data collection methods developed.

Thus with proper planning and encouragement, the short-term policy impact evaluations are expected to lead to the development of a longer term collaborative relationship with several countries where TDY consultants collaborate with host government personnel on a major policy analysis program. These collaborative activities are expected to provide the major means by which the analytical methods developed under the auspices of the project are adapted to and tested in developing country planning systems. An advantage of this approach is that it provides some built-in flexibility which means that the project can be more responsive to USAID and country needs.

Criteria used in selecting countries to participate in the short-term policy impact evaluations include whether (1) a major agricultural policy change has occurred or is anticipated which could have consumption/nutrition impacts; (2) the country/USAID indicates an interest in the results of the evaluation; and (3) the country has a food/nutrition problem. Criteria to be

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used in deciding whether to develop a longer-term collaborative relationship with a country include whether (1) the country recognizes it has a food/nutrition problem and appears receptive to doing something about it; (2) the country has an agricultural planning/policy analysis system which could benefit from marginal amounts of technical assistance; (3) country planners and analysts appear interested in expanding their knowledge about the consumption/nutrition impacts of their country's agricultural policies and desirous of improving their capability to undertake consumption/nutrition impact analyses; (4) the USAID is interested, i.e. the activity supports USAID agricultural planning and policy objectives; and (5) the USAID and/or country is willing to commit some personnel and financial resources to the activity (see pages 35 and 43 for a more detailed discussion of cost sharing arrangements).

The potential for developing a longer-term, collaborative arrangement and its successful implementation is likely to be highest in countries demonstrating a continuing, long-term commitment to improved agricultural planning. The existence of a USAID supported agricultural planning project is also likely to increase the chances of success. Such USAID supported activities are either underway or in the design stage in four of the five countries presently participating in the short-term policy impact evaluations. USAIDs in these cases can use CEAP technical assistance to complement the resources they are funding directly, to add this additional dimension to the assistance being provided or to help insure that the country develops a data analysis capability in an area that is not receiving sufficient resources under the USAID project.

Working out the arrangements required to actually adapt and test analytical methods in a developing country planning system can take months, if not years. The considerable amount of time and effort required to develop such collaborative activities was, in fact, one of the major reasons for designing the project so that the collaborative arrangements necessary for testing the methods in developing country planning systems could be developed during the project itself.

Considerable importance was attached to insuring that the feasibility of utilizing methods for analyzing the consumption impacts of a country's agricultural policies was adequately tested in at least one developing country planning system. This meant building at least one such test directly into the Project Paper. Negotiations for such a test began in 1978, very early in the design stage of this Project, with the Center for Studies of Economic Development and Integration (ECID) of the Central American Common Market Secretariat (SIECA) and the Government of Honduras. Other countries with whom similar discussions were held include the Dominican Republic and Thailand. ECID's proposal was

approved by AID's Research Advisory Committee (RAC) and the necessary agreements were reached with ECID, the Government of Honduras, USAID Honduras and AID's Regional Office for Central America and Panama (ROCAP). The activity was funded in FY80 and initiated in Honduras in FY81. (See pages 15-17 for more details.)

Tasks to be completed during the two years life-of-the-project include (1) the development and testing of analytical methods for evaluating the consumption/nutrition impacts of Honduran agricultural policies; (2) a demonstration of the utility of these methods to Honduran planners and decision makers; and (3) the dissemination of information about these methods and how to use them to planners and decision makers elsewhere in Central America. Special steps are also being taken to insure that the results of the sub-project will be internalized into the Honduran agricultural planning system: the Honduran Government is providing counterparts to the project director and principal investigators; additional resources are built into the project to provide for in-service training for Honduran staff; and, a technical coordinating committee and a policy advisory committee with strong government membership are also being established.

In designing the CEAP Project, a deliberate attempt has been made to reach a large number of countries with the message that the consumption/nutrition impacts of their agricultural policies are important issues and deserve consideration when evaluating policy alternatives. This will be done through the short-term policy impact evaluations, the seminars and information network. However, it was also recognized that the message is more likely to be believed and acted upon if it can also be demonstrated that planning methods can be developed which are useful to and capable of being utilized by developing country planners and analysts. Thus some resources were also set aside to test and demonstrate the utility of these methods in a smaller number of more carefully selected countries.

### C. Expected Outputs

The eight to twelve countries participating in the short-term policy impact evaluations will receive detailed analyses of the likely consumption/nutrition impacts of specific government policies under examination. Contractors will also prepare a report describing the analytical methods used during each evaluation and one containing guidance for others wishing to undertake similar evaluations. Contractor reports on analytical methods, state-of-the-art papers, methods reviews and results from the technical workshops will be synthesized during the second phase of the project. A manual or set of manuals will be prepared describing in detail the various analytical methods developed/adapted under the auspices of the project and how to use them. A set of guidelines for undertaking consumption/nutrition impact

analyses will also be prepared during the second phase of the project based on contractor and consultant reports and experiences.

A final report will also be prepared which reviews the activities funded under the project, including the policies analyzed, the analytical methods used and the policy guidance offered. It will also draw conclusions about the importance of these policy impact evaluations, what types policies are most likely to generate important consumption/nutrition impacts and under what conditions these policy impact evaluations are most likely to succeed in drawing policy conclusions and influencing decision makers. This report will be written for the use of development planners within AID, the developing countries and the international development community. It will be used to encourage those not directly participating/collaborating in the project to consider the results and their implications for their own programs.

Information on the analytical techniques and knowledge of how to use them will be transferred to developing country planners and analysts during the second phase of the project through a series of expert consultancies, seminars, workshops and an information network. Decision makers in all participating countries should be made more aware of the desirability of considering improved consumption/nutrition as one of the goals for their agricultural sector and the need to consider consumption/nutrition impacts when evaluating alternative agricultural policies. Agricultural planners and analysts in countries participating in the short-term policy impact evaluations should at the minimum have a rudimentary knowledge of the data collection and analysis methods used in the impact evaluations done in their countries. Planners and analysts in countries electing to enter into a longer term collaborative arrangement under the CEAP Project will be much more knowledgeable about the methods and their use even to the point of being able to apply the methods themselves.

Internalization of these methods in developing country planning systems is the most important output of the project. Internalization, however, implies that country analysts and planners will be capable of applying the methods developed, adapting them as necessary to changing conditions, and providing decision makers with reliable results on a timely basis. Given the limited resources available under the CEAP Project, resources sufficient to achieve this objective will be available from the Project for one country only--Honduras. Internalization will be one of the objectives of the other collaborative activities, but success in these cases will depend on whether sufficient commitment and complementary resources will be forthcoming from the participating governments and USAIDs. Successful internalization in even a few countries, however, should provide a strong influence on the practices of other countries.

### III. DETAILED PROJECT DESCRIPTION

#### A. Short-Term Policy Impact Evaluations

A series of short-term, in-depth analyses of the consumption/nutrition impacts of selected agricultural policies were initiated during the first two years of the project in six developing countries to identify and test a range of analytical techniques. Additional evaluations will be started in Phase II. These evaluations will explore and systematically analyze the linkages between selected agricultural policies and the food consumption patterns and nutrient intakes of groups likely to be at risk of malnutrition in these countries. They will deal with the way such policies affect the amount and type of food available to these groups, their incomes and the prices they pay. They will also deal with the way these groups alter their consumption patterns and nutrient intakes when their incomes and prices change.

These evaluations will help identify the kinds of technical problems involved in undertaking such analyses. They will provide some preliminary policy guidelines which should be of immediate and direct use to others wishing to undertake similar analyses.

These evaluations are meant to be exploratory, however, in recognition of the large number of variables which are likely to affect people's consumption patterns and the complex relationships among them. Most are expected to raise new issues as well as provide only partial or tentative answers to some of the original questions raised. The need for follow-up has been anticipated, however, both to help countries better understand the consumption/nutrition impacts of these policies as well as to help them develop the capacity to undertake these evaluations themselves (see following section on technical assistance).

The evaluations are deliberately designed to be carefully focussed and to be completed in a relatively short-period of time (meaning six months to a year from initiation to completion of the analysis). This will require analysts to use simple methods which can be applied to developing countries with very limited human and data resources as well as in developing countries more favorably endowed. This was also done to demonstrate what can be learned about a policy's consumption/nutrition impacts within a time frame more akin to that faced by policy makers and planners than by academicians.

The aim is to give analysts time to begin to understand and quantify the relationships between agricultural policies and food consumption without the delay and expense of large scale surveys or complex analytical methods. As a result of the time constraints built into these evaluations, analysts will have to

rely primarily on data already collected, supplemented by their own observations and personal interviews. Where collected data are lacking, analysts will be expected to explore nonconventional but accessible data sources, in the interests of identifying those simplified alternatives available to policy analysts and planners in developing countries. Analysts also will be expected to experiment with a variety of relatively simple analytical techniques--new techniques as well as those already used by economists, sociologists, anthropologists and nutritionists. At the end of the contract, they will also be expected to comment on the suitability of the techniques selected given various types of data and time constraints.

The first set of evaluations began in FY81 in six countries--Jamaica, Cameroon, Senegal, Botswana, Sudan and Tanzania (see Table 1 for additional information on contractors, length of study, host institutional contacts, etc.). Before field work could be initiated in Botswana, however, the USAID decided that it no longer wanted to participate in the evaluation. Several alternative sites in Latin America were considered. Panama was selected and a scope of work developed. Further execution awaits final approvals of the scope of work.

Additional evaluations will be initiated in FY82 in four primarily Asian and/or Latin American countries. Scopes of work were also prepared in FY80 for Costa Rica, Bolivia, Paraguay and Liberia which could be resurrected if conditions change. Plans are to follow the same procedures in designing the second set of evaluations as were followed with the first: cables will be sent to selected developing countries describing the objectives and focus of the short-term policy impact evaluations; design teams will be sent to countries expressing an interest in participating in the evaluations to explore the nature and scope of USAID and country interests; scopes of work will be drafted in collaboration with USAID and host country personnel where sufficient interest exists and an appropriate policy focus can be identified.

Countries were and will be selected and evaluations designed to represent a range of policy types and methodological approaches. (See page 6-7 for a discussion of the other criteria to be used in selecting countries.) Major policy issues which will be dealt with during the first round of evaluations, for example, will include the promotion of food self-sufficiency, the trade-offs between the promotion of export crops versus food crops, how to deal with the increased demand for food generated by rapidly growing urban populations and/or export markets. Although each evaluation is designed to be of particular relevance to the individual country involved, the major issues being addressed are also important and therefore should have some relevance to a larger number of developing countries.

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TABLE 1

## Short-Term Policy Impact Evaluations Initiated During Phase I

| <u>Country</u> | <u>Contractor*</u> | <u>Policy Being Examined</u>  | <u>Host Institution</u>                                     | <u>Length</u> | <u>Person Months</u> |
|----------------|--------------------|---|---|---------------|----------------------|
| Cameroon       | CRED               | Opening of border with Nigeria to agricultural trade                | Department of Studies and Projects, Ministry of Agriculture | 6             | 21                   |
| Jamaica        | DAC                | Export promotion (sugar); Food import substitution                  | Ministry of Agriculture                                     | 6             | 23                   |
| Panama         | RTI**              | Promotion of self-sufficiency in basic grains                       | Planning Directorate<br>Ministry of Agriculture             | 6             | 8                    |
| Senegal        | CRED               | Promotion of increased food crop self-sufficiency                   | Senegalese Institute of Agricultural Research               | 6             | 18                   |
| Sudan          | RTI/IFPRI          | Elimination of wheat price subsidy; sorghum and millet substitution | Ministry of Planning  | 13            | 17                   |
| Tanzania       | RTI/IFPRI          | Reversal of previous policy to emphasize food vs. export crops      | Market Development Bureau, Ministry of Agriculture          | 8             | 21                   |

\* RTI, Research Triangle Institute, Raleigh, N.C.  
 IFPRI, International Food Policy Research Institute, Washington, D.C.  
 CRED, Center for Research on Economic Development, Ann Arbor, Michigan  
 DAC, Development Assistance Corporation, Washington, D.C.

\*\* Execution dependent on final approvals of scope of work.

A brief description of the policy environment in each of the six countries and the specific focus of the evaluation follows:

CAMEROON: The Cameroonian Government recently announced a policy of encouraging trade with Nigeria. This policy initiative includes improving the feeder roads serving the border areas of Northwest Cameroon as well as lifting restrictions on agricultural exports to Nigeria. The evaluation will estimate the probable impacts of such a policy on agricultural production in Northwest Province and on the incomes and food consumption patterns of low income farmers.

JAMAICA: The Jamaican Government plans to promote the increased production and export of sugar to earn additional foreign exchange and reduce its debt burden. The Government also plans to encourage increased production of food crops as a substitute for food imports. The Jamaica evaluation will estimate the impacts of these two policies (export promotion and import substitution) on: net foreign exchange earnings, changes in the incomes and employment of farmers and the urban poor, and the implied changes in their food consumption patterns.

PANAMA: In 1974 the Government of Panama shifted its policy emphasis from agrarian reform to achieving self-sufficiency in basic grains. To decrease its dependency on food grain imports, the Government raised its support prices for rice, corn and beans. Retail price ceilings were also raised. The Government also created a new semi-autonomous marketing agency to help rationalize its procurement of grains from domestic as well as international sources. The Panama study will evaluate the impact of these policies on the production of basic grains and on the food consumption patterns of urban and rural consumers.

SENEGAL: In 1974 the Senegalese Government reversed its export oriented agricultural policy and began to emphasize food self-sufficiency. To decrease its dependency on external food sources, rice and wheat imports were restricted and the domestic production of rice and wheat substitutes, such as millet, were encouraged. Consumer price subsidies were also reduced and farm gate prices raised. The Senegal study will evaluate the impact of these policies on agricultural production, and the incomes and food consumption patterns of households in selected villages in the Peanut Basin.

SUDAN: Price subsidies on imported wheat were removed in 1979. Irrigated lands used for domestic wheat production are being returned to cotton production, under pressure from the International Monetary Fund (IMF). Wheat consumption has grown dramatically over the last decade, but could drop with the rise in price. Programs to encourage the substitution of wheat with domestically produced sorghum are being considered as part of an attempt to reduce the potential negative impact of the wheat price increase. The evaluation will estimate how different socio-economic groups were affected by the elimination of the wheat subsidy and the potential for encouraging them to substitute sorghum for wheat.

TANZANIA: In 1974, the Tanzanian Government attempted to promote food self-sufficiency by directing agricultural policies toward food crop production and away from their previous emphasis on export cash crop production. Because of severe foreign exchange problems, the Government is considering reversing this policy. The evaluation will explore the effects of the 1974 policy shift on the consumption/nutrition status of low-income urban food buyers and farmers. The evaluation will also estimate the probable effects of reversing the emphasis on food self-sufficiency.

A preliminary report of findings and conclusions will be prepared for each evaluation to be discussed during in-country seminars with senior-level policy makers as well as planners and analysts at the working level. After taking account of suggestions emerging from these discussions and those with concerned USAID and AID/W officials, the contractors will prepare a three-part final report for submission to AID. The main body of this final report will cover all pertinent aspects of the study findings and conclusions together with the contractor's assessment of the extent to which they can be generalized to other developing countries. The second part will discuss the study methods and analytical techniques used, focusing particularly on their strengths and weaknesses. The third part of the final report will provide guidelines for others wishing to undertake similar analyses, including pertinent observations on techniques of data collection, manipulation, etc. These in-country seminars will also be used to plan for follow-on activities. These could take the form of technical assistance to utilize the results of the evaluation in USAID and government planning and design efforts, or a longer term collaborative arrangement during which a government planning unit would undertake similar evaluation(s) with outside guidance and assistance.

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## B. The Collaborative Sub-Project in Central America

One major collaborative sub-project was funded in FY80 to adapt and test methods for analyzing the consumption/nutrition impacts of agricultural policies working within a developing country planning system and to demonstrate the utility of these methods to the planners and decision makers in this system. The Center for Studies on Integration and Development (ECID) of the Central American Common Market Secretariat (SIECA) is undertaking this activity in collaboration with two institutions in the Government of Honduras--the National Planning Council and the Ministry of Natural Resources.

Honduras was selected as the site for this activity for several reasons: (1) the country is poor, and evidence suggests that people are malnourished; (2) the Government recognizes that malnutrition is a problem and seems willing to take some steps to deal with it--the Government has created a nutrition planning unit (SAPLAN) within the National Planning Council (CONSUPLANE), and both CONSUPLANE and the Ministry of Natural Resources have agreed to support the project; (3) much of the needed data is already available or will become available during the life of the project; (4) project activities will complement the data collection and analysis and agriculture and nutrition planning activities already underway, financed by AID's Regional Office for Central America and Panama (ROCAP), the Honduras USAID and the Government itself.

Since a major purpose of this activity is to ensure that some of the methods developed under project auspices are actually tested and used in a policy making environment, the majority of the \$600,000 devoted to this activity will be spent in Honduras. The remaining resources (5-10 percent) will be utilized to disseminate information describing the methods developed and the results of the field trials of these methods to decision makers and planners elsewhere in Central America. The ultimate objective is to have the methodologies that are developed used by those responsible for agricultural and nutrition planning in the individual Central American governments. Because of limited time and financial resources, efforts to achieve this objective will be concentrated in Honduras.

Policies which were initially identified by the Hondurans as deserving of in-depth analysis included: (1) pricing policies for producers and consumers for specific food commodities; (2) risk reduction policies such as credit, extension services and crop insurance; (3) promotion of technological gains in yields and nutrient composition of foods; (4) factor price subsidies (e.g. fertilizer or improved seed) with emphasis on access by marginal and subsistence farmers; (5) marketing policies affecting field losses, storage and marketing margins; (6) policies

affecting the use of agricultural land; and (7) comparative investments for infrastructure and human capital development in the rural, small-farm sector. Two factors--the first structural and the second fortuitous--are expected to increase the likelihood that these policy concerns remain a central focus of project activities. Provision has been made for project analysts to interact at least every six months with the heads of agencies concerned with the development of the agricultural sector so that project members can learn about the priority policy issues facing the country and how they are viewed by the various policy makers and the policy makers can learn more about the project and the policy implications of its current and projected outputs. The project director has first hand knowledge of the policy formulation process in Honduras having served in several policy level jobs in the Government in the past.

One method to be adapted and tested in Honduras--an agricultural sector model disaggregated by different types of socio-economic groups--is relatively more complex and data intensive than the methods being tested in the short-term policy impact evaluations. Experimenting with several more complex, data intensive methods was felt necessary for several reasons: to help substantiate the results obtained from the short-term policy impact evaluations; to provide a basis for comparing the relative reliability and cost effectiveness of more in-depth versus short-term policy impact analyses for meeting the priority needs of agricultural planners and policy makers; and to develop techniques which are compatible with the range of agricultural planning techniques already in use in developing countries. Agricultural sector models have already been experimented with in Honduras, for example, and techniques for adapting them to consumption/nutrition impact analyses, if cost effective, would have immediate applicability in other developing countries which already have a sector modeling capability, e.g., the Dominican Republic, Thailand, and/or the Philippines.

Specific sub-project outputs will include:

- (1) a description of income and expenditure patterns in Honduras by socio-economic groups, by region;
- (2) a description of food consumption patterns and implied nutrient intakes in Honduras, by socio-economic groups in three regions;
- (3) calculations of demand functions and income and price elasticities;
- (4) detailed computer models for at least one of the subregions in Honduras, an aggregate model for the remaining regions, and a national agricultural sector model which links together the subregional models;

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- (5) analyses of the impacts of selected priority agricultural policies on the food consumption patterns of various socio-economic groups in Honduras;
- (6) machine-independent computer software for data handling and model construction;
- (7) interim reports, technical notes and published articles; and,
- (8) seminars for training technicians to use the analytical methods developed and for informing planners and policy makers about the nature and results of the project.

### C. Technical Assistance and Field Support

Approximately 25 percent of the resources in this project is devoted to providing technical assistance to developing countries. This technical assistance is available for a variety of activities consistent with the purpose of the project. Technical assistance will be used to make the necessary links between the development of analytical methods and their testing in and utilization by planners and analysts in developing countries. Countries participating in the policy impact evaluations can request a consultant to help them utilize the substantive policy findings, for example. Participating governments will also be able to request consultants to advise their policy analysts and planners how to use the analytical methods developed in these studies and how to build the capacity to undertake such analyses on an on-going basis into their agricultural planning systems.

If countries are interested, they can also elect to participate in a longer term collaborative relationship where TDY consultants will be made available over one or more years to work with host government personnel on a major policy analysis program. These activities will be used to assist collaborating countries improve their agricultural planning processes by helping country policy makers and planners better understand the linkages between agricultural policies and food consumption and nutrition. They will also be used to help and encourage developing countries develop the capacity to undertake consumption/nutrition impact evaluations on an on-going basis. Technical assistance will also be provided upon request to other countries to advise them on how to design and implement similar impact evaluations and/or how to build the capacity to undertake consumption impact analyses into their planning systems. First preference, however, will be given to countries having participated in the policy impact evaluations.

Technical assistance will also be available under the project to support training activities designed to upgrade the analytical capabilities of developing country planning staffs.

Outside consultants can serve as trainers for regional or within country training projects or can help to plan, implement and evaluate training projects. These activities will complement the training of developing country agriculture and rural development project officers which is to be provided under the "Nutrition: In-service Training Project" scheduled for implementation in FY82.

In order to build a capacity to undertake consumption/nutrition impact analyses in their existing planning systems, many countries will have to improve their data bases and/or upgrade the skills of their planners and analysts. Some countries, for example, decided not to participate in the short-term policy impact evaluations, opting instead to improve their data base first before launching into any detailed analyses of the consumption impacts of their agricultural policies. Other countries, having participated in the short-term policy evaluations, may decide that improving their consumption/nutrition data base is one of the steps required if they are to internalize the capacity to undertake consumption analyses on an on-going basis. Technical assistance is available for these countries under other AID funded mechanisms, such as the Nutrition Economics RSSA with USDA, to help them design household consumption surveys, budget/expenditure surveys with a food consumption dimension and/or integrated rural data systems with a food consumption/nutrition component and to help them process and analyze the data which is produced by such surveys.

A roster of professionals concerned with the consumption/nutrition effects of agricultural policies, including those involved in providing complementary types of technical assistance, will be developed under the auspices of this project. It will be made available to USAIDs, and through them to developing countries, as a planning resource.

#### D. Dissemination of Project Results

Project results will be disseminated using several approaches, including expert consultancies, seminars and workshops, and the publication and dissemination of reports, manuals, research summaries and a newsletter. Results of the short-term policy impact evaluations, for example, will be disseminated to participating countries and USAIDs immediately upon their completion through reports and seminars. A report will be prepared for each country discussing substantive aspects of the evaluation's findings and policy conclusions. Each contractor will prepare a report describing and evaluating the data collection and analysis methods used. At least one seminar or part of a seminar will be directed to a presentation and discussion of major findings with senior level policy makers and planners. Another seminar or part of the seminar will be devoted to the presentation and review of

the analytical techniques used with planners and analysts at the working level. These seminars will provide important feedback beginning in mid FY82.

At the end of the first round of short-term policy impact evaluations (late in FY82), the contractors will be brought together to discuss their findings and experiences with each other and with selected AID/W, USAID and host government staff and other interested personnel. A summary paper and abstracts of the papers presented will be prepared and distributed through the AID Report Distribution Center and special mailings to disseminate the results of the workshop beyond the workshop and project participants.

USAID and participating government personnel present at the workshop will also be asked to comment on the relevance of the policy analyses and the suitability of the analytical methods used in developing countries, their own included, and to advise on whether and how to assist countries develop the capacity to carry out such analyses on an on-going basis. The results of this discussion will provide a major input into the special evaluation planned for FY83 (see page 44).

Some critical gaps in knowledge and methods are expected to be identified at this review (or during other more technical reviews which will also be organized). Approximately \$100,000 in project funds have been reserved for state-of-the-art papers, methods reviews and assessments, and the refinements of promising methods which are needed to close these gaps.

Several state-of-the-art workshops will also be organized to review and evaluate specific data collection and analysis methods. Possible topics include: a review and evaluation of alternative methods for collecting information on household food consumption; a review of selected agricultural sector models and an evaluation of their potential utility for analyzing consumption/nutrition impacts; a review and evaluation of the theoretical foundations for and recent experiences using cross sectional survey data to estimate income and price elasticities (analytical techniques in use in developed countries for predicting changes in food consumption patterns given changes in household incomes and prices); a review of selected farm household firm models and evaluation of their use or potential use for improving our understanding of and eventually predicting the consumption behavior of farm households.

These workshops will also be used to provide an opportunity for participating country personnel to share experiences and for planners and government analysts to interact with other professionals working on related issues. Participants will also be invited from academia, national and international research institutes (such as the International Food Policy Research Institute) and the international donor community.

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As activities (and sub-activities) are completed, various reports will be published. These will be widely distributed to prospective users. This will be done through special mailings as well as through S & T/DIU's Development Information Clearing House . A newsletter summarizing project reports and other relevant work will be prepared periodically to keep practitioners and researchers informed.

Countries participating in CEAP activities will receive these reports and newsletter as a matter of course. Other USAIDs will be queried by cable as to their interest or the interest of their government counterparts in receiving the newsletter and/or reports. Participating USAIDs/countries will be given preference during the selection of participants for seminars and workshops. Other USAIDs will also be queried as to their interests and the availability of suitable candidates.

#### IV. PROJECT ANALYSIS

##### A. Technical Analysis

###### 1. Proposed methods

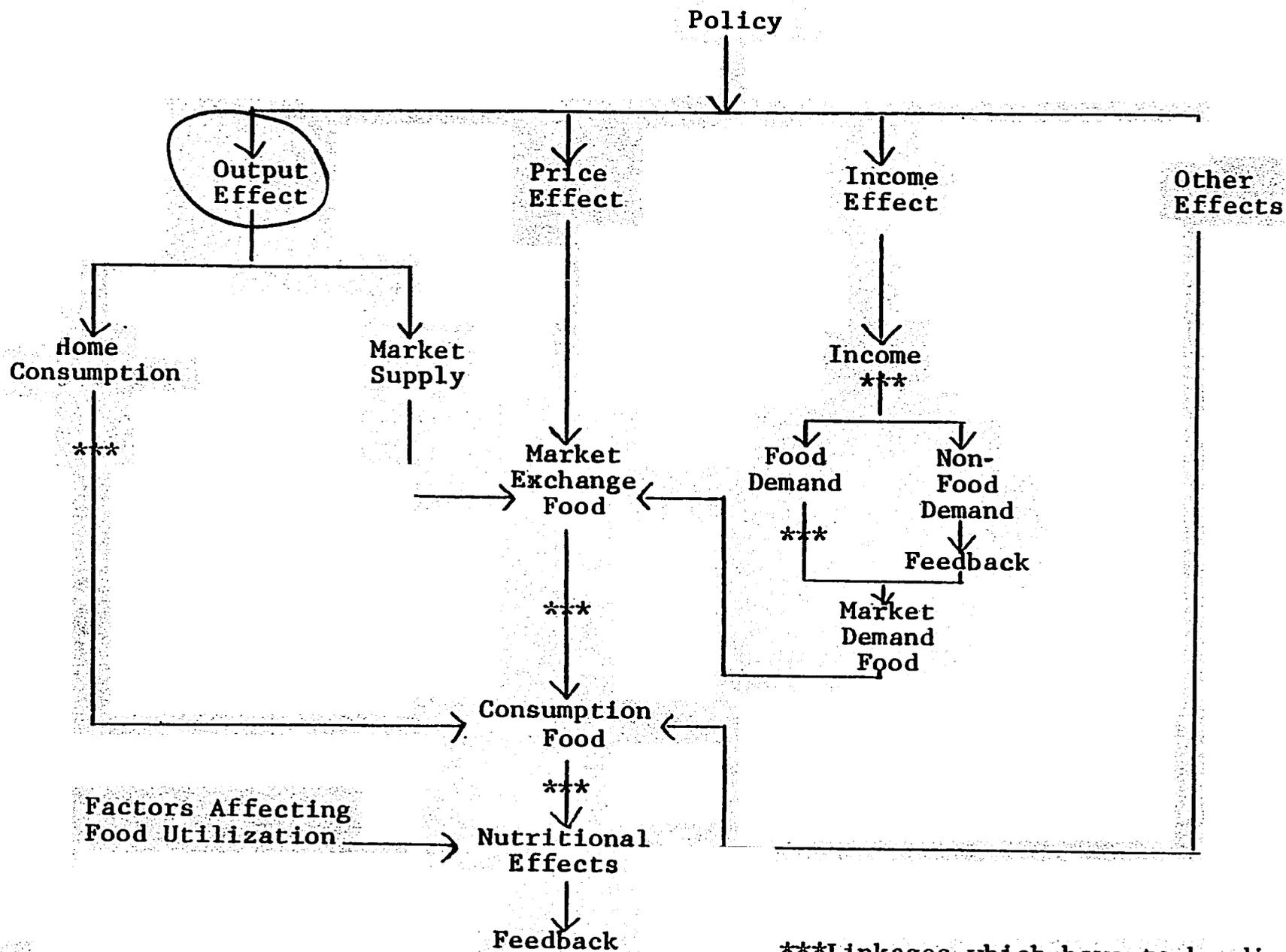
This project is designed to develop analytical methods which can be used by developing country planners and analysts to evaluate the consumption/nutrition impacts of alternative agricultural policies. Because the objective is to incorporate consumption/nutrition concerns into agricultural sector analyses and planning activities, the tools and techniques utilized will be based on those already known and used by agricultural analysts and planners, most of whom are economists. A variety of techniques--simple tabulations, regression analysis, complex modeling (econometric, linear programming, simulation)--are expected to be pressed into service in new ways. In fact, although this Project Paper refers to the "development" of data collection and analysis methods, expectations are that most of the work to be undertaken might more properly be referred to as "adaptation and/or refinement" of already known methods.

The methods developed/adapted will have to help analysts trace and at least partially quantify the linkages between agricultural policies and the food consumption patterns and implied nutrient intakes of groups likely to be at risk of malnutrition in developing countries--the urban poor, landless laborers and subsistence oriented farmers. The first step in making this link is to determine how particular policies are likely to affect food output, prices and the incomes of the groups likely to be at risk. The second step is to estimate how the food consumption patterns of these groups will change when prices and their income change. Other projects and analysts have focused on the first step--how agricultural policies affect food output, incomes and prices. Few, however, have concerned themselves with, let alone tried to implement, the second step. It is, however, at the core of undertaking consumption/nutrition impact analyses and will be one of the main methodological problems to be focused on under the auspices of this project.

A framework useful for conceptualizing these linkages is given in Figure 1. Its purpose is to highlight the most important linkages between economic policies and household consumption patterns as well as the major parameters for which data should be sought and analyses performed.

In this framework, agricultural policies influence consumption and implied nutrient intakes through changes in food output, food prices and incomes. The effect on food output may be direct, e.g. expanded production or changes in the nutrient composition of the food being produced. The output effect may also be indirect, i.e. policies may affect the use of inputs like labor or fertilizer which in turn affect the level and/or composition of food output. The output effects on consumption and nutrition may be positive, neutral or negative. Changes in output are reflected in either home consumption, market supply, or

Figure 1. Illustration of Linkages Between Policies and Consumption Effects



\*\*\*Linkages which have to be disaggregated by socio-economic group to be able to identify the effects on those groups likely to be at risk of malnutrition

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both. Changes in home consumption may or may not affect households with malnourished members. Changes in market supply may, in turn, influence prices and consumption by malnourished and well-nourished households. The key question from the nutritional point of view is not how the aggregate output of nutrients is affected or what the average household response is but what is the resulting change in consumption by malnourished households.

Agricultural policies may affect food prices directly, e.g. price subsidies or price supports, or indirectly through changes in output and/or incomes. Low income consumers are likely to benefit from lower food prices but small subsistence oriented farmers may or may not benefit (see following discussion).

Agricultural policies may also affect the incomes of farmers and landless laborers and workers in rural service and input supply sectors. Changes in income by these groups may affect their demand for food which in turn will alter their competitive position in the market and as a result their food consumption. Changes in incomes by producers may also alter their home consumption. Income changes among higher income groups could also influence food demand, the competitive market position of various consumer groups and thus the consumption of well-nourished and malnourished households. Increasing incomes among higher income groups may bid up food prices and reduce consumption among the lower income groups more likely to be at risk of malnutrition.

Agricultural policies may also influence consumption and nutrition in other ways. It may alter the intra-household distribution of incomes and as control over various sources of income changes so too may how the household spends its incomes. The demand on the time of various household members may also change leaving more or less time available for growing and/or preparing food, for example.

Given the present stage of development of economic theory and methods, it will be easier to estimate changes in the consumption behavior of the urban poor given changes in their incomes and prices than subsistence oriented farmers. Lower food prices will enable the urban poor to purchase more food by increasing their real incomes and their purchasing power. So too will direct increases in their incomes. Estimating the impact of lower food prices on farmers' behavior will be more difficult, however. Lower food prices may increase or decrease farm income depending on the supply response and market demand for food, the type of output produced and the dependency of the farm household on commercial market sales and the consumption of on-farm produce. For farmers, lower market prices could lower profits, act as a disincentive to production, and thereby reduce farm incomes and purchasing power. Lower food prices could also increase farmers' real incomes and enable them to purchase more food, depending on how dependent they are on the market for their food needs.

For urban consumers, the relationship between income and expenditures on food and other commodities or quantities of

food consumed can be easily quantified if the required data is available. Data needed includes information from households on their incomes and/or total expenditures and their expenditures on foods and/or quantities of food consumed. If such data are available, the amounts of different kinds of food consumed by households at different income/expenditure levels and the food consumption patterns of these households can be calculated. Coefficients relating quantities of food demanded given households' incomes/expenditures, size, composition and other socio-economic factors can also be calculated. Such data can also be used to construct a matrix of income elasticities for households at different income and/or expenditure levels for all foods. An income elasticity is a statistical tool which relates percentage changes in expenditures on different foods or quantities of foods consumed to percentage changes in incomes/expenditures. An elasticity matrix has the potential for being a particularly useful tool for the purposes of this project. To be really useful for the purposes of this project, however, income elasticities (or other calculations) will have to be made for each major income class (or socio-economic group).

A strong theoretical foundation exists for the computation and use of income elasticity matrices in cash economies. Techniques for developing separate income elasticity estimates of demand for households at various income levels are readily available. The data needed to make these calculations already exist in a number of developing countries from national income and expenditure, budget and/or consumption surveys. Such data are often used to develop weights for consumer price indices. They are seldom used for other purposes including consumption analyses, however, due to lack of interest and/or lack of data processing and/or analytical capability.

Further work may be needed before income elasticity matrices can be used to estimate the demand for food by rural households which derive a portion of their income in kind (as home produced and consumed food) and have a choice regarding buying or growing any particular food item. Different income elasticities may have to be calculated for the same commodity depending on whether it was purchased or produced in the household. This would require modifying the standard income elasticity matrix. Or models (simple as well as complex) may have to be developed which treat farm households as units which make simultaneous decisions about production and consumption choices. In the longer run this is probably the most promising approach for (1) improving understanding of farm family behavior given changes in agricultural policies and (2) predicting their behavior.

Research in this area, financed under S. & T/N's "Consumption Effects of Economic Policy" project with Michigan State University (MSU), will be completed at the end of October, 1981. A state-of-the-art paper will be commissioned during this project to review the MSU and other selected farm household firm models and evaluate their use or potential use for improving our understanding of and predicting the consumption behavior of farm

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households. Models identified as technically sound and promising for use in analyzing the consumption/nutrition impacts of agricultural policies on farm households may be tested and refined and adapted to country planning needs as part of one or more of the collaborative activities to be developed during the project.

Evaluating the relationships between changes in prices and changes in consumption patterns which is equally necessary may be more difficult due to data and methods constraints. The necessary price elasticities could be constructed if data were available showing prices and commodity consumption over time by various income classes or socio-economic groups. Such data are seldom available, however, and because of the expense are unlikely to become more readily available. The problem would be solved if price elasticity matrices could be calculated from the same cross-sectional survey data that income elasticity matrices can. The usual assumption is that price elasticities cannot be calculated from cross-sectional surveys because these surveys do not capture sufficient price variation being conducted as they are over a relatively short period of time--a year or less. Methods have been developed which make it possible to calculate price elasticities from cross-sectional data when little information is available on prices, but the assumptions required to use these methods are controversial. Nor may they be necessary, since several analysts have been at least partially successful recently in calculating price elasticities from cross-sectional survey data. Using cross-sectional data to construct the needed price elasticity matrices would be a more theoretically and empirically sound procedure as well as practical one.

Income and price elasticities were recognized as being of central importance to the analysis of the consumption/nutrition impact of economic policies as early as November 1976 during an AID sponsored meeting of experts interested in the nutritional implications of non-nutritional policies. Participants at this meeting included economists, agricultural economists and nutritionists from the U.S. academic community, the World Bank, the International Food Policy Research Institute (IFPRI) and AID. Their potential for being core tools was confirmed by a Rockefeller Conference on the "Economics of Nutrition Oriented Food Policies" held at Bellagio in August 1977. Participants at the Bellagio Conference also pointed out the potential usefulness of these matrices for evaluating direct nutrition interventions which have an income transfer component. Both groups also recognized the need for modifications of these matrices and/or the development of models of farm households to assist with the evaluation of farm household responses to price and income changes.

To ensure that the analytical methods developed/adapted during this project are actually relevant to and feasible in a broad range of countries, project activities will occur in a number of countries carefully selected to represent a range of planning and policy needs and levels of planning capacity. This strategy is expected to provide experiences and results suitable for three different types of situations:

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1. Where quantitative data at the national level or even sectoral levels are not readily available;
2. Where some consumption as well as economic data are available and planners and policy analysts have minimum levels of economic training;
3. Where some consumption as well as economic data are available, planners and policy analysts have some advanced economic training, and sector modeling techniques have already been experimented with.

These situations are not necessarily mutually exclusive. Methods suitable for the first type of situation can also be used in the second and third types of situations; when some results must be provided to policy makers in a very short time, for example, or as the first step in a longer, more in-depth, more complex analysis. Many, perhaps the majority, of developing countries will fall into the second category where some consumption data as well as economic statistics are available and planners and policy analysts have at least minimum levels of economic training. However, enough developing countries fall into the third category to justify devoting some resources to the development and/or adaptation of methods suitable when data availabilities and manpower levels are somewhat more advanced.

In the Sudan short-term evaluation, for example, analysts will be able to use data from an existing income and expenditure survey to estimate demand functions of different socio-economic groups for wheat and sorghum (the second type situation). These data will form the basis for the construction of income and price elasticity matrices. Data from an income and expenditure survey will also be analyzed in the Tanzania short-term policy evaluation and the Honduras sub-project. In the Sudanese case and in Tanzania (if processing problems can be worked out), such data will be available from two points in time --before and after the policy change which is being evaluated. Little or no consumption information was available in the Cameroon or Senegal (the first type situation). So here analysts will have to experiment with more descriptive techniques and/or develop/adapt relatively quick, simple techniques for collecting such data. In Sudan the focus will be primarily on the impact of the policy change on urban consumers so analyses using standard income and price elasticity matrices will be sufficient. In Senegal, the Cameroon, Tanzania and Honduras, on the other hand, analysts will have to estimate what kind of production as well as consumption changes various strata of farm families will make in response to alternative policies. Techniques which will be used by analysts to develop these estimates include interviewing key informants, collecting survey data, building simple simulation models of farm households, and building more complex linear programming models of these households, as in the case of Honduras.

Once analysts have constructed income and price elasticity matrices and/or farm household models, they will be in the position to translate the price and income effects of various policy options into their impacts on the consumption patterns and

implied nutrient intakes of various groups likely to be at risk of malnutrition. All they need to use these techniques are forecasts of economic events (crop projections, price forecasts, income projections), traditional outputs of agricultural and other planning establishments. These forecasts can come from informed and experienced judgement, some seat-of-the-pants guesstimates, simple two equation supply and demand models and/or complex multi-stage models of the agricultural sector. Analysts working in the short-term policy evaluations, given their time constraints, will have to rely primarily on informed judgements, price and income forecasts already available and/or what can be produced with relatively simple simulation models. In the Honduras sub-project, both the price and income effects and the consumption effects for different socio-economic groups will be produced by the model which is to be developed (the third type situation).

A great deal of experience in modeling a developing country's agricultural sector has been gained over the last ten years. Numerous countries now have some type of sector model at some stage of development, including Nigeria, Korea, Colombia, Thailand, the Philippines, Bolivia, Guatemala, Honduras, El Salvador, Nicaragua, the Dominican Republic, Tunisia and Pakistan. Techniques experimented with include linear programming, econometric and systems simulation. As a result, there now exists a broad base of knowledge about the structure and operation of a developing country's agricultural sector and how to describe and predict its behavior. This project will build on this wealth of knowledge and experience, particularly during the first step; when the links between agricultural policies and their price and income effects are being evaluated.

The work to be done in Honduras, i.e., converting their existing agricultural sector model to a social accounts matrix format and using it to assess the consumption impacts of alternative agricultural policies, will also build on this knowledge and experience. The development of this technique, although relatively more sophisticated and data intensive, is feasible in Honduras since a considerable base of quantitative data already exists. Plus, the existing planning units are equipped to incorporate more complex planning techniques; a simpler model of the agricultural sector and several regional models have already been built, for example. Finally, in a two year project, there is greater opportunity to work with host country counterparts who have been seconded to work on the project.

The methods developed will have to provide information which is of use to developing country decision makers, and their planners and analysts have to be able to use them. Design features which were built into the project to insure that the methods developed are relevant and feasible include: involving host government officials in the selection of their policy focus; emphasizing the use of existing data, much of which is routinely collected but never analyzed by developing country governments; insisting that the majority of work be done in developing coun-

tries; and keeping the time frame for the policy impact evaluations short to force contractors to work under conditions and in a time frame similar to that faced by developing country planners and analysts or having the actual development done within a developing country planning unit as in the Honduras case.

In the final instance, the methods which are developed during the project will be the product of three factors: (1) what developing country planners and policy makers want, need and can use; (2) what AID requires to meet the goal and purpose of this project; and (3) the state-of-the-art.

## 2. Replicability of results and methods

The methods which are developed, to gain acceptance, will have to produce results which are accurate and replicable, i.e. another person using the same technique will get the same result. Accuracy and replicability are tests which all analytical techniques must pass. Given the present state-of-the-art of policy analysis, however, the relevant test is one of relative accuracy and replicability, not absolute accuracy and replicability. For the individual participating country, the base against which project results might be measured could be quite low, since many current policy decisions are often based on subjective judgements with little or no formal policy analysis being undertaken.

Policy analysts commonly use a variety of techniques to test the accuracy and replicability of their results. Predictions made with one set of data are compared with predictions from other sets of data. Analysts model a system using historical data, use this system to predict current variables and compare these predictions with actual data. Experts in the field are asked to review the results and the relationships they are based on to see if they make "sense." Conclusions and the relationships they are based on are reviewed to see if they are consistent with economic theory. Parameters are varied and results calculated and compared to see how sensitive they are to certain relationships and to the quality of the estimates. If the results prove sensitive, additional data can be collected to improve the specification of the relationship and/or the quality of the estimates and thereby the accuracy of the final results. By carefully specifying important relationships, quantifying them and testing their results, analysts also expect to enhance replicability.

The analysts involved in the development/adaption of the methods under this project will be expected to utilize a variety of tests like the above to insure accuracy. They will also be expected to identify and specify important linkages and to quantify relationships. Given the time constraints imposed on the short-term policy impact evaluations, many of their conclusions are expected to be tentative. Numerous recommendations as to relationships needing further analysis and supporting data are also expected. Policy analysis has to be viewed as a continuing

process, however, one in which the advice provided improves over time as the data base, the analytical techniques and the ability to use them improve.

The question whether methods developed in one set of countries will be replicable in another set of countries was also raised in review discussions. The conceptual framework which was discussed earlier is expected to be relevant to all countries. Different linkages will be more or less important in different countries, however. The direction of relationships and magnitude of relationships are also expected to vary from country to country. Whether one analytical method or another is suitable for use in a particular country to help analysts capture these relationships will depend in part on the data available, the amount of training analysts have, and the level of sophistication of the overall planning system.

The more similar two countries are in level of institutional development, the more likely it is that planning methods developed in one will be applicable to the other. But if project resources are concentrated in countries whose characteristics are too similar, the range of socio-economic and planning environments in which the methods developed can be utilized may be too narrow. Whether methods developed in one country are applicable in other countries also depends in part on the time available for transfer. Techniques which can be applied next year in a country which has a well organized, well staffed planning unit with adequate data collection facilities may take ten years to be useful to a country which is just beginning to train the people who will eventually staff its planning unit.

The short-term problem is to ensure that methods developed in each country are communicated effectively to other countries with similar policy needs and planning capacities. The longer-term problem is to ensure that the methods developed in countries with stronger planning systems will be available for future use by countries whose present planning capabilities are weak. Several steps will be taken to encourage replication--(1) distributing publications widely; (2) including planners and analysts from participating and other countries in project conferences and workshops; and (3) providing technical assistance to participating and other countries to advise them on how to design and implement consumption/nutrition impact evaluations and/or how to build the capacity to undertake consumption/nutrition analyses into their planning systems. The information network and conference and workshops will also be used to help sort out which aspects of the methods developed are location-specific and which are transferable.

## B. Economic Analysis

This project could have a substantial economic impact if it succeeds in introducing consumption/nutrition concerns into developing country national planning systems. It is increasingly recognized that, in countries where malnutrition is prevalent, improvements in food consumption and nutritional status can make

significant contributions to improved national economic well-being. This may be achieved by improving the productivity of workers through improved health, strength, energy and alertness. Returns to education may be increased through better learning ability, fewer sick days, greater alertness on the part of students and reduced child mortality. Expenditures on health care may be reduced as the health of the population improves. The current state of knowledge does not provide a ready calculus for measuring the financial and economic value from improvements in nutrition, however. It is impossible, therefore, to attach a dollar value to the benefits to be derived from the successful completion of this project.

### C. Project Management Analysis

The Office of Nutrition, S & T, has responsibility for this project. The S & T/N Project Manager ensures that all aspects of project implementation, including negotiation of contracts and the flow of AID monies, are in accordance with AID procedures. The Project Manager provides overall policy guidance and ensure that other relevant AID offices, particularly the USAIDs and Geographic Bureaus, are informed about the project and its progress. Selection of sites and determination of methods for additional short or longer-term activities will be made in full collaboration with USAIDs and Regional Bureaus.

Authority for the day to day monitoring and sub-project implementation activities is delegated, subject to AID (S & T/N) review, to the USDA Nutrition Economics RSSA. The USDA RSSA coordinates the drafting of scopes of work for the RFPs, arranges for their review, arranges and participates in the technical reviews of proposals and the selection of contractors, provides day-to-day technical supervision of contractors and arranges for (and participates in) all evaluations of contractor performance. The RSSA group will also coordinate the implementation of the information network and other information dissemination activities.

An outside expert advisory group will be organized to review the methods developed/adapted under project auspices for their technical merit. Members will include professionals from the disciplines of economics, other social sciences, statistics and nutrition who have experience dealing with issues related to food policy, food consumption and nutrition. To insure adequate liaison with other Agency technical advisory groups, several members of AID's Research Advisory Committee (RAC) will also be included in this group. An Inter-Bureau Advisory Committee with membership from within the Agency (all Regional Bureaus, PPC, S & T/AGR, S & T/RAD, S & T/PO) has already been organized to provide overall guidance to the project, particularly on questions related to the relevancy of activities to USAID and developing country needs and capabilities. This Committee has also been asked to review appropriate project documents, help identify countries in which to undertake activities and evaluate project and sub-project performance, including the lessons learned during implementation.

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## D. Social Analysis

### 1. Socio-cultural context

This project has a world-wide scope and will be implemented in a number of developing countries with diverse cultures. Nevertheless, there are some important elements common to many of these nations. Most of these countries have largely rural populations and traditions, but they are undergoing rapid urbanization. The seats of government are physically located in urban centers where rural-urban migrants are concentrating in greater and greater numbers. Thus, the political and social welfare demands, largely for cheap food, of the concentrated urban populations physically surround governments. Pressures from residents of urban zones often cause governments to take short-term actions to respond directly to these pressures. Many governments have responded with actions designed to maintain low food prices, such as importing cheap food or subsidizing staple foods. These food and agricultural policies, and others like them may, however, have long run deleterious effects on the well-being of the poor majority of their citizens through creating disincentives to local agricultural production and/or decapitalizing agricultural investments.

### 2. Beneficiaries

The direct beneficiaries of this project will be the planners and policy makers in developing countries who will receive much needed technical assistance and transfer of analytical techniques which will enable them to provide their governments with better information on and alternatives to current policies.

Indirect beneficiaries will include the larger number of small farmers, landless laborers and poor urban consumers in the participating developing countries whose needs for improved levels of food consumption will be enhanced by the longer term effects of the project.

### 3. Issues and constraints

This project is feasible and socially sound, in that each activity is adapted to the participating country in which the activity will occur. Most activities will take place in what may be highly sensitive, political environments. Achievements of the goal targets will ultimately depend on whether governments will have the political will as well as institutional capability to alter policies once their consumption/nutrition impacts have been identified.

Nevertheless, introducing consumption/nutrition concerns into the evaluations of alternative agricultural policies could have a substantial impact on the social as well as economic well-being of a country. Government agricultural policies affect food production, food availability in various markets, incomes of farmers and rural laborers and income distribution. All these variables influence the social as well as economic well-being of different socio-economic groups. Reduced morbidity and child

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mortality have social as well as economic benefits. Some believe that improved incomes and nutritional status, by reducing infant and child mortality, also support long-run trends leading toward a reduction in the rate of population growth. If so, this would also constitute a substantial social as well as economic benefit in most developing countries.

E. Environmental Impact

Project activities, which include data collection, analysis and dissemination of results, will have minor, if any, impacts on the environment of the participating countries.

## V. PROJECT IMPLEMENTATION

### A. Implementation Plan

The CEAP project is designed to include a variety of activities which will take place over a six year period--FY80 to FY85. Activities scheduled to begin during the first year of the project were approved in FY80 and are already underway. This Project Paper seeks approval for the activities and funding levels scheduled for the second phase of the project--FY82 to FY85.

Six short-term policy impact evaluations were financed during the first phase. Contracts were awarded in FY80 and field work began in the second and third quarters of FY81 (see Table 2). The Jamaica reports were received in August 1981. The Tanzanian report is scheduled to be completed by the end of January 1982, the Cameroon and Senegal reports by the end of February 1982 and Panama and Sudan by the end of June 1982.

The collaborative project in Honduras was also financed during the first phase. ROCAP signed the Project Grant Agreement for the United States Government with the Central American Common Market Secretariat (SIECA) in August 1980. According to the three-way memorandum signed by S & T/N, ROCAP and USAID/Honduras, S & T/N has responsibility for all substantive aspects of project management and ROCAP all administrative/financial aspects. SIECA ECID met all conditions precedent in January 1981, and most of the core staff was working by March 1981. The Grant Agreement provides for a technical evaluation every six months. The first was held in October 1981. The Project Assistance Completion Date is January 30, 1983.

Four additional short-term evaluations will be undertaken primarily in Asia and/or Latin America during the second phase of the project. Cables soliciting country participation will be sent to selected countries upon approval of Phase II of the project. Design teams will be sent to interested countries during the following quarter. Scopes of work for the Phase II studies will not be finalized until after the AID in-house evaluation of the project which is scheduled for the third quarter of FY82. This is to insure that their design and execution will benefit from the lessons learned from the Phase I studies.

Technical assistance will be provided throughout the second phase of the CEAP project. Substantial amounts of complementary technical assistance has been provided by the Nutrition Economics RSSA with USDA. It is expected that USDA, under this or a separate RSSA, will be a prime source of the technical assistance to be funded under this project. Other mechanisms for obtaining consultancy services for technical assistance to countries, state-of-the-art papers, workshops, etc., include IQC's and purchase orders. Consideration was given initially to contracting for these services with one or two institutions under some type of umbrella arrangement. A brief review of potential contractors, however, indicated that no one or two institutions had a predominant capability to undertake the kinds of data collection and analyses and methods development services needed. These activities are also expected to be quite diverse, many will be unrelated and most will be short in duration and/or small in dollar amount.

TABLE 2  
Implementation Chronogram

| Sub-Activities                                  | FY80 |   |   |   | FY81 |   |   |   | FY82 |   |   |   | FY83       |   |   |   | FY84                              |   |   |   | FY85 |   |   |   | FY86 |   |   |   |   |   |   |
|---|------|---|---|---|------|---|---|---|------|---|---|---|------------|---|---|---|-----------------------------------|---|---|---|------|---|---|---|------|---|---|---|---|---|---|
|   | 1    | 2 | 3 | 4 | 1    | 2 | 3 | 4 | 1    | 2 | 3 | 4 | 1          | 2 | 3 | 4 | 1                                 | 2 | 3 | 4 | 1    | 2 | 3 | 4 | 1    | 2 | 3 | 4 | 1 | 2 | 3 |
| <b>Phase I</b>                                  |      |   |   |   |      |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| <b>Short-term Policy Evaluations</b>            |      |   |   |   |      |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| Jamaica   | S-C  |   |   |   | S*-C |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| Cameroon  | S-C  |   |   |   | S*-C |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| Senegal   | S-C  |   |   |   | S*-C |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| Tanzania  | S-C  |   |   |   | S*-C |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| Sudan   | S-C  |   |   |   | S*-C |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| To be identified                                |      |   |   |   | S-C  |   |   |   | S*-C |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| Long-term Collaborative Arrangement in Honduras |      |   |   |   |      |   |   |   |      |   |   |   | -C S-----C |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| <b>Phase II</b>                                 |      |   |   |   |      |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| <b>Short-term Policy Evaluations</b>            |      |   |   |   |      |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| To be identified                                | S-C  |   |   |   | S*-C |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| To be identified                                | S-C  |   |   |   | S*-C |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| To be identified                                | S-C  |   |   |   | S*-C |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| To be identified                                | S-C  |   |   |   | S*-C |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| <b>Technical Assistance</b>                     |      |   |   |   |      |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| S-----C   |      |   |   |   |      |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| <b>Information Dissemination</b>                |      |   |   |   |      |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| Information Network                             |      |   |   |   |      |   |   |   |      |   |   |   | S-----C    |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| Mid-Project Workshop                            |      |   |   |   |      |   |   |   |      |   |   |   | S-C        |   |   |   |                                   |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| Other Workshops                                 |      |   |   |   |      |   |   |   |      |   |   |   |            |   |   |   | s-c s---c s-c s---c <sup>1/</sup> |   |   |   |      |   |   |   |      |   |   |   |   |   |   |
| End-of-Project Conference                       |      |   |   |   |      |   |   |   |      |   |   |   |            |   |   |   |                                   |   |   |   | s-c  |   |   |   |      |   |   |   |   |   |   |

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- Design Phase
- Implementation Phase
- \* Initiation Field Work

<sup>1/</sup> Illustrative, actual workshops will be scheduled at appropriate times given project progress

Formal results and information dissemination activities will commence with the holding of in-country seminars to report the results of each short-term evaluation and will continue throughout the life of the project.

A workshop to discuss the results and implications of the project to date will be held in mid-1982. A major international conference is also scheduled prior to the end of the project, in mid-1985.

A detailed implementation plan for the ECID/Honduras sub-project was included in the Project Grant Agreement (see Annex 2). Implementation plans were included in the scopes of work developed for the short-term policy impact evaluations. These were cleared with the participating USAIDs and Regional Bureaus. Similar implementation plans will be drawn up for the remaining policy impact evaluations and for each collaborative activity in conjunction with USAIDs and host governments. Personnel and scopes of work for all technical assistance activities undertaken will be cleared by USAIDs and Regional Bureaus.

#### B. Financial Plan

The total cost of the project is estimated at \$2.8 million. The project is expected to run for six years, with funds obligated for FY80-FY85. Approximately two-thirds of total project funds will be devoted to in-country studies which will provide specific policy impact information and appropriate methods for determining and incorporating such information into national planning systems. Another approximately 25 percent of project funds will be devoted to technical assistance activities.

Table 3 indicates how project funds will be allocated among sub-project activities. Table 4 provides an illustrative budget for a short-term policy impact evaluation. The cost estimates for the ECID/Honduras project are presented in Tables 5 to 7. The estimated budgets for the information dissemination activities are presented in Table 8.

Although countries/USAIDs were not required to contribute resources to the short-term policy impact evaluations, most are in fact making some contribution. The Cameroonian Ministry of Agriculture, for example, provided the team with a vehicle to use in its field work and tried to make a counterpart available to work with the team during the data analysis stage in Michigan. USAID Senegal provided office space and a vehicle for several days each week for the team. In Tanzania, both the USAID and the Ministry of Agriculture provided the team with some office space and other logistical support. In Sudan, the evaluation is being undertaken as one of the four policy studies required under a PL480 Title III Agreement. A Government Steering Committee with members from the Ministries of Planning and Agriculture and the University of Khartoum has been established and approximately Sudanese Pounds 52,000 from the PL480 Special Account have been set aside to finance the travel and per diem of contractor personnel while in Sudan and the costs of undertaking a mini-household budget survey.

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TABLE 3

Project Budget  
(000)

|   | Phase I |        | Phase II |        |        | Total  |         |
|---|---------|--------|----------|--------|--------|--------|---------|
|   | FY80    | FY81   | FY82     | FY83   | FY84   |        | FY85    |
| <u>Methods Adaptation, Review and Field Testing</u>   | \$1,085 | \$ 227 | \$ 300   | \$ 220 | 68     | \$     | \$1,900 |
| Short-term policy impact evaluations  | (485)   | (227)  | (300)    | (188)  |        |        | (1,200) |
| ECID/Honduras sub-project   | (600)   |        |          |        |        |        | (600)   |
| State-of-the-art papers, other reviews and development of methods identified as a result of special TDY requests and collaborative activities |         |        |          | (32)   | (68)   |        | (100)   |
| <u>Technical Assistance</u>   |         |        | 60       | 135    | 252    | 218    | 665     |
| Utilization of substantive findings   |         |        |          |        |        |        |         |
| Design of impact analyses   |         |        |          |        |        |        |         |
| Implementation of impact and other analyses   |         |        |          |        |        |        |         |
| Reorientation of planning systems   |         |        |          |        |        |        |         |
| Staff training  |         |        |          |        |        |        |         |
| Other   |         |        |          |        |        |        |         |
| <u>Information Dissemination</u>  |         |        | 40       | 30     | 80     | 50     | 200     |
| Information network   |         |        |          |        |        |        |         |
| Mid and end project seminar/conference  |         |        |          |        |        |        |         |
| Technical workshops   |         |        |          |        |        |        |         |
| <u>Special Evaluations</u>  |         |        |          | 15     |        | 20     | 35      |
| <u>Total</u>  | \$1,085 | \$ 227 | \$ 400   | \$ 400 | \$ 400 | \$ 288 | \$2,800 |

TABLE 4

Illustrative Budget  
(Short-term Policy Impact Study)

|   |                    |                  |
|---|--------------------|------------------|
| <u>Salaries and Per Diem</u>                                    |                    | \$53,500         |
| Senior agricultural economist<br>2.5 months @ \$7,000/month     | \$17,500           |                  |
| Two research associates<br>6 months @ \$2,000/month, each       | 24,000             |                  |
| Two local research assistants<br>6 months @ \$1,000/month, each | 12,000             |                  |
| <u>Survey Costs -- Equipment</u>                                |                    | 500              |
| Scales, hand calculators,<br>notebooks, etc.                    | 500                |                  |
| <u>Travel</u>   |                    | 14,500           |
| International (3 round trips)                                   | 6,000              |                  |
| In-country  | 8,500              |                  |
| <u>Report Preparation, Miscellaneous<br/>and Contingency</u>    | 15,000             | <u>15,000</u>    |
|   | <b>SUB-TOTAL</b>   | <b>\$83,500</b>  |
| Overhead (100 percent of salaries)                              |                    | <u>36,500</u>    |
|   | <b>GRAND TOTAL</b> | <b>\$120,000</b> |
| 10 studies (@ \$120,000)  |                    | \$1,200,000      |

TABLE 5

Summary of Estimated Total Costs of the  
ECID/Honduras Collaborative Sub-Project  
(in \$CA<sup>1/</sup>)

|  | <u>ECID Funded</u> | <u>GOH Counterpart<sup>2/</sup></u> | <u>Total</u> |
|--|--------------------|-------------------------------------|--------------|
| A. <u>Local Currency</u><br><u>Costs</u>   | \$557,400          | \$159,300                           | \$716,700    |
| 1. Wages/Salaries                          | 334,500            | 103,500                             | 438,000      |
| 2. Other Costs                             | 111,400            | 55,800                              | 167,200      |
| 3. Administrative<br>Expenditures          | 111,500            | -                                   | 111,500      |
| B. <u>Foreign Exchange</u><br><u>Costs</u> |                    |                                     |              |
| U.S. Consultants                           | 42,600             | -                                   | 42,600       |
| TOTALS (A & B)                             | \$600,000          | \$159,300                           | \$759,300    |

<sup>1/</sup>Equivalent to U.S. \$

<sup>2/</sup>Estimated contribution in kind and in services.

Source: Project Grant Agreement between the Secretariat for Economic Integration of Central America and the United States of America.

TABLE 6

Estimated Budget Requirements for  
the ECID/Honduras Collaborative Sub-Project  
(in \$CA<sup>1</sup>/)

| A. <u>Local Expenditures</u>   | <u>\$/Mos.</u> | <u>No. Mos.</u> | <u>TOTAL</u>    |
|--|----------------|-----------------|-----------------|
| <u>1. Personnel</u>  |                |                 |                 |
| Project Director   | 2,500.00       | 24              | 60,000.00       |
| Research Associate   | 1,500.00       | 7               | 10,500.00       |
| Systems Analyst  | 1,200.00       | 24              | 28,800.00       |
| Principal Investigator<br>(Demand Analysis)  | 2,000.00       | 24              | 48,000.00       |
| Research Associate   | 1,500.00       | 7               | 10,500.00       |
| Research Associate   | 1,500.00       | 9               | 13,500.00       |
| Research Assistant   | 500.00         | 24              | 12,000.00       |
| Secretary/Clerk  | 350.00         | 24              | 8,400.00        |
| Principal Investigator<br>(Agricultural Models)                                      | 2,000.00       | 24              | 48,000.00       |
| Research Associate   | 1,500.00       | 7               | 10,500.00       |
| Research Associate   | 1,500.00       | 9               | 13,500.00       |
| Research Assistant   | 500.00         | 24              | 12,000.00       |
| Secretary/Clerk  | 350.00         | 24              | 8,400.00        |
| Consultants (C.A.)   |                |                 | <u>6,800.00</u> |
| Salaries Sub-Total   |                |                 | 290,800.00      |
| Insurance Benefits-Personal<br>Benefits-Personal Allocation<br>(15% Personnel Costs) |                |                 | 43,600.00       |
| <u>2. Computing and Data Processing</u>  |                |                 |                 |
| - Rent of Equipment and "Software"   | 240.00         | 24              | 5,800.00        |
| - Computing Stationary   | 300.00         | 24              | 7,200.00        |
| - Complementary Surveys<br>Honduras (first year)                                     |                |                 | 10,000.00       |
| - Key punch and Verifying Expenses   | 350.00         | 24              | 8,400.00        |

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TABLE 6 (cont.)

|   | <u>\$/Mos.</u> | <u>No. Mos.</u> | <u>TOTAL</u> |
|---|----------------|-----------------|--------------|
| 3. <u>Travel</u>                                      |                |                 |              |
| - Air Tickets   | 400.00         | 24              | 9,600.00     |
| - Per Diem  | 600.00         | 24              | 4,400.00     |
| 4. <u>Seminars and Publications</u>                   |                |                 |              |
| - Seminars and Regional Meetings                      | -              | -               | 20,000.00    |
| - Publications  | -              | -               | 9,600.00     |
| 5. <u>Other Expenses</u>                              |                |                 |              |
| - Equipment and Supplies                              | 500.00         | 24              | 12,000.00    |
| - Communications                                      | 400.00         | 24              | 9,600.00     |
| - Diverse Expenses                                    | 200.00         | 24              | 4,800.00     |
| 6. <u>ECID Administrative Expenditures (Overhead)</u> |                |                 | 111,500.00   |

B. Foreign Exchange Costs1. Consultants (U.S.)

|                            |                      |   |                 |
|----------------------------|----------------------|---|-----------------|
| - Fees                     | (100 days/<br>year)  | - | 30,000.00       |
| - Air Tickets              | (6 tickets/<br>year) | - | 7,000.00        |
| - Per diem and other costs | (70 days/year)       | - | <u>5,600.00</u> |

T O T A L S

600,000.001/ Equivalent to US\$

NOTE: Within the total amount shown, budget line items may be increased or decreased in a maximum not to exceed 15% without prior written approval, except that no transfers will be allowed between line item A & B.

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TABLE 7

Estimated GOH Contribution in Kind to  
the ECID/Honduras Collaborative Sub-Project  
(In \$CA)

A. PERSONNEL

|  | <u>\$/MOS.</u> | <u>NO. MOS.</u> | <u>TOTAL</u>   |
|--|----------------|-----------------|----------------|
| Research Associate<br>(Demand Analysis)                    | 1,500          | 17              | 25,500         |
| Research Associate<br>(Agricultural Models)                | 1,500          | 17              | 25,500         |
| Research Associate<br>(Data Collection)<br>Policy Analysis | 1,500          | 17              | 25,500         |
| Research Associate<br>(Demand Analysis)                    | 1,500          | 9               | 13,500         |
| Research Associate<br>(Agricultural Models)                | 1,500          | 9               | 13,500         |
| <b>Sub-Total</b>   |                |                 | <b>103,500</b> |

B. OPERATING COSTS

|   |       |    |               |
|---|-------|----|---------------|
| Office space for all pro-<br>ject staff in Honduras | 1,000 | 24 | 24,000        |
| Water, lights & General<br>Services                 | 100   | 24 | 2,400         |
| Computing Services                                  | 1,100 | 24 | 26,400        |
| Internal Transportation                             | 125   | 24 | 3,000         |
| <b>Sub-Total</b>                                    |       |    | <b>55,800</b> |
| <b>TOTAL</b>  |       |    | <b>59,300</b> |

Source: Project Grant Agreement between the Secretariat for  
Economic Integration of Central America and the  
United States of America

TABLE 8

Estimated Budgets  
(Information Dissemination)

|  |                  |
|--|------------------|
| <u>Final Conference</u>  |                  |
| International travel (12 round trips<br>\$2,000 ea)                  | \$ 24,000        |
| Local Travel (10 round trips \$300 ea)                               | 3,000            |
| Per Diem (130 days \$80/day)   | 10,400           |
| Facilities (\$400/day)   | 2,000            |
| Materials  | 2,000            |
|  | <u>\$ 41,400</u> |
| <u>Mid-Project Workshop</u>  |                  |
| International Travel (10 round trips<br>\$2,000 ea)                  | \$ 20,000        |
| Local Travel (10 round trips \$300 ea)                               | 3,000            |
| Per Diem (120 days x \$80/day)                                       | 9,600            |
| Facilities (\$400/day)   | 2,000            |
| Materials  | 2,000            |
|  | <u>\$ 36,600</u> |
| <u>Technical Workshops</u>   |                  |
| International Travel (3 round trips<br>x \$2,000)                    | \$ 6,000         |
| Local Travel (10 round trips x \$500)                                | 5,000            |
| Per Diem (90 days x \$80/day)  | 7,200            |
| Consultant Fee (20 days x \$130/day)                                 | 3,600            |
| Facilities (\$200/day)   | 1,000            |
| Materials  | 2,200            |
|  | <u>\$ 25,000</u> |
| 4 Workshops ( \$25,000)  | \$100,000        |
| <u>Information Network</u>   |                  |
| Publication of Project Results and<br>Other Information Distribution | \$ 22,000        |
| <b>TOTAL</b>   | <b>\$200,000</b> |

USAIDs and/or host governments, however, will be expected to contribute to the collaborative activities developed under the project. In the sub-project in Honduras, for example, the Government of Honduras is contributing 20 percent of the total resources devoted to the activity (\$159,000 out of \$759,000). The other collaborative activities are expected to develop primarily out of the short-term policy impact evaluations. Here USAID and/or country willingness to make a commitment of personnel and financial resources will be one of the criteria to be used in deciding whether to develop a longer term collaborative relationship with a particular country (see pages 6-7).

In countries where collaborative activities will complement on-going agricultural planning activities being supported by a USAID project (also see page 8) developing an acceptable cost sharing arrangement with the USAID and/or country should not prove difficult. In these cases, the CEAP project would cover primarily the salary and travel costs of the outside consultant while the USAID and/or country would cover the salary and travel costs of the local analysts, statisticians, computer programmers, interviewers, etc. participating in the collaborative activity. In some cases, the USAID and/or country may cover the per diem and in-country travel cost of the outside consultant as well.

### C. Evaluation Plan

Major responsibility for routine evaluations lies with the Office of Nutrition. Input is planned from contractors, USAIDs, Regional Bureaus and host governments, with the USDA RSSA group performing a coordination function.

#### 1. Criteria

The logical framework which appears in Annex I lists the objectively verifiable indicators and means of verification. These will be used as a basis for the routine evaluations conducted by the Office of Nutrition. The means of verification will be obtained by making requests to the Regional Bureaus, USAIDs and host governments for documentation and status reports.

Because of the experimental nature of the project, special evaluations will be undertaken in FY83 and in FY86. The Office of Nutrition will be responsible for organizing the first special evaluation. Members of the evaluation team will be drawn from the Inter-Bureau Advisory Committee and the outside expert advisory group (see page 30). Questions of contractor performance, relevance of consumption impact analyses to USAIDs and developing countries and suitability and technical merit of the analytical methods developed/adapted will all be on the agenda. The results of this review will provide guidance for the remaining activities scheduled under the project: what are the most promising methods and how best to use the remaining technical assistance to test these methods and to help the collaborating countries develop the capacity to carry out such analyses on an on-going basis.

The Evaluation Office of the Science and Technology Bureau will be responsible for organizing the final special evaluation. A major purpose of this evaluation will be to verify the degree of the impact of the project on the direct and indirect beneficiaries. The results of this evaluation should indicate (1) whether further actions are warranted to extend the results of the project to other developing countries, and (2) what further actions, including funding, are called for.

2. Schedule of evaluations

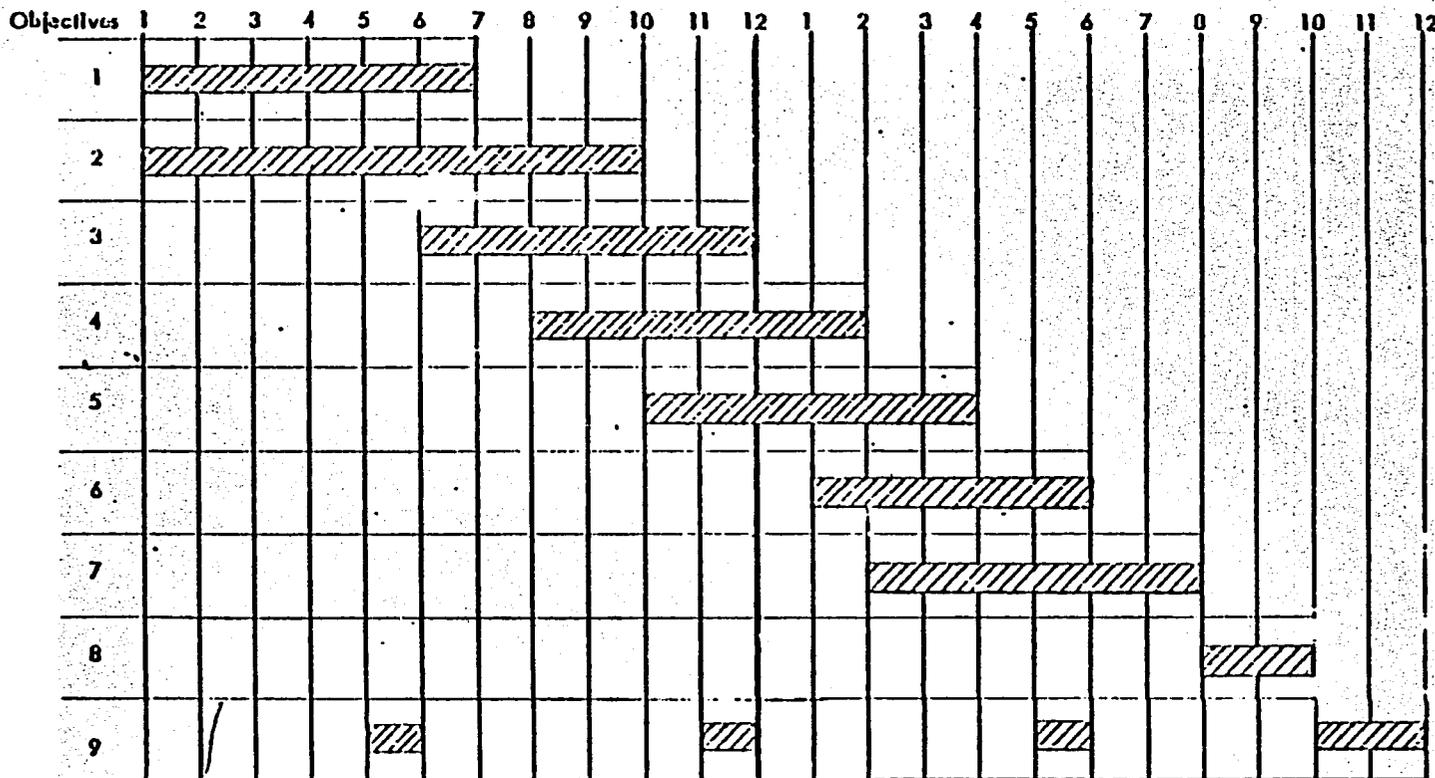
| <u>Year</u> | <u>Type</u>              | <u>Output</u>                 |
|-------------|--------------------------|-------------------------------|
| FY 82       | AID in-house evaluation  | PES                           |
| FY 83       | Special evaluation       | Special Report                |
| FY 84       | Management review        | Monitoring/status report      |
| FY 85       | Management review        | Monitoring/status report      |
| FY 86       | Final special evaluation | Special Report covered by PES |

u. 8

ANNEXES

## ECID/Honduras Sub-Project

## Timing of Activities (Months from Inception)



## Best Available Document

- OBJECTIVES:**
- To specify the structure of the Honduran subregional models. their relation with other groups (in line with methodology of Objective 1.)
  - Describe the income expenditure/patterns and implied levels of welfare of urban and rural socio-economic groups by regions in Honduras.
  - Estimate food demand relationships for different socio-economic groups.
  - 4-6. Construct the subregional agricultural models beginning in the South Sub-region and expanding to two additional regions as time permits. This model(s) will include significant detail on small
  7. Construct an aggregated model for the other 1 to six regions consistent with the sub-regional model(s) of Objectives 4-6.
  8. Construct a national agricultural sector model (which links together the subregional models) and utilize it for policy analyses.
  9. Disseminate the findings of the project among policy makers and technicians in Honduras and in the other Central American countries.

**ATTACHMENT I**  
**PROJECT DESIGN SUMMARY**  
**LOGICAL FRAMEWORK**

(INSTRUCTION: THIS IS AN OPTIONAL FORM WHICH CAN BE USED AS AN AID TO ORGANIZING DATA FOR THE PAR REPORT. IT NEED NOT BE RETAINED OR SUBMITTED.)

Year of Project: \_\_\_\_\_  
 From FY 80 to FY 85  
 Total U.S. Funding \$2.8 million  
 Date Prepared: October 1981

Project Title: **NUTRITION: Consumption Effects of Agricultural Policies 931-1274**

| NARRATIVE SUMMARY  | OBJECTIVELY VERIFIABLE INDICATORS  | MEANS OF VERIFICATION  | IMPORTANT ASSUMPTIONS   |
|--|--|--|---|
| <p>Overall Goal: The broader objective to which project contributes:</p> <p>To improve the nutritional well-being of the poor in developing countries.</p> | <p>Measures of Goal Achievement:</p> <p>Nutritional status of the poor improves.</p> | <p>Nutritional status surveys of target populations in situations where nutrition goals are approved show improvement.</p> | <p>Assumptions for achieving goal are:</p> <ol style="list-style-type: none"> <li>1. The current nutrition/consumption situation is known so that what constitutes improvement can be evaluated.</li> <li>2. Once consumption/nutrition impacts have been identified, countries will have the will and institutional capability to alter policies.</li> </ol> |

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**PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK**

NUTRITION: Consumption Effects of Agricultural Policies 931-1274

Title of Project: \_\_\_\_\_  
 From FY 80 to FY 85  
 Total U.S. Funding \$2.8 million  
 Data Prepared: October, 1981

| NARRATIVE SUMMARY   | OBJECTIVELY VERIFIABLE INDICATORS  | MEANS OF VERIFICATION   | IMPORTANT ASSUMPTIONS  |
|---|--|---|--|
| <p>Purpose:</p> <p>To encourage developing countries to develop national agricultural planning systems that are conducive to improved national levels of consumption and nutrition.</p> | <p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ol style="list-style-type: none"> <li>At least half of the countries assisted will have incorporated consumption/nutrition goals and criteria into their agricultural planning system.</li> <li>Guidelines for undertaking consumption/nutrition impact analyses elsewhere will be published.</li> </ol> | <ol style="list-style-type: none"> <li>Analysis of planning documents from countries will provide evidence that consumption/nutrition impacts are a) used as evidence of policy success b) made an integral part of the analyses of alternative policies.</li> <li>Contractor will be required to report how Ministry of Agriculture planning procedures have or will be modified.</li> </ol> | <p>Assumptions for achieving purpose:</p> <p>Most developing countries already have a type of agricultural planning system whose scope of activities can with guidance and marginal amounts of technical assistance be expanded to include consumption/nutrition concerns.</p> |

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PROJECT SUMMARY  
LOGICAL FRAMEWORK

Project No. 80  
Total Cost \$2.8 million  
Start Date October, 1981

UNEP/WHO  
1981/1982

Project Title & Number: **NUTRITION: Consumption Effects of Agricultural Policies 931-1274**

| NARRATIVE SUMMARY  | OBJECTIVELY VERIFIABLE INDICATORS   | MEANS OF VERIFICATION   | EFFECTS BY ACCESS  |
|--|---|---|--|
| <p>Objectives:</p> <p>1. Linkages between policies and consumption/nutrition impacts identified and substantive policy findings developed for selected developing countries.</p> <p>2. Planning methods (simple as well as more complex) for measuring the consumption/nutrition impacts of agricultural and other development policies developed and field tested.</p> <p>3. Information on these techniques and knowledge how to use them transferred to developing country planners and policy analysts through a series of expert consultancies, workshops, a conference and an information network.</p> | <p>Magnitude of Outputs:</p> <p>1. Short-term analyses of the consumption/nutrition impacts of agricultural policies in 8 to 10 countries.</p> <p>2. Reports describing the analytical methods developed and/or adapted, both simplified and more complex.</p> <p>3. State-of-the-art papers covering various analytical and data collection methodological issues.</p> <p>4. Methods for analyzing the consumption/nutrition effects of agricultural policies developed and field tested in an on-going planning system in at least one country.</p> <p>5. Consulting services, including assistance utilizing substantive findings, designing impact analyses, reorientating planning systems implementing impact analyses and training staff.</p> <p>6. Final report</p> <p>7. Information about the analytical and data collection methods developed disseminated through a series of seminars, workshops and an information network.</p> | <p>1. Analyses, reports, guidelines, papers etc. received AID/W and acceptable.</p> <p>2. Consultant services utilized by countries/missions.</p> <p>3. Conference/workshops held</p> <p>4. Reports, etc. received by countries/missions.</p> | <p>Assumptions for implementation:</p> <p>1. It is possible to relate consumption/nutrition benefits to a particular policy.</p> <p>2. Expertise required is available.</p> <p>3. Contractors will have access to relevant data and data sources.</p> <p>4. Developing countries are willing to participate/collaborate.</p> |

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**PROJECT DESIGN SUMMARY  
LOGICAL FRAMEWORK**

Life of Project: From FY 80 to FY 85  
Total U.S. Funding: \$2.8 million  
Date Prepared: October, 1981

Project Number: NUTRITION: Consumption Effects of Agricultural Policies 931-1274

| NARRATIVE SUMMARY   | OBJECTIVELY VERIFIABLE INDICATORS   | MEANS OF VERIFICATION  | IMPORTANT ASSUMPTIONS  |
|---|---|--|--|
| <p>1. Expenditure of \$2.8 million over five year life of Project for contractor services and expertise.</p> <p>2. Travel to and work in selected developing countries.</p> | <p>Implementation Target (Type and Quantity)</p> <p>1. Six Short-term analyses contracted for in FY80.</p> <p>2. ECID/Honduras collaborative sub-project initiated FY80.</p> <p>3. Three to four additional short-term analyses contracted for in FY82/83.</p> <p>4. State-of-the-art papers, consultations and information dissemination activities undertaken during second phase of project.</p> | <p>1. Documentation from AID systems.</p> <p>2. Regular AID reporting procedures.</p> <p>3. Other vouchers and audits.</p> | <p>Assumptions for providing inputs:</p> <p>1. PP is approved.</p> <p>2. Scopes of work sufficient for RFI development.</p> <p>3. Agreements can be reached between AID and bidding contractors.</p> <p>4. Agreements can be reached with AID Missions, developing countries and sub-contractors.</p> <p>5. Funds are available.</p> |

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