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EVALUATION OF THE SOCIAL PROGRESS INDICATORS PROJECT IN EL SALVADOR

(Project No. 931-0236.05)

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I. PURPOSE OF THE EVALUATION

A. Overview of the SPI Project

The Social Progress Indicators project (hereafter called SPI) has as its objective the development of a set of statistical measures that reflect socioeconomic conditions at one point in time and permit the tracking of changes in those conditions over time. The project has exclusively used as its data base information provided by the Unidad de Investigaciones Muestrales (UIM) of the Salvadorean census bureau. The data base at UIM is drawn from a permanent sampling frame of 10,000 households which were defined by a previous A.I.D.- financed project.

As stated in the project paper, the major purpose of the SPI project is "to develop and utilize measures of level of living in order to improve the ability of national agricultural and rural development in planning units in El Salvador and ultimately in other Central American countries to better define rural development problems, to design programs and policies to solve the problems, and to evaluate rural development activities."

Implementation of the project began in May 1979 with U.S. funding grants of \$800,000 projected for the four-year life-of-project span. The funding source is S&T/AGR and the funds are administered by USAID/ROCAP in Guatemala. Thus far, actual obligated funds total \$600,000 and about \$422,000 has been disbursed (through October 1982). The implementing agency is SIECA/ECID (from "Secretaria Permanente del Tratado General de Integracion Economica Centroamericana, Centro de Estudios Centroamericanos de Integracion y Desarrollo"). The project director throughout the 3 1/2 year life of the project has been Lic. Gustavo Leiva, a Guatemalan with university training in philosophy.

The SPI project is scheduled to conclude in May 1983, and a final grant tranche of \$200,000 (plus about \$178,000 already in the pipeline) remains to be disbursed.

B. Summary of the February 1981 Evaluation

The first major evaluation of SPI was conducted in February 1981 in Washington, D.C. It was basically a technical review of data analysis which had occurred up to that time. The evaluation team consisted of an economic anthropologist, rural sociologist, nutritionist, and a statistician. The evaluation team concluded that the SPI project had made significant progress, but that a number of methodological modifications were necessary. Because the evaluation team did not travel to El Salvador, such factors as institutionalization, host country commitment, project management, and quality of the project personnel were not assessed at that time.

More specifically, the evaluation called for a number of modifications in all five of the social indicator domains which were undergoing preliminary development at that time: (a) employment; (b) education; (c) health; (d) food consumption; and (e) employment. The evaluation also cautioned the project director to refrain from devoting his professional time to such judgemental areas as analysis of government policies and policy prescriptions.

C. Objectives of the Present Evaluation

This evaluation was undertaken at the request of AID/S&T/AGR by Dr. George R. Gardner, a rural sociologist employed by AID/NE/TECH, and Dr. Gary Smith, an agricultural economist employed by USDA/OICD/TA, both senior evaluators with extensive Central American experience and professional proficiency in Spanish. Dr. Gardner has been associated with SPI project since October 1977 when as a consultant he helped design the project. Dr. Smith has worked extensively with data collection and analysis projects in Central America.

Project related issues which led to the present evaluation are several:

- a) There was a need to assess the degree to which the recommendations made during the February 1981 evaluation have been incorporated into the SPI project's methodology;
- b) The commitment of the government of El Salvador to incorporate Social Progress Indicators into its planning program needed assessment;
- c) There was a need to assess the government's ability to incorporate Social Progress Indicators into its planning program; and
- d) S&T/AGR decided that the above factors should be favorably assessed prior to obligation of the remaining tranche of \$200,000 of project funds from the FY 83 authorization.

Specifically, S&T/AGR directed the evaluation team to address the following questions: "Have project evaluation (Feb 81) recommendations been incorporated into methodology? Has modified methodology been tested with appropriate data? What is current status of data gathering activities in El Salvador? What is its effect on project? What is institutionalization progress to date?"

The evaluation team spent the period of November 29 to December 5, 1982, El Salvador and Guatemala reviewing project outputs; interviewing SPI project personnel and relevant persons at the Ministry of Planning, USAID/El Salvador and USAID/ROCAP; and attending a technical review and methodological workshops conducted jointly by the SPI project staff and the Salvadorean Ministry of Planning. The final analysis and write-up of this report was conducted in Washington the following week.

A systematic discussion of evaluation team's findings is presented in the next section of this report.

II. SPI PROJECT PROGRESS SINCE THE 1981 EVALUATION

Rather than a complete summary of the SPI project's activities since its implementation in mid-1979, this section will adhere to the scope of work provided by S&T/AGR and focus primarily on project progress during the 21 months since the February 1981 evaluation.

Initially, the response of the project director to the 1981 recommendations will be presented. Less defined areas such as institutionalization and avoidance of policy formulation/analysis will then be addressed.

A. Development of the final Social Progress Indicators

The project grant agreement signed by SIECA and USAID/ROCAP on May 21, 1979, specifies that the SPI project will be implemented in seven distinct phases and estimates the timing of each phase. The phases, activities and timing are:

<u>Phase</u>	<u>Activity</u>	<u>Months*</u>
I.	Select Initial Indicators	1-3
II.	Present Data on Base-line Indicators	4-12
III.	Analysis of Initial Indicators	13-18
IV.	Measure Government Development Activities	7-26 and 34-36
V.	Periodic Data Collection	19-34 and 33-36
VI.	Analysis of Changes and Impacts	25-42
VII.	Final Report	43-48

*where month 1 = June 1979 and month 48 = May 1983.

Corresponding to each phase of project activity, the project agreement also specifies the major reporting requirements of the project as follows:

<u>Phases</u>	<u>Focus of Required Reports</u>
I.	Selection of Social Progress Indicators
II.	Social Progress Indicators by Department
III.	Cross-Sectional Analysis of Social Progress Indicators
IV.	Measuring Governmental Development Activities (1) Social Progress Indicators by Department: Year 2 (2) Social Progress Indicators by Department: Year 3
VI.	(1) Changes in Level-of-Living: Year 2 (2) Changes in Level-of-Living: Year 3 (3) The Impact of Government Development Activities on Selected Social Progress Indicators
VII.	Measuring Socio-Economic Progress Using Household Survey Data

While in El Salvador, the evaluation team was presented with nearly 2,000 pages of "final reports" with dozens of separate titles. The project director contends that these reports virtually complete the reporting requirements specified in the project grant agreement. Furthermore, he contends that all seven phases of project activity have virtually been completed.

In fact, however, the evaluation team quickly determined that the most fundamental phase (Phase II) of the SPI project has not yet been completed. The five dimensions for level-of-living measurement have been defined (employment, food consumption, education, health, and housing). Additionally, various indicators have been defined for each dimension as seen below:

<u>Dimensions of Level-of-Living</u>	<u>Indicators</u>	<u>No. of Variables Used</u>
1. Empleo	a. Balance de Recursos Humanos b. Condiciones del Empleo	16
2. Consumo de Alimentos	a. Adecuacion calorica b. Adecuacion Proteica c. Adecuacion NDPCAL	18
3. Educacion	a. Nivel de Alfabetismo b. Nivel Educativo Alcanzado c. Asistencia Escolar	25
4. Salud	a. Tasa de Morbilidad b. Tasa de Atencion Medica c. Tasa de Hospitalizacion d. Tasa de Invalidez e. Tasa de Vacunacion f. Tasa de Alcoholismo	24
5. Vivienda	a. Hacinamiento b. Condiciones de la vivienda c. Caracteristicas de la vivienda	74

However, far too many variables are still used to construct these 17 indicators: 157 variables in total The three indicators for the housing ("vivienda") dimension alone encompass no less than 74 variables.

Within a given dimension there is often a high degree of redundancy among the variables used. In many cases, the correlation coefficients among the variables exceed .95 or higher. Thus, although much of the work specified for phase III (analysis of initial indicators) has been completed, the final product -- a core set of indicators based on the smallest feasible number of variables-- has not been completed.

Although the current social conflict in El Salvador has certainly slowed or curtailed other aspects of the SPI project (e.g., the further collection of household surveys), the evaluation team sees no reason why phase III cannot be completed promptly. Indeed, it appears that this phase should have been completed many months ago.

For reference purposes, the description of phase III is quoted from the project grant agreement.

"In Phase III, the relationships between the various progress indicators will be evaluated using correlation and other types of statistical analysis... The major purpose of this analysis will be to determine if it is possible to reduce the initial core set of indicators to a smaller final set of indicators. A second purpose will be to develop effective methods of comparing differences in the levels-of-living between departments and groups of persons. Finally, an effort will be made to evaluate the usefulness of the initial core set of indicators by comparing the indicators to other information obtained from censuses and other surveys. A seminar will be held at the end of Phase III to report on the progress of the project. This seminar will include participants from Central American countries and appropriate persons from other countries. The basic purpose of the seminar will be to illustrate how multi-purpose household surveys can be utilized to provide useful progress indicators."

B. Project Response to Previous Evaluation: Income and Employment Indicators (Documents No. 1Pros 2112-82 ad 19-3119-9.82)

The following recommendations were made concerning measures of "income" during the February 1981 evaluation:

1. Include measures of in-kind and subsistence income for a more realistic figures of rural income.

2. Include a classification of rural occupations that represents the generalized nature of the rural economy.

3. Include a proxy variable, such as size of landholding, for in-kind earnings and subsistence production in the determination of family income. Alternatively, reanalyze the income classification of the rural sector with a distinction between those families with land and those without.

4. Retitle the "formal" "informal" dimension in the definition of economic activity "size of firm," which precisely captures this dimension. Also, intercorrelate size-of-firm with degree of formality (capital intensiveness) in order to demonstrate that size of firm is as accurate a measure of cost of job creation as the more difficult to define concept of formality.

5. Elaborate the classification of rural occupations, distinguishing among artesans, small farmers, and small farmers who engage in other activities. Use this finer classification only if it proves empirically useful.

6. Distinguish between rural and urban unpaid labor in the analysis.

7. Intercorrelate the control variables in order to eliminate redundant variables, if any.

The present situation regarding income measures and related concepts is summarized in IPROS document No. 2112-82 entitled "IPROS: Metodologia General." More detail can be obtained in document No. 19-3119-9.82 (draft) entitled "IPROS: Subsistema Monitor de las Condiciones de los Ingresos en El Salvador." According to the first document, "income" is not an indicator per se; rather, it is one of several means of stratifying El Salvador's population as represented by other indicators.

That is, the INDICATORS employment, food consumption, education, health housing, and professional training are stratified according to the following CATEGORIES population age and sex, geographic region, socioeconomic sector, occupational category, and income. (See pp. 17-28).

In this scheme, income evidently is still measured as cash income. The evaluation team had little time to examine the voluminous material relating to "income" in detail, but a cursory examination reveals no attempt to include "in-kind" income in any of the measures. As a consequence, income per se would understate the

"well-being" of rural versus urban families as indicated in the previous evaluation. We feel, however, that this is not as serious an issue as it may appear. In the first place, using cash income as a category of stratification instead of an indicator increases the relative importance of other measures of well-being, measures which, in the case of rural households at least, may more accurately reflect the actual status of the family (e.g. type of house, foods consumed). Secondly, demand analysts active in developing countries have found that total family expenditure (in cash terms) is a useful and reasonably accurate proxy for net income, even for semi-subsistence households. This variable is considerably easier to measure than net income, and it is more directly relevant to a household's growing involvement in the market economy and to its food consumption/production decisions.

The SPI team has proceeded to measure income inequalities in El Salvador and they have identified "gaps" between "incomes" or "minimum salaries" and consumer price levels. Ostensibly this analysis was undertaken to provide MIPLAN with an "example" of how the indicator system in general and the concept of income in particular might be used to evaluate programs designed to alter relative incomes. We feel this is another example of the SPI team's moving beyond the scope of the original project paper. This kind of analysis is more appropriate for the proposed analysis unit within MIPLAN.

In sum, recommendations 1-3 of the previous evaluation have not been followed, but we do not regard this as especially serious in view of altered circumstances and the more thorough development of other indicators.

In its analysis of income inequalities, the SPI team did attempt to stratify rural families by size of landholdings and to relate this stratification to cash income levels, as suggested in recommendation No. 4 above. It is not included as an indicator, however, nor is it explicitly included among the component variables. As a proxy for rural income, size of landholding can be useful, although in the context of rapid and forced land reform, its value for that purpose in El Salvador is now doubtful. However, it should be included somewhere in the present indicator scheme--perhaps as a component to the HOUSING indicator--and tested for consistency against the other variables.

Rural and urban unpaid labor have not been separated as suggested by recommendation No. 6, but rural occupations have been elaborated as suggested by recommendation No. 5.

Finally, intercorrelation of control variables has been undertaken, but, as indicated elsewhere in this report, much more "streamlining" needs to be done.

Recommendation:

That the concept of income be reviewed with the objective of identifying alternative proxies (e.g., total household expenditure, farm size) which would simplify the task of obtaining necessary data and increase the flexibility of data gathering in the face of security and resource constraints.

C. Project Response to Previous Evaluation: Employment Indicators

The February 1981 evaluation report made the following recommendations regarding the employment indicator:

1. Include a proxy variable for non-cash income in the calculation of rural wage underemployment.
2. Compute the employment indicator on a quarterly basis, in order to capture seasonal variation in employment conditions. Recalculate this indicator on a monthly basis also. Test both quarterly and monthly results for level of reliability.
3. Run the employment indicator by the entire set of control variables.
4. Recalculate Table 1 (p. 11 of the employment report) in a manner that accords with the hypotheses and algebraic procedures mentioned in that text. Moreover, explain these hypotheses and procedures fully.
5. Present only those tables that depict actual conditions at one or more points in time; do not predict future conditions.

Since the SPI document describing its employment variables--No. 10-3110-6.80 entitled "IPROS: Subsistema Monitor del Empleo en El Salvador"--is dated 30 June 1980, one can reasonably assume that none of the above recommendations--made 8 months later--are embodied in it. Hence, we would make the same recommendations here, with the understanding that the impossibility of obtaining accurate data on rural employment during the past year is a significant mitigating circumstance. Employment is a notoriously difficult concept in economically advanced countries, let alone LDC's and much more in El Salvador . We do, however, underscore the desirability of recommendation No. 3 above as part of the "streamlining" process. Moreover, as data gathering becomes easier in the future, recommendation No. 6 under Measures of Income (distinguish between rural and urban unpaid labor) should be followed.

D. Project Response to Previous Evaluation: Education Indicators
(Document No. IPROS-13-31133-10.80)

The educational dimension of level-of-living is measured in the SPI system by three indicators: (a) level of adult literacy; (b) attained formal educational level; and (c) school attendance. These three indicators are derived from a total of 25 variables.

The definition of these indicators is straightforward and could be easily replicated in another country or at different (lower) units of

analysis in El Salvador. The February 1981 evaluation recommended that the education measures include an "overage indicator" which would record the number of students who are two or more years older than the norm for each grade. Such a measure would help identify areas where educational services are incomplete, so that children must re-enroll in lower grades in order to continue their education.

The SPI project has not incorporated such an indicator into the system. However, it is not clear whether the data derived from the multiple purpose household survey would permit the construction of an "overage indicator". This is an area where alternative data sources (e.g. records maintained by the Ministry of Education) should be considered for use.

E. Response to Previous Evaluation: Health indicators (Document No. IPROS-20-3120-11.80)

The health dimension of level-of-living is measured in the SPI system by six indicators: (a) morbidity rate; (b) rate of medical attention (rendered formally); (c) hospitalization rate; (d) invalid rate; (e) vaccination rate and (f) rate of alcoholism..

These six indicators are derived from 24 separate variables. While conceptually most of the variables used are straightforward, the derivation of multiple-variable indicators from self-reported health data introduces many possibilities for errors.

Two of the most important recommendations from the February 1981 evaluation were: (a) shorten the recall period (on the questionnaire) to two months--provided that particular types of illness do not then become rare events with high rates of sampling error and (b) verify all health indicators with independent information from the Ministry of Health and include such information in the health report for comparative purposes.

Because no additional field data have been collected since December 1980 (due to the war) it has not been possible for the recall period for health data to be shortened from six to two months.

It appears that the second important recommendation--listed above as (b)--has not been implemented either. While the SPI report on the health indicators contains interesting background data on health service delivery in El Salvador, the data are all in aggregate form. There appears to have been no real attempt to verify the SPI measures against Ministry of Health data for a given region or province.

F. Project Response to Previous Evaluation: Food Consumption Indicators (Documents No. IPROS 11-3111-8.80 and 12-3112-9.82)

The February 1981 evaluation report contains a large number of recommendations regarding this indicator. Of these, the most important are the first two:

1. Appoint a technical review team to review the accuracy of the data and their interpretation before any documents are circulated.

2. Compare the costs, reliability, and usefulness of the food-consumption indicator with a nutrition status indicator based on available data.

The SPI team has approached the food/nutrition issue from two directions: (1) protein/calorie (i.e., nutrient) approach, and (2) food basket (i.e. individual diet patterns) approach.

The SPI food indicators--in particular the component representing the "food basket" approach--have been reviewed and modified following the suggestions of representatives of the Nutritional Institute for Central American and Panama (INCAP) and approved by the National Food and Nutrition Commission for El Salvador (CONAN).

Our opinion is that periodic surveys designed to obtain information for social welfare indicators are not the instruments for obtaining detailed data on food consumption and/or nutritional status.. Consumption surveys and household expenditure surveys which provide meaningful information on nutritional status are costly and time-consuming in themselves and should only rarely be done on a nationwide scale in detail. Thus we would not recommend a caloric, protein, or any other individual nutrient criterion for a food consumption indicator.

The food basket approach has the virtue of measuring foods actually consumed, thereby capturing the element of food choices, a potentially useful index of income levels (and changes therein) and relative price movements over time. Nevertheless, since literally hundreds of different food items are consumed in countries like El Salvador, even by the poor, it is impractical to try to capture all of them in routine indicator surveys. Thus, the focus should be upon those relatively few food items consumed in large amounts, especially by the rural and urban poor, and representative samples of foods for which income and/or price elasticities of demand are expected to be high. The ratio of traditional foods/nontraditional foods (for example, basic grains/meat and dairy products by weight) might be a sensitive indicator of social progress, on the assumption that this indicator would decline as incomes rise and popular tastes change.

The issue of whether or not to use simple anthropometric measures of nutritional status--height-for-age, weight-for-height, weight-for-age--is still being debated in the professional literature. Such indicators can be useful as a flagging device to signal planners that a probable nutrition problem exists in Region X or among population group Y, thereby triggering a more detailed, but small scale, survey of the target region or group. Whether or not this would be feasible for the periodic indicator surveys is problematical, but we think it should be tried.

Recommendations:

1. That representative "baskets" of traditional grains (with low long-term income elasticities of demand) and of nontraditional foods (with high short-term elasticities) be developed and a series of indicators be formed from the ratios of the two. The composition of each component "basket" would probably vary from one geographical region to another.
2. That simple anthropometric measures be tried, at least in the urban areas where sampling is presently feasible, to test the usefulness and practicality of such measures.

F. Project Response to Previous Evaluation: Housing Indicators (Document No. IPROS-14-3114-3.81)

The housing dimension of level-of-living is measured in the SPI system by three indicators: (a) residential density; (b) housing physical condition; and (c) housing characteristics (tenancy and services such as water, electricity, etc.). In the current SPI formulation, these three indicators are measured by no less than 74 separate variables!

The February 1981 evaluation determined that the data available from the multiple purpose household survey are more than adequate for the derivation of indicators of housing sufficiency. In fact, the main problem in this area of the SPI system is an abundance of data.

The main shortcoming in the housing area is a lack of internal analysis as a basis for reducing the number of variables utilized. Many

of the variables which measure household characteristics (possessions) such as radio, television, telephone, etc. are highly correlated.

(Indeed, correlations of $r=.95$ or higher are typical.) When such strong associations exist, there is no need to include multiple variables nor to use techniques such as Guttman Scaling.

In summary, the SPI project has not been very responsive to the previous recommendations with respect to the housing indicators. Much methodological improvement could be made in this area.

G. General and Miscellaneous Recommendations from the 1981 Evaluation

1. Review and revise the questionnaires in light of the analytic difficulties encountered by the project technical team, and recommend to the UIM appropriate changes in items and phrasings.

(COMMENT: The SPI team has concentrated over the past year on substantive matters relating to the cross-indexing of the indicator variables and has done little in the area of survey design reorganization due to the security problem in the field. Thus the recommendation still stands.)

2. Define each indicator variable in such a way that it taps but one aspect in the domain. Combine distinct variables into a single indicator only where each variable covers but part of a characteristic, e.g., combine floor, wall, and ceiling materials into an indicator of house type.

(COMMENT: It is likely that the present evaluation team has some differences of opinion with the 1981 team. In our view, simplicity should be the prime governing principle. In other words, our advice is that the SPI team select only the most significant aspects of each domain (empirically determined) and use them to form each indicator. As indicated elsewhere in this report, a target maximum of 50 variables in all should be sufficient.)

3. Present each indicator variable in the finest degree of disaggregation possible, given the constraints of sample size.

(COMMENT: The ideal would be disaggregation to the municipio level, but this is not presently practical. The department level would be somewhat finer than the regional levels now used (there are a few more departments than regions), but the regions presumably reflect more accurately climatic, ecological, etc. conditions.)

4. Use the simplest statistical procedures possible; for summary measures, use visual aids instead of sophisticated analytical techniques.

(COMMENT: So far the SPI team has generally followed this prescription. However, the evaluation team learned that the Project Director has discovered the Publishing Co. series on quantitative techniques in the social sciences. Some of the more advanced and/or specialized

techniques found there were mentioned in passing during the evaluation in contexts the evaluation team believed to be inappropriate. So far none of the more esoteric econometric devices have found their way into the project's publications, but this will bear watching.)

5. Assign lowest priorities to the development of composite indicators on the grounds that these will not be immediately useful and must undergo much testing.

(COMMENT: This is still good advice, and the project team so far seems to have followed it. The issue of composite indicators is inseparable from the thorny question of component indicator weighting, one which should only be addressed by analysts and decision makers themselves.)

6. Provide a measure of sampling error for the most important variables in each table.

(COMMENT: Again, good advice, but difficult to follow until the team can resume significant surveying.)

7. Verify the results in each domain against all available independent reports, and pinpoint the sources of error in the indicator system or in the other studies when results are divergent.

COMMENT: This activity is implicit in our earlier recommendations concerning alternative information sources. We go somewhat farther, however, in suggesting that the team use the independent sources, if possible, whenever the usual indicator variables cannot be measured for some reason.)

8. For each indicator, consult available experts before defining variables and establish a technical review team composed of national and international experts to assess the indicator and its accompanying report before the indicator is presented to the government ministry.

(COMMENT: We were unable, in the short time available, to verify that this had been done for all of the indicators. We know that this was done for at least some of them (e.g., food consumption, employment). A lengthy period of testing will necessarily have to follow termination of the project in 1983 (unless it is extended) by MIPLAN or some group having evolved from the SPI team. A great deal of testing time has unavoidably been lost because of the team's inability to field the necessary surveys.)

H. Institutionalization Progress (Doc. No. 4110 30-4111-7.82).

As the Project moves into its final phases, the question of institutionalization of the Project's work (and of some of its personnel) becomes paramount. Presumably data to support the indicators will continue to be collected and processed; updated indicators will be calculated; ongoing programs and projects will be judged in light of what the new indicators say, and adjustments will be made where deemed necessary. The question remains: who will do all these things?

In SPI Document No. 4110, entitled "Propuesta de Formacion de la Unidad de Analisis del Ministerio de Planificacion," it is recommended that a unit be formed within MIPLAN charged with the responsibility for (1) the control of information, (2) preparation of plans, (3) monitoring of projects in the areas of income/employment and basic necessities (p. 1). Although the document is not altogether clear, the implication is that this "analysis unit" would use the SPI-generated indicators to perform the three essential planning functions as outlined in SPI Document 2112-82, namely, describe the existing situation in the various development sectors as revealed by the indicators (diagnosis), evaluate the existing situation in relation to the expected situation (i.e., detect "gaps" between actual vs. desired stated of affairs), and prioritize new projects and adjustments to old ones so as to correct the situation. The document proceeds to suggest how such a unit might be staffed and some of the functions it might fulfill.

The evaluation team recognizes the need for an analytic capability within MIPLAN if the indicators generated by the Project are to be properly interpreted and used to help with future policy formation. However, we do not feel that the creation, staffing, or training of an analysis unit within MIPLAN fall within the scope of the Social Indicators Project. Experience in other developing countries suggests that these tasks themselves can be difficult and time consuming, as

such, they merit a separate project of their own. While we did not have time to evaluate the capabilities of MIPLAN's professional personnel, there is evidently a need for institutional reorganization which would permit MIPLAN to make optimum use of the SPI indicator scheme. Whether or not ROCAP/SIECA, USAID/El Salvador, or some other institution provides support, we would recommend that serious consideration be given a possible project to aid MIPLAN develop an analytic capability commensurate with the sophistication of the methods needed to make the best use of the SPI indicators.

No mention is made in the document proposing the analytic unit of existing analytic capability at the sector levels. For example, El Salvador's Ministry of Agriculture has its own planning unit, and comparable units within other ministries could play an important role in helping to calculate and to refine development indicators over time, and they would certainly be important users of the information generated. In none of the documents read by the evaluators were linkages to individual ministries made explicit; MIPLAN and SPI are treated as if they orbited each other independently of the rest of the public sector. We feel that efforts should be made during the remaining life of the project to acquaint sector level planners and analysts with the work being done under SPI and to develop a system of communication and coordination at the sector level within which the indicators may be evaluated and used effectively.

More in line with the existing responsibilities of SPI is the proposal contained in SPI draft document No. 30-4111-7.82, entitled "Propuesta de Organizacion del Centro de Informacion al Ministerio de Planificacion de El Salvador." This recommends creation of a centralized information unit for MIPLAN. Such a unit, while not engaging in development analysis per se, would oversee the continuous collection of data for the indicators and for other purposes, the periodic adjustment of the nation's area sample frame, and, presumably, provide data and information services as needed for sector level planners as coordinated by MIPLAN. The document calls for the following specific functions: (1) Standardization of requests for, and reports containing data in order to provide "immediate access" to users. (2) Integration of social, economic, and political data at micro and macro levels, (3) response to calls for information relevant to planning and coordination, (4) identification of potential information users, including both the public and private sectors and the international donor community, and (5) continuous collection of data for updating social welfare indicators (pp. 2-3).

We feel that creation of such a unit would be a logical outcome of the SPI. It would be built upon the existing data collecting framework and, presumably, would absorb some of the present SPI personnel. Nevertheless, we see this kind of unit as separate and distinct from any form of analytic unit formed within MIPLAN as discussed above.

The MIPLAN "analysis unit" would be a principal client for services provided by the Information Center and would have exclusive authority to define the nature and content of those services. Nor should the proposed Information Center become involved directly with policy issues, real or simulated. The proposal suggests that one function of the Information Center would be to "order information according to levels of policy use and planning tasks" (pp. 7-8). So long as "policy" here is interpreted in a broad taxonomic sense (e.g., credit data, extension data, research results), the cataloguing of information according to potential user category would be an appropriate function of an Information Center. However, it would not be appropriate for such a center to enter the normative realm by indicating policy-related data which is "prioritized" in some way.

Recommendations

1. That consideration be given to establishing a project, possibly supported by USAID, to help MIPLAN organize and train a team of development analysts as a follow-on to the SPI activities. Although present MIPLAN staff may be adequate to man such a team, funding would be required for technical assistance and training.

2. That attention be given by the SPI staff to informing sectoral planners of the Project's work (possibly via workshops and seminars) and to creating a coordinated planning network at the interministerial level designed to make optimum use of the Project indicators.

3. That an Information Center be established within MIPLAN to collect, coordinate, process, and disseminate information relevant to calculation of social welfare indicators and to other uses as needed by public and private development agencies.

III. MAJOR ISSUES AND IMPLICATIONS

A. Financial Status of the SPI Project

The project grant agreement calls for AID to disburse up to \$800,000 to SIECA for the SPI project over its four year duration. At the time of this evaluation, the project had completed 42 months (3 1/2 years) of activity and had been paid a total of \$404,802 by USAID/ROCAP. (Vouchers paid covered the period through September 30, 1982).

At the same time, only \$600,000 had been obligated by USAID, Thus, even without the final \$200,000 obligation, there was a pipeline amount of \$195,198. During the past six months, the monthly SPI project vouchers have averaged \$14,509. The project is scheduled to be completed on May 21, 1983. Thus, at the current rate of expenditure, the current pipeline (without the final \$200,000) could be expected to last for 13 months--or until November 1983. Even if the expenditure rate increased by 33% for the final six months, it appears that the current pipeline would sustain the project until well beyond completion date.

Based on this analysis, it appears that any justification for the final \$200,000 obligation for the SPI project would have to be based on other considerations such as an expanded scope of work and/or an extension of the project. In fact, the SPI project director has submitted proposals for both an extension and expanded scope of work. These proposals were assessed in a previous section of this evaluation report.

One factor which will have financial consequences during the final six months of SPI project is the use of U.S. consultants to undertake tasks which are at best marginal to project objectives. For example, the project director has recently signed a \$20,000 consulting contract with two U.S. economists (Dr. Roger Norton of the University of New Mexico and Dr. Carlos Benito of the University of California) at daily consulting rates of \$300 each. Based on extensive discussions with the consultants in El Salvador, the evaluation team determined that their task--while professionally interesting and worthy--is not within the SPI defined scope of work, and at best would contribute only indirectly to project objectives.

B. Data Collection--Alternative Sources At the time of the evaluation, data collection, using the existing government enumerators and the permanent 40,000 household sample, had been suspended for some time due to the security problems in the countryside. Although El Salvador has constructed and maintained a sophisticated area sample frame and has trained a large number of permanent enumerators, the present situation highlights the danger of overdependence upon an excessively complicated, rigid system of data collection and analysis. In any developing country, decision makers need information quickly and the tradeoff between quick (but imprecise) versus precise (but slow and expensive) information systems is a real one. In the case of El Salvador, the situation

arguably tilts the balance towards rapid and relatively simple data gathering methodologies which can be refined through repetition. Enumerators need to be able to move into an area, ask a number of simple, key questions, and get out quickly. Moreover, in view of the large number of complex programs underway in the country, the kinds of information needed by development agencies will not necessarily conform exactly to the categories developed by SPI.

A number of conclusions follow from these facts. First, the number of variables supporting each synthetic indicator should be kept as small as possible. This "streamlining" of the indicator system already developed by SPI has been mentioned elsewhere in this report, but it deserves to be underscored here. Not only will data-acquisition time and costs be reduced thereby, but analysis and evaluation of ongoing programs will be simplified and expedited, too. Second, in the process of "weeding out" redundant variables for each indicator, alternative ways of measuring a given concept (e.g., income) can be identified. Some of these may prove to be more accurate and/or consistent than others (for example, using total household expenditure--relatively sophisticated--OR type of house--relatively crude--as proxies for income). But each will provide an alternative way of measuring a given concept which may serve when conditions preclude measuring it another way. Third, other data collected by different public and private agencies should be routinely

reviewed by the SPI team--or the MIPLAN Information Center, should it be established--with the objective of filling-in gaps caused by the inability to field complete surveys of its own. Fourth, the SPI team should consult with all major donor agencies and public sector development institutions regarding their own information needs. The impression received by the evaluators has been that SPI relatively unilaterally has developed its typology of policies relevant to its indicator system and is presenting the results to MIPLAN as a normatively desirable product. As a result, at least one potential client for the indicator system--USAID/San Salvador --has expressed strong reservations about the relevance of the SPI project to the mission's activities in the realm of rural development.

Recommendations:

1. That the number of variables supporting each indicator domain be reduced to a minimum (e.g., to a total approximating less than 50).
2. That alternative sets of variables be tested for each domain to increase data collecting flexibility in the face of resource, time, and security constraints in the future.
3. That a thorough review be made and continually updated of all information gathered by researchers and agencies in El Salvador in order to glean information which will (a) supplement that obtained regularly for the indicators, (b) provide alternative support for specific indicators when regular data sources cannot be used, and (c) orient the results of data processing more towards the specific needs of agencies promoting development programs.

4. That an inventory be made of the information requirements of all major development agencies with projects presently underway in El Salvador and that these needs be given weight when prioritizing specific indicators and data gathering objectives in the future. This should be done with the close cooperation of MIPLAN and would be a regular function of the proposed Information Center.

C. Drift into Policy Areas

SPI document No. 2112.82 entitled "IPROS: Metodologia General" discusses the bases for selection of the indicators and their component variables, provides a listing of the variables by indicator domain, and then proceeds to develop a typology of "policies" and "projects" generated by crossing the variables with a series of "profiles" each representing a specific categorization of El Salvador's population (e.g., population, occupation, geographic region, sector, etc). Given the very large number of variables undergirding the indicators (approximately 250) and the numerous ways of breaking-down the "profiles," (approximately 75 in all), this activity has produced a sizeable matrix of possible interactions and a comparably large list of potential areas for policy intervention by the government.

The evaluation team recognizes the importance of project identification and prioritization in the face of scarce resources and under the peculiar conditions presently afflicting El Salvador. Moreover, it is understood that MIPLAN does not presently have an

analytic unit whose specific function is to identify interrelationships among sectors and related projects. Nevertheless, we do not believe that this vacuum should be filled by the SPI team. Judging from the volume of material published by the team, a very large effort has been devoted to expanding the list of indicators (and their component variables) into a kind of "roadmap" designed to "automate" planning in El Salvador, as it were; so much so, in fact, that the team is still in Phase III of the contemplated seven phases more than a year after the first interim evaluation.

As we have indicated earlier, we feel that the function of integrating the many facets of El Salvador's economy analytically, identifying inter-related alternative systems of projects to deal with the country's problems, and forecasting future consequences should be activities shared by a new MIPLAN analysis unit at the macroeconomic level and by the various ministerial analysis/planning units at the sector levels. SPI's job is to provide them with the necessary data and data processing methodologies to fulfill these functions.

We understand the necessity for thinking conceptually in policy-related terms when pondering the many possible variables to choose for building a small number of truly useful indicators. Moreover, the indicators actually selected by SPI will need to undergo extensive testing and revision in future years which will involve reciprocal

communication among analysts, planners, and data management personnel. At this time, however, we feel that the limited resources of the Project and of the GOES would be better served by simplifying the existing indicators (in view of the difficulty of data collection at present), formation of a "back-up" system as an alternative to the existing household survey system for use when regular data gathering techniques are not possible due to security problems, and (possibly) establishment of an Information Center within MIPLAN as recommended in SPI document No. 30-4111-7.82.

Recommendations

1. That the SPI team concentrate upon "streamlining" the system of indicators developed during the past year, reducing to a minimum the number of component indicators.
2. That alternative sources of information and data be developed to support the more key indicators for use when emergency conditions do not permit routine data gathering.
3. That less effort be devoted to attempts to "predetermine" data needs of policy-makers and more to efforts to find out the needs of existing clients (e.g., MIPLAN, USAID/San Salvador, other public and private agencies devoted to development).

D. Project Monitoring

Even in the absence of the special conditions found in El Salvador, projects like SPI frequently are "undermonitored." On the one hand, planning, data management, and analysis activities are complicated and

frequently are beset with administrative, bureaucratic, and political problems. On the other hand, they are relatively low-cost compared with large scale sector loan projects and are often tacitly assigned a low priority.

Ironically, these projects, if successful, promote structural and institutional changes within the public sector which can profoundly influence the direction and makeup of future development strategies. This is especially true in the case of El Salvador, where powerful political and economic factors unavoidably will be influenced by the results of SPI work..

In the opinion of the evaluators, the Project Director is an exceptionally skilled manager whose steady vision of the project's goals has helped him to maintain a stable working team and a consistent course of work during a period of rapid change and political instability in the country. Such leadership is essential, given the nature of the SPI project and given the environment within which it is working. Nevertheless, it is precisely for this reason that careful monitoring--by POCAP and by AID/Washington--is very important. Many of the issues giving rise to criticism in this evaluation (and the previous evaluation) have been in part the outcome of the Project Leader's unhesitatingly filling a management "gap." In the absence of strong and consistent

focus regularly reenforced by AID, the Project Leader has moved the SPI team decisively into areas not explicitely contemplated in the project paper.

RECOMMENDATIONS

1. That monthly reports concerning substantive work accomplished during the preceding month and including plans for the following month be submitted to USAID/San Salvador, ROCAP, SIECA and AID/Washington for the remaining life of the project. This report would be in addition to periodic financial reports and would be reviewed by professionals with backgrounds in planning and socioeconomic analysis, as deemed appropriate by the AID project manager.
2. That the direct monitoring of the Project by undertaken by USAID/San Salvador, since this agency is in the best position to make timely and appropriate adjustments to the course of SPI activities via face-to-face consultation with the project Manager.
3. That ROCAP, SIECA, and AID/Washington (if necessary) be informed immediately of any conflicts or differences of opinion in San Salvador concerning the activities of the Project so that problems can be resolved with minimum delay.

IV. SUMMARY OF RECOMMENDATIONS

1. It is recommended that the SPI staff identify alternative data sources for the derivation of proxy variables. Such sources could be used to verify and validate current measures derived from the household survey. Furthermore, because the household survey has been suspended since December 1980 and is not likely to be renewed during the civil conflict, alternative measures will be necessary if any longitudinal analysis is to be done by the SPI project. (See Section II.A, and III.B)
2. It is recommended that the overall number of variables (258 total) be reduced to a manageable number. This is especially critical for the housing indicators (74 variables currently used). The 258 total could easily be reduced by 50% with careful methodological refinements. (See Sections II.A and II.F)
3. It is strongly recommended that the SPI project director synthesize the more than 2,000 pages of project working documents (presented to the evaluation team) into a single summary document. The summary document should not exceed 100 pages in length, and should include an executive summary of 10 pages or less. Furthermore, the various technical working documents which explain the SPI methodology in detail should be edited down to technical appendices which are merely referenced in the summary document. (See Section II.A).
4. If the proposed new units at the Ministry of Planning ("Analysis Unit" and "Information Unit") are to be formed with AID funding, it is

recommended that they constitute a new project with possible direct funding and project management by USAID/El Salvador (See Section II.D).

5. After the final indicator system has been refined and presented in a more readable format it is recommended that the SPI project conduct several regional workshops to diffuse the SPI results to other Central American governments. (See Section II.H.)

6. It is recommended that the SPI project manager avoid the areas of policy evaluation and policy advice to the government of El Salvador. Such activities go well beyond the scope of work described in the project grant agreement. (See Section III. C).

7. It is recommended that SPI project funds not be used to provide consulting services for MIPLAN which do not directly contribute to the project objectives. (See Section III. A).

8. It is recommended that SPI project activities be monitored directly by a project officer at USAID/El Salvador rather than by USAID/ROCAP. (See Section III.D).

9. It is recommended that all statistical data collected and analysed by the SPI project be readily available to all ministries and agencies of the government of El Salvador. Without greater diffusion of the data demonstrating the utility of the SPI methodology, the project is unlikely to have lasting institutional impact. (See Section II.H.)

10. It is recommended that all data analysis and presentations done by the SPI project be based on the departmental level (N=14). Aggregating the data into only nine planning regions--or worse yet, into only three categories--is contrary to the most basic objectives of the project.

(See Section III.B).

11. It is recommended that the SPI project director discontinue attempts to construct "causal models". Such activities are beyond the scope of the project, and defeat the most fundamental objective of the project (i.e., the establishment of objectively verifiable measures compiled in a systematic and replicable manner. (See Section III.C).

12. It is recommended that the SPI project director discontinue the practice of "prioritizing" certain social indicators. Such attempts are highly subjective, and go well beyond the diagnostic use of statistics into the area of policy formulation which is not an objective of the project. (See Section III.C).

13. It is recommended that the SPI project staff make greater efforts to establish direct communications and information exchanges between the Ministry of Planning and other Ministries--especially Agriculture, Health, and Education. (See Section II.H).)

14. It is recommended that a consultant be used to help the SPI project director synthesize the reams of technical working documents into a single coherent summary document. Because diffusion of the SPI

methodology is a primary project objective, it is critical that the final document be professionally edited into a succinct, highly readable document. (See comments throughout Sections II and III.)