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PD-AM-86-21

245

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

COSTA RICA

PROJECT PAPER

NATIONAL DEVELOPMENT INFORMATION SYSTEM

AID/LAC/P-013

Project Number: 515-0139

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AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT PAPER FACESHEET		1. TRANSACTION CODE <div style="border: 1px solid black; display: inline-block; padding: 2px;">A</div> A ADD C CHANGE D DELETE	PP 2. DOCUMENT CODE 3
3. COUNTRY/ENTITY <p style="text-align: center;">COSTA RICA</p>		4. DOCUMENT REVISION NUMBER <div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto;"></div>	
5. PROJECT NUMBER (7 digits) <div style="border: 1px solid black; display: inline-block; padding: 2px;">515-0139</div>	6. BUREAU/OFFICE A. SYMBOL <p style="text-align: center;">LA</p>	7. PROJECT TITLE (Maximum 40 characters) <div style="border: 1px solid black; display: inline-block; padding: 2px;">NATIONAL DEVELOPMENT INFORMATION SYSTEM</div>	
8. ESTIMATED FY OF PROJECT COMPLETION <p style="text-align: right;">FY <div style="border: 1px solid black; display: inline-block; padding: 2px;">83</div></p>		9. ESTIMATED DATE OF OBLIGATION A. INITIAL FY <div style="border: 1px solid black; display: inline-block; padding: 2px;">79</div> B. QUARTER <div style="border: 1px solid black; display: inline-block; padding: 2px;">2</div> C. FINAL FY <div style="border: 1px solid black; display: inline-block; padding: 2px;">79</div> (Enter 1, 2, 3, or 4)	

10. ESTIMATED COSTS (\$000 OR EQUIVALENT \$1 -)						
A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. L/C	D. TOTAL	E. FX	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL	1,935	1,565	3,500	1,935	1,565	3,500
(GRANT)	(250)	(-)	(250)	(250)	(-)	(250)
(LOAN)	(1,685)	(1,565)	(3,250)	(1,685)	(1,565)	(3,250)
OTHER U.S. 1.						
2.						
HOST COUNTRY	690	431	1,121	969	3,031	4,000
OTHER DONOR(S)						
TOTALS	2,625	1,996	4,621	2,904	4,596	7,500

11. PROPOSED BUDGET APPROPRIATED FUNDS (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. 1ST FY <u>79</u>		H. 2ND FY <u> </u>		K. 3RD FY <u> </u>	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	I. GRANT	J. LOAN	L. GRANT	M. LOAN
(1) ST	797	968	968	250	3,250				
(2)									
(3)									
(4)									
TOTALS									

A. APPROPRIATION	N. 4TH FY <u> </u>		Q. 5TH FY <u> </u>		LIFE OF PROJECT		12. IN-DEPTH EVALUATION SCHEDULED
	O. GRANT	P. LOAN	R. GRANT	S. LOAN	T. GRANT	U. LOAN	
(1) ST					250	3,250	<div style="border: 1px solid black; display: inline-block; padding: 5px;"> MM YY 03 82 </div>
(2)							
(3)							
(4)							
TOTALS							

13. DATA CHANGE INDICATOR. WERE CHANGES MADE IN THE PID FACESHEET DATA, BLOCKS 12, 13, 14, OR 15 OR IN PRP FACESHEET DATA, BLOCK 12? IF YES, ATTACH CHANGED PID FACESHEET.

2 1 = NO
 2 = YES

14. ORIGINATING OFFICE CLEARANCE				15. DATE DOCUMENT RECEIVED IN AID/W. OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION			
SIGNATURE 			DATE SIGNED				
TITLE <p style="text-align: center;">Stephen P. Knaebel Mission Director</p>			MM DD YY <div style="border: 1px solid black; display: inline-block; padding: 2px;">02 07 79</div>	MM DD YY <div style="border: 1px solid black; display: inline-block; padding: 2px;">02 08 79</div>			

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT IDENTIFICATION DOCUMENT FACESHEET
 TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE

C A = ADD
 C = CHANGE
 D = DELETE

PID

2. DOCUMENT CODE
 1

3. COUNTRY/ENTITY

COSTA RICA

4. DOCUMENT REVISION NUMBER

1

5. PROJECT NUMBER (7 DIGITS)

515-0139

6. BUREAU/OFFICE

A. SYMBOL LA B. CODE 05

7. PROJECT TITLE (MAXIMUM 40 CHARACTERS)

NATIONAL DEVELOPMENT INFORMATION SYSTEM

8. PROPOSED NEXT DOCUMENT

A. 3 2 = PRP
 3 = PP

B. DATE MM YY
 02 79

10. ESTIMATED COSTS

(\$000 OR EQUIVALENT, \$1 = 3,500)

FUNDING SOURCE		BASE
A. AID APPROPRIATED		3,500
B. OTHER U.S.	1.	
	2.	
C. HOST COUNTRY		4,000
D. OTHER DONOR(S)		
TOTAL		7,500

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION

a. INITIAL FY 79 b. FINAL FY 79

11. PROPOSED BUDGET AID APPROPRIATED FUNDS (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. FIRST FY 79		LIFE OF PROJECT	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN
(1) ST	797	968	968	250	3,250	250	3,250
(2)							
(3)							
(4)							
		TOTAL					

12. SECONDARY TECHNICAL CODES (maximum six codes of three positions each)

710

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)

RDEV BR BU

14. SECONDARY PURPOSE CODE

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)

Permanent socio-economic improvement of Costa Rica's poorest groups through increased access to and more productive use of the means of production.

16. PROJECT PURPOSE (MAXIMUM 480 CHARACTERS)

Improved information base for development policy making and for planning and management of priority development programs and projects.

17. PLANNING RESOURCE REQUIREMENTS (stuff/funds)

18. ORIGINATING OFFICE CLEARANCE

Signature

Title

Date Signed

MM DD YY

19. DATE DOCUMENT RECEIVED BY AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY

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NATIONAL DEVELOPMENT INFORMATION SYSTEM
PROJECT PAPER

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PROJECT PAPER

I. PROJECT SUMMARY AND RECOMMENDATIONS

A. Face Sheet (attached)

B. Recommendations

It is recommended that AID approve the following:

Loan: \$ 3,250,000

Terms: 20 years to include
a 10-year grace
period on amorti-
zation; 2% interest
during the grace
period and 3%
thereafter.

Grant: 250,000

AID Total \$ 3,500,000

GOCR Contribution: 4,000,000

Project Total \$ 7,500,000

Implementation Period: 5 years
from authorization.

C. Description of the Project

1. Borrower/Grantee

The Government of Costa Rica (GOCR) will be the Borrower/Grantee. Seven GOCR entities will implement the Project: the Office of Information of the Presidency (OIP); the National Economic Planning Office (OFIPLAN); the Agricultural Sector Planning Office (OPSA); the Industrial Sector Planning Office (OSPI); the Ministry of Health (MS); the Directorate General of Statistics and Census (DGEC); and the Ministry of Finance (MH). Of these entities

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OIP, OFIPLAN, and OPSA will be most active in producing the Project Outputs. OIP will have the principal responsibility for the Project's administration and technical content.

2. Project Summary

The Goal of the proposed Project is the permanent socio-economic improvement of Costa Rica's poorest groups through increased access to and more productive use of the means of production. This improvement for Costa Rica's poorest groups will be brought about by improved public sector policy-making and better planning and management of GOCR development programs (Project Sub-Goal). The Project's Purpose is to provide improved information about priority development problems and programs. "Improved" information in the context of Costa Rican development planning and management is information that is more relevant, more timely, more comparable, more accessible, and in certain areas where insufficient information exists, such as agriculture, just more information. Improved information in the Costa Rican context is also information that permits users to make analytical distinctions between the poor and non-poor. "Priority development problems and programs" in this Project are those related to agriculture and natural resources, health and nutrition, and industry and employment.

The Project will finance, during its five-year life from authorization, the creation of a National Development Information System (SNID) for Costa Rica. 1/ SNID will have the following components:

a. A Development Data Bank, which will consist of geographically coded data sets, consistent with user needs,^{2/} organized into modules covering: (1) agriculture and natural resources; (2) health and nutrition; (3) industry and employment; (4) community infrastructure and population characteristic information not covered in other modules; (5) information on specific project and program inputs and results. The data bank would be supported by a network of computer terminals located in OFIPLAN, OIP, DGEC and three sectoral/ministry planning offices. These terminals will be connected to the MH computer's Project-funded central processing unit (CPU).

b. An Area Sampling Frame and Survey, whose

1/ Actual Project implementation will occur over a four-year period starting in CY 80. Subsequently, in this paper, year one of the Project will mean 1980, year two, 1981, etc.

2/ Data in the data bank will be limited to that needed for assessments, planning and evaluation. The criteria for inclusion of data in the bank will be relevance to the National Plan and whether it fits within the sectoral modules noted above. Relevance will be determined by OFIPLAN.

purpose will be to generate more, statistically representative data on the rural sector. Under this component a continuing survey mechanism will be created. This component will fund the construction of an area sampling frame and ten national and special surveys which will generate new and needed data on agriculture, land use, and the rural dweller. SNID's computer network will be used to process survey data and to feed data into the Data Bank.

c. Two Development Documentation Centers, the purpose of which will be (to make more available to users information which is in the form of the printed word. One documentation Center, located in OFIPLAN, will collect GOOCR or GOOCR-funded planning documents and assessments, feasibility studies, and survey documentation. The other, located in OPSA, will collect more detailed

information on Costa Rican agriculture and rural life. Documents in both centers will be abstracted, indexed, and a key word access system for them will be developed in order to facilitate user research. (Reproduction facilities will be funded for them so that SNID users will be able to copy relevant information. The index, abstract, and key word system of both centers will be accessible to all users of the SNID computer network.

The Project will also fund a Project Coordination Office consisting of two professionals and support staff. This office, located in the OIP, will have primary responsibility for overall technical and administrative coordination and supervision of the Project.

A small AID Grant of \$250,000 is proposed to fund the services of a technical expert for a three-year period. This expert, to be contracted by USAID/Costa Rica would be a specialist in computer science and information management. He would provide technical assistance to OIP's Project Coordination Office and advise the Mission project manager on technical matters related to Loan implementation.

AID Loan funds will be used to fund temporary specialized technical services to help design, install and test the SNID systems, foreign short term technical assistance, vehicles, materials and supplies, and project coordination costs.

D. Summary Findings

The Project Committee has reviewed the technical,

financial, social, and economic aspects of the proposed project. The technical review included assistance from SER/DM for the electronic data processing (EDP) features of the Project, from ROCAP/PIADIC (USDA) in relation to the Area Frame Sampling and Survey component and from ROCAP and IICA for the Documentation Centers. Taking into account the technical and other assistance to be provided under the Project, it is believed that the GOCR institutions involved will have the capacity to carry it out successfully. There appear to be no financial constraints to prevent the GOCR from providing the required funding for the Project. The social analysis identifies no obstacles to the Project's activities and the Project was found to be economically sound. The GOCR should have the overall technical and financial capability to maintain and institutionalize Project activities after AID support terminates. The Project is feasible for completion within a five-year period and will have no environmental effects.

On the basis of the analysis contained herein, the USAID Mission to Costa Rica concludes that the Project is technically, economically, and financially sound and recommends that a loan not to exceed \$3,250,000 and a grant not to exceed \$250,000 be authorized to the GOCR.

E. Project Issues

The issues raised by the Interim Report DAEC Review cable are addressed in various sections in this PP. The issues of Project focus and scope (issues Nos. 1 and 2), dealt with in several places throughout the PP, are treated most thoroughly in Part III.A.1., Alternative Project Designs (Technical Analysis). Issue N^o 3, relating to policy-maker information needs and the system for communicating them are dealt with in Part IV.A.1., GOCR Role, Responsibilities, and Institutional Analysis (Implementation Arrangements) Issue N^o 4, on the cost-effectiveness of alternative data collection and utilization methodologies is addressed in Part III.A.2., Design of Project Components (Technical Analysis) and also in Section III.D.1., Cost-Effectiveness (Economic Analysis). The institutional arrangements (Issue N^o 6) and the role of the DGEC are treated in Part IV.A., GOCR Role, Responsibilities and Institutional Analysis.

F. Composition of the Project Committee

Lic. Alvaro Borbón

- Director, Division of
Inter-Institutional
Coordination, OFIPLAN

Lic. Carlos Manuel Echeverría - Assistant Director,
OFIPLAN.

Ing. Roberto Escoto - Advisor to OIP.

John Marshall - Systems Analyst,
SER/DM, AID/W.

Ing. Miguel Murillo Monge - Director, OIP.

Erhardt Rupprecht - Agricultural Economist,
Project Manager, Office
of Rural Development,
USAID/CR.

Bastiaan B. Schouten - Loan Officer, Project
Coordinator, Chief,
Office of Capital
Development,
USAID/CR.

Monty Wallace - Mathematical Statis-
tician, SRS/USDA,
ROCAP's PIADIC Project.

Reviewed and approved by:

Stephen P. Knaebel, Director, USAID/CR

II. PROJECT BACKGROUND AND DETAILED DESCRIPTION

A. Background

1. Nature of Current Costa Rican Development Problems

Costa Rica has achieved a marked degree of economic and social development. In the last fifteen years per capita income has more than doubled, the population growth rate has slowed significantly, infant mortality has dropped sharply, and basic literacy has become almost universal. Moreover, Costa Rica's socially balanced development has been achieved within the framework of its democratic traditions and is the result of a strong and sustained social commitment to growth with equity.

In spite of significant progress in many areas, and in some instances as a result of that progress, Costa Rica faces increasingly complex and interrelated basic development problems:

Considerable Poverty Remains. The extension of basic infrastructure and health and education services to a majority of the Costa Rican population has made significant inroads on absolute poverty over the last two decades, e.g., between 1961 and 1971 the number of absolute poor, with per capita incomes of less than \$150 (1969 dollars), has declined about 40%. Yet the problems of those remaining in absolute poverty are more intractable and cannot be solved by a further expansion of social services alone -- somehow these citizens must become more productive. Furthermore, there are indications that the incomes of the poorest segments of the population are not growing as fast as those of the middle and upper middle classes. The average per capita real (1969) income in Costa Rica increased from \$429 in 1961 to \$518 in 1971, a rate of 1.9%, p.a. but the average per capita income of the poorest 20% of the population increased from \$112 to \$132 in the same time period, a rate of 1.6% p.a. (See FY 81-85 CDSS).

Environmental Problems are Developing. Plentiful virgin land has been one of Costa Rica's traditional poverty escape valves. Today, except in the Northern Plains region, Costa Rica's agricultural frontier is closed. Little good unused agricultural land remains, and in some areas much of the land presently in annual crops or in pasture should, from an environmental point of view, return to forest uses or be planted in environmentally sound permanent crops. In these areas such environmental symptoms as (dropping water tables, faster stream run off, soil erosion, land slides, floods, and rapidly declining soil fertility are increasingly apparent. Despite these problems,

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spontaneous colonization and deforestation continue, the predictable consequence of a growing population of rural landless poor.

Employment Generation. Even though Costa Rica's overall population growth rate has dropped to 2.6% p.a., because of the age distribution of the population and higher labor force participation rates, especially among women, the labor force is growing at about 3.4% p.a. Both urban and rural open unemployment and underemployment among the poor, although not well quantified, are known to be high. The provision of viable employment to Costa Rica's citizens would be a challenge even if the overall policy environment (which the GOCR is only recently facing up to) favored the use of labor. At present, because of a series of incentives, capital is underpriced, and because of high payroll taxes and minimum wages, labor continues to be overpriced. The resolution of the employment problem in Costa Rica will be a complex and difficult task.

The Welfare State. In the last several decades the role of the state both as producer and provider of goods and services has expanded significantly. Concern exists in Costa Rica not only about the increasing size of the public sector, but also that it appears out of control. Related issues are the efficacy and efficiency of many government programs and rapidly increasing transfer payments. The current GOCR Administration appears concerned about the possible "Uruguayization" of Costa Rica, i.e., that a modern welfare state has been created without the corresponding productive structure to support it in the long-run.

New Sources of Growth. The underpinnings of Costa Rica's growth are fragile. The motor of recent Costa Rican growth has been its traditional agricultural exports - coffee, bananas, meat and sugar. An additional positive factor, at least for the manufacturing sector, has been the Central American Common Market (CACM) and its import substitution policy. The CACM import substitution model is apparently reaching its limits and the future potential of Costa Rica's traditional export crops also seems limited. Coffee and sugar have serious market problems and increased cattle production, unless intensified, cannot be sustained in the long-run because of environmental problems. A consensus seems to exist among principal Costa Rican policy makers that if Costa Rica's growth is to be maintained, its economic base must be diversified and it must become more competitive in world markets.

The increasing complexity of Costa Rican development problems requires better public policy making and improved public sector program planning and management. This Project will contribute to better public management in the priority development sectors most

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related to Costa Rica's poor (agriculture, health, and industry) by improving the information base for decision making in those sectors.

2. Information and GOCR Decision Making

There are various levels of planning and policy making within the GOCR's Executive Branch. At the highest level, there is the President of Costa Rica and his Council of Ministers. There is also a Council of Economic Advisors which assists the President in formulating economic policy. These high level officials, require information in an analyzed form in order to make decisions and formulate policy. Many sources, formal and informal, exist for that type of information. The most important formal sources are the staffs of OFIPLAN and OIP which prepare analyzed information based on data provided by others.

At the sectoral level, decisions and policy are made by Ministers, Presidents and Boards of Directors of autonomous institutions, Vice-Ministers, Directors General, and department and program chiefs. At the sectoral level, various sources of analyzed information also exist. The most important formal sources are the sectoral planning offices.

Thus, at national and sectoral levels there exist decision and policy makers and their planning staffs (who, of course, also make certain types of decisions). Although at different levels information is needed in different forms, both national and sectoral level decision makers and planners are primarily information users, as opposed to being information producers. 1/

As the above GOCR information users develop and implement the National Development Plan and its specific sectoral components and address current socio-economic issues they must determine the trade-offs among alternative policy options. Likewise, as they develop and design programs which affect different target groups or areas, they must be aware of the inter-sectoral dimensions of these problems and programmatic solutions. Fortunately, the information needs of planners and policy makers at various levels are not inconsistent since all are concerned with policy and program trade-offs.

The major Project implementing institutions are directly

1/ Planners, of course, are data users who provide analyzed information to decision makers. They are therefore also, in a sense, information producers.

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involved in the planning process or are called upon to provide GOCR policy-makers with the information necessary to make policy decisions. For example, OFIPLAN's planners and their sectoral level counterparts in OPSA, OSPI, and the MS are charged with developing and monitoring the implementation of the National Plan and its sectoral elements. OFIPLAN's Director is a member of the GOCR's Council of Economic Advisors and, as a Minister, forms part of the Council of Ministers. Likewise the Office of Information of the President (OIP), which plays a central role in this Project, is constantly called upon to analyze and report to the President and his Council of Ministers on important socioeconomic policy questions.

GOCR information users, both decision makers and planners, need an information system that will provide them with more relevant and timely information on Costa Rica's increasingly complex development problems in order to design and execute effective programs and policies for dealing with them.

3. GOCR Development Information Problems

In order to effectively plan for development, two types of information are needed: (1) information which permits analysis of existing situations in given sectors or geographic areas (including the making of analytical distinctions between the poor and non-poor), and (2) information on the expenditures for and the results of specific programs and projects. Considerable room exists in Costa Rica for improvement in both types of information.

The GOCR has outlined a number of information and related organizational problems which undermine the ability of its planners and policy makers to sharply define development problems, establish factually based priorities, define proper program and project content and emphases, and objectively monitor and evaluate development programs and projects. In preparation for this project, the Office of Information of the Presidency (OIP) did an assessment of Costa Rica's development information problems and USAID/Costa Rica funded an inventory of available information which was carried out by the Academia de Centro América (Annex II-F). Based on these efforts, the following development information problem areas have been identified:

Information Users Have Little Impact on Determining Information Priorities

Because no effective mechanism exists for communi-

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cating needs of data users to those who produce and process data, much needed data is not available, and it is likely that much data now regularly produced is not utilized. Although in the agricultural sector, for example, it is known that much needed data is not available, it is not known to what extent that which is available is used. This Project will deal with this problem by establishing a user feedback mechanism and by providing user training.

Non-Comparable Geographic Bases of Information

Information must of necessity refer to specific geographic areas. Costa Rica's political-administrative divisions consist of six provinces, 69 cantones (municipalities) and 411 distritos. Unfortunately, for planning and administrative purposes, as in many other countries, (Costa Rica's provinces do not correspond to functional regions) (this problem is more serious in Costa Rica than in most other countries). The result has been a myriad of regionalizations, all of which serve or have served as frameworks for gathering and presenting data. In Costa Rica, not only do different sectors have differing regionalizations, but even general socioeconomic planning regionalizations are frequently revised. The result: information aggregated to the regional level and published in this form is not comparable either across sectors or over time. It is, of course, understandable that different sectors utilize differing regionalizations. For example, in the health sector, regions are based upon the areas of influence of major medical facilities, and statistics in this sector are, in the main, a by-product of the activities of those facilities and are tabulated by their respective regions. In agriculture, on the other hand, agriculturalists try to work with ecologically homogenous areas (rain-fall, elevation, soil types and land use) for planning purposes. Costa Rica's general socioeconomic planning regionalizations have been based on a polarized model (urban centers and their areas of influence). These general regionalizations have been modified several times by incoming governments, and as a result it is often impossible to make regional comparisons over time.

This Project will address the problem of non-comparable geographic data bases by: (1) careful geographic labeling of all information entering data banks, and (2) maximum geographic disaggregation of specific data sets, generally to the district or canton level when feasible.

Geographic disaggregation of data and its careful geographic identification will permit maximum data comparability

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and manipulation of data into various regional frameworks. Geographically coded data on agriculture and natural resources, health and nutrition, industry and employment, as well as other basic population and community characteristics combined with information on government services will quickly provide analysts with rankings of these geographic areas according to a simple characteristic (or index of characteristics) or with profiles of given areas. Information contained in such profiles and rankings would assist both national and sectoral level planners in allocating investment. Using available data, it is possible to develop a rather comprehensive geographically based socioeconomic profile for the nation. ^{1/} Indicators of infrastructure and public services and access to them could be formed or calculated in such sectors as agriculture, health, and industry. For example, indicators such as the existence of branch banks and the number of farmers served by them could easily be compared to the number of farmers and a comparative index of access or use developed. Indicators which reflect levels of achievement, such as infant mortality rates, incidence of poverty-related disease, crop yields, or the ownership of durable goods as proxies for income will also form part of the profile.

In addition to permitting planners to perform simple or basic analyses such as rankings or profiles of access, comparable geographically coded and disaggregated data sets will permit them to perform more sophisticated types of multivariate (e.g., regression or factor) analysis. For example, assume that the objective of a program is to reduce infant mortality and that information by geographic area is available on morbidity, sanitation, food consumption, access to potable water, and the number of health professionals. Associations (or lack of them) between infant mortality and the other variables could shed more light on the relationships existing between them and thus permit the formulation of more appropriate program strategies.

Analytical Distinctions Between Groups are
Difficult to Make

Closely related to the problems of geographic

^{1/} Annex II-F, the Academia study, illustrates that much data is available in published form at different geographic levels. Most published data available at regional or higher levels is also available at the district or canton level but because of publication costs is usually aggregated to higher levels.

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aggregation is the fact that (often from published data it is difficult, if not impossible, to draw analytical distinctions between the poor and non-poor or between the large or small farm or industry.) Again, the problem is not that the data is not gathered but rather that it is not tabulated or published in such a way that these distinctions can be made. For example, the Central Bank publishes the amounts of bank loans for industry and agriculture. It does not publish, however, the number of such loans nor is there any indication of what type of farm or industry they go to. Similarly, the National Insurance Institute publishes the number of farmers insured, the land area and crops insured, and premium income and claims paid. This information cannot be readily analyzed for small farmer versus large farmer coverage or for the relative risks and costs of dealing with one group or another. Because the crop insurance program involves a subsidy, this information should be readily available -- it is not.

The Project's data bank will facilitate making analytical distinctions between groups; the information contained in it will be more disaggregated than presently published data, and its software will facilitate custom tabulation of data.

Information is Often Too Late

Decision-making often cannot wait for the time required to gather data and develop relevant information. For example, the initial planning of the Social Development and Family Allowance Program was of high political priority in 1974, and critical decisions regarding nutrition-related programs were made on the basis of out-dated or inadequate information; needed nutritional data were obtained the following year -- too late to influence initial decisions concerning program priorities, designs, or levels of funding. Now, with the information, changing the program is much more difficult.

This Project will help to make needed data available faster through its area frame surveys, its data bank, and documentation centers.

Insufficient Statistically Reliable Information Exists for Agricultural and Natural Resource Planning

Apart from materials developed from the Population Census and occasional ad hoc surveys, which frequently lack statistically reliable sample frames, much basic information needed for

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planning in the agricultural sector is not only not available on a timely basis, or in a usable analytical form; it is just not available at all. Existing information is insufficient to be able to relate such crucial factors as size of farm, technology and input use, credit use, access to technical assistance, land use, labor use, or even crops grown. Such information is indispensable for sound program and project planning related to the GOCR's objectives for permanent socioeconomic improvement of the poorest groups, and for better natural resource utilization.

The costs of not having adequate information available can be very high. For example, (good basic information on amounts of crop production and actual crop yields is not available in Costa Rica. Recently, the National Basic Grains Program increased production incentives for basic grains (rice, beans, and corn), the most important small farm crops, with the goal of achieving self-sufficiency. The program was successful in the sense that farmers responded to its incentives. Yet the program's production goals were so quickly surpassed that insufficient storage capacity and transport facilities became a constraint on the program and support funds were rapidly exhausted. The result: prices received by farmers were adversely affected and the program's financial losses were massive. More timely information on the production of grains, their supply elasticities, and on the intentions of farmers to participate in the program could have averted serious losses to the GOCR and to farmers. Similarly, the National Insurance Institute (INS), a state monopoly, has a crop yield insurance program that could benefit greatly from better general crop production and yield information. In the last several years losses (claims payments in excess of premiums) in this program have been massive (over \$15 million in 1975 and 1976) with most payments apparently going to larger farmers (only 1,600 to 1,700 farmers are insured). Because no reliable crop area and production data exist except that from insured farmers, it has not been possible to accurately compare non-insured yields with insured yields, nor has it been possible to fix fair and reasonable yield targets for insurance purposes based on historical data. Furthermore, the benefit-incidence of the program, which is subsidized by other INS insurance, is difficult to assess.

The Area Sampling Frame and Survey component of this Project will improve the amount and statistical reliability of basic agricultural and natural resource utilization data available to planners and decision makers. The continuing survey mechanism will allow the gathering of information on dynamic characteristics which are the object of government policies or programs in agriculture and

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natural resources.

Much Information Is Lost, Not Accessible, Or Its Availability Is Unknown To Potential Users

The loss of information because of geographic aggregation was discussed above; perhaps equally serious is the lack of access to or knowledge about information contained in planning documents, feasibility studies and analyses, and survey documents which exist in printed form. Large sums are spent every year by the GOOCR in the preparation of this kind of analytical information. Generally, few copies of these types of studies are printed because of cost considerations, even though the costs of study preparation may be very high. Unfortunately, there is also a tendency for this type of study to disappear over time. Often public officials forget that their copies of these studies are not personal property to be taken with them or removed from the files when, for one reason or other, they change jobs. Thus, significant costs are frequently incurred repeating work done previously but not generally available or known. Also the quality of subsequent studies on the same or related problems tends to be lower when previously performed analyses are not readily available to those who follow.

The Documentation Centers component of this Project will deal with this problem by making the contents of these past studies and analyses readily available to users.

Insufficient Program or Project Related Information Is Available

At present, no functioning mechanisms exist to enable planners and policy makers to clearly identify and analyze linkages between priority development problems, national and sectoral policies, the results of specific programs and the resources assigned to them. Even program budgeting, which has been a legal requirement for some time, in fact, has never become effective.

In the absence of effective program budgeting or of such planning and evaluation mechanisms as, for example, AID's Logical Framework, insufficient information about specific programs or projects reaches planners or policy makers. Thus, it is difficult for decision makers to relate these programs to national needs and government development objectives or to receive objectively verifiable information regarding program coverage or effectiveness. The result: decisions about program continuation, expansion, or

elimination are frequently made on insufficient information.

This Project will attempt to increase the amount of program and project specific information available to decision makers and planners in conjunction with the GOCR Administrative Reform Program.

4. Relationship to the GOCR Development Plan

The GOCR in its draft 1979-1982 National Development Plan specifically mentions the increasing complexity of the problems that Costa Rica faces and cites basic obstacles to Costa Rica's development. Among those cited are an excessive degree of external dependence, low productivity, inappropriate consumption patterns, the irrational use of natural resources, overconcentration of activities on the Central Plateau, insufficient employment generation, the exclusion of large groups of the population from the benefits of growth with a resulting unjust income distribution, ineffective educational programs, lack of organizational capability in large groups of the population, and the existence of excessive state paternalism. The plan states that if Costa Rica is to maintain and increase its growth, these basic obstacles must be overcome; but that, at the same time, Costa Rica must find a "humanistic development style" -- "a productive system that is in the service of man and not the contrary." According to the plan this implies the satisfaction of basic human needs both in material and spiritual areas. The fundamental objective of the plan is the "full self-realization of the human being" and "the harmony of interests of all social sectors within a framework of the common good, popular participation, and self reliance." To reach this fundamental objective, the plan sets more specific objectives and related specific policy goals.

In summary, these specific objectives are:
(1) permanent socioeconomic improvement of the poorest groups through greater access to productive assets; (2) popular participation; (3) the promotion of a more efficient productive structure; (4) rationalization of natural resource use both for development and to preserve the environment; and (5) limiting the activities of the state, and making them more effective. To meet these development objectives the GOCR has developed a series of programs and sub-programs in productive areas, social sectors, infrastructure, and finance. This Project is part of one of the so-called "basic programs" of the development plan, the Administrative Reform Program.

The GOCR Administrative Reform Program has as its

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basic objective that public sector activities be "conceived, designed, managed, planned, controlled, coordinated and evaluated in order to guarantee that substantive state activities be carried out effectively and efficiently." According to the program, "the Executive Branch of the GOCR wishes to improve its capacity to coordinate and guide national policy yet at the same time decentralize and deconcentrate (out of San José) administrative decision-making." In order to reach these objectives, measures are being taken to improve the quality and administration of GOCR personnel, to strengthen the role of Ministries in policy making and control in their respective sectors, to improve the National Planning System, to strengthen the role and capability of local governments, and to review juridical and administrative norms based on new or replanned objectives and functions. The program will also develop operating mechanisms designed to provide regular control and evaluation of public sector programs in order to monitor efficiency, efficacy, and institutional productivity.

One of the Administrative Reform Program's seven sub-programs, which is essential to the success of the others, is "the establishment of a statistical and information system (National Development Information System - SNID) to strengthen technical and policy decisions and give a basis to the operational capacity of the National Planning System." The legal basis for the National Development Information System is contained in Decree N° 8647-P of May 9, 1978, and in the National Planning and Economic Policy law.

5. Relationship to Current and Planned AID and Other Donor Activities

This Project, which concentrates on improving the quality, amount, and utility of information in the priority areas of agriculture and natural resources, health and nutrition, and industry and employment (the GOCR sectors most related to meeting the basic human needs of AID's target group in Costa Rica), is highly complementary to and reinforces current and planned AID-supported GOCR programs, especially in sectoral planning and related information activities:

Nutrition Program (026). \$1.3 million of AID/GOCR Loan 026, Nutrition Program, is dedicated to improving the information base for nutrition planning. Broad socio economic variables are major determinants of nutritional status and many indicators of these variables are being collected, organized, and analyzed under the Loan. These "basic need" type indicators could be useful in

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guiding the planning and management of other programs aimed at the rural poor as well, and will provide many basic information inputs into the SNID.

In addition to supplying "basic needs" information, the Nutrition Information System will also provide this Project with: (1) an important institutional base in the Office of Information of the Presidency, the Project's leading GOOCR technical office; (2) a model for comparable data base management; and (3) the core of the health and nutrition subsystem of SNID.

Urban Employment and Community Improvement (028).
Under this project the Department of Information and Studies of the Ministry of Labor's Sectoral Planning Office will conduct and analyze industry establishment surveys for the purpose of determining job vacancies, skill requirements, and forecasting labor demand. These surveys and their analysis will provide important information to the SNID that will permit more efficient analysis of such policy concerns as employment growth and labor intensivity in industrial sub-sectors.

Agricultural Sector and Commodity Systems (022, 025 & 027). A long-run objective in the AID/GOOCR agricultural sector programs has been the creation and strengthening of the GOOCR Agricultural Sector Planning Office (OPSA). OPSA will be a major user of the SNID and through its management of the Project's area frame activity, it will also be an important information provider.

Remote Sensing and Natural Resource Conservation.
The Remote Sensing Pilot Project (515-0144) has given strong indications that remote sensing technology can be applied effectively and efficiently to macro-level natural resources monitoring. Thus, it is possible that the Mission's planned FY 79 Natural Resources Conservation Project will have a natural resources monitoring system based on remote sensing. This remote sensing monitoring system would have a need for certain ground truth information that could be provided by this Project's area frame activity.

ROCAP PIADIC Project. Two of this Project's activities are an outgrowth of pilot activities carried out by ROCAP's IICA PIADIC Project in Costa Rica. The PIADIC Project has been working with OPSA on developing a documentation center and on an area frame for one region of the country. The documentation center in OFIPLAN will apply methodologies being developed in OPSA and in the Costa Rican Technology Institute with PIADIC assistance. PIADIC, as a regional mission-support activity, will be asked to

provide technical assistance for this Project in the areas of documentation centers, data entry/retrieval, and area frame construction and surveys. 1/

Relationship to Other's Donor Programs. Although other donor programs would undoubtedly benefit from the improved development information that will result from the Project, the Mission has been unable to identify significant other donor assistance to the GOCR in information production or management. A possible exception could be the IDB's continued interest in the remote sensing area. IDB's remote sensing effort could benefit from outputs of the area frame sampling component of this Project, and the area frame could possibly benefit from more remote sensing imagery. Although at present no tangible links exist between the activities, the Mission will continue to explore such possibilities during Project implementation and will make use of the DSB Remote Sensing in Agriculture Project for this purpose, should that project receive final approval.

B. Detailed Description

1. Project Goal and Sub-Goal

The Goal of this Project, as of other USAID/Costa Rica-funded activities currently being planned, is the permanent socioeconomic improvement of Costa Rica's poorest groups through increased access to and more productive use of the means of production. This Goal is also the first objective of the draft GOCR 1979-1982 Development Plan.

The effectiveness of public policy making and the successful and efficient planning and management of GOCR development programs have immediate and direct impact on the permanent socioeconomic improvement of the poorest groups in Costa Rica, because many of these priority programs have poorer groups as their principal beneficiaries, and because improvement in the planning and management of these programs is needed so that they function more effectively. Also, as is pointed out in greater detail in the Social Analysis, the poor will benefit through better GOCR program

1/ The relationships between assistance to be provided by PIADIC and this Project are further detailed in Annex II-I.

targeting. Better targeting is indispensable if the poor are to receive more benefit from GOOCR programs, because constraints exist to further broad expansion of the Costa Rican welfare state. The Sub-Goal, to which this Project is aimed, is improved public sector policy making and better planning and management of GOOCR's development programs. This Project forms an integral and important part of the GOOCR's Administrative Reform Program, which has the stated Sub-Goal as a primary objective.

2. Project Purpose

The Purpose of the Project is [to provide improved information for decision making about priority development problems and programs. "Improved" information in the context of Costa Rican development planning and management is information that is more relevant, more timely, more comparable, more reliable, more accessible and in certain areas, such as agriculture, where insufficient information exists, just more information. "Improved" information in the Costa Rican context is also information that permits its users to make analytical distinctions between the poor and non-poor. "Priority development problems and programs" in this Project are those in agriculture and natural resources, health and nutrition, and industry and employment.

Improved information is a necessary condition for improved public sector policy making and better planning and management of development programs. Improved information, however, is by no means a sufficient condition. In any society, especially in a political democracy like Costa Rica, many factors enter into development decisions. It can, nevertheless, be assumed that better informed development decisions are more likely to further development than poorly informed ones and that decision makers will utilize information if it meets their needs.

3. Project Outputs/Inputs

The Project's principal Outputs are: (a) a Development Data Bank; (b) a National Area Sampling Frame and Survey Capability; and (c) two Development Documentation Centers. Although any Project Output would, in and of itself, contribute to achieving the Project Purpose, because the outputs are strongly interrelated and mutually reinforcing, their combined achievement will insure that information is improved. The Outputs and their corresponding Input requirements are described in more detail below, as are the activities required to develop them.

a. Development Data Bank

(1) General Content

This data bank will contain geographically coded data sets, the contents of which will be determined by users. The data bank will be organized into the following modules:

Agriculture and Natural Resources

The agriculture and natural resources module will contain such data as: areas, types, and quantities of production; costs of production; farmgate, wholesale, and retail prices; quantities marketed; exports by markets; land potential and utilization; access to and use of credit, modern inputs and technology; agricultural product and input imports; number and size of farms and their tenure; and the number of landless poor and their employment. To the maximum degree feasible, information will be organized in such a manner that users can distinguish between differing farm sizes. Although some of the information needed for this module exists, much more would be generated by the area frame based surveys which are also funded by this Project.

Health and Nutrition

The health and nutrition module will contain such data as: access to medical and paramedical services; access to potable water and sanitation; access to feeding programs; infant mortality; mortality and morbidity rates (by age group, socioeconomic level, and diseases); anthropometric data on children; food consumption and availability; calorie, protein, and fat intake; and health and nutrition beliefs and practices. Most of the data going into this module will be gathered or organized by the Nutrition Information component of the AID/GOCR Nutrition Loan (515-T-026).

Industry and Employment

The industry and employment module will include such information as: number and size of firms; types and numbers of employees and their compensation levels; value added and types of inputs; markets and exports; and capital investment and types of technologies employed. The information required for this module will come principally from the Directorate General of Statistics and Census (DGEC) Industrial Censuses, from the Economic Studies Department of the Central Bank (BCCR), from the Ministry of Labor (MOL) Employment Survey, and from Ministry of Economics,

Industry and Commerce (MEIC) special publications. Only employment in industry and services will be covered in this module because employment in agriculture will form part of that module.

Community and Population Characteristics

The community and population characteristics module will include general data on population, public services, education and transportation at the district and canton level. The purpose of this module is to provide data to be utilized in planning the Project's priority sectors; but it consists of data which is more general than data which is related to the specific sectors. For example, for agricultural planning, data must be available about road penetration into a given area. Similarly, the existence of a branch bank in a given canton may be crucial information for agricultural planning even though it is not agricultural information. Data in this module will not be as detailed as that in other modules. Eventually, if the GOCR should choose to extend the sectoral coverage of the data bank, this module will provide the basis for such an expansion. Thus education, transport, housing, or finance modules might evolve out of this module. Such expansion may be undertaken if this Project proves successful.

Specific Projects and Programs

This module will contain data on specific GOCR programs in the Project's priority sectors. Specifically, data will be included on program inputs, results, and objectives, and the relation of program objectives to those of the National Plan. The data format will be similar to that of the AID Logical Framework. Initially, the scope of this module will be limited to twenty or thirty programs which will be used to test the effectiveness of this type of mechanism in the Costa Rican context. Data for this module will be a by-product of the GOCR Administrative Reform Program.

(2) The Process of Defining Specific Data Module Contents

As indicated earlier, one of the principal problems to be dealt with by this Project is the lack of knowledge on the part of planners as to what kinds of information exist and the fact that no adequate mechanism exists for the users of data to express their needs and thus guide the collection and presentation of new or existing data.) Thus, in order to assist in the definition of the data to be included in the data bank, two actions are presently

contemplated as first steps. The inventory of data prepared by La Academia de Centro América and prior data user surveys by the Office of Information of the Presidency (OIP) and the National Planning Office (OFIPLAN) will be combined by those two offices into a package. OIP and OFIPLAN will then conduct a seminar for data users in the priority sectors. At this seminar the purposes of the data bank and its operation will be explained by OIP. Data users will be supplied with the package and will be asked what data in it they would like to see included in the data bank as well as what additional data, not now available, they require.

After the initial seminar, OIP and OFIPLAN will analyze the results of the data user survey, carried out as part of the seminar, and prepare a report which will guide the entry of appropriate data into the data bank.

Over the life of this Project a series of seminars, similar to the initial one, are planned to provide for continued dialogue between information users and information specialists to help keep the contents of the data bank limited and relevant and to develop the contents of the program and project specific information module. The initial and subsequent seminars will also allow the Administrative Reform Division of OFIPLAN to explain to data users the data requirements of the Administrative Reform Program. The Division and data users will define the specific data contents of the program and project data module, as well as the projects to be included initially. The need to relate current and planned programs to national and sectoral objectives and the need to develop performance indicators for each project will be stressed.

(3) Data Bank Design and Development

This activity encompasses the design of a coding and entry system for the data bank, the development and/or selection and testing of software for data entry and retrieval, the installation of equipment, and seminars and technical assistance to users in the operation and use of the system. The coding system must be designed to permit the entry of geographically coded data for the sectoral and community and population characteristics modules, which in the first instance will utilize census and existing, but not necessarily readily available, data. The data bank's coding system must also have the capability of accepting new information which is obtained through Project-financed and other surveys so that new information can be related to existing information to the maximum extent possible. The project specific data module must be

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accommodated as well. Because the GOCR is contemplating the eventual inclusion of other sectors in the data bank, the systems designed must also be adaptable to expanded sectoral and institutional coverage.

The hardware configuration which supports the data bank is based on the acquisition of an additional central processing unit (CPU) compatible with the Ministry of Finance's existing IBM 370/148 CPU. The purchase or lease of this unit would be part of the counterpart contribution by the GOCR. 1/ The Ministry of Finance will also supply the necessary operating staff for the expanded activities at its Computer Center (OTM). Terminals consisting of cathode ray terminals (CRT's) and hard-copy printers would provide a time-sharing and remote job entry capability at six institutions. IBM-compatible dual key-to-disk units located at OIP and at institutions which are expected to require a capacity to enter large volumes of information, will speed entry in a batch mode of the large amounts of data into the data bank.

The following institutions will have terminals with access to the data bank: 2/

- (i) National Planning Office (OFIPLAN)
- (ii) Office of Information of the Presidency (OIP)
- (iii) Agricultural Sector Planning Office (OPSA)
- (iv) Ministry of Health (MS)

1/ See Annex II-E for a technical discussion of the rationale for the additional CPU.

2/ The Ministry of Health terminal equipment is being purchased with funds from the Nutrition Loan (026). Several institutions will not have terminals but have indicated interest in access to the data bank. They will be served by institutions with terminals. The Ministry of Agriculture, the Institute of Colonization, and the National Production Council will be served by OPSA's terminal. The Central Bank, the University of Costa Rica and others will use the OFIPLAN terminal.

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- (v) Industrial Sector Planning Office (OSPI)
- (vi) Directorate General of Statistics & Census (DGEC).

As outlined in Decreto 8647-P of May 9, 1978, OIP will be responsible for the technical design and development of the system including: (1) preparation of manuals outlining the technical norms for the system and subject areas; (2) operations and applications manuals; and (3) maintaining an administrative system for recording system documentation, software, special programs, tape archives, and utilization records.

The above responsibilities must be centralized in OIP because the coding and data entry and retrieval systems of the data bank must be consistent. Furthermore, the GOOCR recognizes that the costs of maintaining a programming and systems analysis staff in each institution would not be justified. OIP will provide each institution with a terminal, two terminal operators and a diskette (data entry) operator. OIP will also provide programming services. During the initial phases of the Project, most of the sectoral diskette units will be housed in OIP because of heavy initial data entry. The exceptions will be OPSA and OFIPLAN; the existence of the area frame component in the former and the documentation center component in the latter will require an immediate batch mode data entry capability. For the same reason OPSA and OFIPLAN will need a minimum independent programming/systems analysis capability.

At the start of the Project, the OIP, supported by the Nutrition Information component of the Nutrition Loan, will have a programming and systems analysis capability. However, these people will be hard pressed to provide assistance to the National Development Information System Project in areas other than health and nutrition. A larger pool of programmers and analysts will be needed at the beginning to design the data bank coding procedures, operating programs and manuals, and provide technical services to institutions with terminals. This pool of qualified people will be in the OIP.

After the first seminar, the OIP staff will analyze the user required data in the areas of agriculture and natural resources, health and nutrition, employment and industrial production, and in community and population characteristics with a view to its entry into the data bank. They will prepare a manual outlining

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standardized technical norms regarding coding of data and entry criteria for each module. A second seminar will then be held, which will permit sector and national planners to have a major input in the final draft of the technical norms manual for the data banks.

SER/DM will be asked to review OIP's coding and entry/retrieval design. If necessary, SER/DM will prepare a scope of work for contract services to provide additional assistance in the coding of information and in the selection of appropriate software packages both for data base management and for data analysis and tabulation. Once user analytical and tabulation requirements have been determined, software packages to satisfy these requirements will be evaluated. This evaluation should review packages such as: (1) SPSS; (2) MPSX; (3) SAS-76; (4) CENTS; (5) COCENTS; (6) CENTS-AID, and others. Training seminars in the selected package(s) will be conducted for data users in the various sectoral areas of the data bank. Intensive preparation and testing of specific programs will be carried out during the first two years of the project.

Systems for controlling and cataloging documents and tapes and for monitoring their use will be established at the start of the Project. A junior level computer analyst in OIP will be responsible for maintaining these systems.

(4) Hardware Specification, Installation and Operation

OIP and the Ministry of Finance will prepare technical specifications and initiate the procurement of computer hardware as soon as feasible after Project signing. The installation of computer equipment is planned to occur toward the end of the first year of the Project. Although all computer terminals and data entry devices will be located in the respective offices of the data bank users, during the data bank's initial design and development at least four of the user terminals will be located in OIP. As the various components of the data bank become operational, these terminals will be moved to their regular locations. 1/ This approach will

1/ Either OIP or the Ministry of Finance will own and operate the terminals and new CPU. Thus, the terminals could be moved if a loss of interest or lack of cooperation is encountered in any institution.

permit the OIP programmers and systems analysts to enter data, test entry criteria and programs, and to complete the Manual of Operations and Applications. ^{1/} This Manual will outline procedures for the use of terminals and access to the data bank. A phased approach will be followed in the purchase and installation of disk units as recommended by the technical analysis. (See Annex II-E).

(5) Applications and Analytical Use

In the data bank component of this Project particular emphasis has been placed on communication between the data bank's users and its designers from the earliest stages. Such communication will be a continuing feature of the data bank. Therefore, seminars will be held every year on data bank applications and analytical uses. These seminars will encourage an on-going dialogue about the utilization of the system, the type of software applications and special programming assistance available, assistance in statistical analysis of data, and training opportunities. They will also provide an opportunity for data users to express their data needs and analysis requirements and provide inputs to the annual Project evaluation.

A variety of training activities are scheduled during the Project implementation period. Recently, the GOCR received an invitation from UNESCO to join its IBI (Intergovernmental Information Office) Program. The IBI Program will provide a variety of short and long-term courses in the information management and computer science areas. GOCR counterpart funds will be used to fund Costa Rica's quota for the IBI Program; Loan funds will be used to defray travel, per diem, and other participant costs for 39 months of short-term training. IBI will provide courses in data management and analysis, software applications, and related areas. Other training opportunities, such as the short courses in data gathering and analysis offered in Spanish by New Mexico State in cooperation with the Bureau of Census, will also be utilized. Selection criteria for training abroad will be a condition precedent to disbursement for the data bank. AID will approve all participants in such training.

^{1/} The Nutrition Loan will purchase a terminal configuration for the Ministry of Health. The OIP staff will begin the development of a Manual of Operations and Applications based in part on the data and programs developed by the OIP Nutrition Information group.

The Project will also support a series of courses for data bank users in Costa Rica on statistical analysis and on information for planning and management (one course during each year of the project). This training will increase the utilization of new methodologies for program and project planning and management. OIP programmers and social science analysts will also provide data bank users with in-service training aimed at fully utilizing and understanding the system.

(6) Development Data Bank Inputs

The AID Loan will fund: (1) approximately 168 person-months of contract technical services of systems engineers, systems analysts, and programmers for data bank design and installation (\$354,000); (2) approximately 17 person-months of short-term technical assistance, as well as travel and per diem costs for four person-months of SER/DM supplied services (\$130,000); (3) seminars and in-country short courses (\$71,000); (4) computer equipment (\$560,000); (5) computer software (\$100,000); (6) office equipment (\$30,000); (7) materials and publications, including diskettes, computer tapes, etc. (\$48,000). AID Loan funding of this component will total \$1,293,000.

The GOCR will fund: (1) costs of full-time permanent personnel (\$1,088,000); (2) rent and utilities (\$128,000); (3) equipment maintenance (\$28,000); (4) training and seminars, including IBI quota (\$28,000); (5) materials and publications (\$40,000); (6) office equipment (\$20,000); (7) computer CPU (\$690,000); (8) computer time (\$96,000). The total GOCR contribution to the data bank is estimated at \$2,178,000.

b. National Area Sampling Frame and Survey Capability

(1) Activities to be Undertaken

As discussed previously in the section of this PP dealing with GOCR development information problems, not enough statistically reliable data exists for agricultural and natural resource planning. This Project component will provide resources to complete the GOCR National Area Sampling Frame and to create a continuing area frame survey capability.

Area frame sampling is a proven statis-

tically reliable, cost-effective tool for the collection of many types of information. It will be used in Costa Rica principally to gather data on crop production, farm and rural population characteristics, rural employment, land use, and land tenure. The considerations that led to the choice of the area frame methodology for Costa Rica as well as its data gathering uses are dealt with in more detail in the Technical Analysis Section.

In August of 1978 Costa Rica conducted a pilot survey using an area frame for the Central Pacific Region of the country. This effort was supported by technical assistance funded by USAID/CR and ROCAP. Based on the preliminary results of the pilot effort, the GOCCR wishes to expand the area frame to provide national coverage and will utilize Loan funds for this purpose. To date, approximately 100 area frame segments have been completed. With the assistance of this Project, it is expected that the national frame, which will contain approximately 550 segments will be completed by the beginning of year two of the Project. In addition to funding the completion of the frame, this Project will fund approximately ten surveys which utilize the frame. In the first years of the Project, Loan funds will be used to defray these survey expenses; in latter years they become a GOCCR contribution, thus building GOCCR continuing costs into its budget.

Although the detailed content of the Project-funded surveys must await their actual preparation, five national surveys will concentrate on production and area estimates as well as planting intentions. The first of these surveys is scheduled in year two of the Project; two each year are scheduled for years three and four. Five special surveys are also planned. These special surveys will take place when no national surveys are in progress and according to a complementary time schedule (See Annex II-C). The special surveys will focus on the gathering of more in-depth information than it is feasible to gather in the national surveys. They will attempt to document the dynamics of rural life. Special surveys are planned for gathering information on: family time utilization and employment (and underemployment); farm and rural family characteristics; size, number, and tenure of farms; costs of production of selected crops; and the effectiveness of specific programs, such as access to and costs of credit, technology levels, input use, and evaluation of technical assistance.

(2) Frame Construction and Surveys

The Agricultural Sector Planning Office

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(OPSA), which carried out the 1978 pilot survey effort, will be responsible for carrying out this activity. Its geographical basis will be OFIPLAN's general socio-economic planning regions. OPSA will have the following responsibilities: (1) construction of the frame; (2) maintenance of the frame; (3) preparation of special frames; (4) design and selection of samples; (5) design of the surveys and questionnaires, training of enumerators, and overall supervision of field work to be carried out by the DGEC; and (7) editing, processing, analyzing and disseminating of results.

Because the sampling frame has potential application for uses besides agricultural and natural resources planning, OPSA will make the frame available to other GOCR users who might wish to undertake surveys in other sectors.

Enumerators and field supervisors, vehicles, and processing equipment will be needed to actually conduct and process surveys. The DGEC has survey supervisors, lists of enumerators, and experience in conducting surveys; OPSA will therefore contract with the DGEC for these services. The Loan will also fund the purchase of 28 vehicles for the conduct of the surveys. These will be operated by the DGEC and can be utilized by it for other surveys. However, the surveys carried out under the area frame will have priority in the use of these vehicles. This priority in use will be secured by a GOCR inter-institutional agreement or Executive Decree which will be a condition precedent to disbursement for this component.

During the first year of Project implementation, the National Area Sampling Frame will be completed. Frame construction involves outlining of regions on mosaics, stratification within regions, the construction of count units, and the selection and mapping of sample segments. The first year work will also begin on developing the first national and special survey, to be done in the second year. These preparations will include design and field testing of questionnaires, installation and adaptation of edit and tabulation programs using the health and nutrition unit terminal. Doing one national and one special survey in year two will provide opportunities to train enumerators and supervisors, further test computer programs, and publish and analyze results.

In the remaining two years of the Project, the area frame will conduct two national and two special surveys a year. In order to establish time series data, the timing and principal variables of the national survey must be the same from year to

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year. The special purpose surveys may involve either a sub-sample of the national sample or a sample from a new frame that could either be a list frame or a subset frame of the national. The first special purpose survey will gather rural farm and off-farm employment information.

To complement and correct data on crop area and production and related information from the national and special surveys, objective yield studies will be carried out in years three and four of the Project. Experience in Costa Rica and other countries has shown that farmers are often unable to estimate accurately areas cultivated or amounts produced. This experience also indicates that such estimation errors on the part of the farmers are usually systematic. For example, farmers' concepts of areas may not correspond to official definitions; farmers may tend to exaggerate areas under cultivation to impress the interviewer or minimize them if they believe tax or agrarian reform matters are involved; or they may normally only sell a product before drying while yields are conventionally expressed in dry form. The purpose of the objective yield studies is to either confirm farmer estimates or to develop correction factors which can be applied to farmer responses. The objective yield study involves selecting a sub-sample of the national sample, selecting farmer plots, measuring their area, harvesting the produce, drying or shelling it if necessary, and then weighing it. The result: yield figures that can be compared to farmer responses.

Two reasons exist for close coordination between OFIPLAN, OIP, and OPSA in relation to the area frame activity. First, the area frame provides a mechanism that could be used to gather objective information on the results of specific projects and programs. At least one special survey, and perhaps two, during the life of the Project will have such a project or program specific focus, e.g., credit access or technical assistance use. Secondly, because the area frame survey results will be entered into the data bank and be available to its users, data entry formats and systems must be compatible with those of the data bank. The responsibility for insuring that the necessary coordination takes place will rest with the OIP Project Coordinator, whose task will be facilitated by his control of Loan funds and by the National Information Council (composition and role discussed in Part IV.A.).

(3) Area Frame and Survey Inputs

The construction of the area sampling frame and its proper utilization in surveys requires a variety of technical

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expertise. The Loan will fund twenty months of short-term technical assistance and in-service training which will be provided by the USDA or BUCEN through a PASA:

- A Sampling Frame Construction Technician to train the frame construction supervisor and crew and to review their work.
- A Mathematical Statistician will review the national frame after its completion, advise a local statistician in preparing an optimum design for the national sample and train personnel in sample selection procedures, review survey questionnaires, leave instructions for calculations of variance, and recommend modifications in the sample if necessary. He will also help coordinate GOCR remote sensing activities and the area frame, and assist in the design of special purpose frames and samples. 1/
- A Survey Statistician will advise on all survey planning, organization and questionnaire design. He will also help train supervisors and enumerators, and supervise field work and questionnaire critique and flow.
- A Programmer/Systems Analyst will advise on data processing and programming for data tabulation.
- A Development/Agricultural Economist will

1/ A possibility exists that a new DSB project on the uses of remote sensing in agriculture could help identify links between remote sensing and the area frame. Such assistance would be highly complementary to this Project and would be welcomed by both the GOCR and USAID/CR. It is not, however, crucial to the successful implementation of this Project.

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train and assist OPSA personnel in the use and analysis of results from the area frame surveys, and will help formulate questions for special surveys.

The AID Loan will finance: (1) the above-mentioned technical assistance, (\$146,000)^{1/}; (2) 258 p.m. of temporary contract services (\$201,000); (3) 28 vehicles with spare parts (\$265,000); (4) office furniture and equipment (\$24,000); (5) survey costs (\$206,000); (6) materials and supplies (\$26,000); (7) vehicle and equipment maintenance (\$10,000); and (8) training and seminars (\$60,000). AID Loan funds destined for the area frame and survey activity thus total \$938,000.

The GOCR will finance: (1) permanent full-time personnel costs (\$322,000); (2) survey costs (\$529,000); (3) space for offices and vehicles (\$96,000)^{2/}; (4) vehicle parts and maintenance (\$93,000); (5) materials and supplies (\$29,000); and, (6) computer time (\$10,000). GOCR expenditures for the area frame will total \$1,079,000.

c. Development Documentation Center

(1) Role and Function

This component of the Project will strengthen existing documentation centers in OFIPLAN and OPSA. The OFIPLAN documentation center will, with support from this Project, become a central depository for GOCR planning documents and assessments, feasibility studies, and information on surveys (past and planned). The OPSA documentation center will be limited to the agricultural sector. OPSA will also collect more detailed technical agricultural information. This technical information will consist of books and documents related to Costa Rican rural life and agriculture, including published agricultural research results. At present, the OFIPLAN documentation center consists principally of OFIPLAN publications. OPSA's, on the other hand, has approximately 3,000 titles. ^{3/}

^{1/} Between \$10,000 and \$20,000 of this amount will be used to fund short-term technical assistance for in-depth evaluations.

^{2/} Vehicles financed under the Loan will be of U.S. manufacture.

^{3/} Recently a Bibliography of Poverty and Related Topics was prepared by Manuel J. Carvajal for LA/DR which contains 2,000 titles. Unfortunately, few of these are in OPSA's center and many cannot be located in Costa Rica at all.

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No one in the GOCR keeps track of or collects GOCR or GOCR-funded documents of the type that will be gathered by the centers. As a result, much printed information is lost or not readily accessible. Considerable effort is wasted and high costs are incurred repeating studies and surveys which, if information on them were more readily available, might only require updating. In the agricultural sector much duplication of effort could be eliminated by making technical information centrally available. For example, Ministry of Agriculture technicians may not know what work has been done by Colonization Institute (ITCO) technicians and vice versa.

Under this Project, the scope of OFIPLAN's documentation center will initially be limited to the three priority sectors mentioned earlier; OPSA's center will be limited to rural sector topics. In the case of the OFIPLAN center, when document collection and abstracting in the three priority sectors near completion and systems and methodologies are improved, its efforts could extend to other sectors.

All documents reaching the OFIPLAN and OPSA centers will have abstracts and keywords prepared for them. These abstracts and keywords will be entered into the data bank and all data bank users will have access to them. The centers will have the capability to reproduce documents or parts of documents for users.

Although the total number of documents which will be kept in the documentation center is not known, it is estimated that in the course of the Project approximately 7,500 documents will be abstracted, catalogued and entered into the data bank by the OFIPLAN center. OPSA will enter approximately 5,000 socio-economic and scientific surveys into the data bank over the same period.

In summary, the documentation centers will provide SNID users with rapid, easy access to information on Costa Rica that is in the form of the printed word. Through their abstract and keyword systems, they will facilitate user research; and through their reproduction facilities, users can be supplied with copies of documents or parts of them.

The Project's support of the two documentation centers will enable their employees to get experience in developing keyword systems and computer entry and retrieval systems; this knowledge will surely prove useful developing related documentation

centers for other GOCR planning offices in the future.

(2) Treatment of Planning Documents and Feasibility Studies

OFIPLAN will use its existing coordinating mechanism with sectoral and ministry planning offices to collect documents and feasibility studies that have been produced or funded by the GOCR. ^{1/} Similarly, OPSA will collect documents from agricultural sector entities. In case only one copy exists, a documentation center will make a copy and return the original if requested. Once a document or study is received, the respective center would prepare an abstract and keywords for it.

(3) Treatment of Survey Documents and Information

The OFIPLAN documentation center will receive information on surveys from the sector and ministry planning offices. OIP will receive this information from OFIPLAN and analyze it, focusing on subject area, geographic coverage, and other data details. OIP will develop the format for an index of the information contained in the surveys which will be available to data users through their computer terminals. OIP will canvass appropriate sector offices in order to determine what information in the surveys should be entered into the data bank in line with sectoral priorities and projects. It will use a format similar to that developed for the initial data bank user survey. OIP will analyze the results and enter the requested information contained in the surveys into the data bank. The OIP staff will be responsible for entering survey data into the bank to insure consistency.

(4) Implementation and User Training

SNID users will be able to request information from the centers using their computer terminals. The Loan will fund the purchase of microfilm and reproduction equipment for the

^{1/} OPSA's center would not have to supply OFIPLAN's center with actual documents because abstracts of them will be contained in the data bank.

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OFIPLAN center which will permit data users (including private individuals) to have access to the documents at a nominal charge. OPSA already has such equipment.

OFIPLAN's documentation center and OIP will, as part of the initial seminar on the SNID and the data bank, describe their purpose, the format for the abstracts, the keyword concept and the procedures to be followed in forwarding surveys and documents. Seminars covering these topics in greater detail will be held later with the various sector and ministry planning offices which will forward surveys and documents. Another seminar for the benefit of data users dealing with the retrieval of indexed documents, studies, and surveys will be held by the OIP and the documentation centers approximately three months after the entry of information into the data bank has started. A follow-up seminar to evaluate problems which the users of the system may encounter and to provide additional information on the use of the documentation center system will be held approximately six months later. This is to insure that data users are familiar with the system.

At present OFIPLAN's documentation center employs three persons: a chief and two librarians. It is planned that the documentation center's permanent staff be increased by one person and that in the first three years of the Project six persons will be contracted full-time to assist in preparing abstracts and keywords. By the end of the Project, the permanent staff of the OPSA center will consist of a chief, one agricultural economist/librarian, and one secretary/librarian. During the first two years of the Project eight persons will be contracted by OPSA to prepare abstracts and keywords.

OIP will provide the centers with the part-time services of one systems engineer, one systems analyst, and one programmer during the first two years of the Project to design, install, test, and improve its program systems. A TDY information specialist will be available to complement OIP's services. It is expected that ROCAP's PIADIC Project will provide technical assistance for the development of the documentation center systems. PIADIC has assisted in the development of OPSA's documentation center and has accumulated much experience in the field of documentation centers and information entry and retrieval systems. For example, technical assistance may be needed to determine whether a separate keyword entry and retrieval software package is desirable for the documentation centers or whether data bank software would be appropriate.

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(5) Documentation Center Inputs

The AID Loan will finance: (1) 12 person-months of systems engineering/analysis (\$24,000); (2) 4 person-months of technical assistance by an information specialist to work on the development of the keyword system and to recommend appropriate software (\$32,000); (3) 384 person-months of contract services for the cataloging of documents (\$170,000); (4) computer software (\$20,000); (5) equipment and supplies (\$42,000); (6) seminar costs (\$4,000); and, (7) travel to visit operating documentation centers (\$6,000). Total AID Loan financing for the documentation centers will be \$298,000.

The GOCR will provide: (1) full-time staff costs (\$258,000); (2) materials and supplies (\$19,000); (3) equipment maintenance (\$3,000); (4) computer time (\$10,000); and (5) rent and utilities (\$36,000). The total GOCR contribution to the documentation center will be \$326,000.

d. Project Coordination Office

The Project is a complex one. It involves considerable coordination among differing GOCR agencies in various sectors. It contains a high dose of sophisticated technology that will be transferred to and made to work in the Costa Rican environment. In order to improve the probability of its success, (1) a Project Coordination Office has to be established, and (2) a full-time Technical Expert should be grant-funded by AID for the first three years of the Project.

(1) Role and Staffing

In order to coordinate all the Project's technical and administrative aspects, the GOCR will set up a Project Coordination Office within the OIP. Because the functions of this office are dealt with in greater depth in the Project Implementation Plan, it is sufficient to state here that this office will be the central point of contact for all GOCR entities involved in the Project as well as for USAID/Costa Rica; it will represent the borrower. Because this office is temporary and will only exist for the life of the Project and because it is essential that it be staffed with the highest quality personnel, it will be financed almost entirely with Loan funds. The staff of the Project Coordination Office will consist of a Costa Rican Project Coordinator, an Assistant Project Coordinator (accountant), a secretary, and a clerk.

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A need will remain for some coordination of the SNID system after the Project terminates. This continuing coordination function will, however, be much less complex once SNID's basic systems are in place and the AID Loan is disbursed. The SNID coordinating function could, after the Project ends, pass to the ongoing OIP Systems Group (See Annex II-D).

(2) Technical Expert^{1/}

Neither the GOCR nor the Mission have enough technical expertise in the areas of computer sciences or information management to be able to manage this Project effectively without assistance. Thus, in the Mission's opinion a full-time Technical Expert having these skills is required for the first three years of the Project. The expert will have space both in the GOCR Project Coordination Office and in the Mission. He/she will spend approximately 60% of his/her time advising the GOCR, and the remaining 40% advising the Mission.

On the GOCR side, the Technical Expert will be responsible to the Project Coordinator and assist him in coordinating activities of the various implementing agencies. He will also provide technical assistance to these agencies. At the Mission, he will report to the project manager advising him on technical aspects and progress of the project. Although the Mission considered a Loan-funded host country contract for the advisor, it is unrealistic to expect the GOCR Controller General to approve a GOCR contract costing between \$80,000 and \$90,000 per person-year for an expert who will be responsible to the A.I.D. Mission as well as the GOCR.

(3) Inputs for Project Coordination

The AID Loan will fund the salaries of personnel in the Project Coordination Office (\$140,000) and limited office equipment (\$8,000). The AID Grant will fund the costs of the Technical Expert (\$250,000). AID total funding for project coordination will be \$398,000. The GOCR will provide office space and materials and supplies to the Project Coordination Office (\$16,000).

^{1/} The Technical Expert is sometimes referred to as a project advisor in this paper.

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III. PROJECT ANALYSIS

A. Technical Analysis

1. Alternative Project Designs

Earlier USAID/Costa Rica preliminary designs of this Project, as reflected by the PID and Interim Report, focused heavily on gathering information on the basic needs of Costa Rica's population. In the course of project development, it became apparent to the Mission that although gaps do exist in basic needs information, especially in the agricultural sector, the primary development information problems in Costa Rica do not relate to the lack of raw basic needs data. This conclusion was based primarily on the AID-funded Academia statistical inventory (Annex II-F). There are problems with data accessibility, the forms of its presentation, its aggregation, and its use in development planning and management.

Earlier GOCR conceptions of this Project, as reflected in formal project proposals that it submitted to the Mission stressed the need for improved standardization in data, greater accessibility to existing information, improved communication between data producers and users, and a desire to avoid proliferation of public sector computer hardware. The GOCR approach was public sector-wide in coverage and did not emphasize generation of new data. In the course of Project development it became clear to the GOCR that its earlier conception, which also involved the collection, storage and management of unspecified raw data from all public sector institutions in a central computing facility, would not be feasible to implement because of its complexity.

Neither USAID nor GOCR earlier Project designs had a clear conception, beyond very general statements, about what types of data would be involved nor for what purposes this data would be used.

The present Project design limits the types of information SNID will deal with and its sectoral coverage; the design also puts a stress on information utilization that previous designs did not contemplate.

Mission and GOCR concerns about the need to circumscribe the information content and sectoral coverage of the SNID were reinforced by the summary of case studies on the utilization of management information systems recently reported in the DSB/RD-funded publication, Information for Decision Making in Rural Development,

prepared by Development Alternatives Inc. (DAI). Among the problems with management information systems cited by DAI are:

- The apparent inability of management and policy makers to specify in advance their information needs;
- As a result "information experts" are often given the responsibility for the content of such systems;
- The need to keep information limited to that which is relevant and not just "related to" decision making in order to prevent data overload.

DAI does offer a positive note on such systems, however:

"It is reasonable to suppose that the more decision makers are involved in, understand, and trust the data collection system, the more likely it is that they make use of the results". (P. 66).

The Project Committee, taking into account the above, has not only tried to limit the information content of the SNID. It also included a user feed-back mechanism in the Project (the planned seminars and data bank records), and provided for user training in the analytical applications of the SNID software. If the types of information entering the SNID and its functions are defined, if a workable user feed-back mechanism is established, and if training in utilization is provided, users should be able to specify, as they gain experience, what information is relevant to their needs.

2. Design of Project Components

a. The Data Bank and Documentation Center

Electronic data processing (EDP) was included in the data bank and documentation centers components because:

- (1) large quantities of information must be handled;
- (2) EDP forces a standardization of information definitions and formats;
- (3) EDP facilitates analytical functions; and
- (4) EDP

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facilitates data sharing among users. In the case of the documentation centers, EDP permits the use of the keyword system and permits broader access to the stored publications.

Once it was decided that EDP was indispensable to the SNID, the question of choosing the best configuration was analyzed. The results of that analysis, done by SER/DM, is contained in Annex II-E.

b. Area Sampling Frame and Surveys

Surveys require a sample frame, i.e., a universe from which a representative sample can be drawn. Because there is a need in Costa Rica for periodic collection of data on the agriculture and the rural socio-economic environment, the investment cost of establishing an area sampling frame is justified. The area frame sampling methodology was chosen for this Project because of its versatility, its coverage, its ease of updating, and its efficiency.^{1/}

According to DAI:

"Since units of land rather than listings of farms or households are being used as the reporting units, area frame sampling techniques can be used to monitor those changes that take place over a period of time in the use of the land within the segment. Thus conceptually, an area frame is always current and complete with regard to any definition of a reporting unit. The area frame does not become outdated in terms of coverage of a population unless the population extends into areas not covered by the frame. Changes in land use or number and location of reporting units have some bearing on the variance of the estimate but do not introduce bias...

Because of the land-base concept, a well

^{1/} See Earl E. Houseman, Area Frame Sampling in Agriculture, (USDA/SRS), 1975, p.4-5.

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designed area frame has a variety of possible applications. It can be used repeatedly for a number of years to provide the basis for a program of regular, ongoing surveys for collecting such data as crop production, land use, livestock production, number and size of farms, economic indicators, and suppliers of agricultural inputs. Since cities and populated places can be included in it, the area frame can also be used for conducting surveys of households, persons, service and/or processing facilities, or any other definable reporting units that can be uniquely associated with area frame segments. In some geographic locations, area frame sampling has provided the only means whereby needed data could be obtained." (Vol. II, p. 32)

It will be noted that no general large-scale socio-economic farm survey has been provided for in the Project. Such a survey is one of the few reliable means of estimating small farmer incomes. Reliable small farm income data does not presently exist and "would have been nice to have." It was decided, however, given the information to be gathered in the special area frame based surveys, that gathering the income statistic per se was not a cost-effective investment (it would cost approximately \$300,000). Perhaps the principal consideration against opting for such a farm income survey is that, based on existing information, it appears that a large number of Costa Rica's poor are of the rural landless whose income it is possible to estimate without a costly farm income survey like those which have been done in Bolivia, Colombia, and the Dominican Republic. The planned national and special surveys will include such data as amounts produced, costs of production, and off-farm income. These surveys will make possible the construction of income estimates which can then be used to confirm or adjust present census income estimates.

B. Financial Plan and Analysis

1. Financial Plan

Tables III.B.1 - III.B.3.

The Financial Plan contains a Summary Cost Estimate, a Costing of Project Outputs/Inputs, and a Disbursement Schedule by Calendar Year. More detailed costing of individual Project outputs is presented in Annex II-D.

The total cost of the Project over its four year life is estimated at \$7,500,000, of which \$3,250,000 will be AID Loan funded and \$250,000 Grant funded. The GOCR contribution is estimated at \$4,000,000 or 55.2 percent of the total Project cost, a percentage well in excess of the minimum twenty-five percent host country contribution required by the Foreign Assistance Act. The percentage breakdown of total Project cost by type of expenditure and source of funds is as follows (in per cent):

	<u>A. I. D.</u>		<u>GOCR</u>	<u>TOTAL</u>
	<u>Loan</u>	<u>Grant</u>		
Operating Costs	10	-	64	41
Design & Installation Costs	23	-	-	10
Technical Assistance	9	100	-	8
Training & Seminars	4	-	1	2
Vehicles, Equipment & Supplies	14	-	3	8
Computer, Hardware, Software & Time	21	-	20	20
Inflation and Contingencies	<u>18</u>	<u>-</u>	<u>12</u>	<u>11</u>
TOTAL	100%	100%	100%	100%

The AID Loan portion includes a 17.6 percent allowance for contingencies and inflation (\$573,000). This allowance is thought to be adequate. Approximately 70% of AID financed expenditures are expected to take place in the first two years of the Project. Furthermore, many expenditures are for items whose prices have not been increasing as rapidly as the general price level.

The shares of AID Loan and Grant funding and GOCR funding by type of expenditure is illustrated below (in per cent):

	<u>A. I. D.</u>		<u>GOCR</u>	<u>TOTAL</u>
	<u>Loan</u>	<u>Grant</u>		
Operating Costs	12	-	88	100%
Design & Installation Costs	100	-	-	100%
Technical Assistance	55	45	-	100%
Training & Seminars	83	-	17	100%
Vehicles, Equipment, & Supplies	77	-	23	100%
Computer Hardware, Software & Time	46	-	54	100%
Inflation and Contingencies	55	-	59	100%

It can be seen from the above tables that operating costs and computer related expenditures form the bulk of total Project costs, 39 and 20 percent respectively, and Loan funds defray 11 percent of the Project's operating expenses. All design and installation costs are Loan-funded. These total 10 percent of total Project costs and are to contract temporary highly skilled personnel required to install the various systems of the SNID. These people will train less skilled employees in OFIPLAN, OIP, and OPSA and are scheduled to leave the project mostly by the third year as reflected in the Disbursement Schedule and detailed budgets (Annex II-D). The operating costs defrayed by the Loan consist almost entirely of the personnel costs of the temporary Project Coordinating Office and of area frame survey costs in 1981 and 1982. In 1981, these survey costs are financed entirely by Loan funds. In 1982 Loan funds defray only 24% of the survey costs; in 1983, the last year of the Project, the GOCR assumes all the survey costs.

The bulk of the capital equipment expenditures occur in the first year. Some computer equipment purchases are deferred until the fourth year as recommended by SER/DM (See Annex II-E). Forty-nine percent of AID provided resources are scheduled for disbursement in the CY 1980, 27 percent in CY 1981, and 16 percent in CY 1982. 1/ The Project financial strategy is to provide the GOCR with the technical assistance and equipment early in the Project so that a functioning and totally GOCR-supported system is in place at the end of CY 1983, during which only 8 percent of the Loan disbursements will occur.

2. Financial Viability and Recurrent Budget Analysis

Two principal questions occur in examining the Project's financial feasibility. First, given the GOCR's current austerity program, will it be able to increase its budget sufficiently to meet the Project's cash counterpart requirements? And second, are the Project's recurrent costs of such a nature and magnitude that the GOCR will be able to continue the Project's activities without AID support? In order to answer these questions the nature and timing of the GOCR contribution and its recurrent budgeting costs were analyzed.

1/ Inflation and contingencies are not distributed by years.

TABLE III.B.1

SUMMARY COST ESTIMATE AND FINANCIAL PLAN
(US \$000)

Type of Expenditure	SOURCE OF FUNDS								<u>TOTAL</u>
	A. I. D.					GOCR			
	LOAN		GRANT		<u>TOTAL</u>	<u>FX</u>	<u>IC</u>	<u>TOTAL</u>	
<u>FX</u>	<u>IC</u>	<u>FX</u>	<u>IC</u>						
Operating Costs	-	356	-	-	356	30	2,545	2,575	2,931
Personnel	-	(140)	-	-	-	-	(1,668)	-	(1,808)
Surveys	-	(206)	-	-	-	-	(529)	-	(735)
Rent & Utilities	-	-	-	-	-	-	(276)	-	(276)
Vehicles & Equipment	-	-	-	-	-	-	-	-	-
Maintenance	-	(10)	-	-	-	(30)	(72)	-	(112)
Design & Installation	-	749	-	-	749	-	-	-	749
Technical Assistance	250	58	250	-	558	-	-	-	558
Training & Seminars	90	51	-	-	141	28	-	28	169
Vehicles, Equipment & Supplies	378	65	-	-	443	60	70	130	573
Computer Hardware	-	-	-	-	-	-	-	-	-
Software & Time	680	-	-	-	680	690	116	806	1,486
Inflation and Contingencies	287	286	-	-	573	161	300	461	1,034
TOTAL	<u>1,685</u>	<u>1,565</u>	<u>250</u>	<u>0</u>	<u>3,500</u>	<u>969</u>	<u>3,031</u>	<u>4,000</u>	<u>7,500</u>

TABLE III.B.2.

PROJECTIONS OF DISBURSEMENTS BY CALENDAR YEAR
(US\$ 000)

<u>Type of Expenditure</u>	<u>1980</u>		<u>1981</u>		<u>1982</u>		<u>1983</u>		<u>TOTAL</u>	
	<u>AID</u>	<u>GOGR</u>	<u>AID</u>	<u>GOGR</u>	<u>AID</u>	<u>GOGR</u>	<u>AID</u>	<u>GOGR</u>	<u>AID</u>	<u>GOGR</u>
Operating Costs	40	373	175	509	106	791	35	902	356	2,575
Design & Installation	301	-	266	-	158	-	24	-	749	-
Technical Assistance (Grant Funded)	158 (80)	-	206 (80)	-	156 (90)	-	38	-	558 (250)	-
Training & Seminars	92	10	32	-	9	14	8	4	141	28
Vehicles, Equipment and Supplies	350	22	57	24	22	43	14	41	443	130
Computer Hardware Software & Time	495	716	60	-	10	-	115	90	680	806
Inflation and Contingencies			<u>(not distributed by years)</u>						573	461
TOTAL	<u>1,436</u>	<u>1,121</u>	<u>796</u>	<u>533</u>	<u>461</u>	<u>848</u>	<u>234</u>	<u>1,037</u>	<u>3,500</u>	<u>4,000</u>

TABLE III.B.3.
COSTING OF PROJECT OUTPUTS/INPUTS
(US\$ 000)

<u>PROJECT INPUTS</u>	<u>PROJECT OUTPUTS</u>			<u>TOTAL</u> ^{1/}
	<u>DATA BANK</u>	<u>DOCUMENTATION CENTER</u>	<u>AREA FRAME & SURVEYS</u>	
<u>AID Appropriated</u>				
Operating Costs	-	-	216	216
Surveys	-	-	(206)	(206)
Rent/Utilities	-	-	-	-
Vehicles & Equipment	-	-	(10)	(10)
Maintenance	-	-	-	-
Design and Installation	354	194	201	749
Technical Assistance	130	32	146	308
Training & Seminars	71	10	60	141
Vehicles, Equipment and Supplies	78	42	315	435
Computer Hardware, Software & Time	660	20	-	680
Project Coordination	-	-	-	398
Inflation & Contingencies	-	-	-	573
Subtotal	1,293	298	938	3,500
<u>GOCR</u>				
Operating Costs	1,244	297	1,018	2,559
Personnel	(1,088)	(258)	(322)	(1,668)
Surveys	-	-	(529)	(529)
Rent/Utilities	(128)	36	(96)	(260)
Vehicles & Equipment	-	-	(71)	(102)
Maintenance	(28)	(3)	-	-
Technical Assistance	-	-	-	-
Training & Seminars	28	-	-	28
Vehicles, Equipment and Supplies	60	19	51	130
Computer Hardware, Software & Time	786	10	10	806
Project Coordination (Rent/Utilities)	-	-	-	16
Inflation & Contingencies	-	-	-	461
Subtotal	2,118	326	1,079	4,000
TOTAL	<u>3,411</u>	<u>624</u>	<u>2,017</u>	<u>7,500</u>

^{1/} Totals do not correspond to other tables where Project Coordination costs (not an output) are broken down into its parts.

a. Nature and Timing of GOCR Contribution

The table below, which is based on the detailed project budgets in Annex II-D, compares the GOCR's new cash budgetary contributions to its total contributions over the life of the Project. It can be seen from this table that, with the exception of the first year of the Project, new GOCR budget resources required for the Project increase gradually.

(US \$000)

	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>TOTAL</u>
New Budget Resources	779	317	619	817	2,532
In-kind or In-budget	342	216	229	220	1,007
Inflation and Contingencies	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>461</u>
TOTAL	1,121	533	848	1,037	4,000

The large amount in the first year is due to the planned purchase of a new central processing unit for the Ministry of Finance computer. As of the moment no firm decision has been made about whether to purchase or to lease this new CPU. Were the CPU leased, its cost would be spread out over all years of the Project and therefore the demand on scarce GOCR budgetary resources would be more gradual.

b. Recurring Budget Analysis

From the detailed Project budgets in Annex II-D, it was calculated that ongoing GOCR annual operating costs of the Project totalled approximately \$902,000. In Table III.B.4. this figure is compared to a budgetary projection of the participating GOCR Ministries. The operating expenditures for the Ministry of Agriculture, Ministry of the Presidency and Ministry of Finance increased at an annual rate of 22% during the 1977-79 period. However, because of the government austerity program and attempts to reduce the rate of inflation, it is expected that government expenditures will grow at an annual rate of 15% during the early 1980's. In 1984, the year after the Project ends, such recurrent costs will

TABLE III.B.4.

PROJECT BUDGETARY REQUIREMENTS COMPARED TO
PROJECTED BUDGETS OF PARTICIPATING MINISTRIES 1/
 (US \$000)

<u>Calendar Year</u>	<u>Estimated Budget</u>	<u>GOCR Operating Cost Contributions</u>	<u>Contribution or % of Budgets</u>
1977	42,900	-	-
1978	55,000	-	-
1979	63,800	-	-
1980	73,370	373	0.5
1981	84,376	509	0.6
1982	97,032	791	0.8
1983	111,587	902	0.8
1984	128,325	902	0.7

1/ Source: 1976-79 GOCR General Budget for Ministry of the Presidency, Ministry of Agriculture and Livestock, and Ministry of Finance. Following years projected at 15% annual growth rate.

account for approximately 0.7 percent of the projected budgets of those ministries.

An examination of the nature of the Project's continuing costs indicates that they can be absorbed into the GOCR budget. Salary levels are adequate to attract and retain the quality of personnel required to maintain the system and are within the range permitted by GOCR civil service regulations.

C. Social Soundness Analysis

1. Beneficiaries

As mentioned previously, the Goal of the Project is the permanent socio-economic improvement of Costa Rica's poor; its Sub-Goal is the improvement of policy-making and better planning and management of the GOCR's development programs. The links between a better information base for policy making and project planning and management and the socioeconomic improvement of Costa Rica's poor are real even though indirect. Improved information is required to better analyze and understand the dynamics and causes of poverty, to better target assistance to overcoming the identified problems of poor people, and to improve the cost-effectiveness of programs aimed at them.

The Costa Rican welfare state cannot continue to be indiscriminant about the benefit-incidence of its programs. There are many examples in Costa Rica of the benefits of social programs being appropriated by the non-poor, i.e., "socialism for the middle classes and free enterprise for the poor." This occurs despite the stated or even real intentions of these programs and is to a certain extent inevitable in a genuine political democracy with broad middle class participation. For example, Costa Rica has in recent years had a school feeding program, the intention of which is combating malnutrition. The program, which annually costs \$20,000,000, is financed by sales and payroll taxes (which are regressive and increase the effective price of labor). It is not clear what the program's effect on malnutrition is nor that the poor and nutritionally most vulnerable are its principal beneficiaries. These funds could probably be better employed if the causes rather than the consequences of poverty were the focus of the program. A more cost-effective nutrition program could clearly be designed. The school feeding program is being modified by the GOCR in spite of the political difficulty of making changes now that it is in operation.

The Costa Rican economy and productive structure cannot support a further general broadening of social services because taxes are high -- the payroll tax is about 30% -- and the domestic savings rate low. Therefore: (1) if the situation of the poor is to improve permanently, they must become more productive; (2) programs aimed at improving their productivity must be solidly conceived and well targeted; and (3) those programs, as well as other social service programs, must become more efficient. The foregoing will require better information of the type that the SNID will provide. For example, the area frame surveys can provide information by farm size on access to credit and technology which can be used to design, reformulate, or monitor a credit program: are farmers who grow a certain crop utilizing credit or improved technologies? What are the non-interest costs of loans? SNID's geographic profiles will also contribute to a much better understanding of where to locate programs and projects.

Improved information is a necessary but not sufficient condition for increased benefits to accrue to the poor. Information is an important factor but is only one of many variables that enter into decision-making. However, this Mission is convinced that the GOOCR policy environment in which this information will be utilized is one in which the commitment to equitable development is genuine. Therefore better information on the problems of the poor will lead to sounder policy making and hence, given GOOCR objectives as summarized in Part II.A.4, to more real and lasting benefits for the poor.

A temptation exists in Projects of the type proposed for AID to limit the information to be dealt with to that about the poor, because links between better information and the improved status of the poor are not always immediately self-evident. Yet, planners must have an understanding of trade-offs among sectors and target groups which would not be apparent if data itself were limited to that on the poor. For example assume, for the sake of argument, that no industrial workers are among the poor. If therefore no information is gathered on industrial employment growth or capital (because it doesn't belong to the poor), it is impossible to analyze future employment potential for the poor or such questions as capital-intensiveness which may also crucially affect them. Precisely one of the problems with existing data is that it is not possible to distinguish well enough between the poor and non-poor. In this Project the temptation to limit the scope of data activities to the poor in order to establish a questionable and artificial link has been avoided.

The poor are not the exclusive beneficiaries of the Project.) To the extent that GOCR programs and projects become more cost-effective because of better planning and management, all Costa Ricans will benefit.

2. Socio-Cultural Feasibility

The Project will work with both existing and new data. With respect to the management and analysis of existing data within the data bank, both the GOCR and AID are cognizant of the issue of possible misuse of information, particularly disaggregated data. The GOCR has laws that guard against the disclosure of information which can identify an individual or enterprise; these will provide an adequate safeguard against such occurrences. The data bank will therefore not contain data about specific individuals or firms. With regard to misuse of information for personal or political purposes, the GOCR is convinced, and the Mission concurs, that the best safeguard against this possibility is precisely a "democratization" of data, i.e., the possibilities of such misuse are greatly lessened when data is widely available as it would be through the data bank.

With regards to new data to be generated, the national and special surveys to be conducted using the area frame should encounter no problems of a socio-cultural type in the field. Surveys have been conducted in the past in Costa Rica and few problems have been encountered with cooperation on the part of respondents nor are there sharp cultural, ethnic, or linguistic differences among them. 1/ In any event, all questionnaires and procedures will be pre-tested to minimize problems with respondent cooperation and accuracy.

The objective yield study will require an even greater degree of respondent cooperation than do the surveys. Fields have to be measured, harvested, and crops dried and weighed. In the past, this methodology has been used by GOCR extension agents for cost of production studies which required yield information and no significant problems were encountered once the purposes of the study were explained. It is not known whether the participants in previous yield studies were randomly selected as they would be for the ob-

1/ The only significant minority group is the English-speaking black population around Limón and in this group, all but the very old also speak Spanish.

jective yield studies or whether they were already known to extensionists. In any case, careful explanations of the study's purpose will be in order.

3. Role of Women

Considerable information on the role of women in urban areas exists in Costa Rica. Much less is known about women in the rural environment, except that few farm women work outside the home, that women usually have responsibility for animal care and gardening, and that traditionally they have most of the responsibility for coffee picking. The special surveys using the area frame should provide an excellent opportunity to find out more about the role of rural women. The employment and labor utilization survey will focus, among other things, on the time utilization of rural people, including women who will be separately identified. The importance of this type of information is pointed out in the following quotation:

"Many of the empirical findings in the workshop, although tentative in nature, support the contention that women's time is efficiently allocated in most traditional and developing households. Further, efforts to move women out of accepted roles and into "modern" roles must be viewed within the context of a trade-off between equity, and the efficiency with which very scarce household resources are allocated by families residing in low income countries. Shifting from traditional to modern forms of household production and concomitant change in the role and status of women are laudable policy goals, but the importance of women as "earners" in traditional forms of household activities should not be overlooked." 1/

1/ Dennis N. De Tray, "Household Studies Workshop", A/D/C/Seminar Report, May 1977.

Therefore, as more adequate information is gathered on the woman's role in the rural household, better knowledge can be attained as to the possible above-mentioned trade-offs between traditional income-earning activities and "modern" forms of income-earning activities. Additionally, having more complete information on this subject will enable planners to take into account the women of rural households in a manner beneficial both to them and to their families. The data gathering instruments in Project-funded surveys will be designed in such a way as to permit the making of significant analytical distinctions between the roles of men and women in all aspects of Costa Rican rural life. Similarly, many distinctions between men and women are lost in the data aggregation process and therefore the data bank, which will permit greater data disaggregation, should also assist in making such distinctions.

D. Economic Analysis

AID Handbook 3, Appendix 5G points out that cost effectiveness analysis is a limited tool in evaluating research, technical assistance or "institution building" activities such as those which will be supported under this Project. Nevertheless, during the course of project development an attempt was made to evaluate the cost-effectiveness of alternative approaches to deal with the information problems which were outlined in Part II.A.4. and are treated in Part III.A. The Project Committee is of the opinion that the economic justification for the Project is clear.

1. Cost-Effectiveness

A variety of data gathering mechanisms are utilized by the GOCR such as census and surveys, case studies, and administrative reporting. Depending on the type of information required, one or a mix of these methodologies may be most cost-effective. The information problems of the GOCR go beyond the mere selection of appropriate data-gathering mechanisms, however. For example, as outlined earlier, a crucial bottleneck has been the lack of an effective information management and dissemination mechanism to permit planners to utilize existing data and to determine what additional data is needed. The data bank and documentation center outputs are specifically designed to help the GOCR improve its existing information base, structure the acquisition of new data and make information gathering more relevant to the main task of GOCR planners - the planning and evaluation of the nation's development program.

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Because of the volume of data that will form the data bank modules and the interrelationships among development problems which need to be analyzed, the Project Committee feels that the use of electronic data storage, processing and analysis is the only technically feasible alternative. Alternatives to deal with the information problems outlined in Part II.A.4. could result in some improvements, but would not resolve the more basic institutional and technical difficulties. For example, a minicomputer located at the agricultural sector planning office could handle some of their data needs but it would not allow access to information in other sectors or, more importantly, require them to standardize their data entry or share their information with other planning offices.

Additional data is necessary to properly design and manage sector programs and projects. The area frame methodology and sample surveys using the frame will be utilized to provide additional information for this purpose, particularly in the agricultural and natural resources sector. The surveys using this methodology can deliver statistically reliable estimates of farm production and rural household characteristics and will also be utilized to monitor programs in the agricultural sector. The area frame methodology is cost-effective. The DAI report prepared for DSB/RD states:

"Area frame sampling is now recognized as one of the most important of the sampling techniques currently being used to help collect rural development data. The construction and implementation of an area frame is initially an expensive, complex and highly technical process. However, once a frame is constructed, area sampling offers a relatively inexpensive and accurate method for data collection, and users worldwide have generally been favorably impressed with its convenience, ease of application and versatility. The area frame may also be easily utilized as the vehicle for carrying out continuing programs for gathering data on a regular periodic basis. Furthermore, in addition to providing agricultural statistics, the area frame technique is also capable of obtaining data from other sectors." ^{1/}

^{1/} Information for Decision-Making in Rural Development, Volume II, p. 45-46. Report prepared for DS/RD by Development Alternatives Inc.

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The Project outputs are designed to address the various aspects of the GOCR development information problem. While the technical and capital requirements involved in the solutions are large, the information problems and development issues facing the GOCR are also important. Moreover, in the Project Committee's judgement the GOCR has the commitment and the technical base to utilize the Project resources effectively in the resolution of the planning information bottlenecks.

2. Economic Justification

The economic benefits which may flow from the analytical and information outputs to be generated in this Project are potentially very great, but difficult to quantify. Ludwig M. Eisgruber of Oregon State University wrote in December of 1978:

"Neither theory nor methodology exist to address adequately the economics of information, and, until recently, little effort was made to overcome this deficiency. A number of factors contribute to this deficiency: (a) for most information systems, particularly the public information systems, there is no market price that would suggest the value of information and information systems; (b) information is not a physical good and, therefore, lacks the concreteness that provides a basis for valuing many items such as, for example, a reclamation project; (c) most information systems do not have an impact that is observable in easily measurable variables. Therefore, currently existing econometric techniques are of little assistance in estimating information values; (d) public and private values of information may differ significantly... No integrated operational theory or methodology exists for placing value on information or for selecting the most appropriate information system." 1/

1/ Eisgruber, Ludwig M., "Developments in the Economic Theory of Information," American Journal of Agricultural Economics, Volume 60, Number 5, pp. 901-920.

In spite of the lack of a theory, it is possible to illustrate the possible impact of the SNID. Assume that the improved information and analysis which flow from this Project result in better planning and management of GOCR development programs such that a 1% improvement in the allocation of the operating and investment resources by the Ministry of Agriculture, the Ministry of Health, the Ministry of Economy, Industry and Commerce and the Family Assistance Program occurs for the next eight years (starting in year 4 of the Project). The 1% improvement is a result of more efficient and more effective programs and because of the improved utilization of GOCR staff. GOCR expenditures through these institutions are estimated to increase at a conservative rate of 15% from the present level of \$145,800,000 due to the austerity and inflation-fighting program of the government. ^{1/} Table III.D.1. shows that the benefit/cost ratio of the Project is 1.51.

^{1/} Government expenditures in these sectors increased at an annual rate of over 20% during the latter part of the 1970's, but the GOCR is not expected to sustain the rate in the 1980's, thus a more conservative growth rate has been employed for projection. Expenditures do not include those of autonomous agencies, except the Family Assistance Program.

TABLE III.D.1.

ILLUSTRATIVE BENEFIT/COST RATIO FOR THE NATIONAL
DEVELOPMENT INFORMATION SYSTEM (US\$ 000)

<u>Year</u>	<u>Public Investment Operating Expenditures 1/</u>	<u>1% Improvement in Resource Allocation</u>	<u>P.V. of Improvement</u>	<u>Cost of Project</u>	<u>P.V. of Cost of Project</u>
1977	98,700				
1978	129,800				
1979	145,800				
1980	167,670				
1981	192,820	<u>2/</u>		2,816	2,816
1982	221,744	<u>2/</u>		1,588	1,382
1983	255,005	<u>2/</u>		1,567	1,185
1984	293,256	2,550	1,678	1,529	1,006
1985	337,244	2,933	1,678	902	516
1986	387,831	3,372	1,675	902	448
1987	446,005	3,878	1,676	902	390
1988	512,906	4,460	1,677	902	339
1989	589,842	5,129	1,677	902	295
1990	678,319	5,898	1,675	902	256
		6,783	<u>1,675</u>	902	<u>223</u>
Sum of P.V. (at 15%)			<u>13,411</u>		<u>8,856</u>

B/C Ratio at 15% equals 1.51.

Source: 1979 GOGR Budget, IBRD Projections, and unpublished Family Assistance Data.

1/ For the Ministry of Agriculture, Ministry of Health, and Ministry of Economy, Industry and Commerce.

2/ It is assumed that no benefits are presented until year four.

IV. IMPLEMENTATION ARRANGEMENTS

A. GOCR Role, Responsibilities, and Institutional Analysis

The successful achievement of the Project's Outputs and Purpose will require a high level of effective cooperation between various GOCR entities, especially OIP, OFIPLAN, and OPSA. Close interaction among national and sectoral level planners in agencies such as OFIPLAN, OPSA, OPSI, and the Ministry of Health will be required for the creation of the data bank and documentation center and even closer coordination will be required between DGEC and OPSA for achieving the Area Frame and Survey Output. The Ministry of Finance which houses the computer facilities required for the Project must also be involved technically and operationally in Project activities as they relate to electronic data processing (EDP). DGEC is involved as a principal data supplier.

The general organization and staffing of the principal entities involved in carrying out the Project are discussed in more detail in Annex II-G. This section will deal briefly with the principal roles of these entities in the Project, and how their interrelated actions in the Project will be coordinated.

1. The Lead Institutions: OIP and OFIPLAN

The most important institutional actors in the Project are OIP and OFIPLAN. The Project will join the comparative advantage of OIP, information management, with that of OFIPLAN, planning and inter-institutional coordination. OIP has developed a technical capacity in information management. OFIPLAN is at the apex of the national planning and coordinating system and because it is charged with coordinating the public sector around the National Plan, it and its related sectoral planning system are best able to determine whether national and sectoral priorities and data needs are consistent. OFIPLAN is also charged with carrying out the Administrative Reform Program and thus is in the best position to determine the information requirements of that program.

OIP

OIP will have responsibility for creating and maintaining the SNID and will have the responsibility of coordinating and managing this Project. OIP has the legal mandate to assume these responsibilities, is well positioned in the GOCR hierarchy to carry them out, and has more relevant technical experience than any other

GOCR institution. By Presidential Decree, OIP is charged with developing the technical norms, methodology and operational applications of the National Development Information System (SNID) while involving data users throughout this process. The Office is also responsible for implementing the Nutrition Information component of AID Loan 026 which involves the collection, storage and analysis of nutrition and health data. Since OIP assumed the responsibility for implementing the nutrition information component of Loan 026, the performance of that component has improved markedly. 1/

Because of the technical complexity of this Project and the need to coordinate the technical and administrative activities of a number of agencies, a Project Coordination Office (PCO) will be formed in the OIP. The staffing and funding of the PCO has been previously discussed. The PCO will be responsible for the final preparation and review of Project implementation plans and procurement documents. It will comply with AID reporting requirements, approve all contracting, and because all GOCR Loan disbursement requests will require its approval, it will have significant clout in trying to bring about proper inter-institutional coordination within the Project.

The OIP, like other entities within the GOCR, has had considerable problems developing a nucleus of technical expertise in computer programming and systems analysis. The problem is that highly qualified people with these technical skills are scarce and are easily tempted out of the public sector by higher private sector salaries. This Project has been structured to deal with this problem: high level experts needed for computer systems design will be contracted with Loan funds. The technical skill levels required for systems maintenance are not as high as for design and can be adequately compensated within the GOCR salary structure.

OFIPLAN

While OIP will be responsible for the technical aspects of the Project and overall Project management, OFIPLAN has a crucial role in assuring that the needs of data users are adequately represented. The Inter-Institutional Coordinating Division in

1/ For a more detailed treatment of the current status of the nutrition information component 026 see Annex II-H.

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OFIPLAN will be responsible for working with OIP on the National Development Information System (SNID); OFIPLAN's Administrative Reform Division will also be involved. The Inter-Institutional Coordinating Division has the mechanisms established to reach analysts within OFIPLAN and sector planners in the participating agencies. A Loan-funded systems analyst/programmer will be hired to assist OFIPLAN in working with the technical staff at OIP and also to provide OFIPLAN with in-house technical assistance to its sector analysts and other agency sectoral planning offices for utilization of the SNID computer terminal. This contracted individual will train a permanent OFIPLAN systems analyst/programmer who will continue to provide these services after his departure. The Chief of this Division will be responsible for coordinating with the OIP Systems Group Chief and the Project Coordinator.

The technical coordination mechanism described above will also be supported by a higher level policy making group, the National Information Council. This council will consist of the head of OFIPLAN, the head of the Office of Information of the President and representatives from OPSA, OSPI, the Ministry of Health, the Ministry of Finance and the DGEC. The council will be formalized through an inter-institutional agreement or Presidential Decree which will be an initial Condition Precedent to Loan disbursement. The council will provide general guidance to the Project's technical groups and will insure that planning information network participants are cooperating with the system and that the needs of the data users are adequately considered.

In summary, both OIP and OFIPLAN have had experience in the types of technical and coordination activities which will be necessary for Project implementation. Indeed, OIP and OFIPLAN staff are working jointly with data users to help determine their data needs. Both institutions have legal mandates for the activities which they will carry out under the Project. OIP also has had some experience in procurement and disbursement under the 026 AID Loan. At present, there is no reason to believe that these institutions will be unable to carry out the Project's coordinating and implementation activities effectively given their support for and interest in the Project as well as the assistance that the Project will provide to them.

The Interim Report (IR) for this Project detailed a much more central role for the DGEC than is presently contemplated. The IR review cable specifically requested more information on the DGEC's role in the Project and suggested that the DGEC might be a logical place for data collection and analysis to be lodged because "(DGEC) is presently the best equipped agency for this kind of task."

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The Project Committee examined the option of having the DGEC play a more central role in the Project but concluded that the role contemplated for the DGEC was a proper one. The DGEC's institutional comparative advantage is in data gathering and not in data management. The Project contains less new data gathering than was contemplated at the PID and IR stages. Other factors leading to the Project Committee's conclusion are transmitted to AID/W by separate cable (San Jose 0552).

Although the overall upgrading of the DGEC is clearly beyond the scope of this Project, DGEC institutional capabilities will, as a side product of the Project, be enhanced. For example: DGEC staff will be able to participate in in-country seminars and Project funded training; it will have access to an IBM/equivalent 370/148 computer which could ease transitional problems when it decides to upgrade its EDP capability; and it will have the use of area frame vehicles when these are not required for area frame purposes.

2. Other Institutions

In addition to OFIPLAN and OIP, whose coordination responsibilities were described above and whose implementation activities were covered in the Project Description Section, OPSA, OSPI, the Ministry of Health, the DGEC, and the Ministry of Finance are also involved in the Project Outputs:

a. Data Bank

All of the Project's GOCR implementing institutions will be involved in activities associated with the data bank. The Ministry of Finance will house the SNID CPU and provide necessary operating personnel. Each of the other institutions will be served by a computer terminal providing them with access to the data modules described earlier as well as the abstracted index of documents and surveys prepared in the documentation centers. OIP will provide technical operators for the terminals to be installed. Training in the operation of the terminals will be provided by the vendor. OIP will provide some technical assistance in data use and analysis as well as programming assistance for the sector analysts in these institutions.

Ministry of Finance (MH)

The Ministry of Finances' Mechanized Technical Office (OTM) houses Costa Rica's largest computer, an IBM 370/148, which will be supplied by Project counterpart funds with an additional

Central Processing Unit (CPU) to service five Project-funded terminals. At present, certain technical problems (discussed in the Technical Analysis) and related organizational problems exist in the OTM which if not resolved will make the implementation of this Project difficult.^{1/} Because of low salaries for top-level technicians OTM has experienced high turn-over rates. Morale in OTM has been low because of ineffective past leadership. The OTM now has a new, dynamic Director who is open to change and who is working with Loan 026-funded experts to improve OTM's systems; the creation of a new higher level classification for systems analysts is under consideration by the GOCR civil service.

OTM will require new personnel experienced in hardware and software to handle its responsibilities under this Project. These will include an Assistant for Operations, a systems analyst and additional console operators.

Ministry of Health (MOH)

Loan 026 will provide the GOCR Nutrition Information Group with a terminal similar to those to be used in the Project, connected to the existing OTM CPU. ^{2/} Because of the experience gained, not only will the health and nutrition module require less assistance from this Project than will other modules, but it is expected that the knowledge gained by the OIP/MOH group will be extremely valuable to the Project, especially in its first year. The OIP/MOH group has already designed the basic outlines of the health and nutrition data bank module which should be fully functioning prior to the initial design of the other data modules (end of 1979). Thus, the OIP/MOH group will have experience both in data module design and functioning and in equipment configurations that will greatly aid the Project.

At present, the MOH Data Processing Department operates an IBM System 3 which is used primarily for budgetary and other administrative purposes. The OIP nutrition information group is presently studying whether or not placing the 026 funded terminal under the eventual control of the Data Processing Department would be advantageous and whether or not the OTM-nutrition terminal system

^{1/} These problems which are also discussed in Annex II-E are related to the use of a DOS operating system in OTM's 360/148 rather than an OS system and to the emulation of older computer memories, such as the 1401, in the newer machine. In short, they are programming and systems problems.

^{2/} Once the twin OTM CPU is installed, MOH will use it instead.

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could eventually take over the functions of the existing MOH System 3.

Ministry of Economy, Industry and Commerce (MEIC)

Two entities within the MEIC will be involved in the Project: the General Directorate of Statistics and Census (DGEC) and the Industrial Sector Planning Office (OSPI). Detailed information on the organization and staffing of both entities is contained in Annex II-G.

It is anticipated that OSPI, a relatively new entity, will be primarily a user of data but that it will also supply information derived from the special studies it carries out from time to time.

The MEIC's DGEC, the GOCR's principal information producer, will play a key role in the Project. Since DGEC is responsible for conducting the Census and because it serves as a depository and gatherer of other information (See Annex II-G), it will be the principal initial supplier of data to the data bank. Because the tape formats on which much data is stored in the DGEC are incompatible with those planned for the Project, OIP, with the assistance of DGEC programmers, will have to work carefully to transfer the required data stored in these incompatible formats to the data bank.

OPSA

OPSA plans, designs, and monitors agricultural sector programs. Its organization and capabilities are dealt with in greater detail in Annex II-G. The SNID terminal assigned to OPSA will be used by it both in its capacity as a data user and as a data supplier of area frame survey information, which its terminal will be used to process.

b. Area Frame and Surveys

OPSA and the DGEC will be the principal GOCR agencies involved in this output. OIP's role is limited to insuring that the coding and statistical norms are consistent with those for the SNID since the information generated by the surveys will be incorporated into the data bank's agriculture and natural resources module. OIP will also provide overall coordination of this activity with others in the SNID.

OPSA currently houses the Area Frame Unit which

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consists of 6 individuals, three under contract and three provided by the DGEC. The Unit has received technical assistance from the ROCAP/PIADIC Project and through a Loan-funded (025) PASA with the USDA. It constructed an area frame for the Central Pacific Region of the country and carried out a pilot survey there. The Unit was previously located at DGEC but experienced space limitations and difficulty in processing the results of the pilot survey. Recently a decision was made to transfer it to OPSA where more adequate working conditions are available. It appears that this move has improved progress on construction of the frame.

OPSA will contract with the DGEC for carrying out survey fieldwork. Although the DGEC does not maintain a permanent staff of enumerators -- it normally contracts these services -- it does have approximately 5 permanent survey supervisors. The DGEC supervisors and contracted enumerators will work under the guidance of OPSA frame supervisors. The vehicles which will be purchased with Loan funds are for the area frame activity, but will be available to DGEC for other surveys when not required for area frame activities. An inter-institutional agreement between OPSA and DGEC concerning the use, management and maintenance of these vehicles will be a subsequent condition precedent to AID disbursement for area frame activities.

c. Documentation Centers

OFIPLAN has a functioning documentation center which contains approximately 200 documents (primarily OFIPLAN publications). It currently has a cataloguing capability provided by a staff of two librarians (See Annex II-G). The head of the center, a U.S. trained librarian, is cognizant of the keyword concept and is very interested in developing and utilizing keyword entry and retrieval systems. There is some indication that the center may receive future assistance from UNESCO for a broader activity involving documentation centers in various fields. Discussions are still in the preliminary stage.

The OFIPLAN documentation center will need to utilize the coordination mechanism of OFIPLAN's Inter-Institutional Coordination Division to assure that it receives GOOCR planning documents, feasibility studies, and information on surveys which sectoral and ministry planning offices will channel to it. The center will depend on the clout of the National Information Council and the Project Coordination Office for timely compliance by GOOCR agencies on requests for their documents and surveys.

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Although OPSA's documentation center contains many more documents (around 3,000) than OFIPLAN's, it has no permanent staff at present, but functions using contracted personnel. Many documents in OPSA center are not catalogued. The Project will help to consolidate the OPSA center; the GOCR as part of its counterpart contribution will provide the OPSA center with a permanent staff.

3. Conclusions

The GOCR institutions that will be involved in this Project have the legal attributions to carry out their respective responsibilities, most have some experience in similar tasks, and with the assistance provided by the Project will be able to carry out the activities proposed.

B. AID Role and Responsibilities

1. Implementation Monitoring

The USAID Rural Development Office (RD) will be the Mission office with primary responsibility for overall implementation monitoring of this Project. The Project will be managed by the RD Agricultural Economist who has considerable knowledge of sectoral planning and related data needs; approximately half of his time will be required for this task. The RD office will be assisted in its monitoring responsibilities by the Grant-funded information management/computer specialist who will spend 40% of his time in the RD offices and the rest with the OIP Project Coordination Office.

2. Disbursement Procedures

A four-year disbursement period will be required for the AID Loan (see Disbursement Schedule in Section III.B.1.). A Special account for the Project will be established in the Ministry of Finance for making the disbursements which have been approved by the OIP Project Coordinator. AID standard direct disbursement procedures will be followed. No elements of this loan are acceptable for use of the Fixed Amount Reimbursement (FAR) method.

3. Procurement Procedures

The selection of consultants and contractors, procurement of equipment and materials, shipping and insuring will be carried out in accordance with the standard procedures called for in

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the Project Agreement. (It is anticipated that all goods and services procured under the Project will be contracted for directly by the Borrower, with AID's prior concurrence for all contracts over \$100,000. The Mission will review the scopes of work, qualifications and salaries of all persons paid with loan funds, all procurement of computer hardware and software, and all foreign training.

Appropriate reports on procurement such as 50/50 shipping and source and origin will be prepared by the Project Coordinating Office. These reports and requirements will be monitored by RD, the Capital Development Office and by the Controller's Office through the review of vouchers and supporting documentation. It is presently planned that all contracting under all the Project components will be done by the OIP Project Coordinating Office. Loan funds will not be subject to annual appropriation by the GOCR Legislative Assembly.

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C. Implementation Plan

1. Schedule of Major Events

Because of its technical and administrative complexities, this Project is planned to disburse over a four year period after the meeting of initial conditions precedent. Because the Loan Agreement must be ratified by the Costa Rican Legislative Assembly after signing and because both Loan and counterpart budgets must be included in the GOCR budget, major Project activities are not expected to commence until January of 1980. The Project Assistance Completion Date should therefore be fixed at December 31, 1983. In effect then this will be a five-year Project. The following is the schedule of major events:

<u>General</u>	<u>Date</u>	<u>Activity</u>
	February 1979	- PP submitted to AID/W.
	February 1979	- Project authorized by AID/W.
	March 1979	- Project Agreement signed.
	July 1979	- Grant-funded Project Advisor arrives.
	August 1979	- Loan ratified.
	September 1979	- Initial CPs met. - Project Coordinator Office begins formal functioning. - Formal Loan-funded technical assistance recruitment begins.
	January 1980	- Loan-funded technical assistance activities begin.
<u>Data Bank</u>	1st Qtr. 1980	- Survey package of data users prepared. - Submission of computer hardware specifications.
	2nd. & 3rd. Qtrs. 1980	- Report on survey of planning data users prepared. - Design and implementation of coding system begins.

<u>Date</u>	<u>Activity</u>
	<ul style="list-style-type: none">- Course on statistical analysis held (will be held every year during these quarters).- Preparation of Data Standards and Technical Norms Manual begins.
4th Qtr. 1980	<ul style="list-style-type: none">- Software analysis started.- Installation of computer equipment.- Entry of data on diskettes starts.
1st. Qtr. 1981	<ul style="list-style-type: none">- Preparation of Operations Manual started.- Entry of data continues.- Data Standards and Technical Norms Manual draft ready.
4th Qtr. 1981	<ul style="list-style-type: none">- Implementation of Coding System completed.- Data Standards and Technical Norms Manual completed.
1982	<ul style="list-style-type: none">- Assistance in data analysis and programming becomes a major activity.- Most of contracted technical personnel in OIP and Grant-funded Project Advisor depart.
1983	<ul style="list-style-type: none">- Data bank is fully operational; AID Loan assistance ends.
<u>Area Frame</u> 1st Qtr. 1980	<ul style="list-style-type: none">- Submission of specifications for vehicles.- Establish data priorities, precision of estimates, and a firm survey calendar.
3rd. & 4th Qtr. 1980	<ul style="list-style-type: none">- Complete area frame and draw special survey sample.
1st Qtr. 1981	<ul style="list-style-type: none">- Prepare for special survey.

<u>Date</u>	<u>Activity</u>
2nd-3rd Qtrs. 1981	<ul style="list-style-type: none">- Conduct special survey.- Analyze and publish results of special survey.
3rd Qtr. 1981	<ul style="list-style-type: none">- Prepare for national sample survey.
4th Qtr. 1981	<ul style="list-style-type: none">- Conduct national survey.- Analyze and publish results of national survey.- Prepare for special survey.
1st Qtr. 1982	<ul style="list-style-type: none">- Prepare for national survey.- Conduct special survey.- Analyze and publish results of special surveys.
2nd Qtr. 1982	<ul style="list-style-type: none">- Conduct national survey.- Analyze and publish results of national survey.- Prepare for special survey.
3rd Qtr. 1982	<ul style="list-style-type: none">- Prepare for national survey.- Conduct regional survey.- Analyze and publish results of special survey.
4th Qtr. 1982	<ul style="list-style-type: none">- Conduct national survey.- Analyze and publish results of national survey.
1st Qtr. 1983	<ul style="list-style-type: none">- Prepare for national survey.- Conduct special survey.- Analyze and publish results of special survey.
2nd Qtr. 1983	<ul style="list-style-type: none">- Conduct national survey.- Analyze and publish results of national survey.- Prepare for special survey.

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- 2nd Qtr. 1983
 - Conduct national survey.
 - Analyze and publish results of national survey.
 - Prepare for special survey.
- 3rd Qtr. 1983
 - Prepare for national survey.
 - Conduct special survey.
 - Analyze and publish results of special survey.
- 4th Qtr. 1983
 - Conduct national survey.
 - Analyze and publish results of national survey.

Documentation Center

- 1st Qtr. 1980
 - Hold seminar explaining documentation centers.
 - Begin collecting documents and surveys; develop abstracts.
 - Begin development of Keyword System.
 - Technical assistance for selection of software.
- 2nd-3rd-4th Qtrs. 1980
 - Continuation of collection and abstract activities.
- 1st Qtr. 1981
 - Begin entry of index of documents and surveys into the data bank.
 - OIP begins to enter appropriate survey data into the data bank modules.
- 3rd-4th Qtrs. 1981
 - Seminar on retrieval of information; feedback from documentation center users.
- 1982-1983
 - Continuation of entry of indexes on documents and surveys. Documentation center is operational.

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2. Project Contracting Plan

The following is the contracting plan for the duration of the project:

a. Information Systems Specialist

(1) Description of Services

(i) Assist the Chief of the OIP Systems Group in the development of the data bank activity.

(ii) Responsible for the overall development of the Technical Norms Manual and Operations Manual and the interface of data and equipment.

(iii) Train counterpart.

(2) Proposed Procurement Agent - GOCR

(3) Proposed Method of Procurement - Personal services contract or technical competition.

(4) Cost Estimate - 3 years, \$90,000.

(5) Waivers Required - None

(6) Contractor Start-up - O/A January 1980

b. Systems Engineer

(1) Description of Service

(i) Analyze data procedures and requirements.

(ii) Link the coding specifications for various sectors.

(iii) Focus on development of Technical Norms Manual.

(iv) Analyze operations of documentation centers.

- (2) Proposed Procurement Agent - GOCR
- (3) Proposed Method of Procurement - Personal Services Contract or technical competition.
- (4) Cost Estimate - 3 years, \$72,000.
- (5) Waivers Required - None.
- (6) Contractor Start-up - O/A January 1980.

c. Systems Analyst

- (1) Description of Services
 - (i) Analyze data operations and needs of participating agencies including documentation centers.
 - (ii) Develop coding system for entry of data with the Systems Engineer.
 - (iii) Provide assistance to participating agencies in analysis of data operations and uses.
 - (iv) Train Counterpart.
- (2) Proposed Procurement Agent - GOCR
- (3) Proposed Method of Procurement - Personal Services Contract or technical competition.
- (4) Cost Estimate - 3 years, \$72,000.
- (5) Waivers Required - None.
- (6) Contractor Start-up - O/A January 1980.

d. Systems Analyst/Programmer

- (1) Description of Services

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(i) Work with OFIPLAN's Interinstitutional Coordinating Division assisting the Chief in coordinating with OIP.

(ii) Provide OFIPLAN with in house analysis of data operations and needs and effective utilization of data bank.

(iii) Train counterpart.

(2) Proposed Procurement Agent - GOCR

(3) Proposed Method of Procurement - Personal Services Contract or technical competition.

(4) Cost Estimate - 2 years, \$48,000.

(5) Waivers Required - None

(6) Contractor Start-up - O/A January 1980.

e. Programmer

(1) Description of Services

(i) Works with OIP Systems and Information Unit programmers in developing specific program applications for the Data Bank output.

(ii) Works with technical assistance personnel in evaluation of software needs.

(iii) Reviews programs developed under contract.

(iv) Provides programming assistance to participating agencies.

(v) Trains counterpart.

(2) Proposed Procurement Agent - GOCR

(3) Proposed Method of Procurement - Personal Services Contract or technical competition.

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- (4) Cost Estimate - 4 years, \$96,000.
- (5) Waivers Required - None.
- (6) Contractor Start-up - O/A January 1980.

f. Contracted Programming Services

(1) Description of Service

- (i) Prepare special application programs as determined by OIP Programmer and GOCR agency needs.

- (2) Proposed Procurement Agent - GOCR
- (3) Proposed Method of Procurement - Technical competition.
- (4) Cost Estimate - 16 pm, \$56,000.
- (5) Waivers Required - None
- (6) Contractor Start-up - To be determined.

g. Contracted ST Technical Assistance Information Systems Specialist

(1) Description of Services

- (i) Assist OIP Systems Group and documentation centers in matching data with software and hardware in data bank and documentation centers.
- (ii) Analyze applications and operations software as necessary.
- (iii) Prepare purchase plan for software.

- (2) Proposed Procurement Agent - GOCR
- (3) Proposed Method of Procurement - Technical competition.

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- (4) Cost Estimate - 9pm, \$102,000
- (5) Waivers Required - None
- (6) Contractor Start-up - To be determined.

h. Project Coordinator

(1) Description of Services

- (i) Responsible for the overall technical and administrative coordination of Project activities for all the Project outputs.
- (ii) Prepares all procurement documents and substantiating information.
- (iii) Acts as the AID contact point for the Project.
- (iv) Prepares necessary evaluation and reporting documents.
- (v) Controls disbursement of funds to the participating agencies.

- (2) Proposed Procurement Agent - GOCR
- (3) Proposed Method of Procurement - Personal Services Contract.
- (4) Cost Estimate - 48 pm, \$80,000.
- (5) Waivers Required - None
- (6) Contractor Start-up - O/A January 1980

i. Assistant Project Coordinator

(1) Description of Services

- (i) Assists Project Coordinator in carrying out his functions.

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- (ii) Responsible for maintaining the financial records of the Project.
 - (2) Proposed Procurement Agent - GOCR
 - (3) Proposed Method of Procurement - Personal services contract.
 - (4) Cost Estimate - 48 pm, \$28,800.
 - (5) Waivers Required - None
 - (6) Contractor Start-up - O/A January 1980
- j. Project Coordinating Staff: Secretary and Clerk
- (1) Description of Services
 - (i) Typing and filing of documents and bookkeeping.
 - (2) Proposed Procurement Agent - GOCR
 - (3) Proposed Method of Procurement - Personal Services Contract
 - (4) Cost Estimate - 96 pm, \$32,000
 - (5) Waivers Required - None
 - (6) Contractor Start-up - O/A January 1980
- k. Project Advisor
- (1) Description of Services
 - (i) Provide AID with assistance in monitoring Project implementation particularly with regard to technical feasibility of implementation actions of the GOCR.
 - (ii) Assist the GOCR Project Coordinator on technical issues involved in Project implementation.

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(iii) Review procurement documents for hardware/software with respect to their technical content and feasibility.

- (2) Proposed Procurement Agent - USAID/Costa Rica.
- (3) Proposed Method of Procurement - Personal Services Contract.
- (4) Cost Estimate - 36 pm, \$250,000.
- (5) Waiver Required - None.
- (6) Contractor Start-up - O/A July, 1979.

1. Statistician

- (1) Description of Services
 - (i) Works with Chief of Area Frame Unit in the Construction of the Frame.
 - (ii) Assists Chief of Area Frame Unit in carrying out preparation for surveys, and selection of samples.
 - (iii) Works with the ST Technical Assistance to complete frame construction, select samples and prepare questionnaire.
- (2) Proposed Procurement Agent - GOCR
- (3) Proposed Method of Procurement - Personal services contract.
- (4) Cost Estimate - 36 pm, \$57,600.
- (5) Waivers Required - None
- (6) Contractor Start-up - O/A January 1980

m. Area Frame Supervisor

(1) Description of Services

(i) Works with the ST Technical Assistance in frame construction to assure accurate delineation of count units and segments.

(2) Proposed Procurement Agent - GOCR

(3) Proposed Method of Procurement - Personal Services Contract.

(4) Cost Estimate - 2 years, \$19,200.

(5) Waivers Required - None

(6) Contractor Start-up - O/A January 1980

n. Programmer

(1) Description of Services

(i) Work with the ST technical assistance to develop application programs for the area frame survey processing.

(ii) Provides general assistance to OPSSA in programming for data bank and documentation center.

(2) Proposed Procurement Agent - GOCR

(3) Proposed Method of Procurement - Personal services contract.

(4) Cost Estimate - 12 pm, \$12,000.

(5) Waivers Required - None

(6) Contractor Start-up - O/A January 1980

o. ST Technical Assistance for Area Frame Construction and Surveys and for Evaluation with USDA:

(1) Description of Services

- (i) Assist in frame construction and sampling.
- (ii) Assist in in-depth evaluation.
- (iii) Development of Survey questionnaires.
- (iv) Programming Assistance for Edit Programs.

(2) Proposal Procurement Agent - AID/W

(3) Proposed Method of Procurement - PASA

(4) Cost Estimate - \$145,000

(5) Waiver Required - None

(6) Contractor Start-up-To be determined.

p. Contracted Library Services

(1) Description of Service

- (i) Prepare abstracts and catalog documents for documentation centers.
- (ii) Enter information into data bank.

(2) Proposed Procurement Agent - GOCR

(3) Proposed Method of Procurement - Personal Services Contract.

(4) Cost Estimate - 384 pm, \$170,000.

(5) Waivers Required - None.

(6) Contractor Start-up - O/A January 1980.

D. Evaluation Plan

1. In-Depth Evaluation

This Project will support the establishment of new

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mechanisms for the management, generation, and utilization of information for development planning and administration. The lessons learned during the implementation of this Project could have widespread implications for the establishment of similar systems in other LDCs, and because the GOCR eventually intends to expand the data bank to other sectors, for Costa Rica as well. Therefore, a special in-depth evaluation will be held in February or March of 1982 (prior to a change in government). The evaluation will be in-depth because in addition to normal implementation questions an attempt will be made to determine the impact of better information on GOCR decision making processes and the System's cost-effectiveness. In order to do this two outside experts will be brought in for approximately one month. During this time, they will interview GOCR decision makers and other data users and will participate in a user feedback seminar. They will also consult Project utilization records. It is estimated that \$20,000 of Loan funding will be required for these experts, whose services will probably be procured under the short-term assistance PASA.

2. Annual Evaluations

Joint annual evaluations will also be held and will be timed to coincide with user seminars. Although these seminars will also focus on user utilization they will not attempt to assess the impact on decision making. In addition to examining normal evaluation indicators of the type suggested by the Project Logical Framework, the annual evaluations will examine: the relevancy and effectiveness of technical assistance, the effectiveness of coordinating and management mechanisms established by the GOCR and AID, and the progress that the GOCR is making in institutionalizing the system.

3. Evaluation Schedule

<u>No.</u>	<u>Date</u>	<u>Type</u>
1	2/28/81	Annual
2	2/28/82	In-depth
3	2/28/83	Annual
4	2/28/84	Annual (final)

E. Conditions, Covenants, and Negotiating Status

1. Conditions Precedent to Disbursement

a. Conditions Precedent to Initial Disbursement

Except as AID may otherwise agree in writing,

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prior to any disbursement or the issuance of any commitment document under the Project Loan Agreement, the Borrower shall furnish to AID, in form and substance satisfactory to AID:

(1) Evidence of the formal establishment of a National Information Council composed of representatives of OFIPLAN, OIP, OPSA, OPSI, the MH, the MS, and the DGEC;

(2) Evidence of the formal establishment within the OIP of a Project Coordination Office with sufficient attributions and staff to administer the Project and coordinate its activities; and

(3) Evidence that a Project Coordinator, acceptable to AID, has been formally named.

b. Conditions Precedent to Disbursement for the Data Bank or Documentation Center Components

Except as AID may otherwise agree in writing, prior to disbursement or the issuance of any commitment document under the Project Loan Agreement for the Data Bank or Documentation Centers components, the Borrower shall furnish to AID in form and substance satisfactory to AID:

(1) An inter-institutional agreement or Executive Decree which defines the roles, responsibilities, attributions of the various GOOCR entities involved, the relationships between them, and the information and data that they agree to provide to the data bank and documentation centers.

(2) A detailed time-phased implementation plan and estimated budgets for staffing and technical assistance, procurement and contracting, and training and seminars.

(3) A study that compares the cost and benefits of leasing the computer CPU, terminals and principal software to be employed in the Project to the costs and benefits of direct purchase. The study will include a justification of the specific configuration of equipment to be purchased.

c. Conditions Precedent to Disbursement for the Area Sampling Frame and Surveys Component

Except as AID may otherwise agree in writing, prior to disbursement or the issuance of any commitment document under

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the Project Loan Agreement for the Area Sampling Frame and Surveys component, the Borrower shall furnish to AID in form and substance satisfactory to AID:

(1) An Executive Decree or inter-institutional agreement between OPSA, DGEC, and OIP which defines their roles, responsibilities, and attributions in the Area Sampling Frame and Survey component, and which specifically outlines responsibilities for determining the use of and for providing the maintenance of such vehicles as may be procured under the Loan.

2. Special Covenants

Except as AID may otherwise agree in writing the Borrower shall covenant and agree that prior to the Project Assistance Completion Date it will:

a. Design and test on a sample of programs in agriculture and natural resources, health and nutrition, and industry and employment a simple program planning and evaluation form, the information content of which can be computer processed, which summarizes anticipated program inputs over time, quantifies anticipated results, states the program purpose, and relates its purpose to the National Plan Objectives.

3. Negotiation Status

This Project has been developed in close coordination with OIP, OFIPLAN, and OPSA. They are familiar with the details contained in this paper. The Project has been discussed with all the GOCR implementing entities.

USAID will sign the Project Agreement with the GOCR within one month of the receipt of the Project Authorization.

San José, 6 de febrero de 1979.-

Señor
Stephen P. Knaebel
Director
Agencia para el Desarrollo Internacional
Embajada de los Estados Unidos de América
San José.-

Estimado señor Knaebel:

Por medio del Decreto Ejecutivo N^o 8647-P del 9 de mayo de 1978, el Gobierno de Costa Rica sentó las bases legales para la creación del Sistema Nacional de Información para el Desarrollo (SNID). Durante los últimos ocho meses, representantes de diversas entidades del Gobierno de Costa Rica ha colaborado estrechamente con funcionarios de la Agencia para el Desarrollo Internacional (AID) en el diseño de un proyecto de Préstamo que permita conseguir los recursos técnicos y científicos que necesita el SNID.

Para lograr el mejoramiento socioeconómico permanente de nuestro país, y en especial el de los grupos menos favorecidos, a través del logro de una estructura económica productiva más eficiente - ambos objetivos fundamentales de nuestro Gobierno-es imprescindible mejorar sustancialmente la gestión orientadora y de ejecución del sector público. Esto, a su vez, requiere un mejoramiento significativo, tanto de los mecanismos de información que sirve de base para la toma de decisiones y formulación de políticas, como de la información necesaria para planificar y evaluar los programas de desarrollo y los proyectos específicos.

De acuerdo a este Proyecto, el SNID comenzará a funcionar en los sectores estratégicos para nuestro desarrollo, tales como el agropecuario,

los recursos naturales, la salud, la nutrición y el sector industrial. Para cada uno de estos sectores el SNID deberá crear los mecanismos y sistemas necesarios para la producción y manejo de la información e sencial para orientar, tanto la acción institucional, como los diversos entes públicos y privados relacionados con ellos.

El Proyecto formará parte del Programa de Reforma Administrativa que el Gobierno está llevando a cabo y tendrá una duración de cuatro años, empezando activamente en enero de 1980. Será ejecutado por siete entidades del Gobierno: la Oficina de Información de la Casa Presidencial (OICP), la Oficina de Planificación Nacional (OFIPLAN), la Oficina de Planificación del Sector Agropecuario (OPSA), la Oficina Sectorial de Planificación Industrial (OSPI), la Oficina de Planificación del Ministerio de Salud (MS), la Dirección General de Estadística y Censo (DGEC), y la Oficina Técnica Mecanizada (OTM) del Ministerio de Hacienda.

El Proyecto desarrollará un banco de datos que será apoyado por una red de terminales de computadora que serán conectadas a una nueva unidad central de procesamiento en la Computadora de la OTM. El Proyecto también construirá un marco muestral de áreas de nivel nacional y financiará diez encuestas utilizando dicho marco en el propósito de recoger información relevante para la gestión político-Institucional. Finalmente, el Proyecto financiará el mejoramiento de los centros de documentación existentes en OFIPLAN y OPSA para ampliar su radio de acción y convertirlos en importantes unidades de apoyo institucional a las acciones económicas, sociales y de investigación que se realizan en el país.

Se estima que el costo del proyecto alcanzará un total de U.S.\$7,250,000. Para llevarlo a cabo, me permito solicitar, en mi calidad de Representante del Gobierno de Costa Rica ante la AID, autorización de un Préstamo de Desarrollo al Gobierno de Costa Rica por un monto de U.S.\$3,250,000 y de una donación de U.S.\$250,000. La donación sufragará el costo de los servicios de asesoría de alto nivel al Proyecto y sería contratada por la USAID/Costa Rica y serviría de enlace entre esta entidad y la Oficina de

Coordinación del Proyecto que será establecida dentro de OICP.

Considerando la situación económica de Costa Rica, se solicita que los términos del Préstamo sean a veinte años plazo incluyendo diez años de gracia para su amortización. Se aplicará una tasa de interés del dos por ciento durante el período de gracia y del tres por ciento después.

Como muestra de la prioridad e importancia que el Gobierno de Costa Rica concede a este Proyecto, acordamos aportar fondos de contrapartidas por un monto equivalente a U.S. \$4,000,000. Además, el Gobierno de Costa Rica tomará las medidas necesarias para:

1. Establecer formalmente un Consejo Nacional de Información en el cual estarán representadas las entidades ejecutoras del Proyecto.
2. Establecer formalmente una oficina de Coordinación del Proyecto dentro de la OICP con el suficiente personal y respaldo institucional para administrar el Proyecto y coordinar sus actividades, cuyo financiamiento se contempla en el Proyecto.
3. Diseñar y probar en una muestra de actividades y programas vigentes dentro de los sectores incluidos en el SNID, un formato sencillo de planificación y evaluación de programas, cuyo contenido informático podría ser procesado electrónicamente. Para cada programa, el formato deberá considerar los recursos según la organización de las actividades, cuantificará los resultados esperados, y resumirá el propósito del programa y su relación con los objetivos del Plan Nacional de Desarrollo.

Espero que la AID resuelva favorablemente esta solicitud, ya que el Proyecto propuesto podría tener una importante y favorable incidencia en la administración pública de Costa Rica y podría dar un excelente ejemplo-

MINISTERIO DE HACIENDA

REPUBLICA DE COSTA RICA

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ANNEX I-A

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práctico de la transferencia de tecnología por medio de la cooperación internacional.

Sin otro particular, me suscribo de usted,

Atentamente

Hernán Sáenz Jiménez
Ministro de Hacienda



HSJ/lcl
c.c.archivo

CERTIFICATION PURSUANT TO SECTION 611(e) OF THE
FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED

I, Stephen P. Knaebel, the principal officer of the Agency for International Development in Costa Rica, having taken into account among other factors the maintenance and utilization of projects in Costa Rica previously financed or assisted by the United States, do hereby certify that in my judgement Costa Rica has both the financial capability and the human resources capability to effectively maintain and utilize the Project: NATIONAL DEVELOPMENT INFORMATION SYSTEM.



Stephen P. Knaebel
Director, USAID/Costa Rica

SEC(1) - COUNTRY CHECKLIST

Listed below are, first, statutory criteria applicable generally to FAA funds, and then criteria applicable to individual fund sources: Development Assistance and Security Supporting Assistance funds.

A. GENERAL CRITERIA FOR COUNTRIES

- | | |
|--|--|
| 1. <u>FAA Sec. 116</u> . Can it be demonstrated that the assistance assistance will directly benefit the needy? If not, has the Department of State determined that this government has engaged in consistent pattern of gross violations of internationally recognized human rights? | It can not be demonstrated that this Project will directly benefit the needy. The Department of State has not so determined. |
| 2. <u>FAA Sec. 101</u> . Has it been determined that the government of recipient country has failed to take adequate steps to prevent narcotics, drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully? | No. |
| 3. <u>FAA Sec. 620(a)</u> . Does recipient country furnish assistance to Cuba or fail to take appropriate steps to prevent ships or aircraft under its flag from carrying cargoes to or from Cuba? | No. |
| 4. <u>FAA Sec. 620(b)</u> . If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement? | Yes. |
| 5. <u>FAA Sec. 620(c)</u> . If assistance is to government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) debt is not denied or contested by such government? | No. |
| 6. <u>FAA Sec. 620(e) (1)</u> . If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? | No. |

7. FAA Sec. 620(f); App. Sec. 108. Is recipient country a Communist country? will assistance be provided to the Democratic Republic of Vietnam (North Vietnam), South Vietnam, Cambodia or Laos? No.
8. FAA Sec. 620(i). Is recipient country in any way involved in (a) subversion of, or military aggression against, the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or aggression? No.
9. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction, by mob action, of U.S. property? No.
10. FAA Sec. 620(l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, inconvertibility or confiscation, has the AID Administrator within the past year considered denying assistance to such government for this reason? The Administrator has not considered denying assistance to Costa Rica.
11. FAA Sec. 620(o); Fishermen's Protective Act, Sec. 5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters, Costa Rica has seized two U.S. fishing boats for fishing within its 200 mile protected zone. Case is in Costa Rican court system.
- a. has any deduction required by Fishermen's Protective Act been made? N/A
- b. has complete denial of assistance been considered by AID Administrator? N/A
12. FAA Sec. 620(q); App. Sec. 504. (a) Is the government of the recipient country in default on interest or principal of any AID loan to the country? (b) Is country in default exceeding one year on interest or principal on U.S. loan under program for which App. Act appropriates funds, unless debt was earlier disputed, or appropriate steps taken to cure default? No.
- *13. FAA Sec. 620(s). "If contemplated assistance is development loan (including Alliance loan) or security supporting assistance, has the Administrator taken into account the percentage of the country's budget which is for military expenditures, the amount of foreign exchange spent on military equipment and the amount spent for the purchase of sophisticated weapons systems?" (An affirmative answer may refer to the record of the taking into account, e.g.: "Yes as reported in annual report on implementation of Sec. 620(s)." This report is prepared at the time of approval by the Administrator of the Operational Year Budget.* Yes, as reported in annual report on implementation of Section 620(s).

* Revised

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* Upward changes in the Sec. 620(a) factors occurring in the course of the year, of sufficient significance to indicate that an affirmative answer might have been stated still be reported, but the statutory checklist will not normally be the preferred vehicle to do so.) *

14. FAA Sec. 620(s). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?
15. FAA Sec. 620(w). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget?
16. FAA Sec. 620A. Has the country granted sanctuary from prosecution to any individual or group which has committed an act of international terrorism?
17. FAA Sec. 666. Does the country object, on basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. there to carry out economic development program under FAA?
18. FAA Sec. 669. Has the country delivered or received nuclear reprocessing or enrichment equipment, materials or technology, without specified arrangements on safeguards, etc.?
19. FAA Sec. 201. Has the country denied its citizens the right or opportunity to emigrate?

No.

Costa Rica has no problems in meeting its U.N. obligations.

No.

No.

No.

No.

B. FUNDING CRITERIA FOR COUNTRY

1. Development Assistance Country Criteria

a. FAA Sec. 102(c), (d). Have criteria been established, and taken into account, to assess commitment and progress of country in effectively involving the poor in development, on such indexes as: (1) small-farm labor intensive agriculture, (2) reduced infant mortality, (3) population growth, (4) equality of income distribution, and (5) unemployment.

Yes.

b. FAA Sec. 201(b)(5), (7) & (8); Sec. 208; 211(a)(4), (7). Describe extent to which country is:

(1) Making appropriate efforts to increase food production and improve means for food storage and distribution.

(1) Agriculture output has maintained a steady growth rate in recent years.

- (2) Creating a favorable climate for foreign and domestic private enterprise and investment.
- (3) Increasing the public's role in the developmental process.
- (4) (a) Allocating available budgetary resources to development.
(b) Diverting such resources for unnecessary military expenditure and intervention in affairs of other free and independent nations.
- (5) Making economic, social, and political reforms such as tax collection improvements and changes in land tenure arrangements, and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiative, and private enterprise.
- (6) Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.

c. FAA Sec. 201(b), 211(a). Is the country among the 20 countries in which development assistance loans may be made in this fiscal year, or among the 40 in which development assistance grants (other than for self-help projects) may be made?

d. FAA Sec. 115. Will country be furnished, in same fiscal year, either security supporting assistance, or Middle East peace funds? If so, is assistance for population programs, humanitarian aid through international organizations, or regional programs?

2. Security Supporting Assistance Country Criteria

a. FAA Sec. 502D. Has the country engaged in a consistent pattern of gross violations of internationally recognized human rights? Is program in accordance with policy of this Section?

b. FAA Sec. 531. Is the Assistance to be furnished to a friendly country, organization, or body eligible to receive assistance?

c. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

(2) Costa Rica maintains an excellent climate for investment and private enterprise. It offers political stability, a democratic process, constitutional guarantees, equal rights for foreigners and incentives to foreign investors.

(3) The public is encouraged to take part in development.

(4a) The great majority of the National Budget funds goes for economic and social development.

(4b) Costa Rica has no military.

(5) Substantial progress has been and is still being made in the area of tax collection and tax fund redistribution. Basic individual freedoms and free enterprise are respected.

(6) Costa Rica responds rapidly to the concerns of its people, and clearly demonstrates effective self-help measures.

It is among the 20 countries in which Development Loans may be made.

No.

N/A

N/A

N/A

5C(2) - PROJECT CHECKLIST

Listed below are, first, statutory criteria applicable generally to projects with FAA funds, and then project criteria applicable to individual fund sources: Development Assistance (with a sub-category for criteria applicable only to loans); and Security Supporting Assistance funds.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? IDENTIFY. HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT.

1. App. Unnumbered; FAA Sec. 653(b)
 - (a) Describe how Committees on Appropriations of Senate and House have been or will be notified concerning the project;
 - (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that figure plus 10%)?

The Committees on Appropriations of Senate and House were notified of this Project through the Congressional Presentation, and a Congressional Notification advising of AID's intention to increase the size of the Loan.

Yes.
2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,000, will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?
3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?
4. FAA Sec. 611(b); App. Sec. 101. If for water or water-related land resource construction, has project met the standards and criteria as per Memorandum of the President dated Sept. 5, 1973 (replaces Memorandum of May 15, 1962; see Fed. Register, Vol 38, No. 174, Part III, Sept. 10, 1973)?
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified the country's capability effectively to maintain and utilize the project?

A.

6. FAA Sec. 209, 619. Is project susceptible of execution as part of regional or multi-lateral project? If so why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. If assistance is for newly independent country, is it furnished through multi-lateral organizations or plans to the maximum extent appropriate?

7. FAA Sec. 601(a); (and Sec. 201(f) for development loans). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

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

9. FAA Sec. 612(h); Sec. 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency and, if so, what arrangements have been made for its release?

Improved policy making which will result from this Project will encourage the efforts of Costa Rica in all the items listed.

Improved policy making resulting from this Project should encourage all listed forms of U.S. private participation.

Normal Project disbursement procedures assure this.

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(c); Sec. 111; Sec. 281a. Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production, spreading investment out from cities to small towns and rural areas; and (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions?

Better GOCL policy making will result in involving the poor in development, in increased labor-intensivity, and in spreading investment from cities. Cooperatives will not be assisted. Better policy making should result in self-help measures by the poor and otherwise encourage democratic private and local government institutions.

01

b. FAA Sec. 103, 103A, 104, 105, 106, 107. Is assistance being made available: [Include only applicable paragraph -- e.g., a, b, etc. -- which corresponds to source of funds used. If more than one fund source is used for project, include relevant paragraph for each fund source.]

- | | |
|--|----------------------------------|
| (1) [103] for agriculture, rural development or nutrition; if so, extent to which activity is specifically designed to increase productivity and income of rural poor; [103A] if for agricultural research, is full account taken of needs of small farmers; | N/A |
| (2) [104] for population planning or health; if so, extent to which activity extends low-cost, integrated delivery systems to provide health and family planning services, especially to rural areas and poor; | N/A |
| (3) [105] for education, public administration, or human resources development; if so, extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, or strengthens management capability of institutions enabling the poor to participate in development; | N/A |
| (4) [106] for technical assistance, energy, research, reconstruction, and selected development problems; if so, extent activity is: | |
| (a) technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations; | N/A |
| (b) to help alleviate energy problem; | N/A |
| (c) research into, and evaluation of economic development processes and techniques; | Project will focus in this area. |
| (d) reconstruction after natural or manmade disaster; | N/A |
| (e) for special development problem, and to enable proper utilization of earlier U.S. infrastructure, etc., assistance; | N/A |
| (f) for programs of urban development, especially small labor-intensive enterprises, marketing systems, and financial or other institutions to help urban poor participate in economic and social development. | N/A |
-

(5) [107] by grants for coordinated private effort to develop and disseminate intermediate technologies appropriate for developing countries.

N/A

c. FAA Sec. 110(a); Sec. 208(e). Is the recipient country willing to contribute funds to the project, and in what manner has or will it provide assurances that it will provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or has the latter cost-sharing requirement been waived for a "relatively least-developed" country)?

Yes.

d. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing?

N/A

e. FAA Sec. 207; Sec. 113. Extent to which assistance reflects appropriate emphasis on; (1) encouraging development of democratic, economic, political, and social institutions; (2) self-help in meeting the country's food needs; (3) improving availability of trained worker-power in the country; (4) programs designed to meet the country's health needs; (5) other important areas of economic, political, and social development, including industry; free labor unions, cooperatives, and Voluntary Agencies; transportation and communication; planning and public administration; urban development, and modernization of existing laws; or (6) integrating women into the recipient country's national economy.

Better GOCR policy making should result in indirect impacts on items 1 through 6.

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

The Project recognizes the particular needs of Costa Rica and utilizes Costa Rica's intellectual resources to promote institutional development.

01

g. FAA Sec. 201(b)(2)-(4) and -(8); Sec. 201(c); Sec. 211(a)(1)-(3) and -(8). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth; or of educational or other institutions directed toward social progress? Is it related to and consistent with other development activities, and will it contribute to realizable long-range objectives? And does project paper provide information and conclusion on an activity's economic and technical soundness?

h. FAA Sec. 201(b)(6); Sec. 211(a)(5), (6). Information and conclusion on possible effects of the assistance on U.S. economy, with special reference to areas of substantial labor surplus, and extent to which U.S. commodities and assistance are furnished in a manner consistent with improving or safeguarding the U.S. balance-of-payments position.

2. Development Assistance Project Criteria (Loans only)

a. FAA Sec. 201(b)(1). Information and conclusion on availability of financing from other free-world sources, including private sources within U.S.

b. FAA Sec. 201(b)(2); 201(d). Information and conclusion on (1) capacity of the country to repay the loan, including reasonableness of repayment prospects, and (2) reasonableness and legality (under laws of country and U.S.) of lending and relending terms of the loan.

c. FAA Sec. 201(e). If loan is not made pursuant to a multilateral plan, and the amount of the loan exceeds \$100,000, has country submitted to AID an application for such funds together with assurances to indicate that funds will be used in an economically and technically sound manner?

d. FAA Sec. 201(f). Does project paper describe how project will promote the country's economic development taking into account the country's human and material resources requirements and relationship between ultimate objectives of the project and overall economic development?

The Project will contribute to the development of economic resources and to the increase in production capacities. It is consistent with both AID's and the GOCR's development objectives. The Project Paper contains information and conclusions on the project's economic and technical feasibility.

The Project provides for the procurement of both commodities and technical assistance, much of which is expected to come from U.S. sources.

Other international lending institutions have not indicated an interest in financing the project described in the PP.

The country appears capable of repaying the AID Loan. The terms of the AID Loan appear reasonable and legal under the laws of the U.S. and the host country.

Yes.

Yes.

e. FAA Sec. 202(a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources?

It estimated that \$3,005,000 will go directly to private enterprise. The exceptions are \$145,000 to be used to pay for technical assistance through USDA and \$100,000 to procure special services from the GOCR Census Office.

f. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete in the U.S. with U.S. enterprise, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

N/A

3. Project Criteria Solely for Security Supporting Assistance

FAA Sec. 531. How will this assistance support promote economic or political stability?

N/A

4. Additional Criteria for Alliance for Progress

[Note: Alliance for Progress projects should add the following two items to a project checklist.]

a. FAA Sec. 251(b)(1), -(8). Does assistance take into account principles of the Act of Bogota and the Charter of Punta del Este; and to what extent will the activity contribute to the economic or political integration of Latin America?

Yes.

b. FAA Sec. 251(b)(8); 251(h). For loans, has there been taken into account the effort made by recipient nation to repatriate capital invested in other countries by their own citizens? Is loan consistent with the findings and recommendations of the Inter-American Committee for the Alliance for Progress (now "CEPCIES," the Permanent Executive Committee of the OAS) in its annual review of national development activities?

Yes. High GOCR interest rates encourage repatriation. The Loan is consistent with CEPCIES findings concerning Costa Rica.

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D. C. 20523

ASSISTANT
ADMINISTRATOR

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

Name of Country: Costa Rica
Name of Project: National Development
Information System
Project Number: 515-0139

Pursuant to Part I, Chapter 1, Section 106 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a Loan and a Grant to the Government of Costa Rica (the "Cooperating Country") of not to exceed Three Million Five Hundred Thousand United States Dollars (\$3,500,000) (the "Authorized Amount") to help in financing certain foreign exchange and local currency costs of goods and services required for the project described in the immediately following sentence. The project consists of activities to provide improved information about priority development problems and programs (the "Project"). Of the Authorized Amount, Three Million Two Hundred Fifty Thousand Dollars ("Loan") will be loaned to the Cooperating Country to assist in financing certain foreign exchange and local currency costs of goods and services required for the Project. The entire Authorized Amount will be obligated when the Project Agreements are executed.

I hereby authorize the initiation of negotiation and execution of the Project Agreements by the officer to whom such authority has been delegated in accordance with A.I.D. regulations and Delegations of Authority, subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate:

A. Interest Rate and Terms of Repayment

The Cooperating Country shall repay the Loan to A.I.D. in United States Dollars within twenty (20) years from the date of first disbursement of the Loan, including a grace period of not to exceed ten (10) years. The Cooperating Country shall pay to A.I.D. in United States Dollars interest from the date of the first disbursement of the Loan at the rate of (i) two percent (2%) per annum during the first ten (10) years, and (ii) three percent (3%) per annum thereafter, on the outstanding disbursed balance of the Loan and on any due and unpaid interest accrued thereon.

B. Source and Origin of Goods and Services (Loan)

Except for ocean shipping, goods and services financed by A.I.D. under the Loan shall have their source and origin in the Cooperating Country or in countries which are included in A.I.D. Geographic Code 941, except as A.I.D. may otherwise agree in writing. Ocean shipping financed under the Loan shall be procured in the United States or in countries which are members of the Central American Common Market, including the Cooperating Country, except as A.I.D. may otherwise agree in writing.

C. Source and Origin of Goods and Services (Grant)

Goods and services financed by A.I.D. under the Grant shall have their source and origin in the United States, except as A.I.D. may otherwise agree in writing.

D. Conditions Precedent to Initial Disbursement (Loan)

Prior to any disbursement, or to the issuance of any commitment documents under the Project Loan Agreement, the Cooperating Country shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D.:

- (1) Evidence of the formal establishment of a National Information Council composed of representatives of the Oficina de Planificacion Nacional y Politica Economica, Oficina de Informacion de la Presidencia, Oficina de Planificacion Sectorial Agropecuaria, Oficina Sectorial de Planificacion Industrial, Ministerio de Salud, Direccion General de Estadistica y Censos; and Ministerio de Hacienda.
- (2) Evidence of the formal establishment within the Oficina de Informacion de la Presidencia of a Project Coordination Office with sufficient responsibility and staff to administer the Project and coordinate its activities.
- (3) Evidence that a Project Coordinator, acceptable to A.I.D., has been formally named.

E. Conditions Precedent to Disbursement for Certain Activities (Loan)

(1) Prior to any disbursement, or the issuance of any commitment documents under the Project Loan Agreement, to finance the Data Bank and Documentation Center components, the Cooperating Country shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D.:

(a) An inter-institutional agreement or Executive Decree which defines the roles and responsibilities of the various Cooperating Country entities involved, the relationships between them, and the information and data that they agree to provide to the Data Bank and Documentation Center;

(b) A detailed, time-phased implementation plan and estimated budgets for staffing and technical assistance, procurement and contracting, and training and seminars. The implementation plan for training and seminars will include criteria for the selection of participants in foreign short-term training;

(c) A study that compares the cost and benefits of leasing the computer central processing unit, terminals, and principal software to be employed in the Project to the costs and benefits of direct purchase. The study will include a justification of the specific configuration of equipment to be purchased.

(2) Prior to any disbursement, or the issuance of any commitment documents under the Project Loan Agreement, to finance the Area Sampling Frame and Surveys component, the Cooperating Country shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., an Executive Decree or inter-institutional agreement between the Oficina de Planificacion Sectorial Agropecuaria, the Direccion General de Estadisticas y Censos, and the Oficina de Informacion de la Presidencia, which defines their roles and responsibilities in the Area Sampling Frame and Survey component, and which specifically outlines responsibilities for determining the use of and for providing the maintenance to such vehicles as may be procured under the Loan.

F. Covenants

Except as A.I.D. may otherwise agree, the Cooperating Country shall covenant and agree that prior to the Project Assistance Completion Date it will design and test on a sample of programs in the areas of agriculture and natural resources, health and nutrition, and industry and employment a simple program planning and evaluation form, the information content of which can be computer processed and which summarizes anticipated program inputs over time, quantifies anticipated results, states the program purpose, and relates its purpose to the National Plan Objectives.

Assistant Administrator
Bureau for Latin America
and the Caribbean

INITIAL ENVIRONMENTAL EXAMINATION

PROJECT LOCATION: Costa Rica

PROJECT TITLE: National Development Information Systems

FUNDING: FY1979, Development
Loan \$3,250,000
Grant \$ 250,000

LIFE OF PROJECT: Five (5) years

IEE PREPARED BY: Heriberto Rodríguez
USAID/General Engineer

ENVIRONMENTAL ACTION RECOMMENDED: That the project will not have a significant effect on the environment and therefore a negative determination is appropriate

CONCURRENCE: 
Stephen P. Knaebel
Director
USAID/Costa Rica

DATE: February 7, 1979

UNCLASSIFIED

During its five-year life the Project will finance the creation of a National Development Information System (SNID) for Costa Rica. SNID will have the following components:

a. A Development Data Bank which will consist of geographically coded data sets consistent with user needs. These will be organized into modules covering: (a) agriculture, natural resources, and land tenure; (2) health and nutrition; (3) industry and employment; (4) basic needs information not covered in other modules; (5) information on specific project and program inputs and results. The Data Bank would be supported by a network of computer terminals.

b. An Area Sampling Frame and Survey which will generate more representative data on the rural sector, and establish continuing survey mechanism. This component will fund the construction of an area sampling frame and five national and special surveys which will generate new and needed data on agriculture, land use, and the rural dweller.

c. Two Development Documentation Centers which will collect and make available printed information such as GOCR or GOCR-funded planning documents, feasibility studies, and survey documentation. These documents will be abstracted and indexed. A key word access system for them will be developed in order to facilitate user research. The Documentation Centers' index, abstract, and key word systems will be accessible to all users of the SNID computer network.

The project consists primarily of data management activities which will not have any direct impact on the environment. This project will include training programs, analysis, studies, workshops and seminars, documentation and information transfers, and therefore in agreement with regulation 16, sections 216.3(9), 216.2(c), and 216.2(e) does not require the filing of an Environmental Impact Statement or the preparation of an Environmental Assessment.

IMPACT IDENTIFICATION AND EVALUATION FORM

Impact Areas and Sub-Areas 1/

Impact
Identification
and
Evaluation 2/

A. LAND USE

- | | |
|--|-------|
| 1. Changing the character of the land through: | |
| a. Increasing the population ----- | N |
| b. Extracting natural resources ----- | N |
| c. Land clearing ----- | N |
| d. Changing soil character ----- | N |
| 2. Altering natural defenses ----- | N |
| 3. Foreclosing important uses ----- | N |
| 4. Jeopardizing man or his work ----- | N |
| 5. Other factors | |
| _____ | _____ |
| _____ | _____ |

B. WATER QUALITY

- | | |
|---|---|
| 1. Physical state of water ----- | N |
| 2. Chemical and biological states ----- | N |

1/ See Explanatory Notes for this form.

2/ Use the following symbols: N - No environmental impact
L - Little environmental impact
M - Moderate environmental impact
H - High environmental impact
U - Unknown environmental impact

- | | |
|-----------------------------|-------|
| 3. Ecological balance ----- | N |
| 4. Other factors | |
| _____ | _____ |
| _____ | _____ |

C. ATMOSPHERIC

- | | |
|--------------------------|-------|
| 1. Air additives ----- | N |
| 2. Air pollution ----- | N |
| 3. Noise pollution ----- | N |
| 4. Other factors | |
| _____ | _____ |
| _____ | _____ |

D. NATURAL RESOURCES

- | | |
|--|-------|
| 1. Diversion, altered use of water ----- | N |
| 2. Irreversible, inefficient commitments ----- | N |
| 3. Other factors | |
| _____ | _____ |
| _____ | _____ |

E. CULTURAL

- | | |
|--|-------|
| 1. Altering physical symbols ----- | N |
| 2. Dilution of cultural traditions ----- | N |
| 3. Other factors | |
| _____ | _____ |
| _____ | _____ |

F. SOCIOECONOMIC

- | | |
|--|-------|
| 1. Changes in economic/employment patterns ----- | N |
| 2. Changes in population ----- | N |
| 3. Changes in cultural patterns ----- | N |
| 4. Other factors | |
| _____ | _____ |
| _____ | _____ |

G. HEALTH

- | | |
|---|-------|
| 1. Changing a natural environment ----- | N |
| 2. Eliminating an ecosystem element ----- | N |
| 3. Other factors | |
| _____ | _____ |
| _____ | _____ |

H. GENERAL

- | | |
|---------------------------------|-------|
| 1. International impacts ----- | N |
| 2. Controversial impacts ----- | N |
| 3. Larger program impacts ----- | N |
| 4. Other factors | |
| _____ | _____ |
| _____ | _____ |

I. OTHER POSSIBLE IMPACTS (not listed above)

- | | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 79 to FY 82
Total U.S. Funding \$3,250,000
Date Prepared: 2-5-79

AID 1020-20 (1-79)
SUPPLEMENT 1

Project Title & Number: National Development Information System (515-0139)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes: (A-1)</p> <p>Permanent socio-economic improvement of Costa Rica's poorest groups through increased access to and more productive use of the means of production and through popular participation.</p>	<p>Measures of Goal Achievement: (A-2)</p> <ol style="list-style-type: none"> 1. Increases in real income of the poor. 2. Continued equitable income distribution. 3. Wider ownership of productive assets. 4. Increases in real wage level. 5. Increased number of base level groups. 	<p>(A-3)</p> <p>102(d) indicators</p>	<p>Assumptions for achieving goal targets: (A-4)</p> <ol style="list-style-type: none"> 1. Continued sustained economic growth. 2. Continued GOCR concern with equitable development. 3. Continued political stability.
<p><u>Subgoal</u></p> <p>Improved public sector policy making and better planning and management of GOCR development programs.</p>	<ol style="list-style-type: none"> 1. Sectoral and national development plans based on more solid factual diagnoses. 2. Plan and project revisions made on the basis of factual evaluations of progress to date. 3. The establishment of more effective project planning and monitoring systems. 	<ol style="list-style-type: none"> 1. GOCR planning documents. 2. Annual Reports of GOCR Ministries. 3. Use of instruments such as logical framework and/or program budgeting. 	<ol style="list-style-type: none"> 1. The public sector continues to play a key role in national development. 2. The GOCR's Administrative Reform Program is implemented effectively.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: _____
From FY 79 to FY 83
Total U.S. Funding \$3,250,000
Date Prepared: 2-5-79

AID 102C-20 (1-73)
SUPPLEMENT 1

Project Title & Number: National Development Information System (515-0139)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose: (B-1)</p> <p>Improved information base for development policy making and for planning and management of priority development programs and projects.</p>	<p>Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)</p> <p>The utilization by GOCR decision makers and planners of such information system products as:</p> <ul style="list-style-type: none"> - geographically coded information for problem identification and analysis; - information on inputs into and results of specific programs and projects in agriculture and natural resources, health and nutrition, and industry and employment; - abstracts of past studies and surveys; - newly generated information on the agricultural sector and rural poor. 	<p>(B-3)</p> <p>Computer and Documentation Center user records.</p> <p>Examination of specific project records and sectoral and program plans.</p> <p>Site visits and periodic interviews with planners and decision makers.</p> <p>Records of user feedback from seminars.</p>	<p>Assumptions for achieving purpose: (B-4)</p> <p>Information is an important element in development planning and administration.</p> <p>Decision making on development subjects is at least in part rational.</p> <p>GOCR supports the costs of maintaining the system.</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 79 to FY 82
Total U.S. Funding \$3,250,000
Date Prepared: 2-5-79

AID 1020-28 (11-73)
SUPPLEMENT 1

Project Title & Number: National Development Information System (515-0139)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Outputs: (C-1)</p> <ol style="list-style-type: none"> 1. Development Data Bank containing geographically coded data on: <ol style="list-style-type: none"> a. Agriculture & natural resources; b. Health & nutrition*; c. Industry & employment; d. Inputs to and results of a sample of specific programs in priority sectors; e. Community and population characteristics. 2. National area sampling frame and survey capability. 	<p>Magnitude of Outputs: (C-2)</p> <ol style="list-style-type: none"> 1.a. Report on Planners' data needs, 3rd Qtr., 1980. b. Draft Standards and Norms Manual, 4th Qtr., 1981; final 4th Qtr., 1981. c. Operations Manual prepared by 1st Qtr., 1981; revision and updating is continuous. d. Five computer terminals and new CPU installed by 1st Qtr. of 1981. e. Six seminars on data analysis and data user feedback and four in-country courses on statistical analysis held prior to end of Project. 2.a. 450 new frame segments completed, 2nd Qtr., 1981. b. One national and special survey in 1981; two of each in 1982 and 1983. 	<p>(C-3)</p> <p>AID and GOCR Project records including computer system records.</p> <p>Visual inspection</p> <p>Project progress reports.</p>	<p>Assumptions for achieving outputs: (C-4)</p> <p>The operating systems of the Ministry of Finance computer will become more efficient because of efforts to improve them under Loan 026.</p> <p>When the types of information that can enter a management information system is defined and limited, national and sectoral planners and decision-makers are capable of specifying their information needs.</p>

* Data generated by Loan 026.

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ANNEX II-A

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PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:

From FY 79 to FY 82

Total U. S. Funding \$3,250,000

Date Prepared: 2-5-79

AID 1020-20 11-732
SUPPLEMENT 1

Project Title & Number: National Development Information System (515-0139)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Outputs: (C-1)</p> <p>3. Development documentation centers.</p>	<p>Magnitude of Outputs: (C-2)</p> <p>3.a. 7,500 GOCR studies and surveys abstracted, cataloged, and entered into SNID data bank by OFIPLAN documentation center by end of Project;</p> <p>b. 5,000 socio-economic and scientific studies on agriculture abstracted, cataloged and entered into SNID data bank by OPSA documentation center by end of Project;</p> <p>c. Keyword retrieval system for documents and surveys in operation by 2nd Qtr., 1981;</p> <p>d. Index of GOCR surveys installed by end of 1981;</p> <p>e. Five seminars on use of documentation centers held prior to the end of the Project.</p>	<p>(C-3)</p>	<p>Assumptions for achieving outputs: (C-4)</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: From FY 79 to FY 82
Total U.S. Funding \$3,250,000
Date Prepared: 2-5-79

AID 1920-20 (11-75)
SUPPLEMENT 1

Project Title & Number: National Development Information System (515-0139)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS			MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Inputs: (D-1)	Implementation Target (Type and Quantity) (D-2) (US\$1,000)			(D-3)	Assumptions for providing inputs: (D-4)
	AID	GOCR	TOTAL		
	<u>Loan Grant</u>				
Operating Costs	356	2,575	2,931	Project and GOCR budgets	All project inputs are provided on a timely basis.
Personnel	(140)	(1,668)	(1,808)		
Surveys	-	(529)	(735)		
Rent and Utilities	-	(276)	(276)		
Vehicle and equipment maintenance	(10)	(100)	(110)		
Design and Installation Costs	749	-	749		
Technical Assistance	308	250*	558*		
Training and Seminars	141	28	169		
Vehicles, Equipment and Supplies	443	130	573		
Computer hardware, software and time	680	806	1,486		
Inflation and contingencies	573	461	1,034		
TOTAL	3,250	250*	4,000		
			7,500		

* Excludes approximately 12 person months of technical assistance to be provided by the ROCAP regional PIADIC project, value \$60,000.

ACTION: RD
INFO:
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ANNEX II.B.
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TELEGRAM

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Classification

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TO AMEMBASSY SAN JOSE 4259-60
BT
UNCLAS STATE 150563

AIDAC

E.O. 11652: N/A

TAGS:

SUBJECT: REVIEW OF BASIC NEEDS INFORMATION SYSTEM
INTERIM REPORT

A. SUMMARY. THE SUBJECT REPORT WAS REVIEWED ON MAY 5, 1978 AT AN INFORMAL DAEC MEETING. WHILE THE DEVELOPMENT OF A BASIC NEEDS INFORMATION SYSTEM WAS SEEN AS AN IMPORTANT AND INNOVATIVE STEP IN ASSISTING THE GOCR TO BETTER ADDRESS THE NEEDS OF THE COUNTRY'S POORER CITIZENS, THE INTERIM REPORT (IR) GOES FAR BEYOND THE ORIGINAL PURPOSE (TO INSTALL A BASIC NEEDS POVERTY ANALYSIS AND MONITORING SYSTEM INTO THE GOCR PLANNING SYSTEM) AND TACKLES THE BROADER AREA OF GOCR PLANNING INFORMATION IN GENERAL. THE REVIEW CONCLUDED THAT THE PROJECT DESCRIBED IN THE IR MAY BE TOO BROAD AND AMBITIOUS. ISSUES RELATING TO THIS AND OTHER CONCERNS WHICH SHOULD BE ADDRESSED IN THE PP ARE:

--1: PROJECT FOCUS. WHILE THE REVIEW WAS NOT OPPOSED TO A PROJECT WHICH FOCUSES ON DEVELOPING INFORMATION FOR A VARIETY OF PLANNING USES, THERE WAS GENERAL AGREEMENT THAT DEVELOPMENT OF A BASIC NEEDS MONITORING SYSTEM SHOULD CONTINUE TO BE A PRINCIPAL FOCUS OF THE PROJECT.

--2. PROJECT SCOPE. THE IR PLACES EMPHASIS ON GENERATING TIME SERIES DATA ON A VARIETY OF SOCIAL AND ECONOMIC PARAMETERS. WHILE SUCH DATA ARE UNDOUBTEDLY NEEDED AND WOULD BE USEFUL IN PLANNING EXERCISES, THE SCOPE OF THE PROJECT SHOULD BE CAREFULLY DEFINED IN VIEW OF POTENTIALLY LIMITLESS DEMAND FOR SUCH DATA. FURTHERMORE, THE REVIEW WAS CONCERNED THAT THE IR DOES NOT PROPOSE TO COLLECT DATA SPECIFICALLY NEEDED FOR DEVELOPING STANDARD SOCIAL AND ECONOMIC INDICATORS, BUT SIMPLY TO MAKE DATA AVAILABLE TO SATISFY THOSE NEEDS THAT ARE CONSIDERED HIGH PRIORITY AND/OR OF SALIENT GENERAL USE BY THE COORDINATING COMMITTEE.

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IT WAS RECOGNIZED THAT GOOD DEFINITIONS FOR SUCH ELUSIVE CONCEPTS AS INFORMATION NEEDS, BASIC NEEDS, BASIC PLANNING DATA AND SOCIO-ECONOMIC INDICATORS WOULD EMERGE DURING PROJECT IMPLEMENTATION. HOWEVER, OPERATIONAL DEFINITIONS, HOWEVER ARBITRARY, ARE NEEDED TO FACILITATE DEVELOPMENT OF SPECIFIC CRITERIA FOR DETERMINING WHICH DATA SHOULD BE COLLECTED UNDER THE PROJECT AND TO LIMIT THE PROJECT SCOPE TO A REALIZABLE SET OF ACTIVITIES AND OUTPUTS. ONE POSSIBLE WAY OF STRUCTURING THE PROJECT WOULD BE TO DEVELOP A SET OF WELL DEFINED INDICATORS COVERING KEY SOCIAL AND ECONOMIC VARIABLES AND CONCENTRATE PROJECT ACTIVITIES ON COLLECTING DATA NEEDED FOR CALCULATING THOSE INDICATORS. MONITORING THESE INDICATORS OVER TIME WOULD PROVIDE IMPORTANT FEEDBACK ON THE GENERAL SOCIO-ECONOMIC DEVELOPMENT OF THE COUNTRY AND PROVIDE AN INDICATION OF THE EFFECTIVENESS OF GOVERNMENT PROGRAMS GEARED TO ASSIST THE POGR. THESE DATA WOULD ALSO BE AVAILABLE FOR USE IN SPECIAL STUDIES.

--3. INFORMATION NEEDS AND PROJECT DESIGN. THE IR WAS VAGUE ON HOW THE INFORMATION NEEDS OF POLICY MAKERS WOULD BE ASSESSED IN IMPLEMENTING THE INFORMATION SYSTEM. THE CHANNELS OF COMMUNICATION BETWEEN POLICY MAKERS AND THE DATA COLLECTION AND ANALYSIS SYSTEM SHOULD BE FULLY DISCUSSED IN THE PP AND SPECIFIC EXAMPLES OF THE EXPECTED USE OF THE DATA TO BE COLLECTED IN GOGR POLICY MAKING AND PLANNING SHOULD BE DESCRIBED.

--4. DATA COLLECTION METHODOLOGY. TWO METHODS OF DEVELOPING INFORMATION ARE DESCRIBED IN THE IR: BETTER UTILIZATION OF DATA FROM EXISTING SOURCES THROUGH COORDINATION; AND A SAMPLE SURVEY SYSTEM. AFTER ASSESSING INFORMATION NEEDS OF POLICY MAKERS AND PLANNERS AND DETERMINING WHAT KINDS OF DATA ARE REQUIRED,

THE PP SHOULD THEN DISCUSS THE MIX OF DATA REFLECTION METHODOLOGIES THAT WILL BE EMPLOYED. THIS DISCUSSION SHOULD INCLUDE AN ANALYSIS OF THE ADVANTAGES AND DISADVANTAGES OF PROPOSED DATA COLLECTION METHODOLOGIES AND THEIR RELATIVE COST EFFECTIVENESS. IF THE METHODOLOGY TO BE USED WILL BE DETERMINED ON A CASE-BY-CASE BASIS DURING IMPLEMENTATION, THE PP SHOULD DISCUSS THE CRITERIA DEVELOPED TO ENSURE APPROPRIATENESS AND COST EFFECTIVENESS. THE REVIEW FELT THAT PROJECT ACTIVITIES AIMED AT SOLELY ELIMINATING THE PROBLEMS OF DUPLICATION AND INEFFICIENCY CITED IN THE IR WOULD PROBABLY BE A WASTE OF TIME. IF SUCH ACTIVITIES ARE PROPOSED, THE PP SHOULD ANALYZE WHETHER THEY ARE BASIC OR INCIDENTAL TO ACHIEVEMENT OF THE PROJECT PURPOSE AND DEMONSTRATE THAT THEY ARE WORTH ATTACKING BY CITING EXAMPLES OF AVOIDABLE DUPLICITY OR INEFFICIENCY. PLEASE INCLUDE A DISCUSSION OF THE ESTIMATED COST OF RESOLVING THESE PROBLEMS IN COMPARISON TO THE SAVINGS THAT WOULD BE REALIZED.

--5. INSTITUTIONAL ARRANGEMENTS. IT WAS FELT THAT THE DATA COLLECTION AND ANALYSIS OPERATIONS SHOULD BE

LOGGED IN A PERMANENT GOCR AGENCY WHOSE PROFESSIONAL CAPACITY TO CONTINUE DEVELOPING THE INFORMATION SYSTEM WOULD BE ENHANCED THROUGH THE PROJECT. WE UNDERSTAND THAT THE BUREAU OF CENSUS IS PRESENTLY THE BEST EQUIPPED AGENCY FOR THIS KIND OF TASK AND THAT IT WOULD BE A

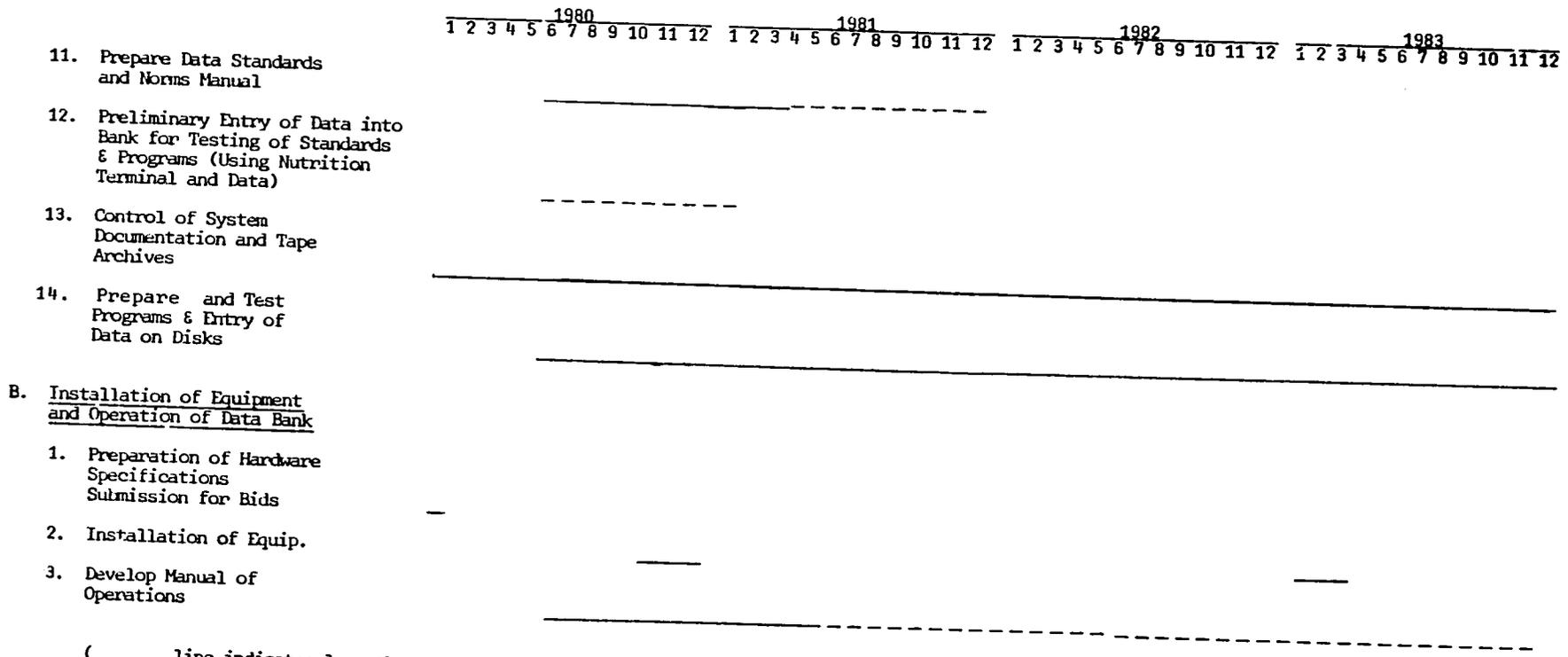
BGICAL PLACE TO FOCUS PROJECT ASSISTANCE AIMED AT IMPROVING THESE FUNCTIONS. HOWEVER, THE BUREAU OF CENSUS' ROLE IN THE PROJECT AND ITS LOCATION IN THE GOCR GOVERNMENTAL STRUCTURE WERE UNCLEAR IN THE IR. IF IT IS NOW DIRECTLY OR NOMINALLY RESPONSIBLE TO A MINISTRY OTHER THAN THE MINISTRY OF THE PRESIDENCY, THE PROPOSED INSTITUTIONAL ARRANGEMENTS MIGHT PUT THE BUREAU IN THE UNENVIABLE POSITION OF ANSWERING TO TWO MASTERS, WHICH COULD LEAD TO DELAYS IN IMPLEMENTATION. THE PP SHOULD CAREFULLY ANALYZE THE INSTITUTIONAL ARRANGEMENTS; AVOID, IF POSSIBLE, VESTING SIGNIFICANT ADMINISTRATIVE RESPONSIBILITY IN A COMMITTEE; AND MAXIMIZE USE OF THE EXISTING GOCR STRUCTURE UNLESS THAT STRUCTURE IS JUDGED WHOLLY INAPPROPRIATE AS A VEHICLE FOR PROJECT IMPLEMENTATION. CHRISTOPHER

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DATA BANK: IMPLEMENTATION SCHEDULE

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ANNEX II-C
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(----- line indicates less than full-time effort)

DATA BANK: IMPLEMENTATION SCHEDULE

ACTIVITY	1980												1981												1982												1983											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
4. Training in Operation of System (Vendor)																																																
C. Data Analysis & Use																																																
1. Seminars on Data Analysis																																																
2. Assistance in Data Analysis																																																
3. Programming Assistance Provided to Institutions with Terminals																																																
4. Courses in Statistical Analysis for Sector Analysts																																																
5. Training (Short Courses) in System Operations, Software																																																
6. Develop Criteria for Selection of Training Participants																																																
D. Personnel																																																
OIP: 1 Chief Systems Group																																																
1 Information Systems Spec.																																																
1 Systems Engineer																																																
1 Systems Analyst																																																
1 Systems Analyst																																																
	9 mo.												9 mo.																																			
	9 mo.												9 mo.																																			

DATA BANK: IMPLEMENTATION SCHEDULE

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ANNEX II-C
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ACTIVITY	1980												1981												1982												1983											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
OIP: 1 Programmer (Senior)																																																
1 Asst. Programmer																																																
1 Asst. Programmer																																																
1 Computer Sciences Spec.																																																
1 Project Coordinator																																																
1 Asst. to Proj. Coord.																																																
1 Secretary for Project Coord.																																																
4 Socioeconomic Analysts	(2 Analysts in 1980)																																															
2 Statisticians																																																
1 Dual Diskette Operator																																																
1 Terminal Operator																																																
5 Dual Diskette Operators																																																
5 Terminal Operators																																																
6 Terminal Operators																																																
(Additional)																																																
Contract Services																																																
(Programming)																																																
Contract for Statistics																																																
Course																																																
Ministry of Finance:																																																
1 Software Analyst																																																
1 Asst. for Operations																																																
1 Tape Operator																																																
1 Console Operator																																																
Technical Assistance:																																																
SER/DM																																																
Short Term Contract																																																

Area Frame and Surveys: Implementation Schedule

	1980												1981												1982												1983											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
1. Preparation of Specifications for Vehicles & Submission for Bids	—																																															
2. Establish Data Priority, Level of Estimates and Survey Calendar	_____																																															
3. Select Candidates for Short Courses	_____																																															
4. Select Candidates for Long Term Training													_____																																			
5. Complete National Area Frame & Select Sample	_____																																															
6. Prepare for First Special Survey													_____																																			
7. Conduct Special Survey													_____																																			
8. Critique Questionnaires, Summarize, Analyze and Publish Results													_____																																			
9. Survey													_____												_____												_____											
10. Conduct National Sample Survey													_____												_____												_____											
11. Critique Questionnaires, Summarize, Analyze & Publish Results													_____												_____												_____											
12. Prepare for Special Survey													_____												_____												_____											

Area Frame and Surveys: Implementation Schedule

	1980												1981												1982												1983											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
<u>Personnel (cont.)</u>																																																
1 Motor Pool Officer (DGEC)	_____																																															
4 Personnel (Coding, Editing, Punching, etc.)	_____																																															
<u>Technical Assistance</u>																																																
1 Sample Frame Technician	-----																																															
1 Mathematical Statistician	- - - - -																																															
1 Survey Statistician	-----																																															
1 Programmer/Systems Analyst	- - - - -																																															
1 Development Ag. Economist	-----																																															
ROCAP/PIADIC Assistance	- - - - -																																															

Documentation Centers: Implementation Schedule

	1980												1981												1982												1983											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
OFIPLAN Documentation Center:																																																
<u>Documents</u>																																																
1. Seminar (Documents/Surveys)	-----																																															
2. Collection of Documents/Abstracts	-----																																															
3. Dev. of Keyword System Selection of Software	-----																																															
4. Entry of Document Index into Data Bank	-----																																															
5. Seminar (Retrieval of Docu.)	-----																																															
<u>Surveys</u>																																																
6. Collection of Surveys	-----																																															
7. Analysis of Survey Contents (OIP)	-----																																															
8. Dev. of Format for Index of Surveys (OIP)	-----																																															
9. Entry of Index on Surveys	-----																																															
10. Canvass Sect/Min. Planning Offices of Survey Data to Enter into Data Bank	-----																																															
11. Analysis of this Canvassing	-----																																															
12. Entry of appropriate Data into the Bank	-----																																															
13. Seminar (Retrieval of Survey Data)	-----																																															
14. Seminar (Entry/Retrieval Operations and Problems encountered by Users).	-----																																															
OPSA Documentation Center																																																
1. Collection of Documents and Prep- aration of Abstracts (Forward GOCR Documents to OFIPLAN)	-----																																															
2. Collection of Surveys and Forward to OIP for Analysis	-----																																															
3. Development of Keyword System Software Selection (in line with OFIPLAN D.C.)	-----																																															

Documentation Center: Implementation Schedule

	1980												1981												1982												1983											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
<u>Personnel</u>																																																
OIPLAN: 1 Chief (Docu. Center)																																																
1 Librarian																																																
1 Librarian																																																
1 Asst. Librarian/Secretary																																																
Contract Services (Cataloging)																																																
OIP: 1 Systems Engineer																																																
1 Systems Analyst (a)																																																
1 Programmer																																																
Technical Assistance:																																																
Information Specialist (Keyword																																																
System Selection of Software)																																																
ROCAP/PIADIC Assistance																																																
OPSA: 1 Chief Documentation Center																																																
1 Agricultural Economist/Librarian																																																
1 Secretary/Librarian																																																
Contract Services-Librarian																																																
Cataloging and Abstracts (6																																																
pers.)																																																

(Dashed line indicates less than full-time effort.)

Data Bank Output: Budget

(US\$000)

Item	1980		1981		1982		1983	
	GOCR	AID	GOCR	AID	GOCR	AID	GOCR	AID
<u>Personnel</u>								
OIP:								
1 Chief Systems Group	14		14		14		14	
1 Systems Analysts	13		13		13		13	
1 Asst. Programmer	13		13		13		13	
1 Asst. Programmer	10		10		13		13	
1 Computer Science Specialist	13		13		13		13	
4 Socioeconomic (2 in 1980) Analysts	18		36		36		36	
2 Statisticians	16		16		16		16	
1 Secretary	5		5		5		5	
1 Dual Diskette Operator	5		5		5		5	
5 Dual Diskette Operators			23		23		23	
1 Terminal Operator	5				5		5	
5 Terminal Operators			23		23		23	
6 Additional Terminal Operators							28	
1 Information Systems Specialist		30		30		30		
1 Systems Engineer		18		18		24		
1 Systems Analyst		18		18		24		24
1 Programmer		24		24		24		
Contract Services (Coding)	10							
Subtotal	122	90	176	90	179	102	207	24
OFIPLAN:								
1 Chief Coord. Div.	14		14		14		14	
1 Analyst	12		12		12		12	
1 Analyst	14		14		14		14	
1 Analyst	11		11		11		11	

Data Bank Output: Budget

(US\$000)

Item	1980		1981		1982		1983	
	GOCR	AID	GOCR	AID	GOCR	AID	GOCR	AID
OFIPLAN: (cont.)								
1 Asst. Analyst	7		7		7		7	
1 Secretary	4		4		4		4	
1 Systems Analyst	12		12		12		12	
1 Systems Analyst		24		24				
Subtotal	74	24	74	24	74		74	
Ministry of Finance:								
1 Software Analyst			13		13		13	
1 Assistant for Operations			13		13		13	
1 Console Operator			5		5		5	
1 Tape Operator	—	—	5	—	5	—	5	—
Subtotal	—	—	36	—	36	—	36	—
Subtotal (Personnel)	196	114	286	114	289	102	317	24
Technical Assistance								
Programming Services		14		14		14		14
SER/DM Assistance		2		2				
Information Systems Specialist		28		28		14		
Subtotal		44		44		28		14
Training & Seminars								
Statistical Analysis & Information Systems Courses		9		9		3		3
IBI Quota	10							
Travel & Per Diem		16		16	14	2	4	1
Seminars		2		4		3		3
Subtotal	10	27		29	14	8	4	7

Data Bank Output: Budget

(US\$000)

Item	1980		1981		1982		1983	
	GOCR	AID	GOCR	AID	GOCR	AID	GOCR	AID
<u>Computer Hardware & Software Time</u>								
- Computer Time	96							
- Two IBM/equivalent 3330 Disk Units							90	
- Three IBM/Equiv. 3330 Disk Units & One IBM/equiv. 3333 Control Unit		195						
- CPU (IBM compatible/ equiv. 370/148 - One IBM/equiv. 3330 Disk Unit & One IBM/equiv. Control Unit	600							105
- Five Hard-Copy Printers & Two CRTs at Each Terminal Location		200						
- Six Dual Key to Diskette Unit		60						
- Software		20	60		10		10	
Subtotal	696	475	60		10		90	115
<u>Rent & Utilities</u>								
Subtotal	32		32		32		32	
<u>Materials & Supplies</u>								
Cards, Tapes, Diskettes, etc.	5	7	15	17	10	12	10	12
Subtotal	5	7	15	17	10	12	10	12
<u>Office Equipment</u>								
Subtotal	10	10	5	15	5	5		
<u>Maintenance of Equipment</u>								
Subtotal	7		7		7		7	
Total	956	677	345	279	357	165	460	172

Data Bank Output: Budget

(US\$000)

Item	1980		1981		1982		1983	
	<u>GOCR</u>	<u>AID</u>	<u>GOCR</u>	<u>AID</u>	<u>GOCR</u>	<u>AID</u>	<u>GOCR</u>	<u>AID</u>
<u>Summary</u>								
Personnel	196	114	286	114	289	102	317	24
Technical Assistance	-	44	-	44	-	28	-	14
Training & Seminars	10	27	-	29	14	8	4	7
Computer Hardware								
Software & Time	696	475	-	60	-	10	90	115
Rent & Utilities	32	-	32	-	32	-	32	-
Materials & Supplies	5	7	15	17	10	12	10	12
Office Equipment	10	10	5	15	5	5	-	-
Maintenance of								
Equipment	7	-	7	-	7	-	7	-
Total	956	677	345	279	357	165	460	172

	<u>GOCR</u>	<u>Project Life</u>	
		<u>AID</u>	<u>TOTAL</u>
Personnel	1,088	354	1,442
Technical Assistance	-	130	130
Training & Seminars	28	71	99
Computer Hardware			
Software & Time	786	660	1,446
Rent & Utilities	128	-	128
Materials & Supplies	40	48	88
Office Equipment	20	30	50
Maintenance of			
Equipment	28	-	28
Total	2,118	1,293	3,411

Area Frame Surveys Output: Budget

(US\$000)

Item	1980		1981		1982		1983	
	GOCR	AID	GOCR	AID	GOCR	AID	GOCR	AID
<u>Personnel</u>								
OPSA:								
1 Chief Area Frame & Surveys Unit	14		14		14		14	
1 LT Statistician		19		19		19		
1 Frame Supervisor		10		10				
1 Programmer		12	12		12		12	
8 Frame Technicians/ Survey Supervisors		64	32	32	64		64	
1 Secretary	4		4		4		4	
1 Office Boy	2		2		2		2	
1 Motor Pool Office (DGEC)	5		5		5		5	
4 Data-Entry Personnel				9	7	7		19
Subtotal	25	105	69	70	108	26	120	
<u>Technical Assistance</u>								
1 Sampling Frame Tech.		11		6		6		6
1 Mathematical Statistician		7		14		7		7
1 Survey Statistician				21		14		7
1 Programmer				14		4		4
1 Development Agric. Econ.				11		7		
Subtotal		18		66		38		24
<u>Training & Seminars</u>								
BUCEN Course								
Other Training Courses								
Subtotal		60						
<u>Computer Hardware, Software & Time</u>								
Computer time		10						
Subtotal		10						
<u>Vehicles & Parts</u>								
28 Four-Wheel Drive Vehic.		252						
Parts		5		8		10		12
Subtotal		257		8		10		12

Area Frame Surveys Output: Budget

(US\$000)

Item	1980		1981		1982		1983	
	GOCR	AID	GOCR	AID	GOCR	AID	GOCR	AID
<u>Surveys</u>								
National			94		188			188
Special			41		41	41		82
Objective Yield						30		30
Study								
Subtotal				135	229	71		300
<u>Rent & Utilities</u>								
Space for Area Frame								
Unit & Vehicles	24		24		24			24
Subtotal	24		24		24			24
<u>Materials & Supplies</u>								
Subtotal		8		15	14	3		15
<u>Office Equipment</u>								
Subtotal				24				
<u>Vehicle Repairs & Maintenance</u>								
Subtotal	10	5	11	5	25			25
Total	69	477	104	299	410	138		496 24
<u>Summary</u>								
Personnel	25	105	69	70	108	26		120
Technical Assistance		18		66		38		24
Training & Seminars		60						
Computer Hardware, Software & Time	10							
Vehicles & Parts		257		8	10			12
Surveys				135	229	71		300
Rent & Utilities	24		24		24			24
Materials & Supplies		8		15	14	3		15
Office Equipment		24						
Vehicle Repair & Maint.	10	5	11	5	25			25

Area Frame Surveys Output: Budget

(US\$000)

	<u>GOCR</u>	<u>Project Life</u> <u>AID</u>	<u>TOTAL</u>
Personnel	322	201	523
Technical Assistance		146	146
Training & Seminars		60	60
Computer, Hardware, Software & Time	10		10
Vehicles & Parts	22	265	287
Surveys	529	206	735
Rent & Utilities	96		96
Materials & Supplies	29	26	55
Office Equipment		24	24
Vehicle Repair & Maint.	71	10	81
Total	<u>1,079</u>	<u>938</u>	<u>2,017</u>

Documentation Centers Output: Budget

(US\$000)

Item	1980		1981		1982		1983	
	GOCR	AID	GOCR	AID	GOCR	AID	GOCR	AID
<u>Personnel</u>								
OFIPLAN:								
1 Chief Documentation Center	14		14		14		14	
2 Librarians	14		14		14		14	
1 Asst. Librarian/Secretary	4		4		4		4	
Contract Services								
Cataloging & Abstracts (6 pers.)		30		30		30		
Subtotal	32	30	32	30	32	30	32	
OIP:								
1 Systems Engineer		6		6				
1 Systems Analyst		6		6				
1 Programmer	3		3					
Subtotal	3	12	3	12				
OPSA:								
1 Director OPSA Documents Center	14		14		14		14	
1 Agricultural Economist/Librarian	13		13		13		13	
1 Secretary/Librarian	4		4		4		4	
Contract Services:								
Contract Librarian Cataloging & Abstracts (6 pers.)		10		10				
Subtotal	31	40	31	40	31		31	
Total (Personnel)	66	82	66	82	63	30	63	
<u>Technical Assistance</u>								
Information Specialist		16		16				
Subtotal		16		16				
<u>Training & Seminars</u>								
Travel to Inspect Doc. Ctrs.	4		2					
Seminars	1		1		1		1	
Subtotal	5		3		1		1	

UNCLASSIFIED

Documentation Center Output: Budget
(US\$000)

Item	1980		1981		1982		1983	
	GOCR	AID	GOCR	AID	GOCR	AID	GOCR	AID
<u>Computer Hardware, Software & Time</u>								
Computer Time	10							
Software		20						
Subtotal	10	20						
<u>Office Equipment</u>								
Reproduction/Microfiche (OFIPLAN)		32						
OPSA Office Equipment		10						
Subtotal		42						
<u>Rent & Utilities</u>								
OFIPLAN Documentation Center	4		4		4		4	
OPSA Documentation Center	5		5		5		5	
Subtotal	9		9		9		9	
<u>Materials & Supplies</u>								
OFIPLAN	5		2		2		2	
OPSA	2		2		2		2	
Subtotal	7		4		4		4	
<u>Maintenance</u>								
Subtotal			1		1		1	
Total	50	95	38	41	33	11	35	1
<u>Summary</u>								
Personnel	66	82	66	82	63	30	63	
Technical Assistance		16		16				
Training & Seminars		5		3		1		1
Computer Hardware, Software & Time	10	20						
Office Equipment		42						
Rent & Utilities	9		9		9		9	
Materials & Supplies	7		4		4		4	
Maintenance			1		1		1	
Total	92	165	80	101	77	31	77	1

Documentation Center Output: Budget

(US\$000)

	<u>GOCR</u>	<u>Project Life</u> <u>AID</u>	<u>TOTAL</u>
Personnel	258	194	452
Technical Assistance		32	32
Training & Seminars		10	10
Computer, Hardware			
Software & Time	10	20	30
Rent & Utilities	36		36
Materials & Supplies	19	-	19
Office Equipment		42	42
Maintenance	3		3
Total	<u>326</u>	<u>298</u>	<u>624</u>

Project Coordination: Budget

(US\$000)

Item	1980		1981		1982		1982	
	<u>GOCR</u>	<u>AID</u>	<u>GOCR</u>	<u>AID</u>	<u>GOCR</u>	<u>AID</u>	<u>GOCR</u>	<u>AID</u>
<u>Personnel</u>								
1 Project Coordinator		20		20		20		20
1 Assistant Project Coordinator		7		7		7		7
1 Secretary		4		4		4		4
1 Clerk/Secretary/Messenger		4		4		4		4
Subtotal		<u>35</u>		<u>35</u>		<u>35</u>		<u>35</u>
<u>Rent & Utilities</u>								
Subtotal		<u>4</u>		<u>4</u>		<u>4</u>		<u>4</u>
<u>Office Equipment & Supplies</u>								
Subtotal		<u>2</u>		<u>2</u>		<u>2</u>		<u>2</u>
Total		<u>37</u>		<u>37</u>		<u>37</u>		<u>37</u>
1 Technical Expert (Grant-funded)								
Total		<u>80</u>		<u>80</u>		<u>90</u>		<u>90</u>
Total		<u>4 117</u>		<u>4 117</u>		<u>4 127</u>		<u>4 37</u>

Project Life

	<u>GOCR</u>	<u>AID</u>	<u>TOTAL</u>
Personnel		140	140
Rent & Utilities	16		16
Office Equipment		8	8
Subtotal	<u>16</u>	<u>148</u>	<u>164</u>
Advisor (Grant-funded)		250	250
Subtotal		<u>250</u>	<u>250</u>
Total	<u>16</u>	<u>398</u>	<u>414</u>

Assessment of the ADP Component
of the
Development Information System Project

John Marshall
AID/W/SER/DM/DS-B
12/14/78

Purpose

The purpose of this report is to assess the automatic data processing (ADP) component of the Development Information System (DIS) for the Government of Costa Rica.

The scope of this assessment was limited to the areas of :
1) organization; 2) staffing; 3) proposed hardware; and, 4) software.

Overview of the Development Information System (DIS)

The proposed DIS' data bank would be comprised of information on:
1) Population; 2) Housing; 3) Education; 4) Health; 5) Agricultural Production/Employment; 6) Land Tenure and uses; and 7) Manufacturing Production/Employment. Additionally, there would be a Library Information retrieval capability included in the DIS for storage and retrieval of abstracts on past government documents and surveys in the above sectors.

The organizations which would provide more detailed information and be users of the DIS are: 1) Ministry of Health; 2) Office of Agriculture Sector Planning (OPSA); 3) the Office of Information of the President (OIP); 4) the National Planning Office (OFIPLAN); 5) the Census Bureau (DGEC); and 6) the Ministry of Industry, Economy and Commerce.

Other organizations which have indicated an interest in utilizing the DIS are: Ministry of Agriculture; 2) Central Bank; 3) Institute for Colonization; 4) the National Production Council (CNP); 5) University of Costa Rica; and others.

Organizational Structure of the DIS

The proposed DIS would consist of a network of the six government agencies mentioned above. This network would be supported by a central computer site located at the Ministry of Finance. Residing at this

location would be all of the information comprising the data bank. This information would be located on the disk units of the computer. Each of the six government agencies would have access to the data bank through cathode ray tube (CRT) terminals and hard copy printers located at their site. The CRT's and printers would be connected to the central computer site via local telephone service.

Proposed Staffing

1. The Ministry of Finance has a staff of approximately 11 analysts and 13 programmers supporting their computer center. This staff is utilized completely on applications pertaining to administration and finance, therefore, it is unlikely that any of this staff would be available for the DIS.
2. OIP staffing plans indicate that they will have 1 systems analyst and 1 programmer to support the DIS. Additionally, each of the previously mentioned organizations plan to have access to programmers. This programmer's function will be for the purpose of formulating queries to the data bank and provide training to the users. Systems analysts would be provided to the user agency as required.

Hardware

1. The existing hardware structure that is located at the Ministry of Finance's computer center.
 - a. one IBM 370/148 (1024K real core);
 - b. six IBM Model 3330 disk units;
 - c. one IBM Model 3333 disk controller;
 - d. two IBM Model 3410 tape units;
 - e. two IBM Model 1403 printers (1100 lines per minute).
2. In addition to existing equipment listed above, the proposed DIS would require the following additional equipment:
 - a. one central processing unit (IBM 370-148 1,024K real core)
 - b. six IBM Model 3330 disk units;
 - c. two IBM Model 3333 disk controller;
 - d. twelve IBM CRTs' six with printers;
 - e. six IBM dual key to diskette units.

Software

The existing computer center utilizes the following operating system, compilers and software packages in support of the application programs running on the IBM 370/148.

1. Operating system
 - a. DOS/VS with TSO
2. Compilers
 - a. COBOL
 - b. FORTRAN
 - c. PL/1
 - d. RPG-II
 - e. ASSEMBLER
 - f. AUTOCODER
3. Software Packages
 - a. CICS

The Ministry of Finance, within the next several months, plans to convert their operating system from DOS to OS. Additionally, the Nutrition Information Component of USAID/CR's Nutrition Loan plans to add the following software packages:

1. SPSS
2. COCENTS
3. DBMS (specific DBMS has not been defined).

Discussion

Meetings were held with officials responsible for the proposed Development Information System. (See attached list of interviews)

Based on the meetings mentioned above, the author has concluded the following.

1. Review of the draft project documents and the goals stated indicate that the proposed organizational structure of the DIS seems appropriate to accomplish its stated objectives.

Responsibility and control within OIP to develop the DIS will be difficult to accomplish when dealing with other organizations.

There have been several options discussed pertaining to the development of the DIS. The first option is that OIP would give overall guidance and set norms as to data to be used in the DIS, then the participating organizations would develop their own segment of the DIS. The

second option would be that OIP would give overall guidance, set norms for data, and develop the DIS. When completed, OIP would then furnish training to the other organizations pertaining to data entry and usage.

The author suggests that the second option is the best approach to accomplish an integrated data bank. This suggestion is based on the fact that all development would be focused in one organization with input from the other organizations. This approach would insure that all necessary linkages to the varied subject areas would be defined. Also this approach would insure a truly integrated data bank.

2. The proposed DIS will reside in the computers at the Ministry of Finance. The present computer configuration (IBM 370/148 and associated equipment) is not adequate to support the additional processing required by the development and usage of the DIS. The computer center at the present time is operating 24 hours, 5 days per week and 12 hours each Saturday and Sunday. Therefore they are very limited in the amount of new work that can be accomplished on existing equipment. All parties concerned are well aware of this fact. Therefore, the Government of Costa Rica (GOCR) plans to lease an additional central processing unit (CPU) and memory. This additional CPU would share the combined memory (2000K real core) with the existing computer.

Because of two CPU's sharing the memory a problem known as degrading of work process may develop. This problem was discussed with a representative of IBM. The IBM representative indicated that if degradation happened it would be minimal.

The Ministry of Finance plans to have a switch between the two CPU's. This switching capability would provide the means to switch work from one CPU to the other in case of malfunction of either CPU. In case there is a malfunction in either CPU, the Ministry of Finance's work would take priority over all other work. This would mean that the CPU used for DIS would be switched to work for the Ministry of Finance and DIS work would stop until the other CPU were repaired.

The rationale for this type of arrangement is that spare parts for the computer are very limited. One vendor indicated that for parts not stocked in-country, several days may be required before the part could be obtained. Therefore, this configuration for computer hardware was selected to provide the necessary backup computer in case of malfunction, stay within budget limitation, and compatibility with existing equipment. The budget limitations and the above mentioned problem of parts inventory discouraged the consideration of a larger computer. The staff that evaluated the hardware requirements indicated that the addition of the second CPU would increase their capability fourfold.

The purchase of the CPU and additional memory will be from counterpart funds.

3. The proposed loan will purchase the additional equipment listed under the hardware section of this report. The staff which analyzed the requirements for storage space indicated that census of agriculture, population and housing, area frame, and nutrition information would require one disk unit each. Additionally, two disk units would be required for other variables and work space for the DIS.

The author feels that the budget for the project be so structured that only three disk units and one controller be purchased first. At a later date the additional three disks and controller may be purchased when the need is apparent.

4. Proposed in the project, is the purchase of twelve CRT terminals and six hard copy printers. In discussions with staff members who developed the requirements for equipment at each agency, the following is their justification for selection of the equipment proposed. The first option was to have a Remote Job Entry (RJE) station located at each agency. The RJE would have consisted of a printer, input device, viewer, and an IBM Model 3330 disk unit. This option was discarded because the disk unit must be within 33 meters of the control computer. Option two was the same, except the addition of a CPU. This option was discarded too because of the limitation that it would have to be within 1500 meters. Option three was the same, but would utilize an IBM S/3 connected to the main computer via telephone lines. This option was discarded because of cost of the IBM S/3.

Therefore, option 4 which is the purchase of the CRT terminals and printers was chosen based on least cost. The author suggests that as in the purchase of disk units, that the budget provide for twelve CRTS' and six printers, but only six CRTS' and printers be purchased at the beginning of the project. After development of the DIS is underway and the requirements for the additional six CRTS' are justified, then procurement can take place for the remainder.

5. Also proposed in the project is the purchase of six IBM dual key to disk units. They are required for the off-line preparation of information that will be entered into the DIS. The justification for selection of IBM dual density key to disk units is that the Ministry of Finance's computer center has four of the same units plus the diskette reader that is connected to the computer.

ANNEX II-E

6. The estimated cost for the proposed computer equipment is listed below.

	<u>Per Unit</u>	
1. six IBM Model 3330 disk units	45,000	270,000
2. two IBM Model 3333 controllers	60,000	120,000
3. Tweve IBM CRTS, 6 hard copy printers (at six installations)	40,000 (per in- stall.)	240,000
4. six dual IBM key to diskette units	10,000	60,000
		<hr/>
TOTAL.....	\$	690,000

7. Review of the proposed staffing of the ADP portion of the DIS disclosed the following. OIP would have a system analyst and one programmer, at the present time they are working on a nutrition loan. The other organizations involved in the DIS will have one programmer assigned. The computer center, located in the Ministry of Finance has one person trained as a software specialist to support the Disk Operating System on the IBM 370/148. IBM furnishes a software Engineer for this purpose.

It is the author's opinion that this staffing is inadequate to perform development of the DIS, support the users of the DIS after implementation, and in the case of the computer center, support the complex computer configuration proposed.

Recommendations

The author during his assessment of the proposed DIS project loan has developed the following recommendations.

1. Responsibility for development and implementation of the DIS should be in OIP.
2. OIP should have a core staff of at least three Systems Analysts and three programmers for the Development of the General design , detail design, coding, programming, testing, and implementation

of the DIS. Additional analysts and programmers can be contracted for with technical assistance funds to support the core staff.

3. During implementation of the DIS, programmers should be assigned to the agencies which use the DIS. Their function would be to train the users of the system, perform maintenance when necessary and resolve problems that may arise between the computer center and the users.

The analysts would remain in OIP after implementation to provide assistance to each organization when required for special requirements pertaining to the DIS.

4. Staffing of software specialists at the Ministry of Finance computer center should be increased due to the complex computer configuration proposed. As a minimum, they should have two persons knowledgeable in the new operating system, two persons to provide support to users of the center. They should be knowledgeable in all the software associated with the computer center. One person that is an expert in time sharing and one expert in hardware. Since the Ministry of Finance has responsibility for the computer center, they should provide this staffing.

5. SER/DM should support this project by direct hire TDY's for the purpose of reviewing the progress of the development of the DIS.

6. SER/DM should provide assistance for the development of technical specifications for the procurement and evaluation of computer equipment.

7. SER/DM should provide assistance in developing scopes of work, evaluation, and selection of contractor services when needed in the development of the DIS.

8. SER/DM should provide assistance in evaluation and selection of software packages that maybe required for the users of the DIS.

9. Recommend that SER/DM concur on the ADP component of National Development Information System per HB 18 Part V.

List of Interviewers

1. Erhardt Rupprecht, USAID/CR - Agricultural Economist
2. Dr. Walter Vuolo, PAHO Contractor to OIP Computer Sciences
3. Dr. Pedro Rey, PAHO Contractor Information Systems
4. Lic. Roberto Escoto, OIP
5. Marco Aurelio Soto, ITEL
6. Lic. R. Fernández, IBM.

STATISTICAL INVENTORY

ANEXO

INVENTARIO DE ESTADISTICAS

Nota aclaratoria
Significado de las siglas usadas
Significado de la simbología usada
Indice de Cuadros.....
Cuadros.....

NOTA ACLARATORIA

Este inventario de estadísticas que se publican o se preparan en el país no constituye una lista exhaustiva y detallada, sino más bien una lista seleccionada. No se incluyen algunas estadísticas tales como las de accidentes de tránsito o las estadísticas judiciales; tampoco aquellas que en cierta medida ya aparecían en el inventario y que venían a constituir una repetición con mayor grado de detalle, pero que no agregaban información útil de acuerdo con los fines perseguidos.

. . .

SIGNIFICADO DE LAS SIGLAS USADAS

<u>SIGLA</u>	<u>NOMBRE DE LA INSTITUCION</u>
AYA	Instituto Costarricense de Acueductos y Alcantarillados
BCCR	Banco Central de Costa Rica
CCSS	Caja Costarricense de Seguro Social
CGR	Contraloría General de la República
CNP	Consejo Nacional de Producción
DGEC	Dirección General de Estadística y Censos
DGPTE	Dirección General de Planificación del Trabajo y del Empleo
DGTD	Dirección General de la Tributación Directa
IASI	Instituto Interamericano de Estadística
ICE	Instituto Costarricense de Electricidad
ICT	Instituto Costarricense de Turismo
INS	Instituto Nacional de Seguros
LAICA	Liga Agrícola e Industrial de la Caña de Azúcar
MAG	Ministerio de Agricultura y Ganadería
MEIC	Ministerio de Economía, Industria y Comercio
MH	Ministerio de Hacienda
MOPT	Ministerio de Obras Públicas y Transportes
MSP	Ministerio de Salubridad Pública
MTSS	Ministerio de Trabajo y Seguridad Social
SBN	Sistema Bancario Nacional
SNE	Servicio Nacional de Electricidad

COBERTURA

Con este nombre se hace referencia a la unidad geográfica menor a la cual se refiere la estadística respectiva. De manera que si la marca X aparece bajo la columna P (provincia), dicha marca significa que la mayor desagregación geográfica que existe actualmente para la estadística considerada es a nivel de provincia (y por consiguiente que no existe la información para los cantones ni para los distritos)

- T Total del país
- U Zona urbana
- R Zona rural
- P Provincia
- C Cantón
- D Distrito

PERIODICIDAD

Con la letra D se indica que la estadística se obtiene cada diez años, al efectuarse los censos. Con las letras A y M, que las estadísticas se refieren a períodos cuya duración ^{es} de un año o de un mes, respectivamente, cuando se trata de flujos; y a momentos determinados a lo largo del año o del mes, según corresponda, cuando se trata de acervos.

I F S

SIGNIFICADO DE LA SIMBOLOGIA USADA

CARACTERISTICAS

1.- Población

- T Total (hombres y mujeres)
- S Según sexo
- E Según grupos de edad

2.- Educación

- T Total
- S Según sexo
- E Según grupos de edad
- G Según año o grado cursado

3.- Salud

- E Según grupos de edad
- S Según sexo
- I Por institución hospitalaria
- R Por región programática

4.- Fuerza de trabajo

- T Total (hombres y mujeres)
- S Según sexo
- E Según grupos de edad
- C Según categoría de ocupación
- R Según rama de actividad económica

5.- AGRICULTURA

- U Uso de la tierra
- A Area cosechada
- R Régimen de tenencia
- N Número de fincas
- M Tamaño de la finca

6.- Ganadería

- E Según edad de los animales
- N Número de fincas
- P Propósito o destino de los animales
- R Raza
- S Sexo

7.- Industria

- A Valor agregado
- P Personal ocupado
- R Rama de actividad económica
- S Tipo de sociedad
- V Valor de la producción

8.- Electricidad y agua

- N Número de clientes o usuarios del servicio
- E Según empresa
- K Consumo o producción de electricidad en kilovatios-hora
- C Tipo o clase de consumo

9.- Construcción

- A Ampliaciones de construcciones
- R Reparaciones de construcciones
- V Valor de las construcciones
- M Area de la construcción.

10.- Vivienda

- A Clase de servicio de agua
- D Número de dormitorios
- E Estado de la vivienda
- N Número de ocupantes
- S Clase de servicio sanitario

11.- Comercio

- N Número de establecimientos
- R Según rama de actividad económica
- V Según valor de las ventas

12. Turismo

- N Número de turistas
- G Monto gastado por turista
- P Número de turistas según país de procedencia

13.- Transporte

- P Número de pasajeros transportados
- V Número de vehículos o de naves
- Pk Pasajeros kilómetro
- T Toneladas transportadas
- Tk Toneladas kilómetro

14.- Comercio exterior

- P Peso bruto en kilos
- V Valor en colones o en pesos centroamericanos. CIF en el caso de las importaciones y FOB en el caso de las exportaciones
- N Número de unidades exportadas o importadas
- R Monto recaudado por concepto de impuestos

15.- Cuentas nacionales, monetarias y fiscales

- V Monto en colones corrientes
- Vc Monto en colones constantes
- I Ingresos
- E Egresos

16.- Organización Social

- N Número de sindicatos, cooperativas, pólizas o pensiones, según caso.
- R Según rama de actividad económica
- Q Cantidad de miembros afiliados o de socios.

INDICE DE CUADROS

1. Población
2. Educación
3. Salud
4. Fuerza de Trabajo
5. Agricultura
6. Ganadería
7. Industria
8. Electricidad y Agua
9. Construcción
10. Vivienda
11. Comercio Interno
12. Turismo
13. Transporte
14. Comercio Exterior y Balanza de Pagos
15. Cuentas Nacionales, Monetarias y Fiscales
16. Organización Social y Otros

1.- POBLACION

N O M B R E	CARACTERISTICAS			COBERTURA						PERIODICIDAD			FUENTES Y OBSERVACIONES	
	T	S	E	T	U	R	P	C	D	D	A	M		
I POBLACION														
Población total de Costa Rica por áreas demográficas y regiones agrícolas	X					X	X	X			X			DGEC, Censo de Población
Población de Costa Rica, según aumento vegetativo y saldo migratorio	X					X	X	X				X		DGEC, Boletín de Estadística Vital.
Grupos de edad de la población total	X	X						X			X			DGEC, Censo de Población
Años de residencia en el cantón en que fue enumerada la población total	X	X						X			X			DGEC, Censo de Población
Cantía o país de residencia anterior de la población total		X						X			X			DGEC, Censo de Población
Residentes permanentes e inmigrantes en la población activa por ocupación	X							X			X			DGEC, Censo de Población
Población total	X	X	X		X	X	X	X	X	X	X			DGEC, Censo de Población
Hogares y jefes de familia censales en la población total, número de hogares, total de miembros, rama de actividad		X	X		X	X	X	X	X	X	X			DGEC, Censo de Población
II MATRIMONIOS														
Total matrimonios católicos y civiles, según grupo de edad de los contrayentes	X		X		X							X		DGEC, Anuario Estadístico
III NACIMIENTOS														
Nacimientos según edad de la madre y número de hijos nacidos por la madre		X			X							X		DGEC, Anuario Estadístico
Nacimientos según edad de la madre		X					X					X		DGEC, Anuario Estadístico
Nacimientos, según mes de ocurrencia	X				X		X					X		DGEC, Departamento de Estadísticas Sociales
Nacimientos, incluyendo porcentajes, según asistencia recibida	X				X		X					X		DGEC, Departamento de Estadísticas Sociales

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... Continuación 1.- POBLACION

N O M B R E	CARACTERISTICAS T S E	COBERTURA						PERIODICIDAD D A M	FUENTES Y OBSERVACIONES
		T	U	R	P	G	D		
Macimientos y defunciones generales, infantiles, neonatales y fetales	X X	X			X X			X	DGEC, Departamento de Estadísticas Sociales
<u>IV DEFUNCIONES</u>									
Defunciones ocurridas según asistencia médica	X X				X X			X	DGEC, Anuario Estadístico
Defunciones de menores de 1 año, según asistencia médica	X X				X X			X	DGEC, Anuario Estadístico
Defunciones según causa de muerte	X X				X			X	DGEC, Anuario Estadístico
Defunciones generales infantiles y neonatales según causa de muerte y asistencia médica	X X	X						X	DGEC, Anuario Estadístico
Defunciones registradas con certificado médico, según causas más frecuentes de muerte y asistencia médica	X	X						X	DGEC, Anuario Estadístico
Defunciones según ocurrencia fuera o dentro del hogar	X		X					X	DGEC, Anuario Estadístico
Defunciones ocurridas según 150 grupos de causas de muerte	X		X		X			X	DGEC, Departamento de Estadísticas Sociales
Defunciones de menores de 1 año, incluyendo porcentajes, según causas más frecuentes de muerte y asistencia médica	X		X		X			X	DGEC, Departamento de Estadísticas Sociales
Defunciones maternas según asistencia médica	X		X					X	DGEC, Departamento de Estadísticas Sociales
Defunciones ocurridas según asistencia	X X				X			X	DGEC, Departamento de Estadísticas Sociales
Causas más frecuentes de muerte de menores de 1 año, incluyendo porcentajes, según orden de importancia, asistencia médica	X X	X			X X			X	DGEC, Departamento de Estadísticas Sociales
<u>V DIVORCIOS</u>									
Divorcios según edad de los divorciados	X		X					X	DGEC, Departamento de Estadísticas Sociales
<u>VI MIGRACION</u>									
Emigrantes	X X							X	DGEC, Departamento de Estadísticas Sociales
Inmigrantes	X X				X			X	DGEC, Censos de Población
Lugar de residencia hace 5 años	X X				X X			X	DGEC, Censos de Población
					X			X	DGEC, Censos de Población

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2.- EDUCACION

N O M B R E	CARACTERISTICAS				COBERTURA						PERIODICIDAD			FUENTES Y OBSERVACIONES
	T	E	S	G	T	U	R	P	G	D	D	A	M	
I. GENERAL														
Personas analfabetas	x	x	x			x	x	x				x		DGEC, Censos de Población
Nivel de instrucción de la población	x	x	x	x	x					x		x		DGEC, Censos de Población
Asistencia a centros de enseñanza por parte de la población	x									x		x		DGEC, Censos de Población
Instituciones de educación según niveles de enseñanza	x				x			x				x		Ministerio de Educación Pública
Matrícula inicial para cada año, según ciclos de enseñanza	x		x		x			x				x		Ministerio de Educación Pública
II. I y II CICLOS														
Matrícula inicial	x		x		x			x				x		Ministerio de Educación Pública
Número de escuelas, según orden y secciones, número de alumnos y número de plazas (maestros)	x			x	x					x		x		Ministerio de Educación Pública
Número de secciones	x			x	x							x		Ministerio de Educación Pública
Alumnos aprobados, aplazados y reprobados	x		x	x	x							x		Ministerio de Educación Pública. Anuario Estadístico
Alumnos repitientes	x	x	x	x	x							x		Ministerio de Educación Pública. Anuario Estadístico
III. III CICLO Y DIVERSIFICADA														
Matrícula inicial	x			x	x							x		Ministerio de Educación Pública
Graduados en la enseñanza académica	x				x							x		Minist. de Educac. Pública
Alumnos promovidos y reprobados	x			x	x							x		Minist. de Educac. Pública
IV. SUPERIOR														
Matrícula de la Universidad de Costa Rica, según Facultad	x				x							x		Instituto de Investigaciones Económicas, Universidad de Costa Rica.

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3.- SALUD

N O M B R E	CARACTERISTICAS				COBERTURA					PERIODICIDAD			FUENTES Y OBSERVACIONES	
	E	S	I	R	T	U	R	P	C	D	D	A		M
I SISTEMA HOSPITALARIO														
Informe sobre uso y prestación de servicios médicos por regiones programáticas, según número de hospitales, número de camas, egresos hospitalarios, días paciente, partos hospitalarios, consultas atendidas y población total por años	x	x			x								x	MSP, Depto. de Estadísticas de Salud
Consultas impartidas por tipo de consulta					x								x	MSP, Anuario Estadístico
Consultas impartidas y porcentaje de casos nuevos por unidades sanitarias					x			x					x	MSP, Anuario Estadístico
Camas en servicio		x			x								x	MSP, Informe Estadístico del Sistema Hospitalario Nacional
Censo promedio diario de pacientes		x			x								x	MSP, Informe Estadístico del Sistema Hospitalario Nacional
Estancias reales de los pacientes		x			x								x	MSP, Informe Estadístico del Sistema Hospitalario Nacional
Consultas externas por mes y promedio diario		x			x								x	MSP, Informe Estadístico del Sistema Hospitalario Nacional
Servicios de hospitalización en los establecimientos del Sistema Hospitalario Nacional			x		x								x	MSP, Depto. de Estadísticas de Salud
Número promedio de camas, giro de camas, total días paciente y censo promedio diario en el año y porcentaje de ocupación por semestre	x	x						x					x	MSP, Depto. de Estadísticas de Salud.
Número de consultas externas		x			x								x	MSP, Depto. de Estadísticas de Salud
Número de consultas en los centros de salud y establecimientos del Ministerio de Salud		x			x			x					x	MSP, Depto. de Estadísticas de Salud

N O M B R E	CARACTERISTICAS				COBERTURA						PERIODICIDAD			FUENTES Y OBSERVACIONES
	E	S	I	R	T	U	R	P	C	D	D	A	M	
Número de consultas en el sistema hospitalario nacional			X	X	X							X		MSP, Depto. de Estadísticas de Salud
Número de hospitales y casas por clase de hospital					X			X				X		MSP, Depto. de Estadísticas de Salud
<u>II ENFERMEDADES</u>														
Informe mensual de las nueve enfermedades infecciosas más importantes, según paciente	X	X	X		X			X	X				X	MSP, Estadísticas no publicadas
Incidencia de enfermedades venéreas presentadas en el Dispensario Antivenéreo Central y Anexo, según diagnóstico	X	X			X			X					X	MSP, Estadísticas no publicadas
<u>III DEFUNCIONES</u>														
Defunciones ocurridas, incluyendo porcentajes, según causa e importancia						X							X	DGEC, Depto. de Estadísticas Sociales
Defunciones fetales según causa específica y asistencia médica			X			X							X	DGEC, Depto. de Estadísticas Sociales
Causas más frecuentes de muerte según orden de importancia				X		X							X	DGEC, Depto. de Estadísticas Sociales
Defunciones infantiles (menores de 1 año) incluyendo porcentajes, según causas más frecuentes de muerte y asistencia médica			X			X							X	DGEC, Depto. de Estadísticas Sociales
<u>IV PERSONAL MEDICO</u>														
Plazas y horas médicas			X		X			X					X	MSP, Anuario Estadístico
Personal de enfermería			X		X								X	MSP, Anuario Estadístico
Número de médicos, dentistas, enfermeras					X								X	IASI. América en Cifras

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4.- FUERZA DE TRABAJO

N O M B R E	CARACTERÍSTICAS					COBERTURA					PERIODICIDAD			FUENTES Y OBSERVACIONES	
	C	E	R	S	T	T	U	R	P	C	D	D	A		M
Población económicamente activa según ocupación		X	X	X		X	X	X	X			X			DGEC, Censos
Ocupados y desocupados		X	X	X		X	X	X				X			DGEC, Censos
Población económicamente activa	X		X	X	X	X	X	X				X			DGEC, Censos
Trabajadores con remuneración en la población económicamente activa, según sueldo o salario			X	X	X	X						X			DGEC, Censos
Ocupados y desocupados en la población económicamente activa			X	X		X	X	X				X			DGEC, Censos
Ocupados y desocupados en la población económicamente activa		X		X		X	X	X				X			DGEC, Censos
Ultimo año e grado aprobado por los ocupados y desocupados en la población económicamente activa		X		X		X						X			DGEC, Censos
Patrones, trabajadores asegurados, salarios y cuotas por tipo de institución y ubicación patronal			X			X						X			CCSS. 1/ (Base mes de junio)
Distribución por provincias de los trabajadores asegurados, salario y cuota obrera en el sector público					X	X							X		CCSS. 1/
Distribución por provincias de los patrones, trabajadores asegurados, salario y cuota obrera, sectores público y particular					X	X							X		CCSS. 1/
Distribución por actividades de los patrones, trabajadores asegurados, salarios y cuota obrera, sector particular					X				X				X		CCSS. 1/
Número de trabajadores, según clase de salario	X		X	X	X	X			X				X		CCSS. 1/

1/ Estadística de patrones, trabajadores asegurados, salarios y cuotas.

... Continuación 4.- FUERZA DE TRABAJO

N O M B R E	CARACTERISTICAS					COBERTURA					PERIODICIDAD			FUENTES Y OBSERVACIONES	
	C	E	R	S	T	F	U	R	P	C	D	D	A		M
Población total y población económicamente activa (ocupados, desocupados, cesantes), país y por regiones					x	x	x	x							DGPTE, MTSS, DGEC, MEIC. 2/
Población total económicamente activa del país		x		x		x							x		DGPTE, MTSS, DGEC, MEIC. 2/
Población ocupada para el país y por regiones	x				x	x							x		DGPTE, MTSS, DGEC, MEIC. 2/
Población ocupada según rama de actividad y horas semanales trabajadas			x		x	x							x		DGPTE, MTSS, DGEC, MEIC. 2/
Población ocupada asalariada según rama de actividad			x		x	x							x		DGPTE, MTSS, DGEC, MEIC. 2/
Población ocupada asalariada, según nivel de remuneración total mensual, según ocupación					x	x							x		DGPTE, MTSS, DGEC, MEIC. 2/
Población ocupada asalariada y salario mensual promedio	x		x		x	x							x		DGPTE, MTSS, DGEC, MEIC. 2/
Subempleo visible de la población ocupada	x				x	x	x	x					x		DGPTE, MTSS, DGEC, MEIC. 2/
Población desocupada según tipo de desocupación		x		x	x	x							x		DGPTE, MTSS, DGEC, MEIC. 2/
Población cesante según duración de la cesantía			x		x	x							x		DGPTE, MTSS, DGEC, MEIC. 2/
Indice encadenado de salarios 3/ del sector industrial													x		BCCR, Depto. de Crédito de Desarrollo
Población total protegida según clase de seguro													x		DGEC, CCSS, Dirección Técnica de Planificación y Depto. Financiero
Total trabajadores cotizantes en la CCSS, según clase de seguro			x			x							x		Idem
Total trabajadores cotizantes en la CCSS, según clase de seguro.					x	x			x	x			x		Idem

2/ Encuesta Nacional de Hogares. Empleo y Desempleo, Cuatrimestral

3/ Salarios pagados según ocupación.

N O M B R E	CARACTERISTICAS					COBERTURA			PERIODICIDAD			FUENTES Y OBSERVACIONES	
	N	A	R	U	M	T	P	C	D	A	M		
I FINCAS													
Número de fincas	x	x					x	x		x			DGEC, Censo Agropecuario
Número de fincas	x		x				x	x		x			DGEC, Censo Agropecuario
Extensión de las fincas		x	x				x	x		x			DGEC, Censo Agropecuario
Extensión de las fincas				x			x	x		x			DGEC, Censo Agropecuario
Extensión de las fincas			x		x		x			x			DGEC, Censo Agropecuario
Extensión de las fincas		x		x	x		x			x			DGEC, Censo Agropecuario
II PRODUCCION													
Arroz, según producción y destino. 1/	x	x			x		x			x			DGEC, Censo Agropecuario
Arroz, según producción y destino.	x	x					x	x		x			DGEC, Censo Agropecuario
Tabaco, según producción y destino. 2/	x	x			x		x			x			DGEC, Censo Agropecuario
Tabaco, según producción y destino.	x	x					x	x		x			DGEC, Censo Agropecuario
Plátano y guineo (sombra). Número de fincas, número de plantas dispersas, según producción total y cantidad vendida por racimos.	x				x		x			x			DGEC, Censo Agropecuario
Banano (solo), según producción total y cantidad vendida en racimos.	x	x			x		x			x			DGEC, Censo Agropecuario
Banano (solo), según producción total y cantidad vendida en racimos.	x	x			x		x			x			DGEC, Censo Agropecuario
Piña, número de plantas dispersas, según producción total y cantidad vendida en cientos.	x	x					x	x		x			DGEC, Censo Agropecuario
Café arábigo, según producción total en fanegas. 5/	x	x			x		x	x		x			DGEC, Censo Agropecuario
Café arábigo, según producción total en fanegas.	x	x					x	x		x			DGEC, Censo Agropecuario
Café, según producción y destino y valor	x						x				x		Oficina del Café
Cabuya, según producción y destino y valor, por zonas de producción.		x					x				x		DGEC, Censo Agropecuario
Costos de producción del frijol, según trabajo, materiales, transporte, otros. 6/	x	x					x				x		MAG, Dirección de Planeamiento y Coordinación. Boletines Técnicos. 2/
Ingresos de producción del frijol. 6/	x	x					x				x		MAG, Dirección de Planeamiento y Coordinación. Boletines Técnicos. 2/
Tabaco, producción por clase		x					x						Comando en Jefe de Defensa del Tabaco
Total de caña procesada. Producción de azúcar y rendimiento por tonelada							x						
Azúcar, según producción, consumo y exportación.							x			x			..A.I.C.A. ..A.I.C.A.

1/ Los mismos datos existen para frijol, maíz y papa.

2/ Los mismos datos existen para yuca, algodón, camote, maní, ajonjolí, ajo, cebolla, repollo y tomate.

3/ Los mismos datos existen para plátano (solo)

4/ Los mismos datos existen para naranja, papaya y coco

5/ Los mismos datos existen para cacao, cabuya, palma africana y caña.

6/ Estudios de costos basados en la investigación de unas muestras de fincas. Se efectúan para distintos productos como arroz, maíz, cebolla, repollo, ganado, etc., y en cada ocasión se refieren a diferentes zonas o lugares

7/ Se tienen una periodicidad regular.

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N O M B R E	CARACTERISTICAS			COBERTURA			PERIODICIDAD			FUENTES Y OBSERVACIONES
	N	A	R U M	T	P	C	D	A	M	
Café, según producción, exportación y porcentaje que se exporta				x				x		Oficina del Café
Café, producción exportada, valor y precios promedio por tonelada				x				x		Oficina del Café
Café, producción para el consumo nacional, valor y precio promedio por tonelada				x				x		Oficina del Café
Tabaco, extensión cosechada, producción, valor total y clase				x				x		Junta de Defensa del Tabaco
Tabaco, según tipo y producción total en kilogramos por zonas de producción				x				x		Junta de Defensa del Tabaco
Producción y valor de varios productos (arroz, banano, caña, frijoles, etc.)				x				x		BCCR, Cifras sobre producción agropecuaria. Algunas de tales estimaciones no son confiables, pues se carece de una buena base de estimación.
III TECNOLOGIA										
Número de fincas que utilizaron riego, abono, herbicidas, fungicidas e insecticidas	x		x				x		x	DGEC, Censo Agropecuario
Algodón, número de fincas que utilizaron riego, abono, herbicidas, fungicidas e insecticidas. 8/	x			x			x		x	DGEC, Censo Agropecuario
Abono químico, extensión tratada (Has.), cantidad (quintales), valor (colonos). 9/	x	x		x			x		x	DGEC, Censo Agropecuario
IV EXPLOTACION FORESTAL										
Bosques	x	x		x					x	DGEC, Censo Agropecuario
V FUERZA MOTRIZ										
Fuerza motriz, número de fincas que la utilizaron	x			x					x	DGEC, Censo Agropecuario
VI EQUIPO AGRICOLA										
Equipo agrícola, número de fincas que lo utilizaron, según clase de equipo	x						x	x	x	DGEC, Censo Agropecuario

8/ Los mismos datos existen para arroz, papa, tabaco, banano, café, cacao y caña

9/ En los cultivos de café, banano, caña, tabaco, algodón, arroz, papa y cacao.

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6.- GANADERIA

N O M B R E	CARACTERISTICAS					COBERTURA				PERIODICIDAD			FUENTES Y OBSERVACIONES
	N	R	P	S	E	T	P	C	D	D	A	M	
<u>I GANADO VACUNO Y OTROS</u>													
Total de ganado vacuno	x	x	x			x	x	x			x		DGEC, Censo Agropecuario
Total de ganado vacuno según tamaño del hato	x					x	x	x			x		DGEC, Censo Agropecuario
Total de ganado vacuno según tamaño del hato y de la finca	x					x					x		DGEC, Censo Agropecuario
Ganado porcino	x		x	x	x		x	x			x		DGEC, Censo Agropecuario
Ganado caballar, mular y cenal, según clase de ganado	x				x	x	x	x			x		DGEC, Censo Agropecuario
Pollos, gallos y gallinas	x			x	x	x	x	x			x		DGEC, Censo Agropecuario
Destace de ganado vacuno							x	x				x	DGEC, Depto. de Censos 1/
Destace mensual de ganado vacuno y porcino						x						x	DGEC, Depto. de Censos 1/
Número de cabezas de ganado vacuno vendidas mensualmente en las plazas de Montecillos (Alajuela) y Cerrillos (Cartago), según clase					x	x						.x	DGEC, Depto. de Censos.
<u>II PRODUCTOS DE ORIGEN ANIMAL</u>													
Producción diaria (día anterior a la enumeración) de queso, mantequilla, leche y huevos	x					x	x	x			x		DGEC, Censo Agropecuario
Existencia de colmenas y producción de miel, según número de colmenas y galones de miel							x	x			x		DGEC, Censo Agropecuario

1/ Con base en los "Boletos" por derecho a destace, que venden las Municipalidades, y en datos de las plantas empacadoras de carne.

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7.- INDUSTRIA

N O M B R E	CARACTERISTICAS					COBERTURA				PERIODICIDAD			FUENTES Y OBSERVACIONES
	A	P	R	S	V	T	P	C	D	D	A	M	
Número de establecimientos			x	x		x					x		DGEC, Censo de Industri.
Número de establecimientos		x	x			x					x		DGEC, Censo de Industri.
Número de establecimientos					x		x	x			x		DGEC, Censo de Industrias
Número de establecimientos			x		x	x					x		DGEC, Censo de Industrias
Personal ocupado (semana anterior) por sexo		x	x			x					x		DGEC, Censo de Industrias
Valor agregado e insumos	x	x	x		x	x					x		DGEC, Censo de Industrias
Principales aspectos de los contratos firmados				x		x						x	MEIC, Publicaciones Unicas y Especiales
Indice mensual y anual de la actividad industrial						x					x	x	BCCR, Departamento de Estudios Económicos
Indice encadenado de ocupación del sector industrial			x			x						x	BCCR, Departamento de Estudios Económicos
Valor agregado de producción industrial ^{1/}	x					x						x	BCCR, Departamento de Estudios Económicos

^{1/} Precios corrientes

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8.- ELECTRICIDAD Y AGUA

N O M B R E	CARACTERISTICAS				COBERTURA				PERIODICIDAD			FUENTES Y OBSERVACIONES
	N	K	C	E	T	P	C	D	D	A	M	
<u>I ELECTRICIDAD</u>												
Suministro energía eléctrica residencial o no residencial, ventas en colones (y en KWH)	X	X			X	X	X				X	I.C.E., Estadística
Grado de electrificación en Costa Rica						X	X				X	I.C.E., Estadística
Promedio de ventas de energía en KWH e ingreso medio en colones por cliente		X	X								X	I.C.E., Estadística
Energía vendida a consumidores directos	X	X	X		X						X	I.C.E., Estadística
Informe de operación de las principales empresas productoras y distribuidoras de energía eléctrica					X						X	I.C.E., Estadística
Producción de electricidad según capacidad instalada de acuerdo con los datos de placa, según clase de planta			X		X						X	I.C.E., Estadística
Generación anual de las principales empresas según clase de generación		X		X	X						X	S.N.E., Estadística Eléctrica
Consumo e ingresos anuales, promedio por cliente y valor promedio de KWH vendidos según clase de cliente				X	X						X	S.N.E., Estadística Eléctrica
Ventas de energía del ICE, al por mayor, según sistemas				X	X						X	S.N.E., Estadística Eléctrica
<u>II AGUA</u>												
Informe sobre la producción de agua, recopilación mensual												
Población total y población servida, urbana y rural					X						X	A. y A., Estadística no publicada
<u>III ALCANTARILLADO</u>												
Población servida en áreas urbanas y rurales											X	DGEC, Censo Vivienda
						X					X	DGEC, Censo Vivienda

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9.- CONSTRUCCION

N O M B R E	CARACTERISTICAS				COBERTURA				PERIODICIDAD			FUENTES Y OBSERVACIONES
	A	R	M	V	T	P	C	D	D	A	M	
Número de construcciones	x	x	x	x	x						x	DGEC, Anuario Estadístico.
Número de construcciones según destino	x	x	x	x	x						x	DGEC, Anuario Estadístico.
Número de construcciones					x	x	x					DGEC, Anuario Estadístico.
Construcciones, número de permisos y número de obras					x	x	x	x			x	DGEC, Anuario Estadístico.
Construcciones, número de permisos y número de obras	x	x	x	x	x						x	DGEC
Construcciones, valor de los edificios residenciales, no residenciales y otras obras, según meses					x	x					x	DGEC

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10.- VIVIENDA

N O M B R E	CARACTERISTICAS					COBERTURA					PERIODICIDAD	FUENTES Y OBSERVACIONES		
	N	E	A	S	D	T	U	R	P	C	D		D	A
Número de viviendas particulares ocupadas	X	X			X	X	X	X	X	X	X	X		
Número de viviendas particulares ocupadas	X	X	X			X			X	X	X	X		
Número de viviendas particulares ocupadas					X	X			X	X	X	X		
Personas ocupadas de las viviendas particulares, por grupos de edad	X	X				X	X	X	X			X		
Número de ocupantes de las viviendas particulares, por categoría de ocupación	X	X				X	X	X	X			X		
Número de viviendas ocupadas según tenencia	X	X				X	X	X	X			X		
Número de viviendas ocupadas según tenencia y el alquiler mensual	X	X				X	X	X	X	X	X	X		
Número de viviendas ocupadas y promedio de ocupantes por cuarto		X	X	X		X	X	X	X	X	X	X		
Número de viviendas ocupadas, según que cuenten o no con energía eléctrica y según tenencia	X	X		X		X			X	X	X	X		
Número de viviendas ocupadas, según uso de artefactos electrodomésticos y según alquiler		X				X	X	X	X	X	X	X		
Número total de ocupantes, según artefactos en la vivienda, y tenencia.	X					X	X	X	X	X	X	X		

11.- COMERCIO INTERNO

N O M B R E	CARACTERISTICAS			COBERTURA			PERIODICIDAD			FUENTES Y OBSERVACIONES
	N	R	V	T	P	C	D	A	M	
Número de establecimientos, según rama de actividad	x	x		x	x			x		DGEC, Censo de Comercio
Número de establecimientos, según rama de actividad y tipo de sociedad	x	x		x				x		DGEC, Censo de Comercio
Número de establecimientos, según rama de actividad y valor de las ventas	x	x	x	x				x		DGEC, Censo de Comercio
Número de establecimientos, según número de personas ocupadas en los mismos	x			x	x	x		x		DGEC, Censo de Comercio
Personal ocupado, según clase de personal ocupado		x		x				x		DGEC, Censo de Comercio
Valor de las ventas de mercaderías y otros ingresos		x	x	x				x		DGEC, Censo de Comercio
Índice de ventas del comercio de San José			x						x	BCCR, Departamento de Estudios Económicos

12.- TURISMO

N O M B R E	CARACTERISTICAS		COBERTURA				PERIODICIDAD			FUENTES Y OBSERVACIONES
	G	P	T	P	C	D	D	A	M	
<u>I VIAJEROS</u>										
Turistas y dólares procedentes del Istmo Centroamericano, según país de procedencia	x	x	x					x		ICT, Anuario de Estadísticas de Turismo.
Total de turistas ingresados a Costa Rica, e ingreso en dólares por concepto de turismo, por meses	x	x	x						x	ICT, Anuario de Estadísticas de Turismo.
Promedio anual, mensual y diario de ingresos de turistas y dólares	x	x	x						x	ICT, Anuario de Estadísticas de Turismo.
Total ingresados a Costa Rica por zonas y países de América del Norte y América Central	x		x						x	ICT, Anuario de Estadísticas de Turismo.
Total de personas ingresadas, según puertos de ingreso		x	x						x	ICT, Anuario de Estadísticas de Turismo.
Costarricenses y residentes salidos, según mes, por vías y puertos.			x						x	ICT, Anuario de Estadísticas de Turismo.
<u>II HOTELES</u>										
Porcentaje de ocupación hotelera del Valle Central, según categorías									x	ICT, Anuario de Estadísticas de Turismo.
Porcentaje de ocupación hotelera de la provincia de Puntarenas, según categorías, por mes. 1/						x			x	ICT, Anuario de Estadísticas de Turismo.
Total de habitaciones disponibles, por zonas y años			x						x	ICT, Anuario de Estadísticas de Turismo.

1/ También existe la misma estadística para las provincias de Guanacaste y Limón.

13.- TRANSPORTE

N O M B R E	CARACTERISTICAS					COBERTURA				PERIODICIDAD			FUENTES Y OBSERVACIONES
	Tk	V	Pk	T	P	T	P	C	D	D	A	M	
<u>I AEREO</u>													
Movimiento internacional de pasajeros -transporte aéreo, según nacionalidad de las naves, por zonas geográficas					x	x						x	DGEC, Departamento de Estadísticas Económicas.
Número y características de los aeropuertos públicos y privados en Costa Rica						x						x	MOPT, Dirección General de Planificación.
Carga transportada por todas las compañías de aviación, según importación y exportación.				x		x					x		MOPT, Dirección General de Planificación.
Pasajeros y carga movilizados en el Aeropuerto Juan Santamaría, según clase de pasajeros y de carga				x	x	x						x	Dirección General de Aviación Civil.
Movimiento de aeronaves, según tipo de servicios, sistemas de propulsión y número de motores						x						x	DGEC, Departamento de Estadísticas Económicas.
Transporte aéreo doméstico efectuado por las compañías de avionetas, según número de vuelos					x	x						x	MOPT, Dirección General de Planificación
Costa Rica: aeropuertos en servicio, tipo más grande de avión que lo utilizan, tipo de operación, superficie de rodamiento y facilidades de operación						x						x	MOPT, Dirección General de Planificación
<u>II MARITIMO</u>													
Movimiento internacional de carga, pasajeros y naves		x		x	x	x						x	MOPT, Dirección General de Planificación
Número de naves llegadas al país, según puertos de entrada.						x						x	DGEC, con base en información suministrada por las Aduanas Nacionales
<u>III FERROVIARIO</u>													
Carga transportada por los ferrocarriles en tonelaje y toneladas kilómetro.	x			x		x						x	MOPT, Dirección General de Planificación
Pasajeros transportados, pasajeros kilómetro y kilometraje promedio, según empresa				x	x	x						x	DGEC, Con base en información suministrada por las gerencias de las compañías ferrocarrileras.

... Continuación 13.- TRANSPORTE

N O M B R E	CARACTERISTICAS					COBERTURA				PERIODICIDAD			FUENTES Y OBSERVACIONES
	Tk	V	Pk	T	P	T	P	C	D	D	A	M	
Longitud de las líneas de ferrocarril en Costa Rica, según clase de línea y empresa						X					X		DGEC, Departamento de Estadísticas Económicas.
<u>IV CARRETERAS</u>													
Longitud de las carreteras de Costa Rica, según capa de rodamiento						X	X					X	DGEC, Departamento de Estadísticas Económicas.
Toneladas-kilómetro y Pasajeros-kilómetro, movilizadas en Costa Rica, según clase de carretera	X		X	X	X	X						X	DGEC, Departamento de Estadísticas Económicas.
Vehículos en circulación, según estilo						X	X				X		DGEC, Departamento de Estadísticas Económicas.
Mapa de flujo de tránsito para la ciudad de San José						X	X		X		X		MOPT, Dirección General de Planificación.
Vehículos automotores en circulación, según tipo por años		X				X					X		MOPT, Dirección General de Planificación.
Vehículos, pasajeros y toneladas kilómetro, según carreteras nacionales y regionales						X					X		MOPT, Dirección General de Planificación.
Longitud de carreteras y caminos, según clase y tipo de rodamiento, por años						X					X		MOPT, Dirección General de Planificación.
Inventario carreteras, caminos y puentes.						X					X	X	MOPT, Estadísticas no Publicadas. Estadística "permanente".

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14.- COMERCIO EXTERIOR Y BALANZA DE PAGOS X

N O M B R E	CARACTERISTICAS				COBERTURA				PERIODICIDAD			FUENTES Y OBSERVACIONES
	V	P	N	R	T	P	C	D	D	A	M	
I COMERCIO EXTERIOR												
Exportación e importación totales, por zonas económicas y países	x				x					x		DGEC, Comercio Exterior de Costa Rica.
Exportación e importación por aduanas	x	x			x						x	DGEC, Comercio Exterior de Costa Rica.
Importación según clasificación NAUCA	x				x					x		DGEC, Comercio Exterior de Costa Rica.
Artículos importados, según país de origen	x	x	x	x	x					x		DGEC, Comercio Exterior de Costa Rica.
Exoneraciones de impuestos sobre los artículos importados, según artículos	x	x	x		x					x		DGEC, Comercio Exterior de Costa Rica.
Exportación por artículos, según la clasificación NAUCA	x	x	x		x						x	DGEC, Departamento de Estadísticas Económicas.
Importaciones según categorías económicas	x				x					x		DGEC, Comercio Exterior de Costa Rica.
II BALANZA DE PAGOS												
Estructura y financiamiento de los pagos internacionales del país	x				x						x	BCCR, Departamento de Estudios Económicos.
Viajes, transportes y seguros	x				x						x	BCCR, Departamento de Estudios Económicos.
Pagos de transferencia	x				x						x	BCCR, Departamento de Estudios Económicos.
Movimientos de capital	x				x						x	BCCR, Departamento de Estudios Económicos.

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15.- CUENTAS NACIONALES, MONETARIAS Y FISCALES X

N O M B R E	CARACTERISTICAS				COBERTURA				PERIODICIDAD			FUENTES Y OBSERVACIONES
	V	Vc	I	E	T	P	C	D	D	A	M	
<u>I FISCALES</u>												
Presupuesto del Gobierno			x	x	x					x		Contraloría General de la República.
Liquidación del Presupuesto del Gobierno Central	x				x					x		Contraloría General de la República.
Presupuesto del Gobierno de la República y financiamiento del déficit	x				x					x		Contraloría General de la República.
Índice de crecimiento de los ingresos reales ordinarios del Gobierno Central			x		x					x		Contraloría General de la República. Memoria Anual.
Ingresos reales ordinarios, según clasificación económica			x		x					x		Contraloría General de la República. Memoria Anual.
Gastos totales del Gobierno Central y su financiamiento				x	x						x	Contraloría General de la República.
Deuda interna bonificada	x				x						x	BCCJ, Boletín Estadístico Mensual.
Egresos efectivos del Presupuesto, según instituciones y objeto del gasto				x	x					x		Contraloría General de la República.
Comparación de exenciones concedidas e impuesto por importación	x				x					x		Ministerio de Hacienda. Memoria Anual.
Contribuyentes según escala gravable	x				x					x		Dirección General de la Tributación Directa
Sociedades y empresas individuales, según nivel de ingreso bruto			x		x	x				x		DGTD, Estadística Demográfica Fiscal.
Contribuyentes según nivel de ingreso bruto			x		x	x				x		DGTD, Estadística Demográfica Fiscal
Total de ventas brutas	x				x						x	DGTD, Impuesto sobre las Ventas
Recaudación mensual Impuesto de Ventas					x						x	DGTD, Impuesto sobre las Ventas
Total ventas según tipo de empresa	x				x						x	DGTD, Impuesto sobre las Ventas

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... Continuación 15.- CUENTAS NACIONALES, MONETARIAS Y FISCALES

NOMBRE	CARACTERISTICAS				COBERTURA				PERIODICIDAD			FUENTES Y OBSERVACIONES	
	V	Vc	I	E	T	F	C	D	D	A	M		
Impuesto territorial			X		X						X		DGTD, Impuesto sobre las Ventas
Declarantes y contribuyentes, según nivel de ingreso bruto			X		X								Dirección General de la Tributación Directa.
Total de contribuyentes, según ingreso gravable	X		X		X	X					X		Dirección General de la Tributación Directa.
Empresas individuales, según ingreso gravable	X				X						X		Dirección General de la Tributación Directa.
Ingreso bruto de las sociedades y empresas individuales	X				X						X		Dirección General de la Tributación Directa.
Renta gravable de los contribuyentes del impuesto sobre la renta, según categorías	X				X						X		Dirección General de la Tributación Directa.
Distribución empleados no contribuyentes y estado civil					X						X		Dirección General de la Tributación Directa.
Relación carga tributaria y social y el producto nacional bruto a precios de comprador			X		X	X	X				X		Dirección General de la Tributación Directa.
Sociedades contribuyentes, según ingreso gravable	X				X						X		BCCR, Boletín Estadístico.
					X						X		Dirección General de la Tributación Directa.
II MONETARIAS													
Colocaciones efectivas totales, por destino, en el Sistema Bancario Nacional.	X				X						X		BCCR, Boletín Estadístico
Tasas de redescuento y de interés, del Sistema Bancario Nacional					X						X		BCCR, Boletín Estadístico
Colocaciones y recuperaciones efectivas, por actividades, clasificadas por operación e inversión del SBN.	X				X						X		BCCR, Depto. Monetario
Reservas colocaciones, clasificadas por operación e inversión de las secciones financieras del SBN	X				X						X		BCCR, Depto. Monetario
Depósitos en cuenta corriente, según procedencia	X				X						X		BCCR, Boletín Estadístico
Indice de precios al por mayor					X						X		BCCR, Boletín Estadístico Mensual
Indices de precios para el consumidor de ingreso medio y bajo del área Metropolitana, por grupos principales					X						X		Dirección General de Estadística y Censos. Departamento de Estadísticas Sociales.

... Continuación 15.- CUENTAS NACIONALES, MONETARIAS Y FISCALES

N O M B R E	CARACTERISTICAS				COBERTURA				PERIODICIDAD			FUENTES Y OBSERVACIONES
	V	Vc	I	E	T	P	C	D	D	A	M	
Indices de precios para el consumidor del Valle Central											x	DGEC, Depto. de Estadísticas Económicas.
Precios promedio de artículos de primera necesidad pagados por el consumidor, según meses, regiones agrícolas y artículos							x				x	MAG, Boletín Estadístico Agropecuario. Trimestral.
Precios promedio de algunos insumos agrícolas pagados por el consumidor, según meses, regiones agrícolas y artículos							x				x	MAG, Boletín Estadístico Agropecuario. Trimestral.
Emisión monetaria y medio circulante	x				x						x	BCCR, Boletín Estadístico Mensual.
Tipos de cambio fijados por el Banco Central					x						x	BCCR, Bol. Estadístico Mensual
III CUENTAS NACIONALES												
Formación interna bruta del capital por actividad económica	x				x						x	BCCR, Cifras de Cuentas Nacionales de Costa Rica.
Financiamiento de la formación interna bruta del capital	x				x						x	BCCR, Cifras de Cuentas Nacionales de Costa Rica.
Producto Interno Bruto por actividad	x	x			x						x	BCCR, Cifras de Cuentas Nacionales de Costa Rica.
Producto y gasto interno bruto a precio del comprador		x			x						x	BCCR, Cifras de Cuentas Nacionales de Costa Rica.
Oferta y demanda globales		x			x						x	BCCR, Cifras de Cuentas Nacionales de Costa Rica.
Remuneración de los empleados nacionales, por actividades económicas	x				x						x	BCCR, Cifras de Cuentas Nacionales de Costa Rica.
Producto Interno Bruto generado por el Sector Público	x				x						x	BCCR, Cifras de Cuentas Nacionales de Costa Rica.
Ingreso nacional bruto a precios de 1966	x	x			x						x	BCCR, Cifras de Cuentas Nacionales de Costa Rica.
Balanza de pagos según bienes y servicios y movimientos de capital	x				x						x	BCCR, Depto. de Estudios Económicos.

OFFICE OF INFORMATION OF THE PRESIDENT

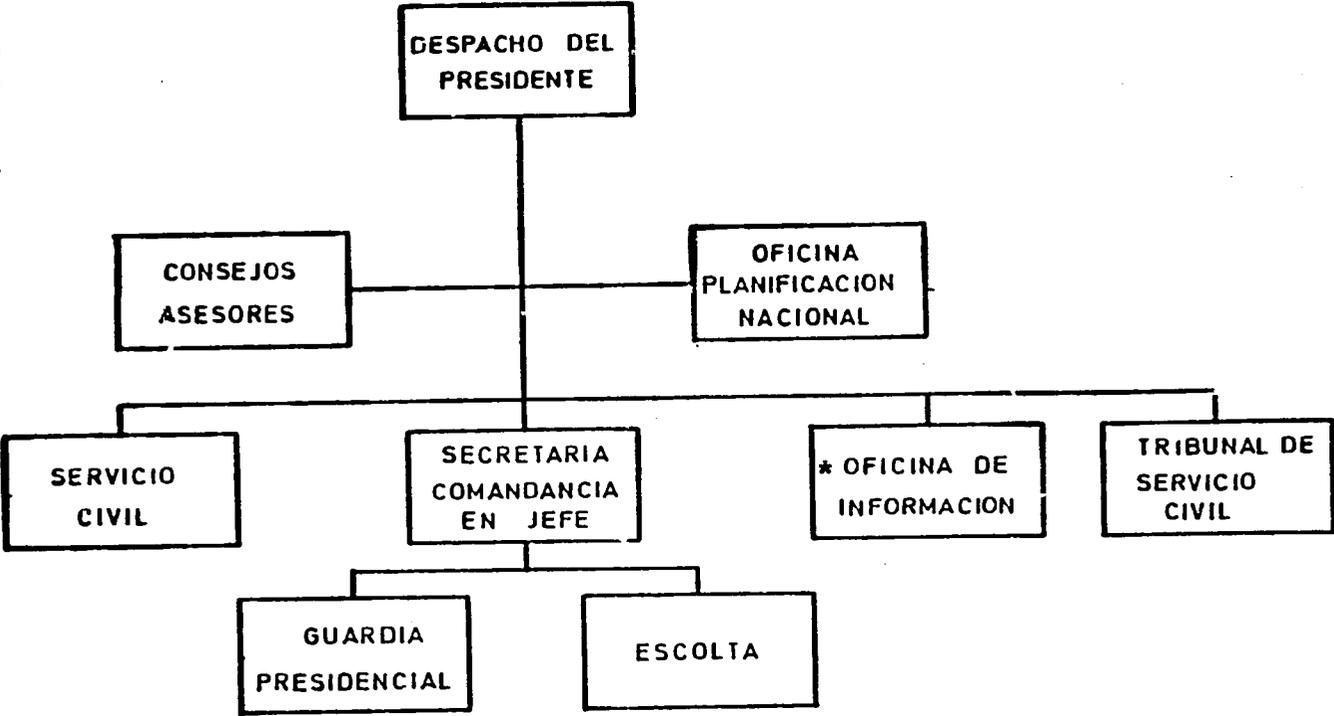
The Office of Information of the President is charged by legal decree with the establishment of the National Development Information System. The Office has the following major responsibilities:

- the development of an information system which can generate, store and process the development data of the various sectors of the National Economy;
- the establishment of instruments and methodologies to improve the planning and policymaking activities related to development programs and projects;
- the more effective and efficient integration of public sector data into the National Planning process; and
- to provide the executive branch with timely information on development problems.

OIP consists of five units and a Nutrition Information Group (see organizational chart). The Project will be located in the Systems and Information Unit which will assume the technical responsibilities for implementing the Project. The Project Coordination Office will manage the loan disbursements, preparation of procurement and evaluation documents as well as overall Project coordination.

The Nutrition Information Group supported under the O26 Loan is linked directly to the Systems Unit and will provide the Project personnel with valuable experience in the creation of the NDIS particularly in the first year of the Project.

PRESIDENCIA DE LA REPUBLICA

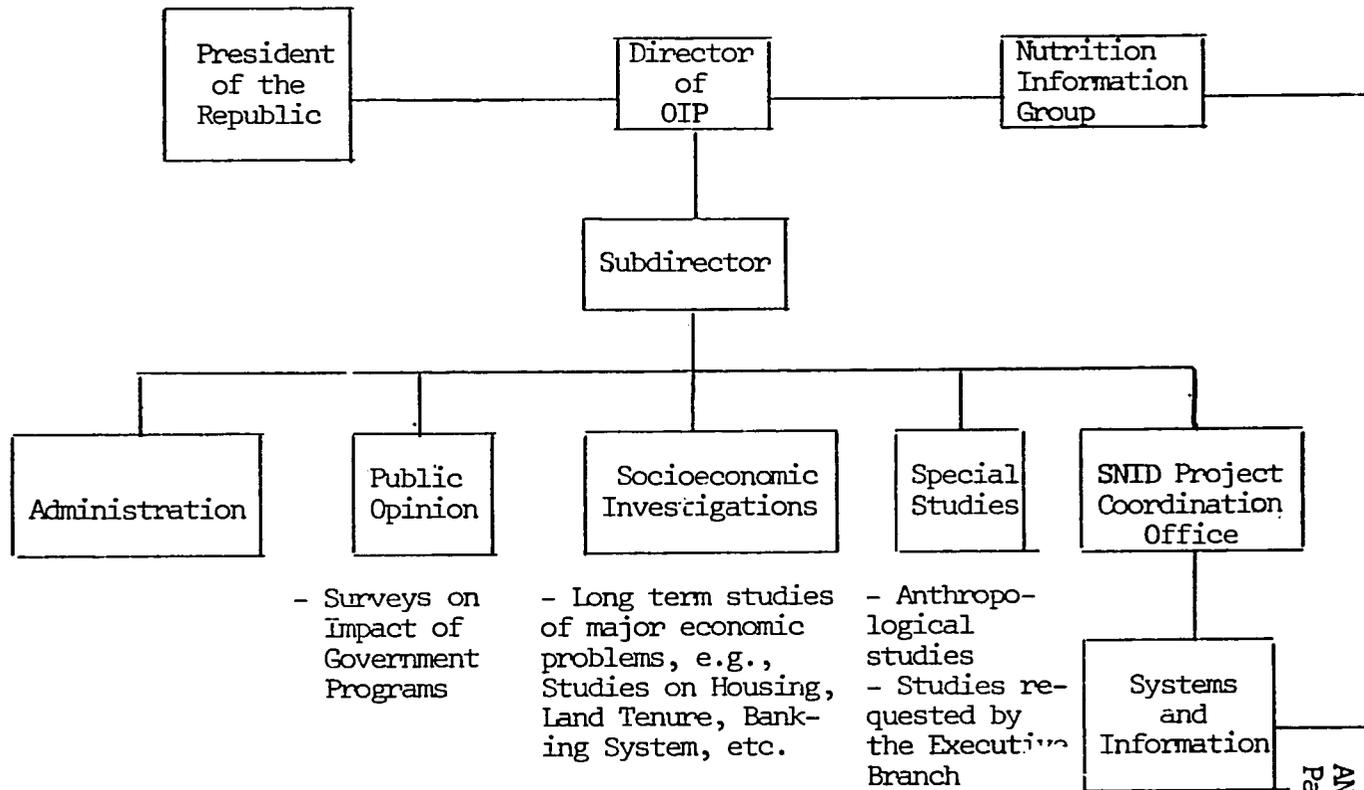


UNCLASSIFIED

* Office of Information

Office of Information of the President (OIP)

Organizational Chart



UNCLASSIFIED

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NATIONAL PLANNING OFFICE (OFIPLAN)

The National Planning Office is responsible for the development of the National Plan by sector and region, reviewing the operational plans of the sectors, assisting the Ministry of Finance in the control of the budget, and the monitoring and evaluation of GOCR programs. It also is responsible for the design and implementation of the Administrative Reform Plan.

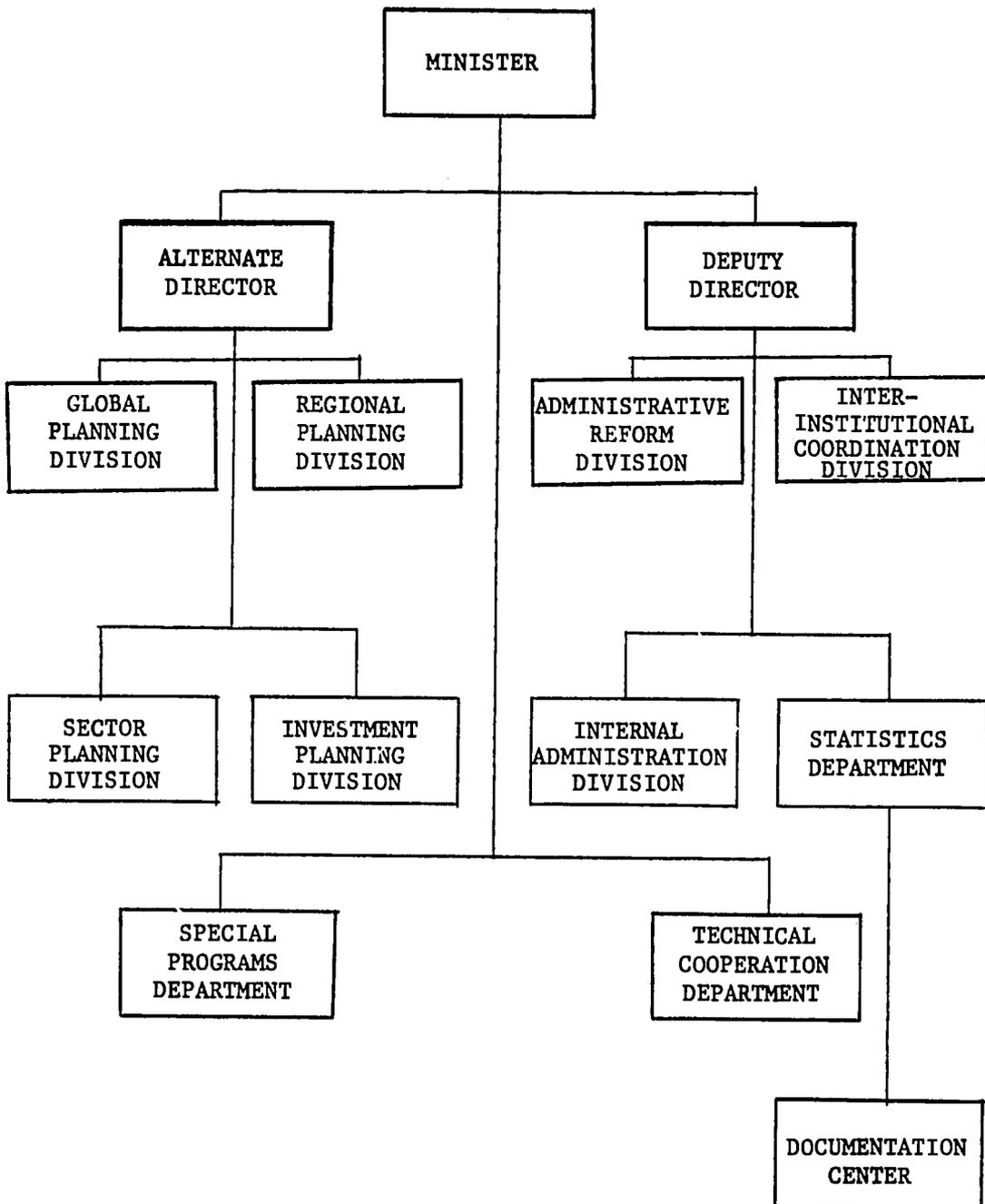
OFIPLAN is divided into seven major operating Divisions: a Global Planning Division, a Regional Planning Division, a Sector Planning Division, an Investment Planning Division, an Internal Administration Division, an Administrative Reform Division and an Interinstitutional Coordination Division (see organizational chart). The Project will work with the Interinstitutional Coordination Division on the Data Bank activities. This Division consists of five professionals. However none of them have had experience with data systems; the project will support a contract systems analyst who will work with a counterpart systems analyst in this Division. This Division will have to work closely with the other OFIPLAN Divisions particularly the Planning and Administrative Reform Divisions. Good working relationships among the OFIPLAN Divisions appear to exist.

OFIPLAN lacks personnel who are trained in data management. Most of their technical people are sector analysts many of whom could benefit from the Use and Analysis of Data training courses supported by the Project.

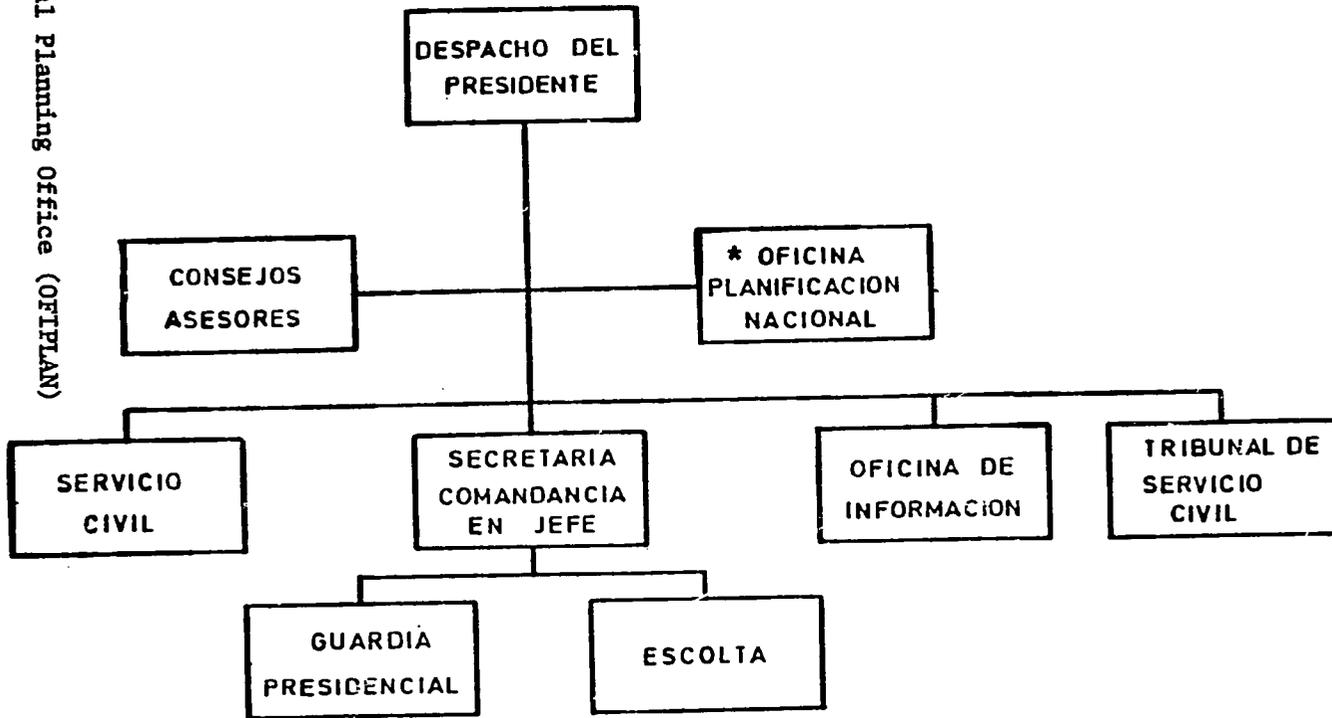
The Documentation Center has been described in detail in the Project Description Section.

NATIONAL PLANNING OFFICE (OFIPLAN)

Organizational Chart



PRESIDENCIA DE LA REPUBLICA



UNCLASSIFIED

* National Planning Office (OTPLAN)

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MINISTRY OF FINANCE: MECHANIZED TECHNICAL OFFICE (OTM)

This Office serves as the computing center for the GOCR, plans the government's national computer program, and is the disbursement agency for the GOCR (see organizational chart). Since 1966 it has shared with OFIPLAN the responsibility of reviewing requests for computer equipment purchases and reviewing these for their economic and technical feasibility.

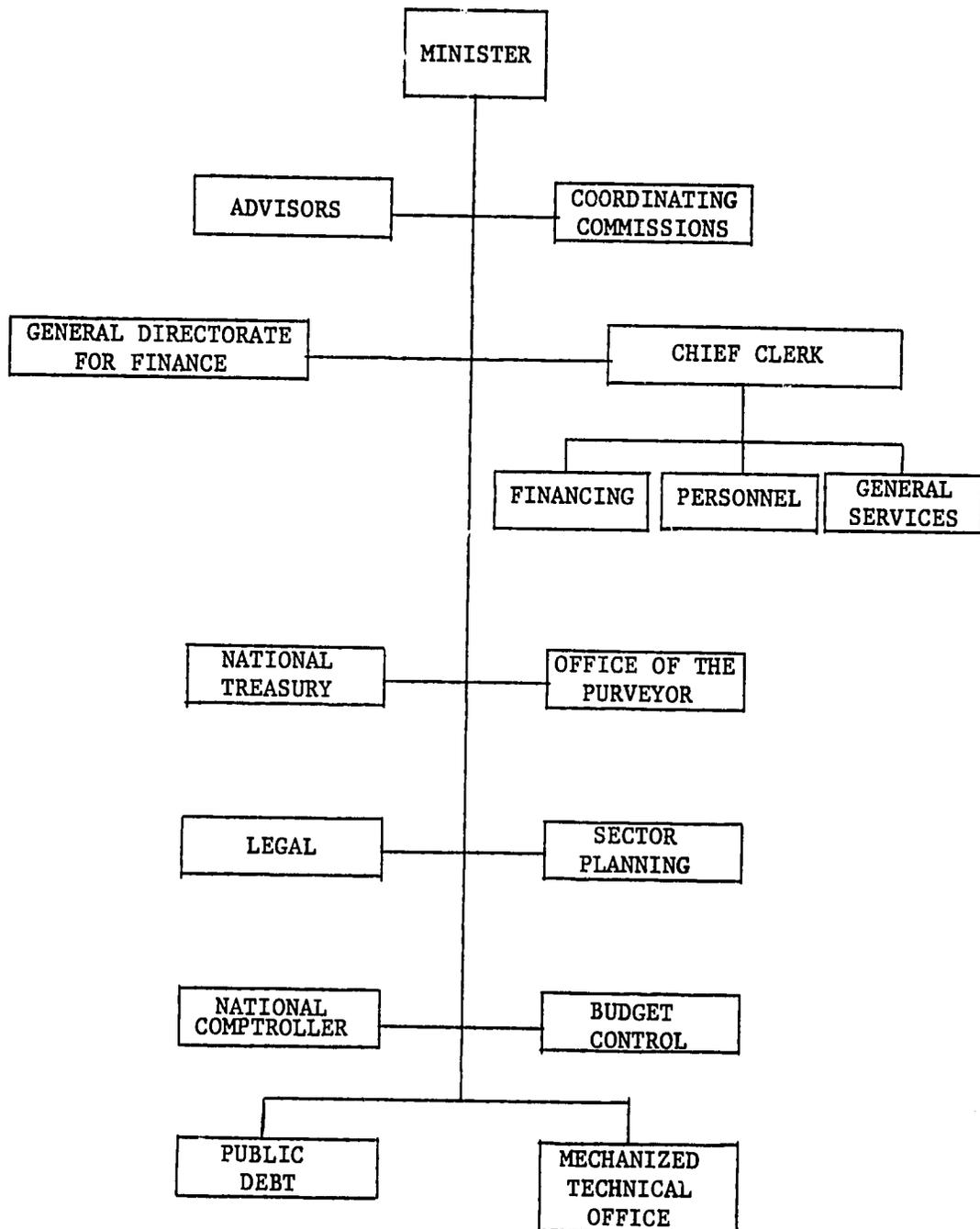
The Office consists of 4 major units:

1. Administration Unit
2. Payroll Unit
3. Programs and Systems Analysis
4. Data Processing Unit

Both the Data Processing Unit and the Programs and Systems Analysis Unit will be providing operating services to the SNID. The Office consists of approximately 63 individuals working directly on the data processing activities. Thirteen of these are classified as programmers and eleven as analysts. The technical equipment installed in this Office is described in Annex II-E.

MINISTRY OF FINANCE (MH)

Organizational Chart



MINISTRY OF HEALTH

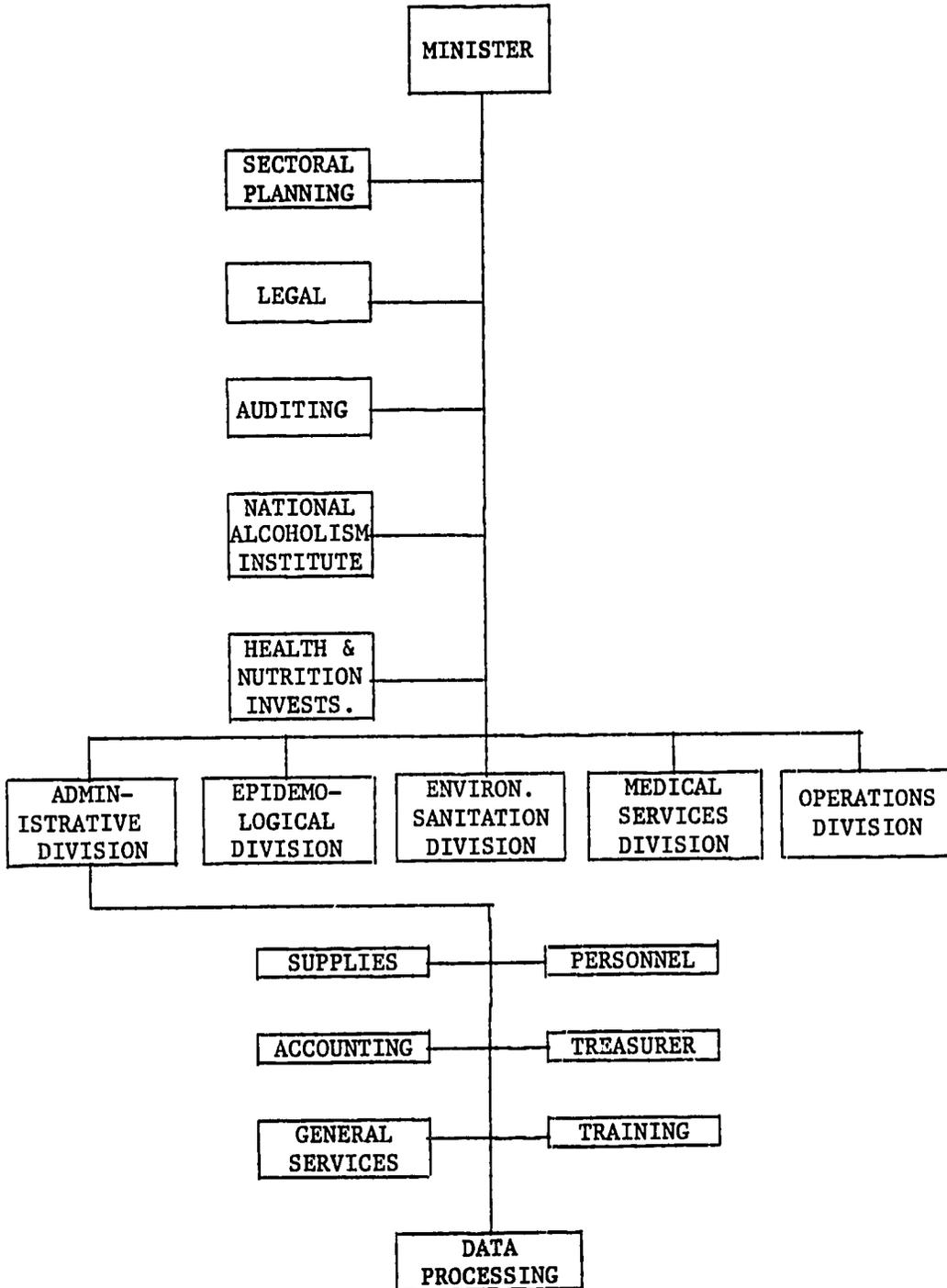
Two units within the Ministry of Health are involved in planning and data analysis: the Data Processing Unit which is located in the Administrative Division and the Sectoral Planning Office for Health (see organizational chart).

The Administrative Division is charged with planning, organizing, directing and managing the execution of the budgeted programs, such as Hospitals, Health Campaigns and the Ministry itself. The Data Processing Unit within this Division uses on an IBM S/3 which is mainly used for fiscal control activities. One Director, two programmers, one Chief of Operations and nine operators/tabulators make up the Unit.

The Sectoral Planning Office is responsible for developing the National Health Plan consistent with the National Development Plan and those of the other sectors; controlling, coordinating and evaluating the progress of Health Programs; and conducting studies to improve the effectiveness and efficiency of services provided by the Ministry.

MINISTRY OF HEALTH

Organizational Chart



AGRICULTURAL SECTOR PLANNING OFFICE (OPSA)

OPSA was established in 1975 as one of the entities which comprises the planning system for the agricultural sector. It serves as a link between these entities and OFIPLAN in the formulation, monitoring and evaluation of the sector's plans, policies, programs and projects. It is currently staffed by approximately 60 technical personnel.

Among the functions assigned to the Office are:

1. The formulation of the National Plan for Agricultural Development within the framework of the National Development Plan and to collaborate with OFIPLAN in reviewing agricultural program budgets submitted to it.
2. The coordination of the actions of the planning units in the sector with respect to the development, management and evaluation of the programs and projects in the sector.
3. To follow the progress of on-going programs and projects and recommend corrective actions.
4. Promote the adoption of measures which strengthen planning institution functions and methodologies and work with the DGEC to obtain the data necessary for agricultural sector planning.
5. Develop and present to the National Agricultural Council policies, programs and projects which promote the development of the agricultural sector.

The Office is divided into six divisions (see organizational chart) with the following responsibilities:

1. National System for Agricultural Information Division which is responsible for collecting, processing, analyzing and disseminating agricultural information and also coordinates the information units of the agricultural sector.
2. A Natural Resources Division which is developing a soils map and agricultural zone criteria for the country.

3. A Programming and Plans Division which is involved in the formulation of policies, plans and programs, as well as the development of methodologies for improved description and formulation of plans in the sector.

4. A Projects Division which develops methodologies for the design and management of projects.

5. A Financing Division which reviews the allocation of resources in the sector and is responsible for channeling international technical assistance.

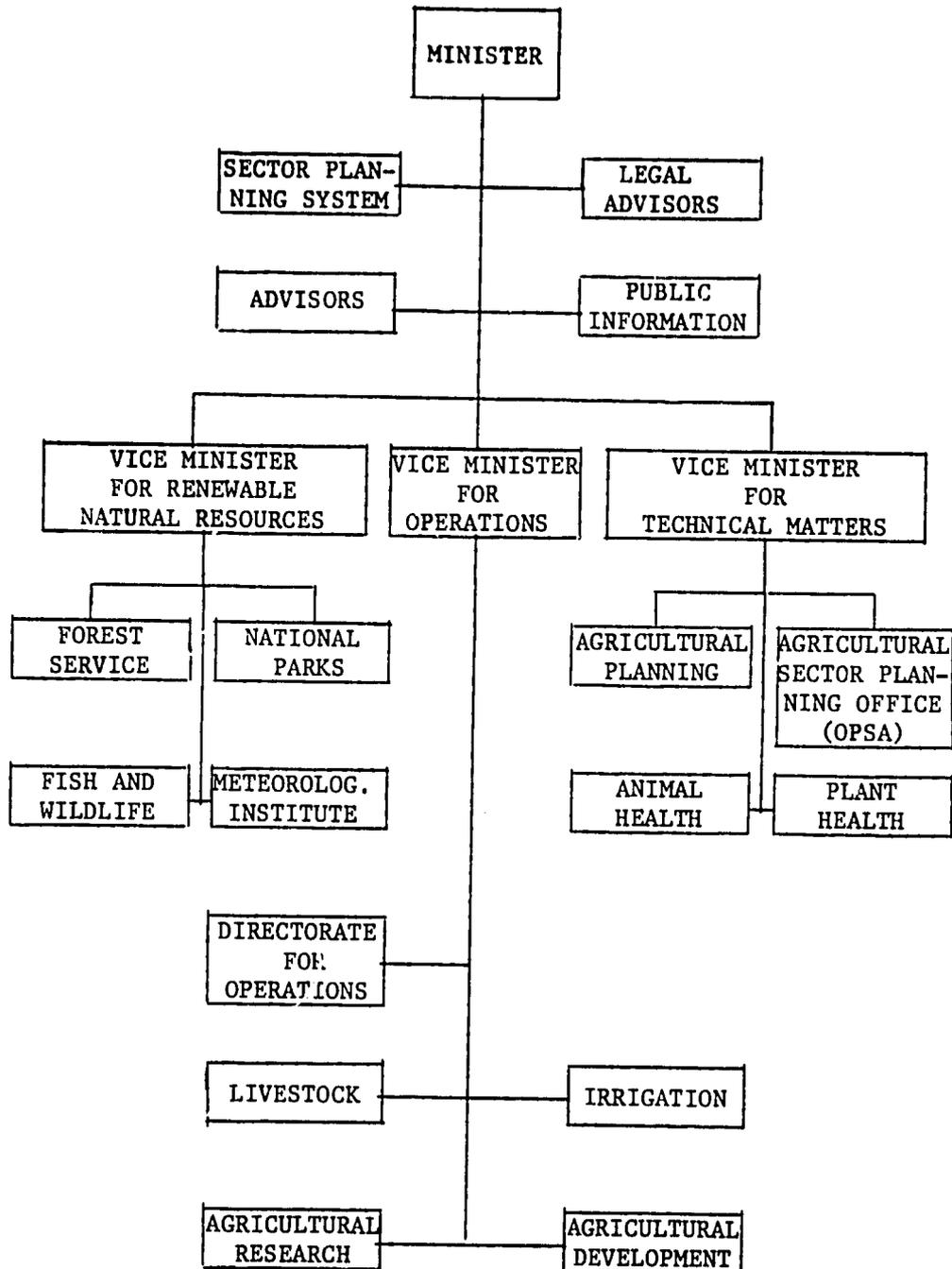
6. A Marketing Division which is involved in the analysis of marketing programs and projects and recommends measures to improve their management.

The functions being carried out by OPSA are intrinsically linked to the activities of this Project. OPSA will be the primary implementor of the Area Frame and Surveys Output; will receive assistance for its Documentation Center and also be involved closely in the Data Bank activity.

The Area Frame Unit and the Data Bank terminal will be located in the National Information System for Agriculture Division (see organizational chart). To carry out its responsibilities OPSA will receive loan assistance as outlined in the project description.

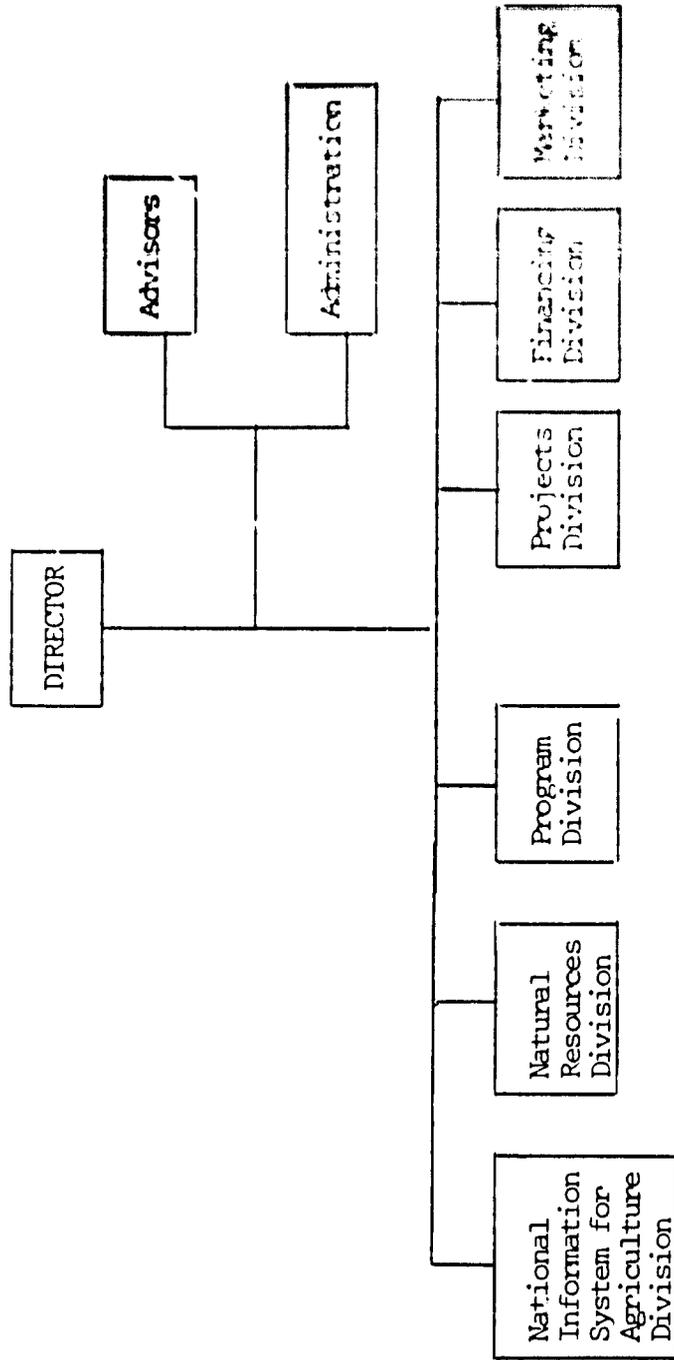
MINISTRY OF AGRICULTURE AND ANIMAL HUSBANDRY

Organizational Chart



Agricultural Sector Planning Office (OPSA)

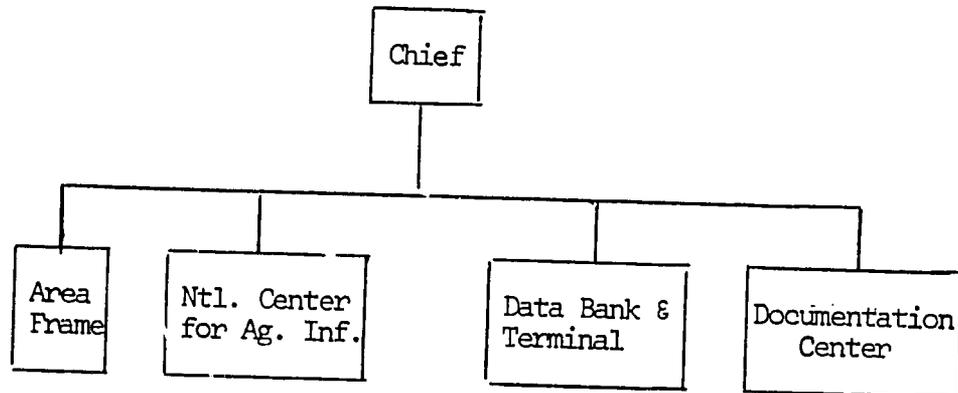
Organizational Chart



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National Information System for Agriculture Division



MINISTRY OF ECONOMY, INDUSTRY AND COMMERCE

I. Directorate for Statistics and Census

GOCR legislation has charged the DGEC with the following functions:

- to collect all basic statistics through population, housing, agriculture and economic censuses, once every 10 years;
- to compute the consumer price index;
- to collect the international trade statistics;
- to compile statistical series on the basis of primary data collected by other public sector agencies, in areas such as health, education, tourism, etc.;
- to produce vital statistics (on births, deaths, weddings, divorces, etc.);
- to collect statistics about transportation, capital formation and livestock inventory changes;
- to conduct household surveys, industrial and agricultural surveys, and;
- to conduct special surveys, on topics such as fertility, incomes and expenditures, employment and unemployment, etc.

The DGEC is also charged with providing institutions with technical assistance on survey matters.

The DGEC consist of five operating Departments:

1. Information Department.
2. Social Statistics Department.
3. Economic Statistics Department.

4. Census Department.

5. Data Center.

The terminal in DGEC will be located in the Data Center. The DGEC is discussed fully in Part IV.A.

II. Industrial Sector Planning Office (OSPI)

The Industrial Sector Planning Office consists of a Projects Department and a Department for Industrial Policy (see organization charts). The Office is headed by an Executive Director who is named by the National Industrial Council subject to approval by the Minister of Economy, Industry and Commerce and the Minister of OFIPLAN.

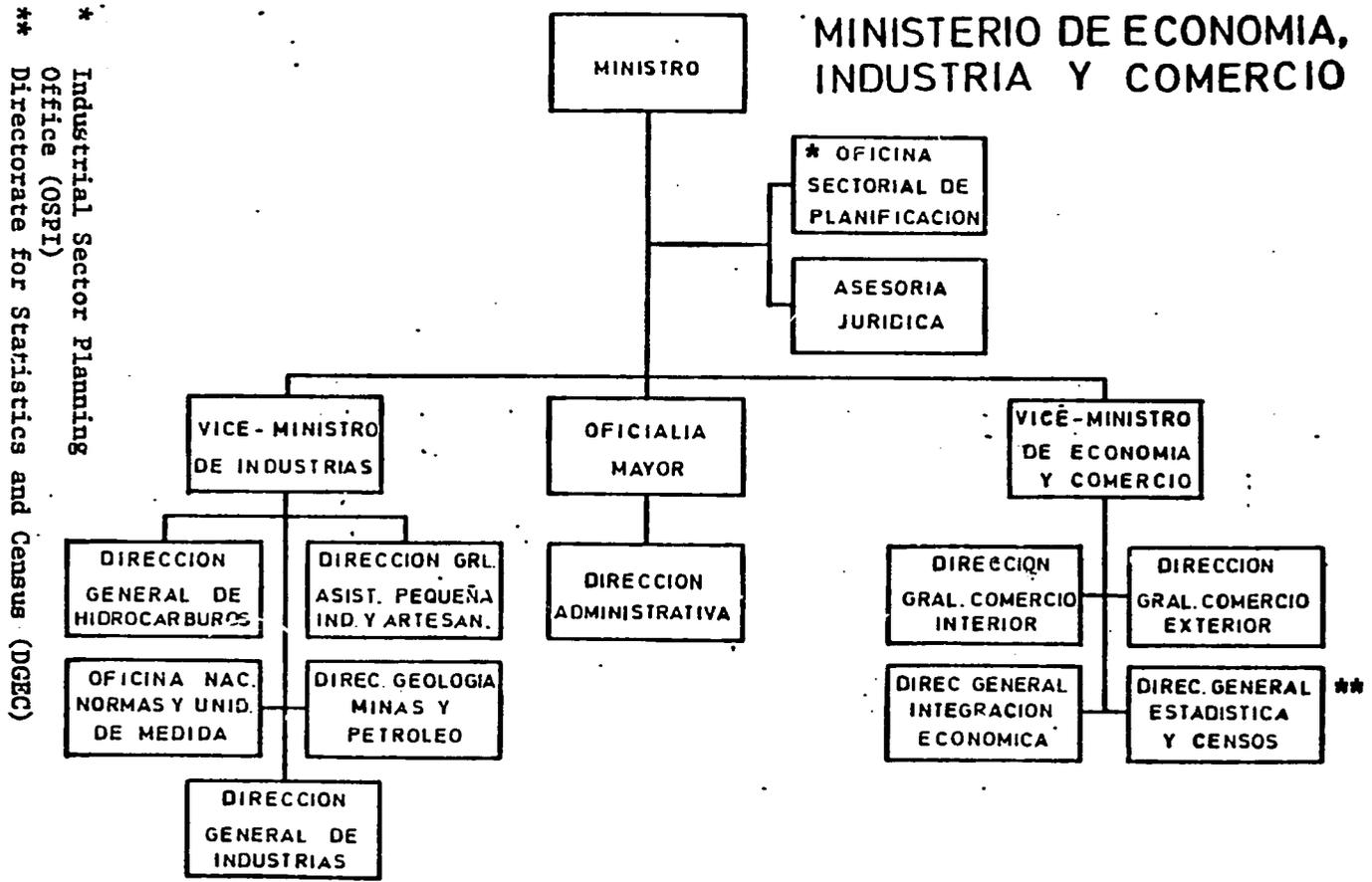
The Office consists of 20 individuals: the Director who is an Industrial Engineer in food technology; 8 Economists specializing in project design and evaluation, 1 Agriculturalist (on loan from OPSA); 1 Agricultural Engineer (on loan from the Central Bank); 1 Assistant to the Economists; 3 Secretaries, 4 Experts in Productivity (part of an international technical assistance team from Israel and the Netherlands), and 1 Industrial Advisor.

The major functions of the Office are:

1. To develop the national plan for the Sector in accord with the National Development Plan.
2. To establish the appropriate channels of communication with the units of the Industrial Sector so that planning has an impact on operating programs.
3. Monitor the Industrial Sector.
4. Identify and develop programs and projects in the sector which fit within the guidelines of the National Plan; supervise the preparation of projects particularly with regard to their feasibility and socioeconomic impact.

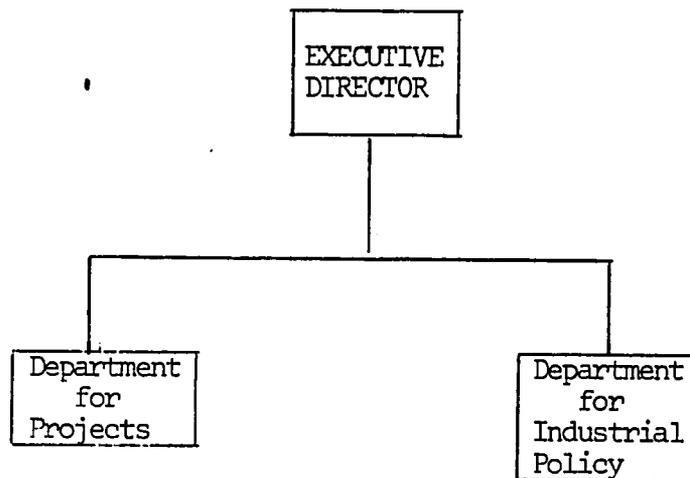
Since the Office does not have personnel with experience in EDP the training courses and assistance provided by OIP under this Project should help improve their planning capabilities. Otherwise the Office would continue to carry out existing functions under the Project.

MINISTERIO DE ECONOMIA, INDUSTRIA Y COMERCIO



* Industrial Sector Planning Office (OSPI)
 ** Directorate for Statistics and Census (DGEC)

Industrial Sector Planning Office (OSPI)
Organizational Chart



NUTRITION LOAN 026: NUTRITION INFORMATION SYSTEM COMPONENT

I. History

The Nutrition Information component has had a difficult implementation history. Jurisdictional disputes over the location of the Information Group delayed the startup of the component. There were serious problems in staffing the Group because of poor recruiting and low salary levels. In effect, there was negligible progress until May 1978 when the Office of Information of the President was given the authority to implement the Loan's information component.

A highly qualified individual was appointed to head the Group and given the authority to recruit staff and properly manage the Group. One of the first tasks was the redesign of the implementation plan and budget which was carried out by this person and the USAID project advisor. The outputs were clearly defined which resulted in a more cogent specification of staff responsibilities, needs, and monitoring of activities.

II Staffing

The Nutrition Information Group is headed by an industrial engineer with a specialization in Information Systems. He has worked for the Office of Information of the President for about three years. Two full time contract PAHO technicians assist the group: an information systems specialist and a computer systems specialist.

The remaining GOCR staff consist of: one industrial engineer, one statistician, one agricultural economist, one computer systems analyst, one programmer, three part-time industrial engineers from the University of Costa Rica, two keypunch operators, one data entry supervisor and two secretaries. In addition, four sociologists and two anthropologists one directly involved in research to develop Operational Methodologies.

III Current Status

The group has developed a design for the nutrition module and is currently involved in the purchase of the data analysis program SPSS. A legal agreement is being prepared to utilize the computer at the Ministry of Finance with the addition of disk units and terminals. A detailed plan on necessary hardware, software (particularly Data Based Management System software) and technical assistance for the Ministry of Finance computer center will form part of this agreement.

The group is working closely with health/nutrition planners to tailor the system to their needs.

In summary, the Information component now has the proper leadership, more clearly defined objectives and responsibilities, and the staff necessary to carry out these responsibilities.

RELATIONSHIP BETWEEN ROCAP/PIADIC AND SNID PROJECT

The 27 month extension of ROCAP's Central American Agricultural Research and Information Program has been approved. There are several activities which are highly complementary to the SNID Project. These include assistance in construction of the area frame sample, in development and use of key baseline data and in the establishment of specialized agricultural data and information centers. The ROCAP extension begins in March 1979 while implementation activities for the SNID are scheduled for January 1980. The technical assistance available from the ROCAP project will therefore provide the SNID Project with valuable expertise in the areas of data base management, area frame construction and documentation centers. However, the SNID Project must provide substantial additional support for the implementation of these activities since the ROCAP technical assistance is directed at six countries requiring different levels of assistance and would not be sufficient to achieve all the SNID outputs.

A. Area Frame

According to the ROCAP PP technical assistance would be provided every month during 1979 and every two months during 1980 and 81. In discussions with the Project Manager, it has been determined that approximately 5 p m of technical assistance would be available for the area frame activity. These would consist of short visits to provide overall guidance in area frame construction. In addition, several courses would be presented in data use, crop forecasting, interviewing and supervising techniques, and basic sampling theory and frame construction.

The SNID PP would support the required technical assistance from USDA mathematical statisticians, survey statisticians, programmers, etc. which would be needed to complete frame construction and actually carry out the surveys.

B. ROCAP Output in Development/Use of Baseline Data and Data Management (Numerical and Documentary)

The ROCAP/PIADIC PP provides approximately 18 p m of technical assistance in these areas. Approximately 9 p m of the U.S. and C.A. technical assistance would coincide with the SNID Project. The ROCAP assistance would be in the are of software selection and as a source of information on additional technical assistance that may be needed is the SNID Project. Again, the Project has the funds necessary to

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augment the technical assistance from ROCAP which while extremely valuable would not be sufficient to achieve the SNID data bank or Documentation Center outputs.

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