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

366 p.

PROJECT PAPER

Proposal and Recommendations
For the Review of the
Bilateral Assistance Subcommittee

PANAMA - Rural Growth and Service Centers

AID/BAS-002

UNCLASSIFIED

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

UNCLASSIFIED

AID/BAS-002

June 9, 1978

MEMORANDUM FOR THE BILATERAL ASSISTANCE SUBCOMMITTEE

PANAMA -
SUBJECT: Rural Growth and Service Centers

Attached for your review are recommendations for authorization of:

1. a loan to the Government of Panama in an amount not to exceed Ten Million United States Dollars (\$10,000,000) to assist in financing the United States dollar and local costs of a project to strengthen the employment and income generating and rural service capacity of growth and service centers in the Central and Western Regions of Panama and to establish a system capable of continuing the process of developing such centers throughout Panama.

2. the issuance of guaranties pursuant to Section 222 of the FAA of not to exceed Five Million Four Hundred Thousand (\$5,400,000) in face amount, assuring against losses of not to exceed one hundred percentum (100%) of loan investment and interest with respect to loans by eligible U.S. investors acceptable to A.I.D. made to finance housing projects in Panama.

This loan proposal and Housing Investment Guaranty are scheduled for consideration by the Working Group on Bilateral Assistance on Friday, June 16, 1978, at 10:00 a.m., in Room 5951 New State.

Please note that your views are requested at the close of the meeting. If you are a voting member, a poll sheet has been enclosed for your response.

Bilateral Assistance Subcommittee
Office of Policy Development and
Program Review

Attachments:

Summary and Recommendations
Project Analyses
Annex I (A-E), Annex II (A)

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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 Panamá		4. DOCUMENT REVISION NUMBER 			
5. PROJECT NUMBER (7 digits) <div style="border: 1px solid black; display: inline-block; padding: 2px;">525-0185</div>		6. BUREAU/OFFICE A. SYMBOL L.A.	B. CODE <div style="border: 1px solid black; display: inline-block; padding: 2px;">05</div>	7. PROJECT TITLE (Maximum 40 characters) <div style="border: 1px solid black; display: inline-block; padding: 2px;">Rural Growth and Service Centers</div>	
8. ESTIMATED FY OF PROJECT COMPLETION FY <div style="border: 1px solid black; display: inline-block; padding: 2px;">83</div>		9. ESTIMATED DATE OF OBLIGATION A. INITIAL FY <div style="border: 1px solid black; display: inline-block; padding: 2px;">78</div> B. QUARTER <div style="border: 1px solid black; display: inline-block; padding: 2px;">3</div> C. FINAL FY <div style="border: 1px solid black; display: inline-block; padding: 2px;">78</div> (Enter 1, 2, 3, or 4)			

10. ESTIMATED COSTS (\$000 OR EQUIVALENT \$1 - B./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						
(GRANT)	()	()	()	()	()	()
(LOAN)	(1,562)	(8,438)	(10,000)	(1,562)	(8,438)	(10,000)
OTHER U.S.						
1. HIG		5,400	5,400		5,400	5,400
2.						
HOST COUNTRY	56	13,044	13,100	56	13,044	13,100
OTHER DONOR(S)						
TOTALS	1,618	26,882	28,500	1,618	26,882	28,500

11. PROPOSED BUDGET APPROPRIATED FUNDS (\$000)									
A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. 1ST FY		H. 2ND FY		K. 3RD FY	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	I. GRANT	J. LOAN	L. GRANT	M. LOAN
(1) FN	263		100		10,000				
(2)									
(3)									
(4)									
TOTALS					10,000				

A. APPROPRIATION	N. 4TH FY		Q. 5TH FY		LIFE OF PROJECT		12. IN-DEPTH EVALUATION SCHEDULED
	O. GRANT	P. LOAN	R. GRANT	S. LOAN	T. GRANT	U. LOAN	
(1) FN						10,000	<div style="border: 1px solid black; display: inline-block; padding: 5px;"> MM YY 11 79 </div>
(2)							
(3)							
(4)							
TOTALS						10,000	

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	<div style="border: 1px solid black; border-radius: 50%; width: 100px; height: 100px; margin: auto;"></div>		
TITLE Charles B. Weinberg Director, USAID/Panamá			
DATE SIGNED			
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**RURAL GROWTH AND SERVICE CENTERS PROJECT
USAID/PANAMA**

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Note: Annex II B-M are being printed separately.

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
 Panamá

4. DOCUMENT REVISION NUMBER
 1

5. PROJECT NUMBER (7 DIGITS)
 525-0185

6. BUREAU/OFFICE
 A. SYMBOL LA B. CODE 05

7. PROJECT TITLE (MAXIMUM 40 CHARACTERS)
 Rural Growth and Service Centers

8. PROPOSED NEXT DOCUMENT
 A. 2 = PRP B. DATE MM YY
 3 = PP

10. ESTIMATED COSTS (\$000 OR EQUIVALENT, \$1 = B/.1)

FUNDING SOURCE		BA65284
A. AID APPROPRIATED		10,000
B. OTHER U.S.		5,400
1. HIG		
2.		
C. HOST COUNTRY		13,100
D. OTHER DONOR(S)		
TOTAL		28,500

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION
 a. INITIAL FY b. FINAL FY

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

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. FIRST FY 79		LINE OF PROJECT	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	H. GRANT	I. LOAN
(1) FN	263		100		1,296		10,000
(2)							
(3)							
(4)							
TOTAL					1,296		10,000

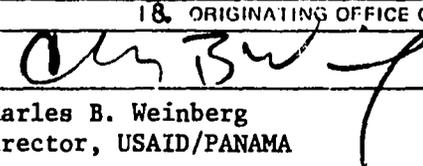
12. SECONDARY TECHNICAL CODES (maximum six codes of three positions each)
 710 | 810 | 830 | 840 | 860

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH)
 BR | BU | EQTY | PART | | |
 14. SECONDARY PURPOSE CODE
 723

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)
 To increase the income and improve the quality of life of the rural poor.

16. PROJECT PURPOSE (MAXIMUM 480 CHARACTERS)
 To set in motion a process that will significantly increase the employment and income generating and rural service capacity of growth and service centers in the Central and Western Regions of Panamá.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)

18. ORIGINATING OFFICE CLEARANCE
 Signature 
 Title Charles B. Weinberg
 Director, USAID/PANAMA
 Date Signed MM DD YY
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19. DATE DOCUMENT RECEIVED BY AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
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I. SUMMARY AND RECOMMENDATIONS

A. RECOMMENDATIONS

1. That a loan be authorized to the Government of Panama (GOP) in the amount of \$10,000,000 to be disbursed within five years from the date conditions precedent to initial disbursement have been satisfied. That the terms of the loan be as follows: 20 years including a ~~ten~~ year grace period at 2% interest during the grace period and 3% thereafter.

2. A Housing Guaranty be authorized to the Government of Panama (GOP) in the amount of \$5.4 million for a term of up to 30 years with a grace period of the repayment of principal to be negotiated with the investor. The interest rate payable to the U. S. investor shall not exceed the allowable rate of interest prescribed by the A.I.D. administrator pursuant to Section 223 (f) of the FAA, and shall be consistent with rates of interest generally available for similar type loans.

B. SUMMARY PROJECT DESCRIPTION

Conceptual Basis. The project is designed to help implement the Government of Panama's decentralized growth policies. These policies are aimed at stimulating growth and development in the populous Western and Central regions of the country to help overcome the enormous income gap between these areas and the metropolitan region centered around Panama City. The project is based on an integrated approach to urban and rural development and draws heavily upon central place and growth pole theory as articulated in recent spatial planning approaches to regional and rural development. The theory holds that rural and regional development takes place largely within the matrix of a hierarchy of interdependent centers which includes villages, market towns, service centers and regional growth centers and the linkages of these centers with their surrounding rural hinterlands. Strengthening the regional growth and service centers stimulates development throughout the hinterland region through spread effects which are manifested in the inter and intra-regional flows of people, goods, money, information and services (see Section III A, Technical Analysis for further detail).

The proposed project seeks to increase the income and improve the quality of life of the rural and urban poor by strengthening the employment and income generating and rural service capacity of eight key growth and service centers in the Western and Central regions. The two growth and six service centers were selected for project concentration because of the important service functions they perform for their own population and the population of their rural hinterlands. In fact most of the population of the two regions falls within the influence areas of these centers which are also the largest centers in the two regions.

Project Elements and Relationship to Project Concept.

The project will be carried out through three major activities: strengthening the GOP's capacity to plan and develop the centers (\$1.3 million); development of viable productive and supporting enterprises (\$11.1 million), and provision of housing and town infrastructure (\$14.7 million). The planning element is needed to: (a) help insure that individual projects are located to serve effectively the centers and surrounding populations; (b) relate urban to regional and rural development; (c) provide a basis for coordination of project activities at the local level; (d) provide a forum for local participation in the planning and development of the eight project centers; and (e) provide a framework for future growth and development of the centers within the context of the GOP's decentralization strategy.

Productive and supporting enterprises are essential to exploit the regional resource base for the benefit of the two project regions and to create employment opportunities for the target population. The enterprises, including agro-processing and other medium to small businesses also are intended to raise income levels within the region, create markets for the produce of small farmers and reduce local pressures to migrate to Panama City. This project element includes an industrial park in each of the two growth centers to help induce business investments in these centers which have the greatest potential for stimulating regional development.

Housing and town infrastructure is needed to help increase the attractiveness of the growth and service centers as places to live and work and to help insure the local availability of entrepreneurial, managerial and technical personnel essential to the growth of the two regions. The transport terminals which are a part of this element are to be located at the three key transport hubs of the project area. They will serve as the core of an improved transport system in the Western and Central regions. They will help relieve present transport bottlenecks and facilitate the increased flow of people and goods which the project is expected to stimulate throughout the project areas.

Institutional Arrangements for Implementation.

The Project will be carried out principally by seven GOP agencies, under the general coordination of the Ministry of Planning and Economic Policy (MPPE), which conceived and planned the Project and negotiated the financing package with A.I.D. The Planning Ministry's capacity to provide the necessary coordination has been established during the planning phase. It will be assisted through the Project in strengthening its ability to promote local involvement in development of the centers as well as plan for the extension of the program to other centers under subsequent phases.

Creation and expansion of agro-industries in the centers will be carried out by the National Finance Corporation (COFINA) with technical support from the Ministry of Agriculture's Agro-Industries Directorate. The Ministry of Commerce and Industry (MICI) will provide technical and financial assistance to small businesses and industries. The Housing Ministry (MIVI) will develop low-income shelter solutions in the centers which will be financed by the National Mortgage Bank (BHN).

The Water and Sewerage Institute (IDAAN) will expand and improve sewerage systems in two of the centers. Other GOP agencies such as the National Training Center (CENAFORP), the National Cultural Institute, and the National Sports Institute will be responsible for implementing specific subactivities in the areas of their specialties.

The Project will cost approximately \$28.5 million, of which \$15.4 million (54%) will be financed with AID and HIG resources.

C. SUMMARY FINDINGS

The Project has been analyzed for technical, economic, financial, social, institutional, and environmental soundness, and found to be feasible on each count.

The technical analysis demonstrates that (i) strengthening the growth centers is vital to achieving regional development growth objectives in the priority Central and Western Provinces; (ii) the growth and service centers have been selected on the basis of criteria which demonstrate that they are primary links in the service delivery structure serving the regions' agricultural areas; (iii) Project activities are key to strengthening the ability of the centers to serve the rural areas (or they support key activities); (iv) the location and mix of subprojects is being planned on a systematic basis to ensure maximum benefit for the population of the rural areas and the centers; and (v) each Project element 1/ is soundly designed and contributes effectively to the achievement of Project objectives.

From an economic perspective, the Project is shown to be sound in supporting a strategy of more balanced growth involving the areas outside the metropolitan region (Panama-Colon corridor). This is judged to be essential if Panama is to more nearly achieve its full development potential on a more efficient and self-sustaining basis. If current trends continue, economic growth and consequently increasing per capita income levels in Panama will

1/ Town planning, agro-industries, small business and industries, industrial sites, housing, transportation terminals, sewerage systems and cultural and recreational activities and facilities.

continue to be concentrated in the metropolitan region because of comparative resource advantages. Over time, these inequities will tend to increase rather than decrease as resources flow toward the more dynamic metropolitan corridor, and the weaker, less productive Project area will act as an increasingly greater burden on the more productive sectors of Panama's economy. The Project, first, recognizes the economic importance of locational and spatial processes of development investments; second, by concentrating these investments, it furthers the process whereby external economies and linkages are strengthened; and third, by improving infrastructural facilities and services in the selected centers, the Project furthers the generation of growth impulses in the geographical areas of which they are a part. The economic impact of the individual subprojects, measured in terms of employment generation, purchases within the Project area, and wage and salary compensation to the target population, has been estimated on a preliminary basis in advance of feasibility studies and is found to contribute significantly toward achieving the goal and purpose of the Project.

Assessment of the Project's financial soundness demonstrates that the credit revolving funds, to be managed by intermediate credit institutions, will be self-sustaining. The financial justification of other Project elements derives from their essential contribution towards achieving the Project purpose. Project activities require that the GOP assume only minimal recurring costs and will not represent a constraint on GOP finances.

The Project is judged to be socially sound in conception and will increase the income and improve the well-being of the rural and urban poor in the target area. By the end of the Project, an estimated 2,700 - 3,500 jobs will have been generated for the urban poor, rural migrants, and non-farm rural poor who choose to remain in the rural areas but join the market town labor force, and a rising income trend of secondary beneficiaries will be clearly evident through higher prices they will receive for raw materials sold to agro-industries developed through the Project. Both target groups will benefit from increased access to expanded and more varied business services - such as sale of agro-inputs, repair services for implements and household goods and general commercial activities. Housing improvements will provide for an improved quality of life for almost 2200 families classed as primary beneficiaries, of which at least 75% will be families with incomes below the 40th percentile.

An important socio-political benefit of the Project will be derived through increased participation by local populations in the development of their communities through the town planning process.

The Mission has worked closely with the major institutions in the Project during the course of designing

the Project and preparing the PRP, interim report and this Paper for submission to AID/Washington. The Mission has also examined each institution's staffing patterns and staff qualifications; the type and quality of subproject analysis undertaken; operating and investment budgets; the history and health of its loan - or project - portfolio. The Mission has assessed institutional weaknesses, particularly as they might affect the execution of the Project, and where warranted, has programmed technical assistance and training. It is satisfied that the current or planned organizational structure, staffing, and budget of each institution - supplemented by the programmed technical assistance and training and, in the case of the BHN, required institutional reforms - is adequate to implement this Project.

Finally, analysis of the potential environmental impact of the Project concluded that the probability of significant environmental effects is minimal and controllable, and that measures for minimizing as well as further protecting and enhancing the environmental quality of the centers have been incorporated into the Project Design. The Assistant Administrator for Latin America approved the Initial Environmental Examination with a negative determination on April 13, 1978.

The Mission believes that the Project meets all applicable statutory criteria as indicated in Annex I-A, Mission Director's Certification, and Annex I-B, the Statutory Checklist, and that it is ready for implementation.

D. PROJECT ISSUES

1. The Investment Climate

Despite known numerous, profitable, identified opportunities for increased productive investments within the target area, many industrialists and other investors in Panama appeared until recently to be afraid or reluctant to invest significant sums in expansion or creation of new productive activities. Available data indicate that growth in country-wide private investments in manufacturing and processing activities declined by as much as one third during the past three years. Several reasons have been advanced to explain this reluctance: fall out from world-wide recession, increased fuel and energy costs, a tight money market, high interest rates, a small Panamanian market and stiff world-wide competition for exportable surpluses, uncertainties surrounding negotiation for a new canal treaty, misunderstandings by both labor and management about the labor law, and the recent trend of government investments in productive enterprises traditionally considered the turf of the private sector, e.g., sugar mills, cement production. The latter has been perceived or interpreted by many potential investors as unfair competition on the part of the public sector.

Some of these factors have been resolved (e.g., canal treaties), and others are long-range problems the solutions to which are in process (large-scale conversion to hydroelectric power).

The GOP is making a concerted effort to increase investor confidence. This Project is a part of that effort. In addition, the Ministries of Planning and Economic Policy, Commerce and Industry as well as other GOP representatives are meeting on a regular basis with business groups (especially in the Project area) to emphasize the Government's support of private investment and to listen to the concerns of potential investors.

2. Relationship to Municipal Development Loan (AID 525-T-044)

Earlier documents for the URBE Project had proposed providing additional funds to the Municipal Development Fund (FODEM) for municipal infrastructure subloans, principally for public markets and transportation terminals. FODEM now plans to finance five markets in the growth and service centers with funds already available through Loan 044. The transport terminals will be financed through COFINA. Consequently, no new funds will be channelled through FODEM. The Mission will continue to work with FODEM to improve its performance under Loan 044 as a significant means of strengthening local government in Panama.

3. Interest Rates on Subloans

The Mission has carried out an analysis of interest rates in Panama (See Annex II-E). This analysis discloses that the interest rates on subloans under the proposed Project are approximately 1% - 3% lower than the lowest commercial rates charged in Panama (without taking into account the effect of commissions or other charges). However, the proposed rates are similar to those charged by specialized private and public banking institutions (FODEM, National Mortgage Bank, National Savings Bank, savings and loans).

The DAEC cable on review of the Interim Report indicated that some upward movement would be expected on the interest rate issue. After extensive discussions with the GOP on this matter, this expectation has been fulfilled literally - if not substantially. COFINA has agreed to raise its rates on subloans by 1/4% from 8.5 to 8.75%. MICI, however, intends to maintain its existing rates of 7 - 8%, at least in the near term.

vii(a)

The GOP has maintained that the proposed interest rates are appropriate for several reasons. They will provide a sufficient margin to the intermediate credit institutions (7-8% to MICI and 8-3/4 to 9-3/4% to COFINA) to ensure continued credit growth in the centers (unless delinquencies are much higher than expected). The differential between the proposed rates and the rates charged by the same institutions in Panama City is needed as one of the GOP's incentives to entrepreneurs to stimulate investment in the project's target area. Finally, using commercial rates as a yardstick is not appropriate as these loans are for longer terms and involve less administrative cost to the ICI's. The Mission believes that the rate structure is reasonable given these factors.

The GOP is aware that long term availability of credit to small businesses and industries can best be increased by stimulating commercial lending to this group. Mechanisms for accomplishing this goal will be studied using loan funds, and the GOP will develop a plan for stimulating greater credit availability through alternative uses of the reflows from the small business and industry fund (see discussion on pp. 32-33 of text).

During the course of Project implementation, the Mission will continue to discuss with the Government the importance of establishing interest rates which more closely approximate Panama's existing commercial rate structure.

E. COMPOSITION OF THE PROJECT TEAM AND REVIEW COMMITTEE

This Project is the result of more than two years of collaborative effort between A.I.D. and the GOP. This Paper accordingly reflects this joint effort and mutual understanding of the Project's aims and planned implementation.

The following individuals contributed to the design of the Project, to the preparation of required studies, and/or to the preparation of this Paper:

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Rubén Obregón
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Jane E. Stanley

Government of Panama

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(Bureau for Regional Planning and Coordination)

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Arq. Mario De Leon
Agustín García Lara
Ing. Oscar Loaiza S.
Ing. Carlos Morales
Ing. Jaime Riera
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AID/Washington

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Robert O. Otto, LAC/DR
Gerald R. Wein, LAC/DR
Eric R. Zallman, LAC/DR

The Paper was reviewed by a USAID Project Review Committee
composed of:

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Bernard Chapnick, Associate Director
Ronald G. Russell, Chief, Office of Development Planning
John D. Kilgore, Chief, Regional Housing and Urban Development
William H. Naylor, Controller

II. PROJECT DESCRIPTION

A. BACKGROUND

1. Overview of Rural Development in Panama

Panama is a classic example of a "dual economy": a dynamic, urbanizing, modern sector concentrated in the metropolitan area, mainly in the cities of Panama and Colon situated at opposite ends of the canal, coexisting with a traditional, essentially rural sector throughout the rest of the country. The nature of this socio-economic structure, which has evolved over the past four centuries, is intimately related to the transit zone - the Panama-Colon corridor - as a result of the geographical location and physical configuration of the country, and of relatively meagre physical resources within the rest of the country. This has resulted in a highly disproportionate concentration of economic, social, political and cultural activities in this area.

The rest of the country, on the other hand, is characterized by a wide dispersion of its population among an inordinately large number of small populated places and a relatively low level of physical and economic integration. This extreme urban/rural dichotomy has resulted in serious adverse effects for both areas. For the rural area it has meant low income, out-migration of the more productive segment of the population, and a dependence on subsistence and low-technology methods of production; in the modern metropolitan area, the result has been an unprecedented flood of immigrants from the rural areas, causing serious deficiencies in housing, social services, employment and a potential for severe social and political unrest.

Beginning with the mid-1960's, the rural sector has received increased attention from the Government. The initial effort was primarily directed towards raising the living standards of the poorest farmers and integrating them into the political life of the nation. Subsequently, this concern began to be accompanied by an emphasis on greater output.

The current GOP strategy stresses two major national objectives: (1) a higher rate of economic growth, and (2) a wider, more egalitarian distribution of the benefits of this growth. These objectives, which have been translated into government policies and commitments at the highest levels, are aimed at reducing the now considerable rural/urban income and development disparities.

These policies encompass a commitment to enhance participation of the poor in the development process, a commitment

clearly stated in the government's national development plans. The policies, programs and institutional changes which have been put into effect, together with public sector investments which emphasize the rural areas, are beginning to be felt. There is a clear trend toward larger farms and rising income levels, with subsistence farming increasingly becoming marginal as an acceptable living alternative. Integrated rural development, which focuses on currently underdeveloped areas with relatively high productive potential, is one approach the GOP is using to help small farmers increase their production and incomes.

2. The Target Area

The GOP has divided the country into four regions for planning purposes: the Metropolitan Region, which includes major portions of the Provinces of Panama and Colon and contains almost 50% of the total population of the country; the Eastern Region, which includes the Province of Darién, the San Blas area and eastern portions of the Provinces of Panama and Colon, and which has less than 5% of the country's population; the Central Region, which includes the Provinces of Coclé, Veraguas, Herrera, Los Santos and the western portions of the Province of Colon; and the Western Region, which includes the Provinces of Chiriquí and Bocas del Toro. The Central and Western Regions contain 46% of the population and the bulk of the country's rural population and known agricultural potential. These two regions are the focus for priority rural development activities by the GOP and constitute the target area for the URBE program. Within these two regions, the AID/GOP development activities will be concentrated specifically in the provinces of Chiriquí, Veraguas, Los Santos, Herrera and Coclé. Within these provinces eight population centers have been selected for development improvements: Puerto Armuelles, La Concepción, David, Santiago, Chitré-Los Santos, Las Tablas, Aguadulce, and Penonomé.

The target area of the URBE program comprises a land area of almost 42,000 square kilometers and contains a wide diversity of physical, social, economic, and political conditions. The 1970 population of almost 695,000 persons residing in the area is estimated to have grown to about 825,000 in 1978. Of this total population, about 156,000 inhabitants or 19% are living in the centers identified above.

Median income in the target area is roughly one third that of the metropolitan region. Moreover, the annual per capita income in the target area is estimated at \$356 in 1978 (slightly more than \$200 in 1969 prices) and \$290 in the rural hinterlands (about \$150 in 1969 prices), less than one-third that of the metropolitan area, indicating that almost half of Panama's rural population has not participated to any meaningful degree in the otherwise slow but steady socio-economic development of the two regions. Other indicators corroborate this evidence of

widespread poverty. 1/

3. Major Constraints to Development in the Project Area

Despite the regional and rural-urban differences that exist among the towns and provinces, they nevertheless share a common set of development constraints. These include: (a) low agricultural land productivity; (b) widely dispersed population; and (c) inadequate levels of basic infrastructure and public service. These conditions have resulted in limited employment opportunities and out-migration, primarily to the Metropolitan Region. Each of these features is briefly described below.

FIRST, the lands in Panama with the highest agricultural capability (Class II and III) represent a total 850,000 hectares or only 11 percent of the country's land area. Roughly 60 percent of these lands are located within the Project area. However, these potentially productive soils represent only 12 percent of the Project area, and the remaining land area (88 percent) is not generally suitable for annual crop production. Within the Project area, the Class II and III lands are concentrated primarily in the coastal plain areas between Puerto Armuelles and David (Chiriqui) and from Santiago (Veraguas) east along the eastern shore of the Azuero Peninsula (Herrera and Los Santos) and north to the Aguadulce area (Coclé).

SECOND, the target area's population is dispersed among an inordinately large number of small population centers. According to the 1970 census, there existed more than 7,000 populated areas of which 97 percent were predominantly small rural settlements of less than 500 inhabitants. The population of these places represented 60 percent of the target area's total population. In addition, another 25 percent of the population resided in places between 500-5,000 persons while only 15 percent were located in larger urban centers.

THIRD, the basic infrastructure and public services required to serve the target area's rural and urban populations either do not exist or are inadequate to serve even present economic and social needs. For example, the existing network of roads permits only limited access to large potentially productive areas and those areas served with road access frequently are not accessible during the rainy season. In addition, facilities for the marketing and storage of farm products are severely limited, overcrowded and not organized to effectively serve current re-

1/ See Thomas H. Eighmy and Augustin Garcia L., Mapping the Poverty Line in Western Panama, Checci and Company, Washington, D.C., December 1977 (Contract AID/afr-C-1141, Work Order No. 19).

gional needs. The limitations on getting farm products to market and the opportunities of readily selling them act as severe disincentives for small farmers to increase productivity and for new settlers to migrate into potentially productive areas without road access.

The principal mode of transportation commonly used by small farmers and urban dwellers is the bus. It serves not only for personal mobility but also as the primary means for subsistence farmers to transport their small surpluses to market for cash income. The safe and orderly movement of agricultural products and people is impeded by the lack of a well organized regional and local transportation system including bus terminals. Trucks and buses daily converge on the towns of David, Chitré-Los Santos, and Santiago near the central plazas and public markets creating serious parking problems, conflicting traffic movements between vehicles and pedestrians, traffic congestion, and a state of general chaos.

FOURTH, as a result of dispersion of the target area's population and the limited agricultural productivity of the regions' soils, present employment opportunities are limited except for subsistence farm production. An analysis of the average size farm indicates the majority are less than 10 hectares. Consequently, it is estimated that the agricultural production for 50 percent of the population is at the subsistence level and outside the market economy. The urban centers of David, Santiago, Chitre-Los Santos and Penonomé offer only a limited number of jobs because of production and marketing constraints which have restricted the regions' development.

FIFTH, these physical, social and economic conditions prevent the two regions from retaining their population. Between 1950-1970, Census data indicate that approximately 140,000 persons migrated from the region. While migration trends are believed to have stabilized somewhat, the target population continues its out-migration at a current rate of slightly less than 5,000 persons per year, primarily to Panama City and surrounding satellite communities such as La Chorrera, Arraijan, San Miguelito and Tocumen.

4. GOP On-going and Planned Programs Addressing Project Area Major Constraints

The GOP is attempting to develop the Central and Western Regions through a combination of improved public infrastructure and services and promotion of private investment. The current national development plan emphasizes the development of these regions and improvement of opportunities for their poorer residents. Summarized below are the major ongoing and planned efforts in the Project area aimed at:

a. Increasing Agricultural Production

-- A GOP program initiated during the past seven years has established more than 200 asentamientos (resettlements) and juntas agrarias for landless campesinos or minifundistas for organized collective farming, benefitting more than 6,000 families to date.

-- An AID assisted cooperative development program emphasizing institutional development, including training and technical assistance, agricultural production credit, equipment, infrastructure and working capital. Initiated three years ago, the program has benefitted 38 cooperatives with a total membership of 13,760 within the target area.

-- The establishment of three new sugar refineries in the Project area, two of which with substantial private sector participation are benefitting more than 6,000 low and medium income farm families through increased production of sugar cane on formally under-utilized land, resulting in increased producer income.

-- The integrated rural development program to be implemented in a number of poor rural areas with high development potential, with emphasis on more fully incorporating the rural poor into the political, economic and social life of the country. The first of these, financed with AID assistance, has recently been initiated in the Tonosí Valley which is located in the Project area and will initially benefit some 1,600 poor farm families.

b. Rationalizing Land Use

-- A watershed management project to upgrade and develop the capability of the GOP's forest and soil conservation service is currently being designed for possible AID financial assistance. Emphasis will be on programs designed to stem erosion in deforested areas, reduce indiscriminate cutting of primary forest and protect degradable land.

c. Improving Infrastructure

-- Transportation

An on-going IDB-assisted road construction program has completed 180 Kms. of primary and secondary trunk roads in the target area since its initiation in 1976. Plans call for an additional 375 Kms. to be constructed by 1983. A rural access road program is being developed for possible AID financial assistance. The project will improve a network of

access roads in rural Panama by up-grading approximately 1,000 Kms. of trails and roads to all-weather status. Most of these are located in the Project target area. Road selection criteria will be written to permit inclusion of roads from production areas to Project-financed processing facilities in or near the eight growth and service centers.

-- Marketing and Storage Facilities

An AID loan is enabling the GOP to provide basic physical infrastructure necessary to the Government Marketing Agency, Instituto de Mercadeo Agropecuario (IMA), to execute public marketing programs of grains and extend their benefits to remote rural areas. The establishment of a number of strategically located buying stations to facilitate produce assembly and the construction of adequate storage facilities are key elements of this program. IMA's major efforts are directed toward improving the marketing constraints in the Project target area. In addition, through another AID assisted program, Rural Municipal Development, the renovation and/or new construction of municipal public markets in a number of the population centers to be assisted by the URBE Project is contemplated. The existence of functional, well-designed public markets in these towns will help to link small agricultural producers in the rural hinterlands to low-income residents of the towns, providing the latter with essential agricultural produce at competitive prices and the farmers with cash income.

-- Power

GOP efforts to increase its hydroelectric generating capacity has shifted to the westernmost part of the country following the recent completion of the first phase of the Bayano project. The Estrella - Los Valles project under construction in Chiriquí Province will have a generating capacity of about 80 mw. and should be operational within the next two years. This is to be followed by two additional projects, La Fortuna, also in Chiriquí Province, and Teribe in the Province of Bocas del Toro. The La Fortuna project is projected to come on stream by 1983 and will add an additional 255 mw. in generation capacity, with the Teribe project providing 560 mw. by 1987. It is anticipated that this capacity will provide ample power for the needs of the Project area, as well as the country, well into the next century at reasonable and relatively stable costs.

-- Potable Water and Sewerage Systems

An important feature of the GOP's Public Health Program is its emphasis on preventive care. Central to this emphasis has been the priority placed on the provision of infrastructure facilities for potable water, excreta disposal and garbage collection and final disposal. Adequate potable

water systems in all of the relatively more important population centers in the Project area have been provided for, many with financial assistance from the IDB. Sewerage systems in some of the centers have been improved, also with IDB financing, and others are planned, e.g., Las Tablas, in the Project area. Through the URBE program, the GOP with counterpart funds will expand and improve sewerage systems in the towns of Penonomé and Puerto Armuelles. AID is assisting in the provision of rural potable water systems and latrines in the rural areas of the Project target area through its on-going health loan, and through its Rural Municipal Development loan in assisting many of the municipios in the Project area to improve their garbage collection and disposal capabilities.

d. Improving Education and Health Facilities and Services

GOP efforts in the education and health sectors which have had a positive impact in the Project target area have resulted in increased construction of classrooms, health posts and health centers in the rural areas with both IDB and AID financial assistance. Improvements in the curriculum, as reflected for example in the creation of the basic cycle which provides for instruction more relevant to the needs of the rural resident, and the creation of an integrated health delivery system have been important innovative initiatives which have increased access to these vital services for a significant segment of the rural poor.

e. Summary

These GOP on-going and planned programs, in combination with the proposed URBE Project, constitute a comprehensive and integrated regional (urban and rural) development program. GOP activities to increase agricultural production and improve marketing and storage are complementary to URBE Project focus on agroprocessing and resulting increased demand for area agricultural commodities. The IDB and AID assisted program for road improvement contribute to the URBE Project objective of improved urban-rural linkages in coordination with the proposed new bus terminals. The new hydroelectric generating capacity will provide URBE industrial parks and other subprojects with more than an ample supply of power. In addition, the GOP activities to improve the availability of potable water and waste disposal complement URBE infrastructure subproject. These water and waste disposal subprojects, as well as GOP activities in education and health sectors, improve the quality of life of the target group and also upgrade the quality of the labor supply. This enhances URBE efforts to increase the derived demand for local labor. In addition, the planning component of the URBE project provides a mechanism for assuring that these GOP activities are coordinated and integrated in a rational and efficient manner.

In short, the proposed URBE Project will complement numerous other activities in the project area by expanding the range of economic opportunities available to the rural poor.

The Project, in summary, is intended to promote the orderly and balanced development of two under-developed, predominantly rural regions which are the major focus of the GOP's rural development efforts. The two regions contain the largest group of poor families in Panama and strengthening the centers and urban-rural linkages will provide demonstrable benefits for the region's poor. The background studies on which the Project design is based (prepared by a combined UNDP/GOP team) incorporate an integrated urban and regional approach to local and national economic development.

B. PROJECT DESCRIPTION

1. Goal and Purpose

The Goal of the Project is to increase the income and improve the quality of life of the rural poor. The Project's target group includes two subgroups: approximately 350,000 poor small farmers and agricultural workers in the Central and Western Regions; and some 60,000 urban poor in the eight principal growth and service centers^{1/} in those regions. While the Project will directly benefit both subgroups, the former will be secondary beneficiaries and the latter the Project's primary beneficiaries.

By the end of the Project, an estimated 2,700 - 3,500 jobs will have been generated for the urban poor, rural migrants, and non-farm rural poor who choose to remain in the rural areas but join the market town labor force, and a rising income trend of secondary beneficiaries will be clearly evident through higher prices they will receive for raw materials sold to agro-industries developed through the Project. Both target groups will benefit from increased access to expanded and more varied business services - such as sale of agro-inputs, repair services for implements and household goods and general commercial activities. Housing improvements will provide for an improved quality of life for almost 2200 families classed as primary beneficiaries, of which at least 75% will be families with incomes below the 40th percentile.

Another subgroup - the entrepreneurs, managers and higher income professional and technical employees of industries and businesses that receive subloans under the Project - will also

^{1/}These centers are market towns, differentiated on the basis of the socio-economic functions they perform. Growth centers represent the most developed market towns in terms of number and size of establishments, number and complexity of services, and number and sophistication of linkages with surrounding rural areas, other market towns, and the primate cities. They are sites of increasing industrial, commercial and service activities and normally net recipients of migrants. By contrast, the primary functions of service centers, as the title implies, are service related, e.g., medical and educational services, provision of basic agricultural inputs and markets for agricultural produce and may be sites for some food processing activities. They are important links between the larger market towns (growth centers) and the dispersed villages and farms within their areas of influence. For a fuller discussion of growth and service centers and their role in regional and national development see pp. 16-21 of the Technical Analysis.

benefit directly from the Project (although not a part of the target group) through higher earnings, and profits from their new and expanded enterprises.

The Purpose of the Project is to set in motion a process that will significantly increase the employment and income generating and rural service capacity of the growth and service centers in the Central and Western Regions of Panama (see Maps 1-4). The overall socio-economic development of these regions, including increased income and well being for the target group, is dependent on the orderly and integrated development of both the centers and their rural hinterlands. The development needs of the hinterlands are being addressed by ongoing AID-supported programs and planned future projects. This Project seeks to address the development needs of the centers by expanding their economic base, strengthening social and economic linkages to their hinterlands, and improving their attractiveness as places to live and work. The activities to be financed through the Project - institutional development, viable productive and supporting enterprises, and housing and town infrastructure - both address the centers' development needs and provide significant benefits for the target group.

By the end of the Project, the increased sales of agri-business enterprises assisted through the Project will reach an approximate level of \$8.5 million per year and about \$6.5 million for small businesses and industries. The employed labor force in the centers will increase in such occupational categories as manager/entrepreneur, professional/technical, clerical, skilled operatives and semi-skilled and unskilled workers. The largest increase, in numbers and percent, is anticipated to be in the semi-skilled and unskilled worker category.

2. Outputs

a. Improved GOP Capacity to Plan and Develop Growth and Service Centers (\$1.3 million)

The capacity of both national government agencies and local governments to plan and develop the centers will be strengthened through the Project. Three key areas will be addressed: development of an effective town planning process; further improvement of the Ministry of Planning and Economic Policy's capability to monitor and evaluate the Project and plan subsequent programs designed to continue the center development process; and, strengthening the capacity of key implementing agencies to carry out their responsibilities under the Project.

(1) Town Plans

The Ministry of Planning is preparing general

development plans (guide plans) for the centers. These plans will be reviewed, modified and adopted by the municipal governments of the centers which will create, or in some cases resurrect, planning advisory boards (planning Juntas) to assist them in the review and adoption process. These boards will be advised and guided by the Ministry of Planning.

After adoption of the guide plans, the Ministry of Housing will prepare detailed physical development plans and land use regulation and control mechanisms which will also be reviewed by the government of each center with the assistance of the Planning and Housing Ministries. These plans will be used by MPPE in programming national government investments to guide and control physical development of the centers.

The ability of MPPE, the Ministry of Housing and the governments of the centers to carry out their responsibilities in the town planning process will be strengthened by technical assistance in municipal administration, finance and planning. Technical advisors will work with MPPE and MIVI staff and with the governments of the centers directly in forming and training local planning boards and improving administration and tax collection systems to develop the centers' ability to play a more active role in plan implementation and updating.

(2) Improved Project Coordination and Replication

The Ministry of Planning will play the role of overall GOP coordinator during Project implementation. MPPE has been the principal agency involved in designing the Project, both on a conceptual level and in detailed activity design. MPPE's central role within the Government (control of overall planning, coordination of external assistance and the budget) makes it a logical focus for overall Project planning and coordination responsibilities.

During implementation, its responsibilities will consist principally of ensuring that sufficient budget is provided to GOP implementing agencies, arranging external training for all implementing agencies, spot checking implementing agency performance, and carrying out progress and impact evaluations. In addition, MPPE will be involved in planning subsequent programs designed to continue the process of growth and service center development initiated under this Project.

Technical assistance will be financed through the Project to improve MPPE's capability in the design of an evaluation methodology to measure the overall impact of the Project and in the preparation of background studies for planning subsequent URBE efforts.

(3) Strengthened Implementing Agency Capacity

In the final analysis, success in accomplishing the Project purpose will depend on the success of the other implementing agencies in providing services that stimulate development of the centers. The ability of each of these agencies will be strengthened through the provision of technical assistance and training in specific areas which are a key to ensuring their effective performance under the Project. (See pp. 82-84 for technical assistance and training plan.)

b. Productive and Supporting Enterprises (\$11.1 million)

Three kinds of productive and supporting enterprises - agro-industries, small businesses and industries, and industrial infrastructure - will be financed through the Project. The subprojects will: utilize natural resources, which are currently wasted or used inefficiently, in the production of processed foods, animal feeds and fertilizers; stimulate agricultural production in the hinterlands of the growth and service centers; provide needed businesses and household services in the regions; generate employment to counteract the current un- and underemployment and the tide of migration to the metropolitan corridor; and improve the economic base of the centers. In addition, training for workers of agro-industries and courses in small business management will be provided to help ensure the viability of the enterprises financed.

(1) Agro-industries

Approximately \$4.6 million of Project resources will be used to finance subloans for agro-industries. The subprojects are expected to generate 750-1000 new jobs, of which an estimated 90% will be for target group members. They are also expected to generate increased income and significant occupational opportunities in the agricultural sector by stimulating demand for agricultural products.

Agro-industry funds will be administered by COFINA - the National Finance Corporation - an autonomous government agency. Technicians of the Agro-industrial Division of the Ministry of Agriculture (MIDA) will assist in subproject identification and development, feasibility studies preparation, and provision of technical assistance during implementation. A staff level technical coordinating committee with equal representation from COFINA and MIDA will review each subproject to ensure that it is consistent with national agro-industry planning objectives and priorities, and is planned and implemented in a technically sound way. Examples of the kind of agro-industries that would be financed are: meat canning, dried

and salted fish, fruit and vegetables processing, fertilizer production and animal feeds. Agro-industry subloans will finance plant, equipment and working capital and will not exceed \$500,000. Subloan reflows will be used to finance additional agro-industries in accordance with the same criteria governing disbursement of Project resources.

Skills training will be provided for actual and potential employees of small and agro-industries receiving subloans through the Project. Examples of the kind of training that may be provided are: grading and sorting of agricultural produce; quality testing; and installation, operation and maintenance of common industrial machinery (e.g., sewing machines, woodworking machines, drying kilns and ovens; and agricultural produce processing machines). The worker training program will be carried out through the National Training Center (Centro de Formación Profesional, or CENAFORP).

The total cost of worker training is estimated at \$0.3 million and will finance purchase, preparation and production of written materials; instructors' travel, fees and per diem; rental and transport of equipment and machinery used in training; and rental of buildings used for training courses.

(2) Small Businesses and Industries

Approximately \$3.8 million of Project resources will be used to finance subloans to small businesses and industries. These projects are expected to provide employment ranging from 750 to 1300 depending on the mix between commercial, industrial and service-type industries. ^{1/} About 80-85% of the jobs will be available for target group workers. Examples of the kinds of enterprises that would be financed are: clothing, leather products, building materials and furniture factories; retail establishments; and service operations, such as auto and appliance repair shops, laundry and dry cleaning stores and barber shops.

The Ministry of Commerce and Industry (MICI) will study, approve, and make subloan disbursements (through its account with the National Bank of Panama) and accept the risk on subloan repayments. Reflows will be used for the same kinds of subprojects as are financed with the disbursement of Project funds. Alternative administrative arrangements (e.g., combining banking and risk-taking functions in the BNP or

^{1/} Sensitivity analyses based on different assumptions on investment per worker and estimated sales levels were used to estimate employment ranges.

other financial institution; use of some or all of the reflows for a guaranty fund or rediscount line) will be studied during Project implementation, and a different arrangement for the use of reflows may be adopted by the GOP with AID concurrence.

Subloans will finance plant, equipment, start-up costs and working capital for new businesses and expansion of existing operations. Subloans will not exceed \$50,000. To maintain emphasis on productive activities, financing for retail operations will not exceed 50% of the total portfolio, and recreation and amusement subprojects (e.g., movie theaters, sports facilities, amusement houses) will not be eligible. The GOP will maintain the fund level at a minimum of \$3.4 million for 10 years after the end of the Project.

Courses in small business management will be provided by MICI for its borrowers. These courses, to be financed by the Project, will concentrate on basic business skills such as bookkeeping/accounting, sales promotion/advertising, store and shop layout and employer responsibilities and employees rights.

(3) Industrial Sites

Approximately \$2.4 million of Project resources, wholly financed with counterpart funds to be administered by COFINA acting in a fiduciary capacity, will be used to develop industrial sites in Chitré and David. MICI will develop the sites and subsequently construct buildings as needed to satisfy requirements of individual entrepreneurs. The estimated cost of the two sites includes land, roads, potable water, sewerage, electrical connections and buildings.

c. Housing and Town Infrastructure (\$14.7 million)

(1) Housing Solutions

Shelter solutions will be provided for about 2200 families in the growth and service centers. Six types of solutions, ranging from serviced sites to completed two bedroom units, will be developed. The estimated cost to the purchaser will range from \$550-\$5,700 (1978 prices). These solutions will be affordable by families in the 10th to 49th income percentiles in the area in which they live. Purchaser downpayments will vary from 5-10% of the purchase price, with no downpayments required on the less expensive solutions. The balance will be financed through long-term loans provided by the National Mortgage Bank (BHN). Loan terms will range from 10 to 25 years, depending on the cost of the solution and the incomes of purchasers.

The interest rate on these loans will be approximately 10%. To ensure that the needs of families in the lower income ranges (i.e., 10th to 39th percentiles) are addressed, no more than 25% of the solutions (and 45% of the total investment) will be for solutions affordable only by families with incomes in the highest eligible decile (40-49th percentile).

The housing solutions will be designed by the Ministry of Housing (MIVI) and built by force account and/or contracted construction firms. The BHN will receive, process and approve home buyer applications through its representative in each of MIVI's regional branches in the Central and Western Regions. Some housing will be developed in each of the eight growth and service centers. The total investment required for shelter solutions will be approximately \$6.8 million. This investment will be financed with HIG funds (\$5.4 million), GOP resources (0.9 million), and borrower downpayments (\$0.5 million).

The BHN will be the borrower and administrator of the HIG loan and will provide construction financing for the housing solutions with its own funds. One of its responsibilities as administrator will be collection of monthly payments from the borrowers. The shelter component of the Project is more fully described on pp. 34-39 and in Annex II - I.

(2) Transport Terminals

Approximately \$3.3 million in Project resources will be used to finance construction of transportation terminals. Subloans will be administered by COFINA acting in a fiduciary capacity. It is expected that \$2.5 million of Project funds will be sublent to the municipalities of David, Chitré and Santiago with the remainder contributed by the GOP and the municipalities themselves. The terminals will include space for loading and unloading interurban buses, commercial stores and storage of freight carried by buses. Subloans will finance plant, equipment and working capital and will not exceed \$1.0 million.

(3) Sewerage Systems

The GOP will wholly finance sewerage systems in two service centers at a total estimated cost of \$3.7 million. At present, the GOP plans to construct such systems in Penonomé and Puerto Armuelles. These systems will serve a total of 12,000 users in Penonomé and a yet to be determined number in Puerto Armuelles.

The systems will be designed by the National Water and Sewer Institute (IDAAN) and built by private construction firms. Plans for Penonomé are now complete and design work has begun on the Puerto Armuelles system. IDAAN will be responsible for maintenance of the systems and collection of user charges (which will be included in the monthly potable water bills).

(4) Cultural and Recreational Activities

The GOP will wholly fund a program of art education and handicrafts development in the growth and service centers. This program will be carried out by the National Cultural Institute (INAC). In addition, community recreation facilities, such as public gymnasiums and playing fields, will be provided by the National Sports Institute (INDE). The cost of this activity is estimated at \$900,000.

3. Inputs

The total Project cost is estimated at \$28.5 million, of which AID will finance \$15.4 million (54%). The AID inputs to the Project will consist of a Development Loan of \$10.0 million and HIG resources of \$5.4 million. The GOP will provide cash and in-kind contributions totalling \$10.4 million. Additional counterpart contributions of \$2.7 million will be made up of land and investment in the industrial sites by the municipalities (\$600,000), contributions by the latter to the transport terminals (\$200,000), subborrower downpayments on housing solutions (\$500,000), and cash and in-kind investment in industrial and business ventures by entrepreneurs (\$1.14 million). Approximately 14 person years of technical assistance at a cost of \$1.1 million, and almost 12 person years of participant training, at a cost of \$0.2 million, will be required to develop the GOP's capacity to carry out the Project and plan for continued development of growth and service centers. Details of sources and applications of Project resources can be found in the Financial Plan (Section IV.A.).

III. PROJECT ANALYSES

A. TECHNICAL ANALYSIS

1. Growth and Service Center Role in Promoting Regional Development

The URBE Project is structured to maximize the benefit impact of new growth and development on the target group ^{1/} of the priority rural regions of Panama, within the context of economically sound regional development programs and subproject design. This subsection attempts to demonstrate how strengthening the growth and service centers is expected to promote regional development.

a. Conceptual Basis for Project Design

The URBE approach to implementation of Panama's decentralized regional growth policies is based on the concept of integrated rural-urban development. As applied to the URBE region, it draws heavily on an integration of growth pole and central place theory. The former recognizes that economic growth and development reach their highest levels in a limited number of centers. These centers are the focal points of the transportation network and hubs of economic activity and innovation, have a critical mass sufficient to provide economies of scale and superior access to services for productive and supporting enterprises, and are capable of spreading development throughout their hinterlands. This spreading is done through linkages with smaller centers on down to the level of rural market towns and villages.

This hierarchy of centers is most frequently described in the context of central place theory, a model of spatial organization in which centers in a given region are arrayed hierarchically in terms of service and economic functions. Centers at the upper end of this hierarchy not only have more but larger establishments and provide a number of more specialized services which are not present in smaller centers and villages. They also need to be more diverse and complex in function, but less numerous and more widely spaced than smaller centers. Network flows tie this central place system together. The flows include transport of people and goods, market transactions, money flows, messages and information. For example, farmers would travel to a growth center to purchase an expensive piece of agricultural equipment or to a smaller center (e.g., service center) to have it repaired. Medical patients would be referred from market town or service center clinics to growth center hospitals for specialized treatment. There would be also a flow of agricultural products to the urban centers and a flow of manufactured goods, supplies and farm inputs from urban centers to rural areas.

^{1/} See definition in Section II.B.1, and description in Social Soundness Analysis (Annex II-H).

In most developing countries, this system is inefficient. Prospective growth and rural service centers are denied the flow of investment and accretion of new skills that would make them increasingly efficient in servicing surrounding centers and rural populations, since resources - capital and a professional, technical and skilled work force - tend to concentrate in the metropolitan areas. Lack of sufficient investment in transport and other physical infrastructure systems also results in weak ties between centers and amongst centers and surrounding rural areas.

This generalized picture is true of Panama today. The metropolitan region has attracted the bulk of the country's human and financial resources, while the remainder of the country, principally agricultural regions, have been growing at rates well below the national average, despite characteristically high birth rates. While flows of financial resources are hard to measure, data on human resources illustrate the point: between 1969 and 1970, 45 of 48 districts in the URBE Project area experienced a net outflow of population. ^{1/} Furthermore, the emigrants tend to be in the most productive age groups. Two of the three exceptions to this trend, predictable under central place theory, were the growth centers of David and Chitre. Moreover, even though the districts in which they are located are losing population, most of the service centers (Aguadulce, Puerto Armuelles, La Concepcion and Santiago) are now experiencing an increase in their population growth. As agricultural productivity increases, the population of all the centers and the demand for the services they provide will also increase. This may already be occurring.

Integration of subsistence producers into the market economy increases incentives and opportunities for commercialization and for distributing services and facilities needed in rural areas. Transformation of communities and productive activities - the evolution of subsistence into commercial farming, of simple handicrafts into specialized processing and manufacturing, of scattered and isolated economic activities into concentrated modes of production integrated into a national system of exchange - requires a well articulated spatial structure. Centers of various sizes, specializing in different economic and social functions, must be linked to each other through a network of physical, economic, technological, social and administrative interactions. The linkages - patterns of transaction among groups and organizations located in spatially dispersed communities with sufficient threshold sizes of population to support their own specialized activities - are the primary means of expanding the system of exchange and transforming underdeveloped societies.

b. Selection of Growth and Service Centers

The Ministry of Planning and Economic Policy (MPPE) with the assistance of the UNDP team of regional planners and AID

^{1/} Checchi & Company Report, op. cit., pp 19-21.

consultants has been preparing regional studies over the last six years. These studies, in addition to serving other purposes, have provided the basis for selection of growth and service centers to be included under the Project. The centers were selected on the basis of service functions performed for their own population and the population of their rural hinterlands, spacing criteria to put the majority of the rural population within reach of a major center, and population size. The selection process included analysis of population distribution, topographical features, road networks and traffic flows, and an inventory of the economic activities and service functions for each center in the region. This analysis also served to identify the market towns and lower order population centers in the URBE region and determine both their areas of influence and the service or growth centers on which each depends for services not available locally. Finally, this analysis identified incipient service centers which could be included in future extensions of the URBE program. Viewed in sequence, Maps 2, 3 and 4 show the influence areas of growth centers, service centers and incipient service centers.

As might be expected, David (population 55,000) and Chitre (population 25,000) clearly satisfy the criteria for growth centers. They are the two largest centers in the URBE Project area and in fact the two largest urban centers outside of the metropolitan region. They are also the administrative, public service and cultural centers for the most densely populated regions in the URBE Project area, namely western Chiriquí Province, and the Azuero Peninsula. Both are sites for regional branches of the University of Panama, and David is home to the Ministry of Public Works, the result of a GOP decentralization effort in 1975. Chitré and David qualify as growth centers, in part, because of their growth potential and the wider range of their influence over the rural hinterlands. Each serves as the primary nucleus of a system of smaller market towns in the Project area. They are sites of increasing industrial, commercial and service activities as well as net receivers of migrants. Both centers have managed to attract a small but growing core of entrepreneurs and professionals, and the private sector plays a strong and vigorous role in their development.

Six towns in the region, which provide a lower level of services for their own population and their rural areas of influence, have been designated service centers. They are La Concepción and Puerto Armuelles in the Western Region, and Santiago, Las Tablas, Aguadulce and Penonomé in the Central Region. As a group, these towns range downward in terms of population from 12,000 to just under 5,000. Their primary functions are service related, e.g., medical and educational services, provision of agricultural inputs and markets for agricultural produce, as well as sites for some food processing activities. They are important links between the larger market towns (growth centers) and the dispersed villages and farms within

their areas of influence. In addition to the recently initiated Integrated Rural Development Program in the Tonosí valley, four additional such projects, planned for implementation within the target area, are within the zone of influence of one or more of these market towns.

In addition to the above, other towns in the regions met some, but not all, of the criteria for designation of service centers. Spacing and linkage considerations of central place theory require that the dispersed rural population have access to specialized services at not too great a distance. Adoption of a fixed time/distance criteria would satisfy this requirement, and argue for the designation of additional towns such as Boquete (population 2,700), Natá (population 3,500), and Anton (population 3,600), as service centers. However, these towns were not included as service centers as they are sufficiently close to other towns (e.g., Penonomé and Aguadulce) that clearly meet all service center criteria, and their designation as service centers at this time would unnecessarily dilute Project resources.

c. Investment Criteria

Historically, the most difficult aspect of planning for regional development has been at the point of translating broad regional development objectives into specific, concrete investment decisions. An attempt has been made to develop a systematic analysis of weaknesses and growth opportunities in the centers and in the linkage network through which they serve the rural areas. It should be recognized that the analytical process relies in large measure on intuitive judgments, and suffers as well from the usual difficulties in finding and developing suitable data sources, quantifying the magnitude of services needed, and balancing growth objectives with equity considerations.

Regional development investment criteria for the URBE project are based on growth pole and central place theory, knowledge of the resource base of the region, and the objectives of the project. Growth pole theory indicates that selected industries in key locations can, through economic linkages, stimulate accelerated regional development. Such industries should be linked to regional resource base; in the case of the URBE area, two predominate resources are agricultural potential and labor. In addition, employment generation, upgraded urban-rural linkages and increased demand for agricultural commodities are objectives of the project. Analysis of these factors suggests that additional agro-processing activities in the region are most consistent with regional development theories, regional resource and economic base, and project objectives. The relatively large amount of food imported to Panama suggests the viability of markets for agro-products through import substitution.

Industrial location theory indicates that industries locate to: (1) take advantage of agglomeration economies (reducing costs of needed industrial infrastructure such as power, water, waste disposal, land, banking facilities, repair services and other needed services) and (2) economization of transportation costs incurred in moving raw materials to industries and final products to market. Because it is easier and cheaper to transport finished products than raw and perishable agricultural commodities, agroprocessing industries should be located near the source of raw materials, i.e., in agricultural areas. In the case of Panama, these industries should be located in the project area instead of at the dominant market of the Panama-Colon corridor. Within the URBE area, the growth centers of Chitre-Los Santos and David are natural locations for these industries because they are centers of transportation in major agricultural areas and they provide the highest level of agglomeration economies (urban functions and infrastructure) in the region. The six service centers also provide reasonable locations for some agroprocessing industries.

The development of agroprocessing industries in these centers requires that the appropriate infrastructure and investment climate be provided along with assurances that the needed factors of production are available. The development of industrial sites in Chitre-Los Santos and David will provide needed physical infrastructure (land, transport routes, water, and electricity). In addition, the URBE sewer projects in Penonome and Puerto Armuelles and the IDB sewer project in Las Tablas will upgrade infrastructure in these centers. The increased hydroelectric generating capacity will provide more than enough power for the proposed agroprocessing activities. The agroprocessing and small enterprise loan components of the URBE project, in addition to already existing GOP tax concessions for the URBE area, provide financial incentives to entrepreneurs. The promotional activities of COFINA and MIDA will provide information on the potential for new industries in the region and on availability of factors of production. Also a number of activities are designed to improve the factors of production, specifically agricultural commodities and labor.

The supply of agricultural commodities will be improved by AID assisted and other GOP activities designed to increase agricultural production and marketing and storage facilities (see Section II.A.4). The flow of agricultural commodities to the centers will be improved by the URBE subfocus on urban-rural linkages and by other GOP activities. The MPPE principal components linkage analysis^{1/} and a nation wide transportation study carried out by a Canadian consulting firm indicate deficiencies in the rural transportation network. Some of these deficiencies will be addressed by a planned AID-financed access roads loan and by IDB supported road improvement projects (see Section II.A.4.). To complement these road improvement programs, three transport terminals are proposed under the URBE project. These terminals, which are to be located in David, Chitre and Santiago, are consistent with the recommendations of the Canadian firm's transportation study. These three centers are the major hubs of transportation in the region and are suffering from congestion which restricts the flow of people and goods throughout the region. The terminals will relieve this congestion and thus improve the flow of agricultural goods into the proposed agroprocessing activities. The construction and efficient operation of the terminals will serve to increase agricultural productivity by providing farmers with improved access to needed urban based agricultural services, such as credit, fertilizers, seed, implements, markets, etc. In addition, the improved transportation network will allow farmers and their families to gain improved access to urban social services, such as health and education; this in turn may have beneficial impacts on their productivity.

A second important factor in production, labor, will also be improved by URBE subprojects, such as worker training, shelter, and recreation facilities, and activities under other GOP programs. The URBE worker training activity will directly upgrade the quality of labor will also be improved by GOP activities to upgrade health and education services in the region including upgrading of sewerage systems (see Section II.A.4.). Delivery of these social services to rural areas will be improved by the proposed bus terminals and improved access roads. These will also streamline the daily commuting of rural labor into the employment opportunities generated by the proposed agroprocessing activities.

^{1/} Copies of the linkages analysis are on file in the Office of Development Resources, Bureau for Latin America and the Caribbean in AID/Washington, USAID/Panama, and the Ministry of Planning in Panama. The analysis is in Spanish.

In addition to the provision of needed infrastructure, loan programs, tax concessions, improved supply of agricultural raw materials and labor, the URBE project will furnish additional incentives for entrepreneurial investment in the growth and service centers. These incentives are designed to create a living environment in the centers which will be attractive to the entrepreneurs and mid-level personnel needed to efficiently operate agroprocessing enterprises. The incentives, which include housing, sewerage, cultural and recreational activities, will also directly benefit lower income groups and the poor.

Within each of the centers, appropriate locations for both Project financed and other activities will be determined by a rational planning process which will include representatives of target group interests. To promote this planning process, the Project will provide considerable technical assistance to MPPE.

In addition to the main URBE focus on employment generation, upgraded urban-rural linkages, and improved shelter, the Project will also stimulate development through multiplier effects. For example, increased employment in agroprocessing and small enterprises and from bus terminal and housing construction will mean increased income and demand. To fulfill this increased demand, small enterprise loans will be made available to encourage the development of small commercial and service activities. These activities will provide improved services to urban and rural target group and to agroprocessing and other production activities in the region.

d. Summary

The GOP is attempting to develop the Central and Western Regions through a combination of improved public infrastructure and services and promotion of private investment. Technical analysis indicates that growth and service centers are a very important element in the development of the region. The centers provide functions which are needed both in their own development and the development of their surrounding hinterlands. Growth and service centers have been selected on the basis of criteria which demonstrate that they are primary links in the service delivery structure serving the regions' agricultural areas.

The selection of project investment activities was based on regional development theory, knowledge of the regions resource and economic base and the regional development objectives of GOP. Analysis of these factors suggest that subprojects be aimed at improving urban-rural economic linkages and generating employment. To achieve this, promotion of agroprocessing and related investments was selected because these both are linked to agricultural production and generate jobs. To promote these investments a variety of subproject components were selected including industrial sites, agroprocessing and small enterprise loans, tax concessions and other elements to attract productive enterprises such as improved housing, sewerage, recreational and cultural activities. In addition, a number of activities are designed to improve the supply of labor and agricultural raw materials. Labor supply will be improved by the Project worker training element and by GOP activities to upgrade health and education services. Agricultural productivity will be increased by agricultural development activities and by improvement of urban-rural linkages through the URBE new transportation terminals and GOP activities to improve roads.

2. Technical Analysis of Individual Project Elements

a. Town Planning

The technical analysis of the town planning element requires: an examination of the relevance of the planning exercise to town growth and development; demonstration of the technical competence of the preparers and reviewers of the plans; and an analysis of whether the process can be reasonably expected to ensure good location decisions for public and private investments.

Town planning for the URBE Project is to be a collaborative effort between the Ministries of Planning and Housing, local authorities and town representatives. The general regional

context and strategy for town development is provided by the regional development strategy and framework produced by the Ministry of Planning's Directorate of Urban and Regional Development, Urban Planning Department (MPPE/UD). This department, with the assistance of a two-man UNDP team of experienced urban/regional planners, has been preparing diagnostic studies (diagnosticos), social soundness analyses and development plans for the URBE centers for the last two years. The same team has also prepared the regional development plans on which the town plans are based. Personnel of MPPE/UD include trained city planners, a sociologist, regional economists and other professionals whose disciplines are relevant to this kind of exercise.

The first town plan prepared by the team is for the Chitre-Los Santos growth center. It consists of a diagnostic study, a social soundness analysis, a development plan and a series of physical development maps for the twin city area. The physical plan for the city takes into account the conclusions of the social and economic analyses. It indicates historical growth of the city, the present basic layout, actual land use, location of public institutions, analysis of population density, land values, roads classification, traffic flows (heavy, medium and low), location of public utilities (electricity, water and sewer), areas for future population expansion and urbanization, areas for expansion of other sectors such as commerce and industry, and a synthesis of proposed land uses. The plan largely meets the criteria set out in the PRP^{1/} for ensuring that the town planning process be initiated by the time of PP preparation.

The rest of the process - review and approval at the local level, development of physical plans and land use regulatory mechanisms, and final adoption by the Municipal Council - has been discussed but not yet initiated. Briefly, these processes are expected to proceed as follows:

The guide plans developed by MPPE/UD will be discussed and approved at the local level through reactivation of the now largely dormant Planning Juntas. These Juntas will be an advisory group to the existing local political apparatus which has been created in Panama to maximize local level participation in the political decision-making processes (see Annex II-L). The

^{1/} The PRP for Growth and Service Centers, p. 17, stated, "It is expected that the town plans will include: a sketch development plan; a narrative description of the social and economic needs of the subregion and targets for the town's development; a map and description of the nature and location of principal public and private investments-existing and planned; criteria for approval of the type and location of private sector subprojects to be financed under the project; feasibility studies for public sector subprojects to be financed under the project; and implementation responsibilities for each subproject."

Juntas will be legally created through formal municipal legislation, a draft of which has been prepared (see Annex II-L). The legislation approved by the municipalities will describe the functions and composition of the new Juntas. They are expected to include representatives of the local business community, GOP agencies active in the area, and the "popular" sector. The Juntas will review the development plans prepared by MPPE/UD with the assistance of MPPE and MIVI personnel and of the technical advisors financed through the loan.

Development plans will be approved by the respective city councils (Consejos Municipales) which are made up primarily of the elected representatives of the ward-like units called corregimientos. The membership of the Planning Juntas will help to strengthen the role of the private sector in the approval process - a factor which is considered important given the strong growth and development orientation of URBE.

Upon approval, the town plans, as modified by the Municipal Councils, will be sent to the Ministry of Housing which by law is responsible for physical planning of Panama's cities. This includes preparation of comprehensive physical town development plans and simplified land use regulation mechanisms. The precise scope and focus of these documents has not yet been worked out, but they will probably include land use, zoning, and site plans and final feasibility studies for principal public investments, a street and traffic engineering plan, and be supported by simplified zoning ordinances and construction codes.

The completed physical plans will be further studied by the Planning Juntas and presented with their comments to the Municipal Councils for adoption. Council adoption will mean that the regulatory mechanisms become local law, and the council will be responsible for enforcement. Enforcement will be accomplished largely through local government control of building permits.

To recapitulate, major steps in the URBE town planning process are:

1. Diagnostic studies by MPPE (coordination and input: MIVI and local Planning Junta)
2. Development Plan by MPPE (coordination and input: MIVI and local Planning Junta)
3. Approval of Development Plan by Consejo Municipal (advised by local Planning Junta)
4. Physical Plan developed by MIVI on basis of approved development plan (coordination and input: MPPE and Planning Junta)

5. Physical Plan adopted by Consejo Municipal (advised by Planning Junta)

6. Continuous evaluation plans and adjustments as necessary by MPPE and MIVI (input and consultation by Planning Junta and approval by Consejo Municipal)

Plans for center growth and development, in summary, are based on regional development plans. Both the regional and town plans are prepared by professionals trained in planning and related disciplines who will be advised by contracted technicians during the early phase of loan implementation. The plans take into account the interrelationships between different land uses, attempt to ensure efficient use of land and infrastructure investment in the centers, and are reviewed and adopted by an elected local government. Capital investment programs based on the plans and enforcement of land use controls in the plans will guide growth and development of the centers over the long run.

b. Agro-industrial Subprojects

COFINA - the National Finance Corporation - will have primary responsibility for the implementation of the agro-industrial Project elements with technical support provided by the Agro-Industrial Division of the Ministry of Agriculture (MIDA).

Technical feasibility of this element will be ensured by COFINA's adoption of the subblending program analyzed in the following subsections.

(-) Subproject Selection Criteria

In order to assure that loan funds allocated for agro-industrial subprojects are utilized in a manner which will lead to achievement of Project objectives, the following eligibility criteria have been established:

- Subprojects must be consistent with MIDA's policy for agro-industrial development.

- All subprojects must be technically, financially and economically viable. Financial and economic viability will be determined according to COFINA's standard appraisal guidelines (see Annex II-G). Evidence of an adequate domestic or export market is required.

- Subprojects must demonstrate a clear benefit to the target group, preferably through employment generation and linkages with small-holder agriculture:

-- Employment generation -- as a norm, one identifiable direct full-time job should be created for each \$5,000

invested. A higher cost may be allowed if the project produces a product utilizable by rural small holders (e.g., animal feed from banana waste) or provides additional income to large numbers of rural holders (e.g., cacao and castor bean processing). In no case may the cost per job exceed \$10,000.

-- Subprojects must demonstrate strong linkages to agricultural production within the Project area. They should utilize raw materials for which current demand is weak or for which production (by small holders) can be expanded.

- Total loan amounts may not exceed \$500,000.

-- Interested investors must provide equity equivalent to at least 20% of the total investment cost in the case of new industries and 25% in the case of existing industries.

- The subprojects should not directly compete with existing industries which have underutilized capacity.

- All subprojects should be located in or near a growth or service center.

- Proposed subprojects do not qualify for commercial loans.

- Existing industries must provide a current certified financial statement.

- Subprojects must be environmentally sound.

COFINA will provide AID with its subblending regulations, which will include the foregoing subproject eligibility criteria, as a condition precedent to disbursement for agro-industrial subprojects.

(2) Subproject Approval and Implementation Process

Subprojects are expected to originate from two sources: interested entrepreneurs who seek financing from COFINA, or from pre-feasibility studies carried out by COFINA or MIDA for projects needing an entrepreneur. The subproject development process will be basically the same in both cases, although more resources and time will obviously be required to develop projects in the latter category.

The loan applications from interested entrepreneurs and pre-feasibility studies prepared by COFINA and MIDA will be reviewed by a technical committee composed of two representatives from each institution. The committee will determine whether the project is consistent with MIDA's agro-industrial policy, and, if it is, the project development process to be followed.

If it is eligible for financing under this Project, the technical committee will determine the additional steps and documentation needed to enable final technical approval. COFINA's standard format for subproject analysis will be used as a guide. This format is being revised as a result of the Intensive Review to include an analysis of alternative labor/capital mixes that might be used in agro-industrial production, and assessment of the environmental effects of subprojects.

-- Subproject development:

Feasibility studies on the technical, financial and administrative aspects of the subproject will be carried out as agreed during the preliminary review. Personnel of MIDA and/or COFINA as well as consultants may participate in the analysis process, depending on project requirements and availability of appropriately qualified personnel. The following sources of funds will be available for financing consultants: COFINA's own resources; an IDB line of credit to COFINA for feasibility studies; and, a small portion of the technical assistance funds under the proposed Project. If an entrepreneur has not yet been identified, MIDA and COFINA will discuss the Project with possible candidates and attempt to interest them. When credit applications are received, COFINA will carry out its normal credit analysis procedures.

COFINA and MIDA both recognize that a key element in determining subproject feasibility is the availability of raw materials. This has been a major reason for past failures of agro-industrial projects in Panama (and, we might add, elsewhere). In some cases, the entrepreneur for the agro-industry may grow his own raw materials. However, arrangements for production of raw materials will usually be through contracts with third parties. In this case, MIDA will analyze the possibility of small farmer participation in raw materials production and provide assistance to groups, cooperatives, and individual small farmers who can meet the demand.

It is recognized that raw materials producers, and in particular small farmers, may be precluded from participation by lack of agricultural production credit in the case of non-traditional products. COFINA does not now have resources for this kind of subloan and funds available through the Agricultural Development Bank (BDA) are used almost entirely for financing the production of traditional crops and livestock. Its current portfolio is about \$52.0 million.

A request to IDB for a loan in the amount of \$15.0 million is currently under review, and formal approval is anticipated by about August of 1978. The BDA will commit \$5.8 million in counterpart funds for this loan. Disbursements will be initiated in CY 1979. Project components are as follows:

	<u>(\$000)</u>	<u>Source</u>
Livestock and Infrastructure	9,000	IDB
Machinery and Equipment	2,000	IDB
Inputs (seed, fertilizer, insecticide, etc.)	4,000	IDB
Working Capital	<u>5,760</u>	BDA
Project total	<u><u>20,760</u></u>	

Reportedly, the only restrictions on the use of IDB funds are for the financing of production for coffee, sugar cane, cacao and bananas. All other traditional and non-traditional produce is eligible. Projection of subloan levels by BDA over the next five years, including the use of reflows, ranges from \$36 to \$39 million annually.

Another source of agricultural production credit may be the "Fund for Promotion of New Agro-industrial Projects," currently being discussed as a joint COFINA-BDA project. The fund's principal objective would be to provide credit for working and fixed capital for production of traditional and non-traditional crops in the volume and regularity required by processing plants. The fund would also support applied research and pilot production programs to encourage producers to begin, or improve, production of crops in demand by agro-industries. Resources for the fund are not yet identified but would come from both the GOP and international donors.

It is anticipated that the required financial resources for non-traditional production under this Project will initially be minimal, and that resources available from the BDA will be quite ample for meeting the demand. ^{1/} More accurate estimates will be available as the feasibility studies are completed. If, over the course of the Project, financial resources, in addition to BDA funds, were to be required, and no other adequate source of financing was available, one possible solution would be to provide limited funds for non-traditional raw material production as part of the working capital of the processing plant. The plant would in turn make funds available to the small and medium farm producers, either individually or collectively, i.e., production cooperatives, for the financing of inputs needed for producing the raw material, as part of the contractual arrangements between the plant and producers.

1/ One source of production credit is the Cooperative Development Loan (525-T-041) should the BDA wish to use loan funds for this purpose and if the loan is not fully disbursed by the time credit is required (TDD is June 1979); the Mission would have no objection as long as subloan criteria already established for the 041 loan are observed.

This arrangement appears to be quite feasible judging from the results of a recent evaluation of the operations of LAAD-CA, a subsidiary of Latin American Agribusiness Development Corporation. 1/ The evaluation found that purchasing arrangements where the processing plant provides credit to farmers, generally in the form of seeds, fertilizer or other inputs, was very common in the Central American area. Furthermore, this type of an arrangement is very effective since it virtually guarantees that adequate produce is delivered to the plant to repay the credit.

A key factor in ensuring maximum employment generation is the establishment of an upper limit on the cost per job created. A limit of \$10,000 per identifiable full-time job equivalent 2/ has been established, based on an analysis of the prefeasibility studies for the illustrative projects included in the next subsection. The norm is expected to be around \$5,000/job. It is the Mission's judgment that \$10,000 represents a good balance between equity (i.e., maximizing job creation) and growth (i.e., increasing the regions' GDP). We believe that a lower figure would severely limit the opportunities for development of viable agro-industrial subprojects. 3/

-- Subproject approval and implementation:

When the technical, financial and administrative analyses are completed, the project will again be reviewed by the technical representatives of COFINA and MIDA. If the project meets the criteria enunciated above, the loan application will be forwarded to COFINA's credit committee for further consideration. If approved by the credit committee, the loan application will then be forwarded to COFINA's Board of Directors. If approved, COFINA's legal officer will draft a loan contract. COFINA will be responsible for all disbursements and collections. Technical assistance to subborrowers during implementation will be provided by MIDA or through any other source specified in the subloan contract.

(3) Credit Demand

1/"Evaluation of LAAD de Centroamérica, A Subsidiary of Latin American Agribusiness Development Corporation," Checchi and Company, Washington, D. C., 1977 (AID Contract otr-C-1378, Work Order 7, Project No. 596-0000).

2/ Employment in the agro-industry plus full time equivalent of identifiable jobs created in transportation (e.g., of raw materials), and production and/or harvesting of raw materials.

3/ For purposes of comparison, investment per each permanent job created in the sugar mill located in the Province of Chiriquí in the Western Region was \$33,000.

Illustrative industries that might be financed under the Project include:

<u>Industry</u>	<u>Total Investment</u>
Meat Cannery	\$ 150,000
Dried & Salted Fish	200,000
Fruit and Vegetable Processing	475,000
Frozen Frog Legs	130,000
Commercialization of Sharks	220,000
Animal Waste Collection & Processing	80,000
Banana Waste Collection	100,000
Castor Bean Processing	400,000
Cacao Processing	500,000
Pineapple Processing	100,000
Potato Processing	500,000
Fertilizer Mixing	500,000
Rice Bran Oil	160,000
Frozen Yucca	80,000
Yucca Starch	400,000
Soy Oil, Flour	400,000
Industrialization of Potatoes	500,000
Cashews, Cashew Oil	350,000
Animal Feed from Molasses	250,000
Citric Acid from Molasses	400,000
Leather Curing	400,000
Total	<u>\$6,295,000</u>

Project funds will not be used to finance tobacco products or alcoholic beverages.

All of the above proposals are consistent with MIDA's agro-industrial policy, and pre-feasibility studies have been prepared for 75% of them. The total identified credit demand - \$6.3 million - exceeds by a comfortable margin the \$3.6 million in sub-lending resources that would be made available through the Project. The latter comparison is important as the interested entrepreneurs often provide non-cash items (e.g., land, already owned buildings, etc.) as counterpart to subloans, whereas the total investment required largely excludes these items.

(4) Eligible Subborrowers

Eligible subborrowers include natural and legal persons (including cooperatives and other legally constituted groups) who meet COFINA's requirements. These requirements include: evidence of managerial and financial soundness; willingness to accept technical assistance recommended by COFINA in production techniques, worker training, financial management or other area which COFINA deems necessary; and normal eligibility requirements established by COFINA for agro-industries.

c. Small Businesses and Industries

This sublending program will be administered by the Ministry of Commerce and Industry (MICI), with the National Bank of Panama (BNP) serving as depository for subloan funds.

(1) Subproject Selection Criteria

- All subprojects must meet current eligibility requirements (See Annex II-F) of the MICI small industries program, including financial viability, and presentation of a study showing the project's profitability. In addition:

-- Eligibility will be extended from industries and repair shops to also include small commercial and service activities.

-- Cooperatives and incorporated small businesses as well as individuals are eligible.

-- Women will be encouraged to participate in the MICI/URBE small business program and will not be discriminated against.

-- The maximum amount of credit will not exceed \$50,000 (\$20,000 in the case of working capital only).

- Subprojects must be located in the growth and service centers and the owner(s) must reside within the Project area.

- Subprojects must demonstrate a benefit to the target group, especially through employment generation or provision of essential goods and services to target group members.

- As a norm, one identifiable direct full-time job equivalent should be created for each \$3,500 invested.

- Proposed subprojects should not qualify for commercial loans.

- Subprojects shall not be related to alcoholic beverages, tobacco or gambling.

MICI will provide AID with its sublending regulations, which will include the foregoing subproject eligibility criteria, as a condition precedent to first disbursement for small businesses.

(2) Subproject Promotion, Approval and Implementation Process

Although MICI has been running a small loan program for industries for some time, it has avoided advertising or soliciting loans due to limited funds and staff. Under this Project, MICI will be provided with a level of resources far greater than it has administered in the past and it will initiate sublending to small retail and service establishments.

In order to make potential entrepreneurs aware of its services, MICI will contract a short term advisor for three months to assist it in developing and implementing a promotional campaign. Interested entrepreneurs will contact MICI representatives who will assist in preparing subloan applications. These applications will be forwarded to MICI's small loan office in Panama City where they will be reviewed by financial and technical analysts. The application and the analysts' recommendations will be reviewed by the Chief of the Financial Section who will present acceptable loan requests to a credit committee. Upon approval by the credit committee, subsequent approval by the Vice Minister and signature of a loan contract, MICI will disburse subloan funds in accordance with the approved financial plan for the subproject. Loan applications rejected at any point in the analyses process will be returned to the field representative with appropriate explanation.

The field representative will provide technical assistance to the subborrowers before, during and after subloan approval.

(3) Credit Demand

The MICI small industries window currently has an unfinanced backlog of 65 loan applications totaling \$598,000 in its Regional Offices in the Project area (see table below). This amount represents loan requests for industrial or repair activities and excludes commercial and service activities. The inclusion of the latter activities into a small enterprise program, the number of additional activities which can be predicted according to near term population growth projections and to central place analysis, and the effective extension of the MICI program to all of the service centers indicate that the proposed \$3.4 million fund can be effectively absorbed during the life of the Project, if sufficient promotion, technical assistance and training are provided to overcome existing constraints to business expansion. 1/

1/ A survey by a UN consultant in Chiriquí identifies 19 existing small industries which could effectively utilize \$500,000 of loans from a small enterprises window.

Current Credit Demand - MICI Small Industries Program

<u>Regional Office</u>	<u>No. of Loan Applications</u>	<u>Amount Requested</u>
Chiriquí	31	\$ 261,000
Herrera	7	65,000
Los Santos	3	35,000
Coclé, Veraguas	<u>24</u>	<u>237,000</u>
	65	\$ 598,000

Projects financed to date have created an average of more than one permanent job for each \$2,000 invested. The above norm for employment generation (\$3,500/job) is considered appropriate in view of the Project's employment generation objectives and should also expand the effective demand for MICI subloans.

(4) Illustrative Small Enterprise Subprojects

Small enterprise activities would include industry (milk products, meat preparation, candy, clothing, shoes, leather, wood crates, furniture, printing, pharmaceuticals, plastic, clay and metal products, bakeries, and animal feed); retail commerce (cloth, clothing and shoe stores, hardware, electrical goods, furniture, pharmacies, book dealers, grocery stores, food kiosks and butchers); wholesale commerce (wholesale grocers); and services (restaurants, auto repair, general mechanics, and electricians).

These categories of activities reflect the types of economic activities which are predicted to be required by the growth and/or service centers and their rural hinterlands. In those cases where the growth and service centers do not adequately provide the economic activities predicted for them, such activities can be established or expanded through Project-related promotional activities.

Loan funds will not be used for production or sale of alcoholic beverages, movie theaters, sports facilities, night clubs, or amusement houses (pool halls, pinball machine parlors, etc.).

(5) Technical Soundness

The long-run objective of this element is to increase availability of medium long-term (up to seven years) credit for small businesses and industries in the rural areas. While private banks and credit unions provide short term credit (up to three years), longer term credit is largely unavailable to small entrepreneurs. However, a sizeable increase in the availability of longer term capital in the centers is not likely to be achieved through the proposed arrangement for two reasons. First, MICI is a government ministry, not a financial institution. Its only source of new

capital is from GOP budget appropriations. Second, it is charging too low an interest rate to permit adequate expansion of the fund (given normal "shrinkage" in small loan programs). Although the proposed mechanism is admittedly less than ideal, it is a start. Two conditions have been built into loan implementation arrangements aimed at improving on this start. First, the GOP will maintain the level of the fund at no less than \$3.4 million for ten years following the end of the loan. Second, by the end of the second year of loan implementation, the GOP will carry out a study (using loan-funded technical advisors) on the design and implementation of alternative mechanisms for increasing the availability of long-term capital for small businesses. The study will analyze, at a minimum, the following alternatives: (a) use of reflows from the small business fund to finance a productive credit guaranty system for eligible loans from private banks, (b) use of fund reflows to create a discount line for loans from private financial institutions (including credit unions), and (c) an active small loan credit program run by BNP with MICI's assistance.

The study will be analyzed by MPPE in consultation with MICI. Based on its analysis, MPPE will formally present to AID a report on the action the GOP intends to take to improve the implementation arrangements for the small credit fund. With AID concurrence, a new arrangement may be initiated during implementation of the Project.

d. Industrial Sites

A prefeasibility study for the industrial sites has been prepared by the Ministry of Commerce and Industry.

The Ministry intends to prepare a scope of work for final feasibility analysis and preparation of plans and specifications in the near future. As presently envisioned, development of the sites will be carried out in two stages. The first stage will consist of site preparation, street layouts, drainage and the installation of utilities. Except for the main access roads, streets will not be paved during the first phase of implementation. Construction of additional facilities will be contingent on firm commitments from interested investors. Estimated cost during the first 18 months of implementation, corresponding to the first stage, will be about \$1.1 million.

The second stage will be implemented during the remainder of the Project period. Additional facilities, such as buildings for processing and manufacturing activities, administrative services and street paving will be provided. Expenditures during this stage are estimated at \$1.3 million. The towns will provide the land and part of the cost for installing utilities, while the GOP and private interests will share the rest of the cost.

As presently planned, the sites will be developed, maintained and operated by two new corporations (one in Chitré and the other in David) each made up of private entrepreneurs and the municipality. COFINA, as fiduciary, will lend the corporations funds for development of the sites on long terms (15 years). MICI will supervise the bidding process for construction and construction supervision of phase one investments. The corporations will be responsible for phase two construction, collection of rents, and operation and maintenance of the sites, including trash collection services. Additional capital needed for phase two investment will also be supplied by COFINA on terms to be negotiated with the corporations. Two questions of technical soundness - the demand for industrial sites and their environmental impact - are discussed below and in the Initial Environmental Examination attached as Annex II-J.

(1) Demand for Industrial Sites

Previous attempts to develop industrial sites in Central America have not always been successful due to lack of demand for this type of facility. However, these attempts have usually involved large investments in infrastructure with insufficient promotion by sponsoring agencies. The present Project attempts to overcome these problems in several ways. First, staging of construction will minimize the investment exposure of COFINA and the corporations. Also, arrangements have been made for adequate promotion. Groups of entrepreneurs, who are expected to form the nucleus of the private investors in the corporations and also locate factories in the sites, have been formed in both David and Chitré. They are actively involved in planning and promoting the projects. As MICI will be the implementing agency for both the industrial sites as well as the small industries loans, it will help to create its own demand for the sites. COFINA and MIDA will also help encourage entrepreneurs to locate at the sites. Furthermore, the town plans are expected to limit the areas for industrial location and correspondingly increase the demand for industrial sites financed through the Project. Finally, the demand for the sites will be increased simply because locating there will reduce the investment requirements for interested entrepreneurs. To the extent that COFINA and the municipalities bear the cost of investment in sites and buildings, working capital requirements will be less and the rate of return on investment higher.

e. Housing

There are two major technical concerns related to the housing component: the appropriateness of the mix of solutions proposed for growth and service centers, and the degree to which the housing component will contribute, in concert with other Project components, to overall development of the growth and service centers.

(1) Proposed Solutions

The shelter component of the URBE Project will provide a total of about 2,200 individual shelter solutions, ranging from serviced sites to completed two-bedroom units on urbanized lots. The project includes six basic solutions:

<u>Shelter Solutions</u>			
<u>Type of Solution</u> ^{1/}	<u>Cost Range</u>	<u>No. of Solutions</u>	<u>Required Investment</u>
1. Serviced Sites	\$ 550	400	\$ 220,000
2. Home Improvement Loans	1,000	200	200,000
3. Urbanized Lots	1,500-1,650	420	685,500
4. Unit on Serviced Land Owned by Beneficiary	2,000	95	190,000
5. Unit with Water and Latrine	3,000-3,200	335	1,046,000
6. Completed 2 bdrm. Units on Urbanized Lots	4,700-5,700	736	3,870,200
Totals		2,186	\$6,211,700 ^{2/}

These shelter solutions will be distributed among the eight regional growth and service centers to support the development of each center on the basis of estimated demand and affordability.

As presently planned, the number of housing solutions and level of investment for each growth and service center are as follows:

<u>Center</u>	<u>No. of Solutions</u>	<u>Level of Investment</u>
Chitre-Los Santos	466	\$ 1,858,200
David	650	1,857,500
Santiago	405	593,500

^{1/} For a definition of each type of solution planned under the Project, see pp. 37-38.

^{2/} This figure does not include inflation, which has been added to the Total Cost figure in the Financial Input Section of the Project Description, and the Summary Cost Estimate and Financial Plan (See Annex II-I).

<u>Center</u>	<u>No. of Solutions</u>	<u>Level of Investment</u>
Puerto Armuelles	50	\$ 240,000
Concepción	50	160,000
Las Tablas	115	310,000
Aguadulce	250	795,000
Penonomé	200	397,500
Totals	<u>2,186</u>	<u>\$6,211,700</u> ^{1/}

For a more detailed description - including type and cost of solutions planned for each center - of the foregoing data, see pp. 3-4 of Annex II-I.

Taken together, the shelter solutions envisioned under this component of the URBE Project will serve the housing needs of families with a broad range of incomes. Of the total 2,186 solutions, approximately 25% will be affordable by families in each of the three deciles between the 10th and 39th percentiles of the income distribution pattern for the centers. Approximately 25% of the URBE Project shelter solutions have been allocated to families with incomes between the 40th and 49th percentiles because (a) it is important to the development of the centers to attract and/or hold a variety of middle management and professional employees, technicians and skilled workers; (b) relatively little housing has been built in the centers for such families; and (c) the target population for HIG lending includes all families below the median income level. Type 6 solutions - completed two-bedroom units on urbanized lots - are principally for such families whose role in local development is important.

(2) Site Selection and Housing Demand

Subprojects for the shelter component of the URBE Project were chosen to support the concentration of resources in the selected growth and service centers by providing a variety of shelter solutions appropriate to the needs of each center. Subprojects have preliminarily been selected to meet the following criteria:

a. Subprojects will help alleviate existing land use problems which currently contribute to the deterioration of the environment and/or restrict the central place functions of each growth and service center;

b. Subprojects will address housing problems of low-income families in growth and service centers and in peripheral areas of these centers; and

^{1/} See footnote 2/ on preceding page.

c. Subprojects will serve the shelter needs of workers in existing or new productive enterprises to be financed under the Project.

The total number of 2,186 shelter solutions was established in consultation with the Ministries of Housing and Planning on the basis of requests already on file with MIVI, and on the basis of projected needs to support the development of new industries. These needs include:

a. Shelter solutions for relocation of shanty dwellers squatting in road or utility rights of way or on other marginal sites;

b. Home improvement loans for families who have started but not yet completed their homes with financing from informal sources;

c. Housing on land identified and available adjacent to agro-industrial infrastructure to support industrial development;

d. Housing on lots owned by individual families for whom long-term financing has not been available.

Land is available for the subprojects in all locations at prices compatible with the cost constraints which exist for low-income families. In some locations, land presently owned by MIVI or the municipalities is available.

(3) Design Criteria and Cost Estimates

The costs of subprojects have been estimated on the basis of 1978 cost data, to which an inflation factor of approximately 7.5% per annum has been added on the undisbursed portions of the project financing during a three year period of implementation. Project cost estimates are based on the following design criteria:

- Type 1, Serviced Sites: Serviced sites are to be provided to families whose incomes preclude their being able to purchase completed units. Lots of 300 sq. m. or less will be served with water connections to property lines and face on gravel roads. Electricity is not included in costs but may be obtained on an individual basis. Beneficiaries will receive legal title to the lots and be expected to construct temporary shelters which will be improved as their incomes rise.

- Type 2, Home Improvement Loans/Core Units: This solution provides a basic core unit to families living in squatter dwellings, or makes loans available to families who own

their land and need to complete or up-grade their units. The core will be 36 sq. m., with concrete floors, galvanized sheet metal roofing, and cement block walls without plaster finishing. Beneficiaries will provide interior partitions, windows and doors. This solution has been satisfactorily demonstrated by MIVI in David.

- Type 3, Urbanized Lots: Urbanized lots fronting on gravel roads or walkways will be no larger than 300 sq. m., and will have water, sewer and electrical connections provided up to the property line. Beneficiaries will be expected to construct temporary shelters which will be up-graded as their incomes or other resources permit.

- Type 4, Unit on Serviced Land Owned by Beneficiary: For families who already own land serviced by water and sewer systems or latrines, units of 45 sq. m. will be provided which contain two bedrooms, living-dining room, and kitchen. Electrical service will be arranged by the owner; for this Project, IHRE will establish a procedure whereby the cost of electrical installation will be paid for through the consumer's monthly electrical bill.

- Type 5, Unit with Water and Latrine: This solution includes a 45 sq. m. unit with two bedrooms, living-diningroom, kitchen, and latrine. Lots will be no larger than 300 sq. m., serviced with potable water and electricity, and front on gravel access roads.

- Type 6, Completed Two-Bedroom Unit on Urbanized Lot: This solution provides 45 sq. m. units, with two bedrooms, living-dining room, kitchen and WC. Lots of not more than 300 sq. m. will be serviced with electricity, water and sewer systems, and roads. In some cases, units of this type will be provided on land already owned by beneficiaries.

For a preliminary cost breakdown of each of the six shelter solutions see pp.13-15 of Annex II-I.

(4) Demonstration Effect of the Shelter Component

One of the implicit purposes in carrying out a shelter program aimed at a broad range of lower income families in the centers is to demonstrate to private construction firms that a profitable market exists for this type of housing. The Shelter Sector Assessment for Panama notes that from 1971 to 1976 the housing construction industry aimed over 90% of its output to the 16% of estimated total demand represented by upper and upper-middle-income groups and observed that the private sector has a significant untapped potential to service the higher

income segment of the AID target population (i.e., the 35th to 49th percentile).

Increased involvement of private housing developers will be enhanced through the Project in three ways. First, the institutional capability of the existing housing finance system to provide long term financing for such groups will be improved (see Institutional Analysis). Second, some of the housing will be built by construction firms, who presumably will make a reasonable profit on their contracts with MIVI. Finally, MIVI will actively attempt to interest developers through personal contact and through seminars and presentations in which they explain the results of the project and analyze the possibilities for private sector involvement. This will include visits to the project sites sponsored by MIVI.

f. Transportation Terminals

As noted in the Agricultural Sector Assessment, the principal impediment to a more rapid improvement of economic and social conditions for the bulk of the rural population is the lack, or inadequacy, of rural infrastructure. The paramount problem is accessibility. Less than 30% of the rural road network in the target area consists of all-weather quality. In addition, large potentially productive areas lack penetration roads and long stretches of many of the existing roads are completely impassable during the rainy season or accessible only by four-wheel drive vehicles even during the dry season. Produce can move to market only at a high cost under such conditions, and government services such as credit and technical advice arrive only sporadically. This sharply limits the incentives for existing small farmers to produce for the market and for new settlers to move into potentially productive areas.

A number of on-going and planned programs have been designed to help relieve this constraint. The Inter-American Development Bank (IDB) has been assisting the GOP in the construction of a number of key primary and secondary roads in the target area. The GOP with AID assistance have recently completed the design of a rural roads program for upgrading existing tertiary roads to all-weather capacity. The AID-financed Municipal Development Program is implementing programs designed to involve municipalities in rural roads maintenance and rehabilitation. Two such projects involve the provision of road maintenance equipment to the municipios of Tonosi and Boquete, both in the project target area.

The transport terminals proposed for financing under this project will complement ongoing and planned programs for improving the rural roads network. They will address marketing and transport constraints involving the movement of goods and people from rural areas to the growth and service centers, intra-urban flows of goods and people and movement of these between the regional centers and the metropolitan corridor. Improvement of the transportation system will particularly benefit the town poor and the rural small producer. The mode of transportation commonly used by small farmers and town residents alike is the bus. It is not only used for personal mobility permitting access to essential services such as medical, educational, and other public and private services, but as a means of transporting small amounts of cargo by the majority of subsistence producers with small surpluses to be sold for extra income. The orderly movement of these people is seriously impeded by the lack of adequate terminals in the towns. The three centers chosen for the construction of these terminals are important elements in the transportation system serving the target area. Currently, vehicles converge on the towns of David, Chitre-Los Santos and Santiago in a chaotic manner. There are problems of noise, traffic safety, and difficulties in moving from one place to another. By contributing to the improvement of the transport system, the project provides an important link in effectively integrating the spatial system of the target area. Additional benefits include reduction of travel time and costs; wider market area and extended areas of service delivery; and greater access to non-agricultural employment. These terminals will be key components in the GOP effort to organize an efficient transportation system among the key centers and between the centers and their surrounding hinterlands.

A prefeasibility study covering three planned bus terminals has been prepared by the Ministry of Planning with guidance from Colombian bus terminal experts.

The Ministry of Planning has prepared a scope of work for final design and feasibility analysis, and the Ministry of Public Works will contract a consulting firm to carry out this work in the near future. Three alternative mechanisms for financing these terminals, or combinations thereof, will be considered: municipio financing, central government financing, and mixed public, private financing. Based on the conclusions of this analysis, the Ministry of Planning will determine how the projects should be financed. If, as expected, the projects are feasible for financing as municipal government enterprises, they will be financed by COFINA on a fiduciary basis and the GOP will guarantee

subloan repayment to COFINA. The reflows will be used for financing agro-industrial subprojects in accordance with the criteria discussed in a preceding section. Estimated cost for the three terminals is \$3.3 million. The size of the terminals and related cost estimates are based on the aforementioned prefeasibility study and take into consideration: (a) the increase in the number of buses serving the area over the next 15 years; (b) projected passenger volumes; (c) size of terminal including open space operating area, service requirements such as ticket vending areas, sanitary facilities, administrative offices, storage facilities, and small related commercial and services establishments; (d) equipment; and (e) working capital and contingencies. Technical soundness of the terminals will be ensured by: contracting qualified consultant(s) to prepare the feasibility study, plans, specifications and bidding documents, to assist in evaluation of bids and to provide supervisory engineering; and provision of technical assistance (partially financed through the loan) to train municipal government personnel in administration, operation and maintenance of the bus terminals.

g. Sewerage Systems

The sewerage systems in both growth centers have been constructed recently. The system in Chitré effectively serves more than 75% of the area within the town limits; the system in David currently serves about one-third of the town but is not used to its full capacity pending completion of its raw sewage treatment facilities. Sewerage systems, however, in Santiago, Las Tablas, Penonomé and Puerto Armuelles need priority attention. The Las Tablas system will be improved through an IDB loan, and financing is being sought for the costly Santiago system. The other two - Penonomé and Puerto Armuelles - will be improved through this Project.

(1) The Penonomé System

The existing sewerage treatment system in Penonomé was constructed in 1936. It consists of a collection system serving 20 percent of the town's population area (45 percent of the population) and three septic tanks which discharge their effluent to tributaries of the Rio Zaratí. Currently, the entire system is overloaded. Although the physical state of the collection system is good, the pipes are undersized to handle the present volume of sewage. In addition, maintenance of these overloaded lines is complicated because they often cross private property. The septic tanks, because of inadequate size, now only partially retain solids, and allow virtually raw sewage to flow to nearby streams.

The remaining 55 percent of the town's population rely on individual septic tanks for waste disposal. In many areas soils are not sufficiently permeable to absorb septic tank effluents, causing ponding of partially treated sewage in densely populated neighborhoods, and again the runoff of wastes into nearby streams.

Both the situation of the town's treatment facilities and individual on-site systems are causing water quality problems that constitute a serious health hazard. The new system will provide for adequate service and treatment through the end of the century. It will serve 12,000 users and will cost about \$1.7 million. It will be constructed by the National Water and Sewer Authority (IDAAN) and will be wholly financed from GOP counterpart funds which will be made available to IDAAN through budgetary appropriations.

Plans and specifications for the new system are complete, except for the selection of treatment alternative. The system will consist of a collection system covering 75 percent of the town's land area, and a treatment facility located on the Rio Zaratí. The southernmost part of town

will not be served by the proposed system for topographical reasons. It is planned that the existing system will be totally replaced. The new collection system will be constructed to accommodate the projected year 2000 flows, and the treatment facility will be built to handle flows until the year 1990.

Plans for the proposed system are based on topographical considerations, population projections, projected waste flows (taking into account domestic, industrial and agricultural use, and infiltration), community needs, land requirements and costs. The plans evaluate three primary treatment alternatives in terms of costs, land requirements and treatment levels, and select Imhoff tanks as the preferred method of treatment. However, IDAAN has agreed to contract two technical advisors, to be financed under the Project, to assist in the re-evaluation of treatment alternatives for the Penonomé system and to further train its staff in the development of appropriate sewage treatment systems.

USAID/Panama has reviewed the existing plans and specifications for the Penonomé system and has determined that they are of good professional quality and soundly developed according to IDAAN's design criteria and standards.

(2) The Puerto Armuelles System

The existing sewerage treatment system for Puerto Armuelles consists only of a collection system serving a small portion of the town's center. This system discharges wastes directly to the ocean without treatment, causing contamination of the area's beaches.

Plans have not yet been prepared for the new Puerto Armuelles system and the number of users is still to be determined. However, the design is expected to be similar to that of the Penonomé system and the cost has been estimated on the same basis. The Mission will review plans and specifications for the Puerto Armuelles system when they are developed.

h. Cultural and Recreational Facilities

The GOP will wholly fund the construction and/or renovation of cultural and recreational facilities in the growth and service centers at a total cost of \$900,000. Of this amount, \$500,000 will be allocated to the National Cultural Institute to construct or refurbish five cultural centers and \$400,000 will be allocated to the National Sports Institute to construct or renovate sports and recreational facilities in most of the centers.

Improvement of the cultural centers and the sports facilities is part of the URBE effort to make the selected market towns more attractive to present and future inhabitants and

to provide a minimum of the amenities which are generally available only in the larger cities in the metropolitan area. In addition, the resources to be made available under the URBE Project will assist the two institutions to increase their efforts outside of the metropolitan region, a process which they have initiated on a modest scale only recently.

The National Cultural Institute (INAC) will construct cultural centers in Chitré-Los Santos and in Santiago at a total cost of \$375,000 including construction, furniture and equipment. Relatively modest facilities, they will consist of about 10-12 classrooms and workshops for instruction in arts and crafts, a small library, offices for administrative personnel and storage space for materials and equipment.

Improvements and additions to existing cultural centers in David (3 workshops), Penonomé (2 workshops), and Las Tablas (remodeling) will cost an estimated \$79,000, including equipment. Training and technical assistance for this activity is estimated at \$21,000. The remaining \$25,000 will be used to complete the construction of an unfinished cultural center initiated by the residents of Monagrillo, a community on the outskirts of Chitré-Los Santos.

These cultural centers in Panama's interior are used primarily to teach arts and crafts to interested residents of the community. Improved facilities will enable INAC to increase its handicraft instruction program which is desirable for two reasons. First, the demand for quality handicraft work has been increasing in Panama over the past few years partly as a result of an increase in tourism which is expected to accelerate substantially in the years ahead. Second, underemployment is high in Panama's interior and by providing handicraft instruction (complemented by marketing assistance to INAC) to the un- and underemployed in the Project area, the GOP hopes to provide income earning opportunities to the rural and urban poor and particularly to the women among them. It is expected that this activity will be complementary to the small business component of the Project as artisans wishing to expand their operations on a commercial basis seek the financial and technical assistance by which to do so.

The construction and improvement of sports and recreational facilities will be implemented by the National Sports Institute (INDE) at a total cost of \$400,000. Plans call for the construction of a gymnasium in Chitré at an estimated cost of \$175,000 and an addition to the gym in Santiago estimated at \$80,000. Renovation of the lighting systems of the stadiums in Chitré-Los Santos is also planned at a cost of \$60,000. The remaining \$85,000 will be used to complete a partially constructed football field in David for \$15,000 and construct, with community

participation, a number of small playing fields for a variety of sports within the remaining centers and their surrounding areas for an estimated \$70,000. Maintenance of these and similar facilities is shared by INDE, the municipal governments, and the communities, with INDE bearing the major burden.

3. Environmental Concerns

The Assistant Administrator for Latin America approved a negative determination on April 13, 1978, as recommended by the Mission in the revised IEE submitted to AID/Washington on March 31, 1978. 1/

The Mission's recommendation was based on the conclusion that Project activities are not expected to create significant changes in the physical and human environment. The IEE concluded (a) that, although the Government of Panama's institutional capabilities are somewhat limited in the environmental protection field, there exists a relatively high level of concern and sensitivity to development impacts within GOP implementing agencies, and (b) that the URBE Project will strengthen the Government's environmental protection capabilities by providing implementing agencies with appropriate technical assistance and/or training to enable them to undertake Project activities with minimal environmental risks.

These conclusions were reached after USAID/Panama and the GOP undertook a month-long investigation to analyze the country's urban regional growth process, the status of environmental conditions and development standards, and the technical capability of GOP institutions responsible for environmental protection. Field visits were made to the eight growth and service centers to inspect proposed sites for subproject components, and interviews were conducted with Government officials and technical personnel of implementing agencies at the municipal, regional and national levels.

The process of assessing the Project's environmental effects was based on an analysis of the following three questions.

1/ An IEE was submitted with the PRP on October 26, 1976, and was re-submitted in revised form in the Interim Report on December 20, 1977. In its review of the latter on January 6, 1978, the DAEC concluded that "the IEE contained insufficient information on which to base the recommended action (i.e., negative determination)." The Mission was asked to undertake additional study of four specific factors (see STATE 027437 in Annex II-B). A revised IEE was prepared by Jeffery G. Boyer, Environmental Consultant, and submitted to AID/Washington on March 31, 1978.

1. What environmental concerns are most likely to be affected by each Project component?

2. Could the causal relationship between the identified areas of environmental concern and individual Project components potentially result in a significant effect on the human environment?

3. Can any identified potential areas of significant change, if adverse, be mitigated by proposed or recommended environmental control measures, and do the GOP's implementing agencies have the technical capacity and capabilities to effectively carry out these mitigating measures?

A detailed list of environmental concerns, representing the most sensitive environmental issues which are indigenous to the Project area, was developed for each component of the Project (See IEE, pp. 12-17). The overall assessment of the Project's potential environmental impact concluded that the probability of significant effects occurring is minimal, and that only one set of environmental concerns deserved special consideration. The environmental concerns identified as potentially significant were those involving possible effects resulting from the interrelationship of individual project components (housing, industrial parks, agro-industrial enterprises) and communitywide wastewater collection and treatment facilities and the condition, per se, of the latter in several service centers.

Although concerns related to this potential for water pollution were identified as significant, the IEE states that these impacts are controllable primarily because of IDAAN's recognition of environmental concerns and its willingness and capability to implement measures that will minimize environmental risks.

The IEE sets forth a series of recommendations for environmental protection measures to be incorporated into the URBE Project design. These recommendations, which principally address the GOP's institutional capabilities and limitations in the environmental protection field, are listed below:

1. Provide technical assistance to the Ministry of Planning (MPPE) in areas of environmental impact assessment, and preparation of environmental guidelines.

2. Provide IDAAN, the agency responsible for implementing the sewerage component, with technical assistance for the completion of its feasibility studies, the selection of a preferred method of treatment and final sites for the proposed treatment facilities, and for the strengthening of operation and maintenance capabilities.

3. Establish a special committee, under the leadership of MPPE and IDAAN, to study the causes of malfunctioning community septic tank systems, and to establish measures to prevent the failure of such systems in the URBE program's subprojects.

4. Increase the Ministry of Health's role in the review of Project activities, and give the MOH a significant participatory role in the committee established to prevent community septic tank problems.

5. Assist the Ministry of Housing to establish an environmental protection capability by, first, providing its designated Environmental Protection Officer with advanced training in the U.S. and, second, providing MIVI with technical assistance in preparing environmental guidelines and companion regulations/procedures for MIVI projects.

These measures have been discussed with appropriate GOP institutions and have their concurrence. In addition, they have been incorporated into the URBE program's planning and design process, and should, in addition to minimizing environmental risks, further enhance the Project's impact on the environmental quality of the eight growth and service centers, both now and in the future.

B. ECONOMIC ANALYSIS

1. Economic Rationale for Panama's Regional Development Strategy

The pattern of Panama's economic development over the years has been shaped by the primary role of the isthmus as a natural transit and international trade zone. These activities began to be concentrated in a fairly narrow corridor as early as the 16th century, and evolved into what is now termed the Metropolitan Corridor between Panama City and Colon following the building of the Canal.

Since 1960, Panama has experienced a period of particularly dynamic growth led by the development of modern commercial and transportation facilities, import substitution manufactures, tourism, and - most recently - emergence of Panama as a regional banking and financial center. Again, this has taken place primarily in Panama City and to a lesser extent in Colon, terminus cities of the Canal, resulting in rapidly increasing employment, income, productivity, labor skills, domestic market development and other economic advances in this metropolitan region. Parallel improvements have taken place in education and health facilities, housing, entertainment facilities, and the many other social amenities that people find attractive and in general make for a "better life."

However, Panama's overall economic growth and the benefits of this growth enumerated above, although substantial in terms of national aggregates, have been confirmed largely to the metropolitan corridor, and have had little impact--either direct or indirect--on the rest of the country. Thus, the country's productive resources and population have become increasingly concentrated in the metropolitan area, which covers 24 percent of the total land area (including much sparsely settled land between the terminal cities). By contrast, the Project area (the Central and Western Regions) is more than twice this size and contains 45 percent of the population.

As described previously, the economy outside the metropolitan area, viz., in the Project area, remains essentially rural and dependent on low technology--based to a large degree on subsistence agriculture. The population in the Project area is not only relatively sparse overall, but is widely dispersed among a large number of small villages and populated places.

The area is characterized by low productivity and incomes compared to the metropolitan area, a high degree of underemployment, poor access to both private (economic) as well

as public services, and high rates of out-migration by the more productive members of its labor force.

The differences in the economic structure of the metropolitan area and the Project area that have resulted from the concentration of growth and development in the "corridor" are illustrated in the following table: 1/

	<u>Metro. area</u>	<u>Project area</u>
% Panama's land area	24%	56%
% Panama's population	53%	45%
Population density (no./km ²)	53	20
Per capita income (annual)	\$950	\$350
% Panama: mfg. facilities <u>2/</u>	75%	24%
mfg. employment	80%	18%
mfg. sales	80%	19%
% Panama's retail establishment <u>2/</u>	76%	23%
retail employment	80%	19%
retail sales	84%	15%
% Panama's: personal services activities <u>2/</u>	82%	18%
personal services employment	90%	10%
personal services sales	93%	7%
area (km ²) per km. of paved road	15	26
telephones per 100 persons	14	1
value of output/worker (current 1975 dollars)	\$5,141 (non-agric.)	\$2,217 (agric.)

1/While the metropolitan area and the Project area together account for only 80% of Panama's land area, the remainder - provinces of Bocas del Toro and Darién and portions of the provinces of Panama and Colon - contains only 2% of the population. This accounts for the apparent monopoly by the metropolitan and Project areas of facilities, employment and sales per the above table.

2/Refers to establishments employing five or more persons.

The social inequities between the two halves of Panama's dual economy are self-evident, and pose a continuing threat to the nation's overall political and social stability. In addition, however, this weaker, less productive economic structure outside the metropolitan area has constituted an economic burden on the more productive sectors of Panama's economy, primarily through the workings of the tax system. Because the tax system is quite progressive in Panama, it forces the more prosperous businesses and individuals in the metropolitan area to contribute vastly more tax revenues in support of general government and its many social services than do provincial taxpayers. These services include not only the normal range of social services which have been provided increasingly by the GOP to the rural poor in recent years (the more remote, the higher the cost) but also involve a GOP policy of producer subsidies to the agricultural sector, including high consumer prices for domestically produced basic foods such as rice, sugar, meat and milk.

So long as rapid growth in the dynamic sector was sufficient to generate a healthy rate of growth for the overall economy, as was the case during the decade of the 1960's and in the early 1970's, an arbitrary redistribution of resources through subsidies might appear to have been a rational strategy, at least over the fairly short run, even though it failed to achieve significant redistribution.

In other words, to concentrate resources where they can be most productive---i.e., the metropolitan area--- and let these strong sectors carry the weak may make more economic sense than wasting resources on a sector that may suffer inherently low productivity in its current setting. However, in the case of Panama, development and growth among the more dynamic industries in the metropolitan sector have not been sufficient to sustain a pattern of continuing unbalanced overall national growth. Panama's Gross Domestic Product (GDP) increased by 8.2 percent during 1960-65, by 7.7 percent during 1965-70, by 4.9 percent during 1970-75, and has experienced virtually zero growth over the past two years. The world trade recession of 1974-75 and the uncertainties which surrounded negotiations for a new Canal Treaty are often cited as major contributors to the pattern of diminishing growth. Although clearly a factor, world trade recovered sharply during the past two years but has not had a measurable impact on Panama's economy; and treaty negotiations per se have had a significant impact on the economy only over the past 12-15 months.

In our view, the more basic cause of this steady decline in Panama's growth rate is that the best, most promising industrial development prospects, in terms of profitability over the long run, were exploited first and that gradually over the

past 15 years or so they became too limited to attract significant investor interest. Panama has few natural resources that can be exploited over the foreseeable future other than its geographic location. This, to a significant degree, has already been done. Panama is a small country with a small domestic market, and the limited opportunities this creates for import substitution industries have already been exploited. Its natural advantage in terms of trade, commerce, tourism and most recently banking and finance are continually being searched for their further investment potential.

In short, Panama has a very narrow economic base, and when the cycles of growth associated with the types of developments described above have played themselves out, as at present, this limited economic base becomes apparent. A narrow base also makes the economy much more vulnerable to the vicissitudes of a few sectors such as the blow dealt the Panamanian economy by the quantum jump in international petroleum prices in 1974 and the related 1974-75 world trade recession. And another wave of development activity is now expected to take place in the near future in connection with the lands and waters which Panama will soon receive under the recently approved Canal Treaties-- especially the railroad and port facilities. However, this too can be expected to play out, even if fully and successfully exploited, which at this stage is not at all certain as to degree. Also public sector developments may take place very slowly in this area of activity in view of the complexities involved in these relatively sophisticated operations. As in the past, if left to the free play of market forces, the euphoria over these recent events will probably lead to excessive expectations of gain by both private investors and workers. Again, there is likely to be a surge of new investment of various sizes and types that is not sustainable, and a corresponding new wave of migration from the provinces to the metropolitan sector, where all this is taking place, to get the expected new jobs which also may prove temporary. As a result, the familiar pressures on housing, sanitation, and the various social services provided by the GOP to the metropolitan region intensify, and the costs of dealing with these matters balloon.

A strategy of more balanced growth involving the areas outside the metropolitan corridor is therefore essential if Panama is to more nearly achieve its full development potential on a more efficient and self-sustaining basis. Regional development will help Panama reduce the limitation on its overall longer range growth and development imposed by unbridled concentration of development resources within the metropolitan area. The gains in productivity and income which will result from lower underemployment and unemployment and more profitable enterprises in the provinces will - apart from providing socio-economic benefits to those directly involved - make the area more

economically self-sufficient and less of an economic drag on the metropolitan sector because of its broadening tax base. Similarly, the need for farm subsidies will be reduced. These gains would also broaden the domestic market, providing additional benefits (external economies) to established Panamanian industry.

Another externality is the general upgrading of the provincial labor force and the opportunities for more productive, remunerative employment which should arrest the out-migration from the provinces - even help create some two-way labor mobility between the metropolitan area and the rest of the country. Employment outside the metropolitan area (viz. the target area) tends to be much more labor intensive and requires lower cost and less sophisticated inputs. Activities are generally on a small scale outside the metropolitan area which maximizes employment opportunities. Furthermore, regional development activities will help draw people away from the highly destructive, inefficient slash and burn farming that is so common throughout rural Panama.

For both political and economic reasons, the GOP has gradually put increased emphasis on regional development as an important strategem in its national economic development policy. This has focussed importantly on the increased provision of social services to the rural poor, such as education and health services, but has also involved on the economic side the asentamiento program and a program of developing and strengthening rural cooperatives and marketing facilities in which AID has been an important contributor. Recently the GOP has begun to attack the problem of low farm productivity more directly as, for example, in the integrated rural development initiative, in which AID also has been playing a vital role.

However, these and other programs which address directly the farm productivity problem - the primary base of the non-metropolitan economy - are insufficient since many of the inefficiencies and deficiencies which contribute to low overall productivity in the provinces are found between the farm and the metropolitan (or foreign) markets, as previously pointed out. Much of this impedece to sufficient economic flows outside the metropolitan area occurs at the urban market centers. The proposed URBE Project is designed to improve the overall efficiency of the provincial economy through development and strengthening of selected market towns within the provinces. It has the additional merit of potentially generating overall benefit to the area even in the absence of immediately significant gains at the primary producer level, whereas gains at the primary level alone often become dissipated at the secondary level.

2. Economic Impact of Sub-Projects in the Project

Area

Economic impact of the sub-projects in the Project area will be felt at three distinct levels: the immediate and primary impact will be on the market towns (growth and service centers) where most of the Project funds will be concentrated; a secondary effect will be at the regional level including the rural hinterlands of the target area; and thirdly, there will also be economic benefits at the macro-economic level of the national economy as a whole.

The Project's real and measurable effects at the level of the market towns, and to some extent their rural hinterlands, will be the most apparent rather than the effects upon the national economy which are more difficult to quantify.

A primary objective of this Project is to facilitate credit for employment generating activities within the Project area. As such, we have undertaken to estimate conservatively in advance of feasibility studies the likely subproject impact in terms of employment generation, purchases within the region, and wages and salaries to residents of the region. These are summarized below:

a. Agro-industries

The Project allocates \$3.6 million to the financing of agroindustrial activities within the Project area. This will be supplemented with an additional \$1.0 million to be provided by subproject participants for a total \$4.6 million of available funds for investments. Based on an analysis of several of the potential subprojects as well as a review of available statistical data on the characteristics of agro-industrial activities in Panama, it was estimated that increased annual sales to be anticipated by this level of investment, once these activities are in full production, is in the neighborhood of \$8.5 million. This level of projected sales is expected to generate annual purchases at the level of \$5.5 million of which \$3.4 million will be goods and services procured from within the Project area, including agricultural raw materials; \$1.7 million of in-country purchases, but outside of the Project area; and about \$0.5 million in imports. In addition, these subprojects should also generate no less than \$1.2 million in employees' compensation annually and create about 750-1000 new jobs. The indirect jobs likely to be generated are difficult to estimate at this time but should be significant. Most of the new direct employment generated by these activities will be based in the growth and service centers and directly involved in plant operations.

Several types of indirect employment are foreseen. One type of indirect employment to be generated will

be associated with produce assembly, sorting, grading and packaging, transportation, communications, maintenance, and other services and will generally be based in the growth and service centers.^{1/} Another type of indirect employment associated with these activities stems from the increased demand for agricultural produce which will be supplied by farmers in the rural hinterlands of the centers. In most cases, it is anticipated that these will be supplied by small and medium size farmers given the type of raw material required by the illustrative subprojects reviewed. The major impact anticipated will be on the currently underemployed, resulting in increased income rather than substantially new employment generation.

b. Small-scale Enterprises

Funds allocated for financing small-scale enterprises total \$3.4 million with an additional \$0.4 million to be provided by subprojects participants. It is anticipated that at least 50% of the investments will be for small-scale industrial production with the balance shared by commercial and service activities. These activities will contribute to the provision of needed goods and services in the market towns, further the creation of economic externalities, increase the centers' attractiveness for additional investment, contribute to their orderly growth, and generate additional employment opportunities. Given the level of investments contemplated under this Project, it is anticipated that the number of activities that may be financed would range between 75 and 150. These should generate increased annual sales of at least \$6.5 million which should result in the generation of about 750-1300 employment opportunities with employee compensation estimated at well over \$1.0 million annually. ^{2/} Employment generated by these activities would be generally located within the centers but would in turn generate additional indirect employment both within as well as outside the centers themselves.

c. Infrastructure and Housing

Allocations for town infrastructure and housing total \$14.7 million. From an economic perspective, in

^{1/} Jobs in sorting, grading, and packaging will also occur at plant sites and would be considered direct employment generation in this case.

^{2/} The wide variance in job generation estimates results from attempting to calculate expected new jobs based on the use of two different assumptions (different alternatives of investments levels per jobs created and various levels of sales projections).

terms of financial flows and employment generation, the major impact of these sub-projects is circumscribed to the construction phase - of getting the facilities into place.

Within the context of this Project, the impact of these activities are measurable over the medium term, i.e., five to seven years. It is anticipated that investment in housing construction will occur over a two to three year period with a total investment of \$6.8 million. Construction of the sewerage systems and transportation terminals will probably stretch over a similar two to three year period, following the first year of implementation when the feasibility studies will be completed, at an estimated cost of \$7.0 million. Recreation and cultural facilities to be wholly financed with GOP resources are estimated at \$0.9 million. The economic benefits anticipated to be derived from the construction of these facilities lie in the creation of demand for finished building materials, the raw materials needed to produce them, related services such as transportation, communications, employment generation, food and clothing for the workers in the construction activities and related fields.

The construction industry has traditionally been one of the areas capable of absorbing large quantities of unskilled labor, and as such directly affects the income levels of the lower economic sectors of the economy. There is a significant amount of unskilled labor in the centers with a substantial percentage of unemployment and underemployment. Correspondingly low family income must be supplemented by several members of the family working on a part-time basis. During the construction phase of these subproject activities, it is anticipated that employment opportunities will be provided to lower income families.

A wide range of figures has been reviewed in attempting to measure the number of direct and indirect jobs which would result from investments in the construction of these facilities. The rule of thumb developed by Strassman in "Employment Generation through Residential Construction in Rio de Janeiro" (Michigan State, October 1975) and "The Employment Effects of Housing in Mexico" (ILD, 1974), has been applied to the housing component of the present Project: every \$10,000 investment in housing construction generates approximately four to five years of combined on-site and indirect employment. For infrastructure, a conservative measure has been applied assuming that every \$20,000 of investment generates four to five years of direct and indirect employment. For the total infrastructure construction and housing investment of \$14.7 million included in the URBE Project, then, approximately 1100 direct and indirect jobs will be generated over an estimated four-year "life of Project" for construction activities.

C. FINANCIAL ANALYSIS

1. Small Business Credit Fund ^{1/}

A \$3.4 million small business credit fund, \$3.0 million financed by the loan and \$400,000 financed by the GOP, will be established and managed by MICI. The estimated cash flow is based upon an analysis of the phased and aggregated credit requirements and discussions with MICI officials. Future credit requirements within the Project area will be financed with funds generated from the interest payments and principal recuperations under this loan; it is anticipated that any similar credit requirements for future growth and service center projects will be partially financed from the cash surplus generated from this Project. At the end of the 10 years, the active loan portfolio will have a value of \$2.961 million and there will be a cash reserve of \$1.566 million available for relending.

The technical and financial analyses of small business/industry credit needs are covered in the Technical Analysis.

Table 1 is the consolidated 10-year cash flow of the small business credit fund. Since it is expected that credit requirements will fall into three areas: \$1,000-\$10,000, \$10,000-\$20,000, and \$20,000-\$50,000, individual cash flows for each of these groupings have been prepared. (Tables 2 to 4 .) The assumptions regarding grace period, interest rates, repayment period, and loan losses shown at the bottom of the cash flows were developed with MICI and MPPE officials.

Historically, MICI has permitted grace periods of one year for the repayment of principal, but the average is about six months. For the purpose of this analysis, a one-year grace period was used. Additionally, since MICI has little experience in developing loan terms for loans in excess of \$10,000, a one-year grace period for all loans is not unreasonable. Since the overwhelming majority of small businesses fail due to insufficient working capital, a longer grace period will help in strengthening the financial viability of the small businesses. An eight percent interest rate, which includes the cost of technical assistance to the borrower, was used since that is MICI's current rate. Until now, MICI has been very conservative with its loan portfolio, requiring co-signers who are steadily employed and also monthly I.O.U.s (letras) to be signed by both parties; for these reasons, it has had a loan loss of only 0.4%. Since MICI will be handling a much larger portfolio than previously, a 5% loan loss for all loans up to \$20,000 has been calculated, and due to its very limited experience in loans of \$20,000-\$50,000, a 10% loan loss

^{1/} For tables, see Annex II-D-1.

was calculated. Therefore, all interest and principal repayments (inflows) were calculated on a basis of 90% or 95% of outflows. The inflows for the first five years represent the loan and GOP contributions to the credit fund; after that, all inflows are shown as reinvestments which are generated from principal repayments and interest payments. Outflows represent the participants' credit requirements.

The administrative costs to MICI to run the small business loan program have not been included. It is expected that these costs will be at least \$100,000 per year without including costs of using other MICI personnel on a periodic basis. It is MICI's belief that this program is a normal function of the Ministry, and that the administrative costs associated with the program would continue whether or not the program existed. Therefore, at its request, administrative costs have not been included. Following is an explanation and analysis of the individual and consolidated cash flows:

\$1,000-\$10,000 Credit Requirements

Because of the current back-log of pending loans, it is expected that pending credit demands will be met very easily and quickly in the first two years and then drop off until MICI is able to take full advantage of its promotional program which will generate additional loan applications. Even though loans in this grouping can have a principal repayment of five years, a four-year average repayment period was used. Beginning in the sixth year, recuperations were used to finance new loans. At the end of ten years, the loan portfolio is valued at \$700,000, and there are \$489,000 in cash reserves available for relending.

\$10,000-\$20,000 Credit Requirements

MICI normally provides for principal repayment within six years, so a conservative pay-back of five years was used. By the end of the fifth year when loan funds are totally disbursed, \$430,000 of recuperations are available for relending. By the end of the tenth year, the cumulative cash reserve is \$596,000, and the loan portfolio is valued at \$1.175 million.

\$20,000-\$50,000 Credit Requirements

MICI has established seven years as the maximum period for repayment of principal, so an average six-year pay-back period was used. Due to its limited experience in this area, MICI can expect a loss rate of 10% or more. It is anticipated that any loan loss problems can be identified from the repayment record of the loans made in the first two years, and that corrective action will be taken if necessary to safeguard the financial solvency of the balance of the loan portfolio. At the end of ten years, there is a cash reserve

for relending of \$407,000, and a loan portfolio valued at \$1.086 million.

Consolidated Cash Flow of Small Business Credit Fund

The consolidated cash flow represents an accumulation of the financial data of the individual cash flows, and it provides an overview of the rate at which loans (outflows) will be made from the credit fund. Frequently, the consolidated cash flow will include administrative/operating expenses and income from loan processing fees and/or charging for technical assistance. In this case, technical assistance charges are included as part of the interest rate, and as previously explained, administrative/operating expenses are not included. Since MICI charges a scaled fee for loan processing, a flat 1% of all outflows (loans) was used.

The consolidated cash flow indicates that sufficient revenue will be generated to permit the credit fund to be self-supporting and permit reinvestments from interest and repayments. This is true even if annual administrative/operating expenses of \$100,000 were financed by the credit fund. At the end of ten years, there will be a cumulative balance of \$1,566,000 which excludes operating expenses and interest and principal payments due in future years. The active loan portfolio will have a value of \$2,961,000.

2. Agro-Industrial Credit Fund ^{1/}

A \$3.6 million agro-industrial credit fund, \$3.2 million financed by the loan and \$400,000 financed by the GOP, will be established and managed by COFINA. The estimated cash flow is based upon an analysis of the phased and aggregated credit requirements. Future credit requirements within the Project area will be financed with funds generated from the interest payments and principal recuperations under this loan. At the end of ten years, there will be an active loan portfolio of \$3.606 million and \$1.183 million of cash reserves available for relending.

The technical and financial analyses of the credit needs in agro-industries are covered in the Technical Analysis.

Table 5 is the consolidated ten-year cash flow of the agro-industrial credit fund. Since it is expected that credit requirements will fall into three areas: \$50,000-\$150,000, \$150,000-\$300,000, and \$300,000-\$500,000, individual cash flows for each of these groupings have been prepared. (Tables 6 to 8 .) Assumptions regarding grace period, interest rates, and repayment period are based on COFINA's current lending practices. In all instances, an interest rate of 9% was used; the grace period and principal repayment period, however, are contingent on the size of

^{1/} For tables, see Annex II-D-2.

the loan. Because COFINA is still so young, it does not have sufficient experience nor historical data to ascertain its percentage of uncollectible loans. Consequently, after consulting with it, a 10% loan loss rate was established. Until now, COFINA has not charged for technical assistance but it is currently discussing this policy; for this reason, no inflow from technical assistance charges has been shown. Only recently has it been decided to charge a loan processing fee, and a flat 1% fee was used. The inflows for the first five years represent the loan and GOP contributions to the credit fund, and after that, all inflows are shown as reinvestments which are generated from interest payments and principal repayments. Outflows represent the credit requirements for agro-industrial loans. In the consolidated cash flow, no outflows are shown for administrative/operating expenses, since COFINA will employ no additional personnel to manage this credit fund and any additional administrative/overhead expenses related to the credit fund are minimal in relation to its overall operating budget. Following is an explanation and analysis of the individual and consolidated cash flows:

\$50,000-\$150,000 Credit Requirements

The Project will provide \$700,000 to help finance agro-industrial sub-loans having the above credit requirements. These smaller agro-industrial loans will have a grace period of only one year with an average principal repayment of five years. After a slow start in the first year, it is expected that the credit demands will be rather uniform for the next four years; after that, sub-loans will continue to be made with the use of roll-over funds. At the end of ten years, there will be a cumulative balance of \$210,000 and a loan portfolio of \$675,000. Roll-over funds will be high enough to support an on-going loan program at an annual level of \$200,000.

\$150,000-\$300,000 Credit Requirements

The Project has budgeted \$1,000,000 for sub-loans having credit requirements between \$150,000 and \$300,000. Sub-loans of this magnitude will have a one-year grace period and an average principal pay-back period of six years. It is anticipated that sub-loans in this category will be made during the last four years of the Project. At the end of the fifth year, the net cumulative balance is only \$182,000 which is not enough to permit the use of roll-over funds in the sixth year. However, at the end of the sixth year, and each year thereafter, there are enough funds in the cumulative balance to permit an annual reinvestment of \$250,000. At the end of the tenth year, the net cumulative balance is \$340,000 and the loan portfolio is valued at \$921,000.

\$300,000-\$500,000 Credit Requirements

The Project has budgeted \$1,900,000 for sub-loans having requirements between \$300,000 and \$500,000. Sub-loans of this

magnitude will have a two-year grace period and even though there can be a pay-back period of fifteen years, an average repayment period of nine years was used. Sub-loans will occur during the second through fifth years of the Project, and at the end of the fifth year there will be a net cumulative balance of \$269,000. However, this balance is not enough to permit the use of roll-over funds for reinvestment in year six, but there are enough funds to permit loans of \$300,000 and \$400,000 in years 7-9 and 10, respectively. At the end of year ten, there will remain a cumulative balance of \$563,000, and the loan portfolio is valued at \$2.010 million.

Consolidated Cash Flow for Agro-Industrial Credit Fund

The consolidated cash flow represents an accumulation of the financial data of the individual cash flows, and it provides an overview of the rate at which loans (outflows) will be made from the credit fund. Frequently, the consolidated cash flow will include administrative/operating expenses (outflows) and income (inflows) from loan processing fees and/or charges for technical assistance. In this case, as previously explained, only a loan processing fee (1%), totaling \$70,000, was included. The consolidated cash flow indicates that sufficient revenue will be generated to permit the credit fund to be self-supporting and also permit annual reinvestments at a level of at least \$800,000. At the end of ten years, there will be a cumulative balance of \$1,183,000 and an active loan portfolio of \$3.606 million. The cumulative balance is a consolidation of the balances of the individual cash flows plus the 1% fee.

D. INSTITUTIONAL ANALYSIS

Six GOP institutions will implement the loan-funded portion of the URBE Project and three additional institutions will have responsibility for implementing Project activities to be financed entirely by the GOP (sewerage systems, cultural and recreational facilities and activities). CENAFORP, the National Training Center, will also participate in the Project by managing the \$0.3 million worker training element.

The Mission has worked closely with the major institutions in the Project during the course of designing the Project and preparing the PRP, interim report and this Paper for submission to AID/Washington. The Mission has also examined each institution's staffing patterns and staff qualifications; the type and quality of subproject analysis undertaken; operating and investment budgets; the history and health of its loan - or project - portfolio. The Mission has assessed institutional weaknesses, particularly as they might affect the execution of the Project, and where warranted, has programmed technical assistance and training. It is satisfied that the current or planned organizational structure, staffing, and budget of each institution - supplemented by the programmed technical assistance and training and, in the case of the BHN, required institutional reforms - is adequate to implement this Project.

1. Ministry of Planning and Economic Policy
(Department of Urban Development Planning)

The Ministry of Planning and Economic Policy (MPPE) will be responsible for overall coordination of the Project, assuring GOP budget support to implementing agencies, periodic review of Project progress, in-depth Project impact evaluation, and design of subsequent URBE phases. It will also assist in arranging for suitable technical assistance and training for the eight institutions for which such TA and/or training is planned under the Project, and it will prepare "guide plans" for each growth and service center.

The Ministry of Planning was established by Law 16 in 1972. Its Bureau for Regional Planning and Coordination has responsibility for regional planning, strengthening the process of provincial planning, and providing technical assistance to new government organizations established under the 1972 constitution. Within the Bureau are eight divisions one of which - provincial planning and coordination - designed the first Integrated Rural Development project (the \$9.7 million loan was signed in November 1977) and now has responsibility for coordinating the project's activities and the eight or nine GOP agencies which share implementation responsibility. Other divisions include

regional programming, local government assistance and coordination, a center for regional data and documentation, and the office of urban development planning (MPPE/UD) in which the URBE program is located. MPPE/UD has a staff of 12 assembled over the period 1976-78 with assistance from A.I.D. The staff includes two regional urban planners, architect, urban geographer, civil engineer, two administrative specialists, financial analyst, demographer, sociologist, a director and one each assistant engineer and architect.

MPPE/UD's budget for 1978 is \$249,500, an increase of \$44,380 over 1977.

Since 1973, the UNDP has assisted MPPE's Bureau for Regional Planning and Coordination under project PAN 72/008, Planning and Administration of Regional Development. Under the Project, the UN has provided a team of planning experts to MPPE and in-country, on-the-job, and external training for MPPE staff. Four years of collaborative effort ^{1/} have produced a major paper on A Medium-and Long-Term Strategy for Regional Development; the regional development portion of the 1976-80 national development plan; regional development plans which lay the framework for implementing the aforementioned regional development strategy; studies of ways to improve the GOP's institutional system at the regional level and involve local populations to a greater degree in the process of regional development; and data-gathering and analysis for two major development programs-integrated rural development (AID and IDB financing) and growth and service center development. In conjunction with the latter, MPPE/UD has prepared since 1975 growth and service center diagnostic studies, a municipal infrastructure assessment, an urban/rural linkages study, master development plan for Chitré-Los Santos, and socio-economic descriptions of three growth and service centers and assisted with the Checci and Company report, "Mapping the Poverty Line in Western Panama." It has also worked with MICI, COFINA, IDAAN and other participating institutions for the past two years on subproject elements; beginning in November 1977, MPPE/UD chaired a series of working level meetings attended by all URBE-GOP agencies and AID to further develop and define the Project and coordinated the reaching of a COFINA/MIDA accord on sharing implementation responsibility for the agro-industrial component.

MPPE/UD, in short, has had a major role in formulating the URBE concept and in designing its first phase

1/ PAN 72/008 terminates in December 1978. A follow-on UN program is anticipated, however, which will emphasize a strengthening of MPPE's municipal development function, regional/local data collection system, and provincial planning function.

(the Project). The Mission, nevertheless, has determined in collaboration with the Ministry of Planning that MPPE/UD capabilities need to be strengthened in certain areas. Accordingly, technical assistance and training will be furnished through the Project to improve its capabilities in project evaluation design and implementation, municipal development planning, preparation of background studies for planning subsequent URBE efforts, and environmental impact analysis. Specifically, six months of a specialist in urban development administration, six months of a municipal administration advisor, 12 months of a specialist in municipal tax administration, five months of specialized services to assist in designing an evaluation format and its implementation, and one month of an urban planner/environmental impact analyst to assist MPPE in drawing up environmental guidelines. In order to plan subsequent rural growth and service center development projects and undertake any necessary studies required by AID or other proposed donor agency, 11 months of specialized assistance in fields to be determined have been set aside. To upgrade MPPE's staff capabilities in fields related to regional development, \$50,000 has been programmed for external training.

2. National Finance Corporation (COFINA)

The Corporación Financiera Nacional (COFINA) will serve as the intermediate credit institution for agro-industrial subprojects and as fiduciary agent for the transport terminals and industrial infrastructure areas planned under the Project.

COFINA was established in December 1975 by Government Decree No. 65 as an autonomous public development agency. COFINA, with funds from several sources - a Government-imposed 7% import tariff, DISA reflows, ^{1/} credit lines from U.S. banks and IDB-funded pre-investment studies - concentrates on large-scale industrial projects. The GOP is totally responsible for COFINA's obligations.

COFINA's mandate provides that it shall promote priority activities in support of national economic development largely in the areas of manufacturing, export, tourism, transportation and utilization or exploitation of Panama's natural resources.

^{1/} A private development bank, Desarrollo Industrial, S.A., was founded in 1963 with AID assistance - a loan for \$5.1 million in 1963 followed by a \$4.1 million loan in 1966, the latter with an option for a two-step repayment mechanism enabling the GOP to channel DISA loan payments to COFINA.

COFINA's terms vary according to the size and type of industry and its location. COFINA currently is loaning at 8 1/2-10%. To date, COFINA has tended to maintain higher interest rates (9%-10%) for industries located in Panama City and Colon. Loans can be made for 15 years with a grace period to three years but, on the average, loans are made for six years with a one-year grace period. Funds from credit lines from U.S. banks are relent at London Interbank Offer Rates (LIBOR) plus 3% for medium and large industries and LIBOR plus 2% for small industries. COFINA may take a minority equity position in new or expanding industries up to 25% of capital assets and had done so in six cases as of April 30, 1978. COFINA's current loan portfolio is valued at \$1.4 million plus \$3.0 million of approved but undisbursed loans. So far, with COFINA still in its infancy, no loans have been declared delinquent in their repayments, nor have any loans needed to have their original repayment schedules re-adjusted.

Of \$20,000,000 available to COFINA from the GOP as stated in Article 11, Government Decree No. 65, \$3,622,975 had been received in capital contributions as of December 31, 1976, and \$6,393,141 as of December 31, 1977. From 1976 to 1977, total assets increased by \$3,900,000 of which \$2,770,000 was the GOP capital contribution and \$870,000 represents long-term debt. As of December 31, 1977, the equity capital/long-term debt ratio was 7.3:1, which indicates an equity capital participation greater than that of long-term debt. The equity capital/total liability ratio as of December 31, 1977 was 5.3:1, which indicates that COFINA/GOP has a greater financial stake in the corporation than outside investors.

From 1976 to 1977, general operating and administrative expenses increased from \$300,000 to \$578,000 and for the first quarter of 1978 they are \$200,000. In 1977, total income, excluding a GOP transfer of funds, was only \$420,000. Consequently, general operating and administrative expenses exceeded income by \$158,000. A condensed common-size income statement for 1977 follows:

Total Income	\$420,000	100%
General/Administrative Expenses	\$578,000	138%
Interest Paid	\$ 47,000	11%
(Net Loss)	(\$205,000)	(49%)

This loss was covered by a GOP transfer of \$539,000, which resulted in a net income of \$335,000 for 1977. Actual administrative expenses in 1977 were only 10% over the

budgeted amount, and for the first three quarters of 1978 they are consistent with the annual budget. The 10-year projected income statement for COFINA indicates a GOP transfer of funds, which is separate from capital contribution, is needed through 1979 to cover projected losses. Even though starting in 1980 net income exceeds the GOP transfer of funds, the transfer diminishes in amount until leveling off at \$250,000 each year after 1983. In order for COFINA to significantly improve its financial position, it is necessary for the corporation to reduce administrative expenses and increase income which the projected 10-year financial statement indicates. (See Table 9 , Annex II-D).

Since its establishment, COFINA has approved 31 loans at an average size of \$150,000, the majority of which have financed the establishment or expansion of industries located within the Panama-Colon metropolitan corridor.

COFINA has a 30-person administrative staff and an industrial credit staff of 24 individuals responsible for identifying and promoting projects, providing or arranging for consultants to conduct feasibility studies and arranging or providing financing. COFINA's central office is located in Panama City, and it opened regional branch offices in 1977 in David and Colon. Its office in David is staffed with a regional director, project analyst, project evaluator and secretary. Given its large and well-prepared staff, only a small amount of technical assistance to COFINA is planned under the URBE project, specifically, 10 months of short-term assistance in subloan promotion and development and a limited amount of external training. Although COFINA has only one individual on its current staff who is knowledgeable in the technical aspects of agro-industrial development, this was taken into consideration in designing the Project. Rather than attempt to build such expertise into COFINA, it was decided to rely on the technical capabilities of the Directorate of Agro-Industries located in the Ministry of Agricultural Development (see following section).

3. Ministry of Agricultural Development (MIDA) (Directorate of Agro-Industries)

While COFINA will serve as the financial agent for agro-industrial subprojects, assistance in determining technical feasibility and in providing technical assistance and follow-up support to agro-industrial enterprises will be the responsibility of the Directorate of Agro-Industries in the Ministry of Agricultural Development

The latter was established by Law No. 12 of January 25, 1973. Included in the new Ministry's mandate was responsibility for establishing and overseeing the implementation

of a national agro-industrial development policy. To assist in the task, the Directorate of Agro-Industries, a part of the Ministry of Industry and Commerce since 1953, was relocated in the new Agriculture Ministry in 1973. Since that time, it has pursued two principal lines of action.

The first is to prepare feasibility studies for potential agro-industrial enterprises, and, where possible, locate investors and financing sources. During 1977, the Directorate undertook four major studies: feasibility study for a \$.5 million slaughterhouse in Santiago to be funded partially by FODEM; feasibility study for a \$1.3 million leather industrial complex in Soná to include a tannery and a shoe factory and to be financed by private money from Argentina and local Soná investors; feasibility study for a plantain processing facility; and a comprehensive analysis of Panama's agro-industrial sector with recommendations for a national sector policy to be coordinated by a single institution. Apropos of the latter, the GOP has not confronted heretofore the question of a national agro-industrial development policy and there are thus agencies - COFINA, BNP, MICI, MIDA, and more recently, the BDA (Agricultural Development Bank) - which presently have overlapping roles in the sector. The Government will use a review of the recently completed MIDA study as a mechanism for addressing the issue, and it is possible that there will be some reorganization of the sector over the next year.

The Directorate's second major activity is to establish and temporarily manage processing plants. With a \$3.1 million investment budget in 1974, it set up a feed plant, mill, poultry and agricultural lime processing facilities and two yucca processing plants to produce bread flour and animal feed. The first four were subsequently transferred to other public sector agricultural institutions (IMA, COAGRO, and Corporación Azucarera), and the yucca plants remained with the Directorate. Its 1978 investment budget earmarks \$100,000 for the reopening of one of the plants.

The Agro-Industrial Directorate has a professional staff of 11 supported by a five-person administrative branch. On the former are: three chemical engineers, two industrial chemical engineers, a mechanical engineer, two economists and one each: industrial technician, plant administrator, and agronomist. Of the total, three are located in Panama, six in

Santiago, 1/ one in Divisa, 2/ and one in David. The industrial chemical engineer has been assigned to David since fall 1977 and will be joined by a second agro-industrial specialist in June 1978. They have offices in the regional MIDA branch serving the provinces of Chiriquí and Bocas del Toro.

The Directorate's operating expenses are funded from MIDA's annual budget and have remained fairly constant over the period 1973 - 1978 at an average annual level of \$163,000. In 1974, 1976 and 1978, the Directorate also received an investment budget for use in establishing processing plants - see above.

Included in the \$130,000 investment fund for 1978 is \$30,000 to be used as counterpart funding for an OAS-sponsored technical assistance program in agro-industrial development (production through all levels of processing). Under the program, the OAS will provide an agricultural economist for two years, an agro-industrial economist for one year, and four short-term specialists. Also included are funds for a limited amount of participant training and in-country courses. GOP counterpart will finance two contract technicians, a vehicle, and office equipment and supplies.

Additional technical assistance will be provided to the Agro-industrial Directorate under the Project in specialized processing fields to complement technical assistance being provided by the OAS. Three months each are programmed in the following fields: meat processing, oil extraction, fruit and vegetable juices, industrialization of sugar derivatives, animal feed, and milk products and three months of an agro-industrial development generalist. The Project will also finance both in-country and external short-term training for Directorate personnel.

4. Ministry of Industry and Commerce (MICI)
(Industrial Development and Productivity
Department)

1/ MIDA was transferred in 1975 from Panama City to Santiago in order, first, to bring public agricultural administration geographically and functionally closer to the main farming areas, and, second, to promote the development of Santiago as a growth center, in accordance with broad development directives, as in the case of the transfer of the Public Works Ministry to David.

2/ Divisa is the site for a GOP-owned processing facility established in the 1960's to serve an agro-industrial technology function and which now operates on a semi-commercial basis, processing tropical fruit concentrates and juices for domestic consumption.

The Industrial Development and Productivity Department within the Ministry of Industry and Commerce will manage the small business credit component of the Project. The Department's experience dates from June 1965 when MICI opened a small enterprise loan window with loans of \$20,000 from DISA, a private industrial bank, and \$20,000 from AID, later increased by modest contributions (\$208,000) from the central government. Because of limited resources, MICI's 150 loans to date total only slightly more than \$500,000.

Administration of the loans is carried out by MICI, which also has responsibility for all payments and collections; MICI funds are held in an account with the National Bank of Panama (BNP). Since 1965, 0.4% of the total amount loaned has been written off as bad debt^{1/} and about 7% of the current \$300,000 in outstanding loans is considered to be delinquent in repayment.

Lending terms are among the most advantageous available to small scale enterprises, and loans are made for either expansion of existing enterprises or for new activities. MICI loans 85% of the investment needed for existing enterprises and 90% for new enterprises. MICI makes loans to \$15,000 to small industrial investors. (Ceiling was raised from \$10,000 to \$15,000 in early 1978.) MICI loans from \$1,000-\$10,000 at 7%; loans for fixed assets may be made for five years with a six months grace period and for working capital for three years with a three months grace period. For loans in the \$10,000-\$15,000 class, MICI loans at 7% with an additional 1% charge for technical assistance. A fee for administrative costs is levied according to subloan size per the following schedule:

\$	1 - 5,000	0%
	5,000 - 7,000	0.4%
	7,001 - 8,500	0.5%
	8,501 - 10,000	0.6%
	10,001 - 15,000	0.7%

MICI subloans to date average approximately \$3,500 divided between new enterprises (44%) and expansion of existing

^{1/} The default rate is unusually low, primarily as a result of the requirement that each subborrower must have a co-signer and both must sign in advance monthly IOU's.

enterprises (56%), and have been restricted to small industrial projects. Under the URBE program, MICI's portfolio will be expanded to include commercial and service enterprises, and a new regulation will be drawn up covering these operations and the criteria to be applied to subloans and sub-borrowers (see Technical Analysis for details).

The Industrial Development and Productivity Department has a qualified and competent staff of 14 professionals, of whom five are assigned full-time to the small industries program, with a proven record of successful loans to small scale enterprises; this experience, however, has been limited to loans of less than \$10,000. Consequently, technical assistance will be provided to upgrade the quality of the current staff and any additional staff in order to handle the larger size loans planned under this Project. Approximately 19 months of technical assistance is programmed under the Project in the following fields: loan application appraisal, loan preparation, program promotion, financial management for small businesses and small business management.^{1/} A mix of external and in-country training will upgrade staff capabilities in small business opportunities, marketing, financing, promotion, loan portfolio management and banking and loan administration.

MICI has regional offices in David (serving the provinces of Chiriqui and Bocas del Toro); Santiago (serving Veraguas and Coclé provinces); Chitré (serving Herrera); and Los Santos (serving the province of Los Santos).

Each of the four regional supervisors plus the central office will be provided an annual operating budget which will include funds for promotional purposes of the loan. In the past, promotion has not been a concern of MICI since it has not had sufficient funds to cover currently pending loan requests. At the time the first sub-loan disbursement is made, a short-term (three months) technical advisor will be contracted to assist in the development and initial execution of a promotional campaign.

Personnel currently serving in MICI field

^{1/} A small business credit systems advisor will also be contracted for six months to study alternative credit mechanisms for small businesses which will lead to improved implementation arrangement for the small credit fund. (See section c. Small Businesses and Industries under Technical Analysis for more details.)

offices will be augmented to assist in the promotion of the URBE small business program, in the preparation of loan applications made by small businessmen, and in the provision of technical assistance to the sub-borrowers. In those centers not now served by a MICI field office, the regional MICI office will maintain an office in the local branch of the National Bank of Panama to be open to the public on specific days each month. MICI headquarters in Panama City will provide such additional personnel as may be needed on a short-term basis.

Salary and operating expenses of the MICI staff are covered by its annual allocation of budgetary funds from the central government and will be increased to cover additional personnel required for the small business credit program. MICI plans to add nine people to the latter between 1978 and 1980; these will include an industrial engineer, a mechanical engineer, legal advisor, credit officer, and collections officer and a credit analyst in each of its four regional offices.

MICI will also serve as implementing agency for the two industrial parks to be established under the Project in David and Chitre-Los Santos. It plans to assemble a team for this purpose composed of an industrial engineer, economist, two assistants, and a secretary at an estimated yearly cost of \$30,000, to be assumed by the GOP. Three months of technical assistance (industrial park designer) will be provided to MICI under the Project for this activity.

5. Ministry of Housing (MIVI)

Created under Law No. 9 (January 1973), MIVI is authorized to formulate and implement housing and urban development policy, and to guide in the formation of policy for private investments in these areas. MIVI exercises this authority through an organization structured to handle the broad range of activities for which it is responsible. Three of MIVI's eight branches are located in URBE growth and service centers (David, Chitré and Santiago), and a sub-branch is in Penonomé. The MIVI branches in these centers are staffed by 36 permanent employees. Of the total of MIVI's 2,400 employees, 922 are considered permanent staff, and the remainder are on contract. MIVI's professional staff includes 56 architects and 20 engineers.

MIVI's stated mandate is to provide housing to families most in need. Its programs include four main types of shelter solutions: (1) serviced lots with core units; (2) completed single-family units; (3) multi-family units; and (4) community up-grading. Within these broad categories, MIVI has 10 prototype solutions, reflecting the wide range of income

groups served by its programs, and the flexible construction and urbanization standards required to do so. Between 1975/76 and the end of 1977, MIVI was responsible for the construction of almost 12,000 shelter solutions in 25 project areas. Approximately one-quarter of these units were priced below \$5,000, well within the range proposed for the URBE Project. During the past two years, MIVI completed small-scale projects in five of the eight growth and service centers, and finds demand in these towns to be many times the available supply.

Apart from production, the Ministry of Housing is also legally responsible for the physical planning of Panama's towns and cities, although its urban planning department has had little experience in town planning to date. However, with AID assistance, eleven professionals have been sent to U.S. universities over the past two and a half years for Master's level training in urban planning and related disciplines.^{1/} Five of these professionals have now returned, and four are working in MIVI's planning department. The remaining six are due to return in June of 1978 and a new planning director will have been installed by then. By the time the first town development plan is adopted, MIVI will thus have in place competent personnel to carry out its responsibilities in preparing detailed physical town development plans and simplified land use regulation mechanisms.

Despite MIVI's clearly outstanding production record and its incipient capabilities in urban planning, the variety of shelter solutions to be provided in the eight growth and service centers and new town planning initiatives constitute an institutionally demanding program. For this reason, considerable medium- and short-term technical assistance will be essential for MIVI to plan and implement the shelter component's sub-projects, to develop, as a result of this experience, the institutional capability to plan and implement similar projects, and to carry out its town planning mandate.

MIVI has need, for instance, to develop better housing and urban development information systems to guide its leadership in making informed policy decisions which will affect the shelter conditions of many thousands of Panamanian families during the next several years. It must also re-organize and re-structure its urban planning directorate to incorporate into its activities the planners now returning to MIVI after advanced studies. In addition, its approach to site planning has fallen behind recent developments in the field, which precludes being

^{1/} Urban and regional planning; urban economics, geography and design; and architecture technology.

able to make the most efficient use of the land and infrastructure which it develops. While it has begun to express real concern for the environmental impacts of its activities, it lacks qualified professionals trained to make the necessary assessments. The technical assistance and training to be provided to MIVI as part of the URBE Project is designed to address these needs, and will significantly strengthen the capacity of this institution to undertake comprehensive town planning and to plan and implement projects which meet the shelter needs of Panama's low-income families.

Technical assistance to MIVI to be financed under the Project is summarized as follows:

(a) Technical assistance for a housing and urban development information system will consist of an assessment of available information as compared to MIVI's needs; advice on the organization and operation of the system; training for MIVI information system staff. A total of 18 months of appropriate technical expertise will be provided.

(b) Technical assistance in the organization of MIVI's urban planning staff, and establishing the structure and procedures for its administration will require a total of 12 months of an experienced senior level urban planning consultant to be provided over an 18-month period as follows: 4 months in the field, followed by 2 months out, 3 months in, 2 months out, 3 months in, 2 months out, 2 months in. MIVI itself has suggested such a sequence to facilitate impact evaluation while discouraging too great a dependence on the consultant.

(c) To assist MIVI in improving its site planning capability, the services of a site planner/design specialist will be provided to help formulate standard plans for several site design types, advise on the preparation of plans for specific subprojects and help oversee their implementation, and train MIVI counterparts. This will require a total of 12 months to be phased over an 18-month period similar to the sequence identified above for the urban planning specialist.

(d) To assist MIVI in establishing an environmental protection capability, its designated Environmental Protection Officer will receive approximately nine months of advanced training in the U.S. An additional two months of short-term environmental consultant services will be made available to the Environmental Protection Officer after the U.S. training to assist in the preparation of guidelines and establishment of regulations and procedures for MIVI projects.

6. National Mortgage Bank (BHN)

The National Mortgage Bank (Banco Hipotecario Nacional, or BHN) was created under Law No. 10 of January 25, 1973, with a mandate from the Panamanian Constitution to facilitate the financing of national housing programs and to implement financial and other national housing policies as established by the Ministry of Housing. BHN is both the financing arm of MIVI, (which has final approval for its loans to the private sector), and the regulatory agency for the savings and loan system. BHN's policies and administrative procedures are formulated by an Executive Committee composed of the Minister of Housing, who is its chairman, the Minister of Planning and Economic Policy, the Minister of Labor, and the General Manager of the National Bank of Panama. While day-to-day administration and management of BHN's operations are the responsibility of its General Manager, supported by a staff of 94, including 24 professionals, administrative authority is firmly held by the Executive Committee, whose chairman must sign even the smallest checks. A management analysis of BHN, financed by AID in 1977, revealed that its generally inefficient administration is the result of its lack of internal controls, (e.g., lack of an auditing department and very weak financial management systems), as well as ineffective policy direction from the Executive Committee which does not meet on a regular basis. Thus, while this Executive Committee retains primary authority, its irregular exercise of this authority tends to contribute to the administrative difficulties apparent from analysis of the institution.

Despite this, BHN has been active in financing housing programs in Panama. For the year ending December 31, 1977, the Bank financed units with a total value of \$46.3 million. While this included urban and rural housing projects and housing cooperative activities throughout the country, the principal focus of BHN financing was the Panama City-Colon metropolitan area where 95% of its investment activities was concentrated. Through the savings and loan system, BHN has financed 1,298 units, valued at \$12.4 million, of which 309 units were domestically financed, and 989 units were financed with AID loans. BHN also supports cooperative housing efforts and is presently financing 700 units being built by the Nuevo Chorrillo Cooperative in Arraijan under HIG financing.

Insufficient information is presently available from BHN for a complete analysis to be made of its financial condition, in part because its own internal financial management and auditing systems are inadequate for its current operations. Nevertheless, BHN has made preliminary estimates of its projected position over the next several years, which indicate that the Bank

will incur a deficit of approximately \$4.8 million on its operations in 1978. These are to be off-set by anticipated capital in-flows and available reserves which BHN estimates will total over \$30.0 million by year's end. BHN estimates that its current operating balance will record a \$1.2 million surplus in 1979, increasing to \$6.9 million by 1981, largely as a result of increased interest earnings from activities now under way or projected.

This kind of improvement in BHN's financial condition appears possible if it is able to correct numerous administrative and managerial problems. BHN concurs in the need to improve and appears willing to do so. While the technical assistance to be provided to the Bank under the URBE Project is designed to encourage and facilitate this process, BHN will need the full support of its Executive Committee for progress to be achieved. AID will require that the following actions be taken in order to strengthen BHN's institutional capability to handle the HIG loan financing.

(a) The Executive Committee must delegate full operating and management responsibility to the General Manager of BHN and the operating officers. This is to be established in a set of internal regulations (reglamento) which do not presently exist, and will include authority to establish operations and management procedures, to commit and disburse funds up to a pre-established maximum on the order of \$3.0 to \$5.0 million, and to manage the mortgage portfolio held in its name. (MIVI is now in the process of transferring to BHN the mortgages it holds in BHN's name). While authority of this nature may already be vested formally in the Bank's management, there are in practice a variety of obstacles, chief among them the lack of a reglamento, which preclude BHN's internal leadership from fulfilling its role. For BHN to develop into the effective housing finance institution which it was established to be, the Executive Committee must delegate full authority to the Bank's management, and intervene only when major overall policy decisions or major commitments or obligations of funds are involved.

(b) The Executive Committee in delegating this authority must commit the BHN and direct its General Manager to establish the internal controls which are essential for its efficient operation. This includes establishing and permanently staffing an Auditing Department, having the BHN's financial statements audited by outside auditors on a regular annual basis, and instituting the variety of financial management procedures and controls recommended in the several management analyses undertaken on behalf of AID and forwarded to BHN.

(c) For BHN to be able to attract capital into

the housing finance market, the process of transferring mortgages from MIVI to BHN should be completed as quickly as possible. Holding title to these mortgages (now held by MIVI but counted as investments on BHN's financial statements, rather than as part of its mortgage portfolio) will allow BHN to offer for sale in the secondary market cédulas or participation certificates backed by its entire mortgage portfolio.

(d) The Executive Committee should begin to set in motion the process by which the management of collections on mortgages held by BHN is transferred to it from MIVI. As a banking institution, BHN should have responsibility for its own collections. This transfer should be undertaken after BHN's management has moved to strengthen its internal operations, and can be easily achieved by transferring the collections staff of MIVI to BHN.

In order to strengthen the institutional capability of the BHN to serve the long-term housing finance needs of low-income families, 18 months of technical assistance will be provided as follows:

Six months of the services of a public accountant with experience in management analysis to assist in developing an internal auditing capability in the BHN as well as financial operations auditing procedures for savings and loan institutions. This will strengthen BHN in its efforts to raise additional capital for housing finance from the banking sector which requires regular internal auditing as a condition for lending to BHN.

Twelve months of the services of a senior level financial management expert with experience in financial economics or public accounting for housing finance systems to strengthen the BHN's financial management capability by establishing a financial accounting system; improving its procedures in mortgage portfolio management, preparing financial statements and projections; and developing a system for issuing securities against its portfolio in the capital market.

7. National Water and Sewerage Institute (IDAAN)

Funds for sewerage infrastructure, which will be financed entirely by the GOP, will be administered through Panama's National Water and Sewerage Institute (IDAAN) which was established under Law No. 98 in 1961. IDAAN is an autonomous government agency with authority to control all activities related to public or private water supply and sewage collection, treatment and disposal; and to fix rates, taxes, rents and valuations and other fees for installation and use of its facilities, and for its water and sewer services.

Under the Project, IDAAN will have two main tasks. It will be solely responsible for all activities associated with the planning, design, construction and operation-maintenance of the proposed wastewater collection and treatment systems in the service centers of Penonomé and Puerto Armuelles, and it will be responsible for the review and evaluation of sewerage plans for all other URBE subprojects.

IDAAN has a technical staff of 15 people in its engineering office in Panama City, responsible for the planning and design of all new projects. In addition, it has small technical staffs in each of seven regional offices among which are the Project's two growth centers - David and Chitré - Los Santos and three service centers - Santiago, Las Tablas and Aguadulce. Regional offices are normally headed by an engineer and organized into five sections: production office with responsibility for operation and maintenance of wells and aqueducts in small communities and water treatment plants in larger communities; water distribution office; sanitary sewer office; and commercial and administrative offices. Under the 1969 AID-financed Panama City Water Supply System loan, IDAAN received technical assistance in financial administration and accounting controls and procedures.

IDAAN operates and maintains 144 water systems which supply water to over 940,000 inhabitants of Panama. (The Ministry of Health has the responsibility in towns of less than 1,000 inhabitants.)

During the past two years, IDAAN has designed and executed aqueduct and sewerage system projects costing over \$25 million, and it is currently a major participant in the \$15 million Slum Upgrading and Home Improvement project initiated by AID and the GOP in the San Miguelito District of Panama City under the Housing Investment Guaranty Program. In addition to AID, the World Bank and the Inter-American Development Bank are financing projects through IDAAN. Under Loan 1280, the World Bank is financing a new water treatment and distribution system, and storage tanks for Colon; increased capacity for La Chorrera water supply system; and water distribution lines for Arraijan and Vacamonte.

The IDB is financing a sewerage system for Las Tablas and a sewerage treatment facility for David, aqueducts for Chilibre (on the eastern Canal Zone border) and elsewhere, and water treatment plants for Chitré and Puerto Armuelles. IDAAN's budget for 1978 is \$29.7 million: \$21.8 million from the sale of goods and services and \$7.8 million in capital income consisting of foreign loans (\$6.8 million) and transfers from the GOP (\$1.0 million). Until 1977, the central government's contribution was higher; IDAAN, however, recently increased its service fees considerably, and the GOP contribution decreased.

IDAAN plans soon to hire up to six new personnel in its David and Aguadulce offices partly as a result of the URBE Project. It will hire two engineers for the David Office to assist in all new projects, including URBE, in Chiriqui Province. For both the Puerto Armuelles and Penonomé subprojects, a sewage treatment plant operator and possibly a maintenance person will be hired. The new technicians will be funded through IDAAN's regular budget. In response to the demands of all new projects, IDAAN is also contemplating hiring new technicians with perhaps two years' engineering education for each of the regional offices to serve an intermediate technical function between office chiefs (usually engineers with long experience) and operation/maintenance crews. Additional administrative and maintenance personnel will also be added.

A thorough assessment early in 1978 of IDAAN's capabilities by an AID-contracted environmental consultant led to recommendations for a limited amount of technical assistance and training to be provided to the Institute under the URBE Project. To assist IDAAN in completing its feasibility studies on providing wastewater collection and treatment systems in Penonomé and Puerto Armuelles and in selecting a preferred method of treatment and final site for the treatment facilities, two months of a planner/ecologist specialized in water quality management studies will be provided.

To strengthen IDAAN's technical capability to effectively operate and maintain the new treatment facilities, one month of the services of a sanitary engineer experienced in sewage treatment system operations will be provided. The advisor will conduct a training program on plant operation and maintenance and assist in establishing a reporting and inspection system to assure efficient operation and maintenance of the new facilities.

8. Ministry of Labor National Training Center (CENAFORP)

The Centro de Formación Profesional (CENAFORP) will be responsible for a \$.3 million program to train industrial workers and small businessmen under the Project. Originally a Division of IFARHU, the Government's Institute for Human Resources Development, CENAFORP, was transferred to the Ministry of Labor in 1974 to become a department within the Division of Employment and Manpower Training. CENAFORP is responsible for organizing, implementing and evaluating the Ministry's manpower development programs in collaboration with other public and private entities. To do this, it organizes and administers training programs, prepares didactic material, and selects and trains instructors. It also supervises and coordinates public and private efforts in manpower training activities.

CENAFORP is organized into four sections. Its technical section prepares, supervises and helps evaluate training programs and undertakes research for improving training methodologies. Another section - a center for manpower training in Panama - offers training in four principal fields: construction, industry, metal-mechanic, and commerce and services; it also coordinates training activities in other parts of the country. A third section organizes, coordinates and/or implements on-the-job training in public and private enterprises.

CENAFORP's section for regional training activities maintains four regional offices, one each in the Project's growth centers (David and Chitré-Los Santos) as well as in the service centers of Santiago and Penonomé, offering good coverage of the Project area. These regional offices, with which the Project will work closely through COFINA-MIDA and MICI, are responsible for organizing, coordinating, implementing and evaluating training programs in areas outside the Panamá-Colón metropolitan area.

CENAFORP has approximately 300 employees of whom 68 are instructors and about 30 technicians responsible for the preparation of training material. The remainder are administrative and semi-skilled and non-skilled employees. All salaries and other compensation for CENAFORP personnel are integrated into the overall budget of the Ministry of Labor. CENAFORP is allotted, however, approximately \$600,000 per year for operational expenditures related to the training programs it sponsors.

CENAFORP is experienced in providing or arranging for the kinds of worker training and small business courses planned under the Project and will not require technical assistance or training to carry out this responsibility.

9. National Cultural Institute (INAC)

The Instituto Nacional de Cultura (INAC) will be responsible for constructing or renovating cultural centers and undertaking a program of artisanry instruction and marketing in the growth and service centers, a Project component wholly funded by the GOP. INAC was created in June 1974 under Law No. 63 to "promote, coordinate and direct cultural activities in the country."

INAC owns and manages all public cultural buildings and installations - e.g., National Theatre, National Palace, museums, National Printing Plant - and sponsors a year-round program of cultural events. In the past few years, it has begun to construct and support in the Republic's interior

cultural centers in association with handicraft programs.

INAC's board of directors is chaired by the Minister of Education and includes representatives from the University of Panama, Legislative Commission, Representatives' Assembly and a cultural organization. The board is assisted by an eight-member advisory council on which sit representatives from private enterprise, organized labor, farmers' and student groups, INAC instructors and historical, literary and art societies. Day-to-day operations are in the hands of a director general.

INAC's staff numbers close to 500 and its annual budget is approximately \$2.3 million, derived from government subsidies, fees charged for the use of installations, and donations.

10. National Sports Institute (INDE)

The Instituto Nacional de Deportes (INDE) will implement a counterpart program of sports and recreational facilities construction and renovation in the URBE centers.

Founded in June 1970 under Decree No. 144, INDE's purpose is to "orient, promote, direct, and coordinate sports activities throughout the country" including physical education programs in the public school system, national sports events of all types, and Panama's participation in international sports events including the Olympics. INDE owns and operates major public sports facilities - stadiums, gymnasiums, swimming pools, playing fields - throughout Panama.

The Minister of Education chairs INDE's board of directors which is composed of the Director of the School of Physical Education of the University of Panama and one representative each from the Ministry of Health, civic organizations, Ministry of Government and Justice, sports federation and non-voting representative from the National Controller's office.

A director general, appointed to a four-year term by the President of the Republic, supervises INDE operations with a staff of 516 and an annual budget of approximately \$2.2 million derived from fees and other charges for the use of sports facilities, donations and government transfers and subsidies.

IV. IMPLEMENTATION ARRANGEMENTS

A. FINANCIAL PLAN

As is customary in regional development projects such as this, a multi-sector approach is adopted encompassing both the overall economic analysis and applicable financial analyses as the justifications for the Project's financial soundness. This section will cover the basis for the development of the Project budget, the allocation of costs between AID and GOP, a detailed financial review of certain sub-activities of the Project, the recurring costs to the GOP of the Project, and the projected disbursement schedule of the Project during its five-year life. The purpose of the financial analysis is to determine the individual financial viability of the various sub-activities to assure that, if subsidies are necessary, they will be adequately provided for in the Project budget. We have demonstrated that the credit revolving funds, to be managed by the intermediate credit institutions, will be self-sustaining. The other sub-activities do not need to be individually justified from a financial perspective since, as integral parts of the Project, their justification is based on their essential contribution toward achieving the Project purpose. Some of these sub-activities terminate at the end of the Project; for those which continue beyond the Project life, the capability to cover recurring costs is demonstrated below in Section IV.A.2.

1. Budget and Cost Analysis

All budgetary support costs for this Project will be borne by the GOP. The financial plan only identifies the new costs - \$1,400,000 - to the GOP for personnel, general administrative/operating expenses, and equipment; however, combined current and new budgetary support costs to the GOP will exceed \$2,300,000. The various GOP institutions which are incurring costs under this Project include MPPE, MICI, MIDA, IDAAN, COFINA, MIVI, BHN, CENAFORP, and INAC. Following is a table which identifies the new budgetary support costs each institution will incur in order to carry out this Project.

New Budgetary Support Costs (\$000)

<u>MPPE</u>	<u>MICI</u>	<u>IDAAN</u>	<u>COFINA</u>	<u>MIVI</u>	<u>BHN</u>	<u>MIDA</u>	<u>CENAFORP</u>	<u>INAC</u>	<u>TOTAL</u>
\$645	\$340	\$20	\$10	\$10	\$50	\$310	\$5	\$10	<u>\$1400</u>

Technical assistance requirements for the various institutions are detailed in Tables 3 and 4 and were developed in close association with the various institutions. External technical assistance has been budgeted at \$7,000/month and contracting for Host Country technical assistance has been budgeted at \$2,500/month. These rates are considered reasonable based upon the Mission's current experience in contracting U. S., Third Country, and Host Country nationals and also allowing for probable cost inflation during the life of the Project.

In conjunction with the ICI loan programs, a demand for skilled and semi-skilled laborers and entrepreneurs will be created. Consequently, \$100,000 of loan funds has been allocated to provide training to meet these needs. Such training will take place in-country and will be provided for currently unemployed and under-employed workers plus the training needs of small businessmen. Various courses, seminars, and other related educational/training programs will be offered on a recurring basis for small businessmen and women.

The overall budget, for both AID and GOP contributions, of the Project has been developed in coordination with the various participating institutions with overall guidance provided by MPPE. Specifically, technical guidance for projecting the costs of the small business and agro-industrial loans programs was provided by a U.N. consultant, a consulting firm, an industrial engineer, plus input from the participating institutions. MPPE studies and a pre-feasibility study by a Colombian consulting firm were used to estimate the costs of the transport terminals, and costs of housing requirements were provided by MIVI. The GOP developed the costs for the infrastructure projects which are totally its responsibility.

The major component of the loan is for sublending through the Intermediate Credit Institutions. As discussed in the Technical Analysis, a demand for \$3,400,000 for small businesses exists in the Project area. Details of the projected cash flows for the MICI small business loan fund are contained in Annex II-D-1. Repayment is considered to be medium-term, and recuperated funds will be used for relending within the area or will become available as a source of credit funds for any future AID/GOP growth and service center projects. The Technical Analysis also discusses the excessive demand for capital for financing agro-industrial activities in the Project area. Since the \$3,600,000 of allocated loan funds do not cover this demand, subloan funds repaid on a long-term basis will be used for financing additional agro-industrial projects in the area. Details of the projected cash flows for the agro-industrial fund are contained in Annex II-D-2. COFINA will also be responsible for subloaning \$2,500,000 of loan funds to several municipalities for constructing and equipping transport terminals. Cash flows for the transport terminals will be part of the feasibility studies still to be done.

Development of the infrastructure of the growth and service centers is an integral part of this Project. Consequently, housing solutions, sewerage systems, industrial parks, and recreational/cultural centers are being financed under this Project. Through a Housing Investment Guaranty, \$5,400,000 will be made available for housing solutions in each growth or service center. The GOP will contribute \$900,000 to the costs of the solutions. The GOP's interest in thoroughly developing the growth and service centers is evidenced by their commitment to finance 100% of the

FINANCIAL PLANS

1. OVERALL FINANCIAL PLAN

<u>COMPONENTS</u>	<u>AID</u>	<u>CONTRIBUTIONS (\$000's)</u>		<u>TOTAL</u>	
		<u>OTHER^{1/}</u>	<u>GOP</u>		<u>PARTICIPANTS</u>
<u>I. PRODUCTIVE & SUPPORTING ENTERPRISES</u>	<u>6300</u>		<u>2800</u>	<u>2000</u>	<u>11100</u>
A. Small Businesses/Industries	3000		400	400	3800
B. Agro-Industrial	3200		400	1000	4600
C. Industrial Sites			1800	600	2400
D. Training of Workers/Small Businessmen	100		200		300
<u>II. HOUSING & TOWN INFRASTRUCTURE</u>	<u>2500</u>	<u>5400</u>	<u>6100</u>	<u>700</u>	<u>14700</u>
A. Housing		5400	900	500	6800
B. Transport Terminals	2500		600	200	3300
C. Sewerage Systems			3700		3700
D. Recreational/Cultural Activities			900		900
<u>III. INSTITUTIONAL DEVELOPMENT</u>	<u>1200</u>		<u>100</u>		<u>1300</u>
A. Institutional Training	105		100		205
B. Technical Assistance	1095				1095
<u>IV. ADMINISTRATIVE EXPENSES</u>			<u>1400</u>		<u>1400</u>
<u>TOTAL</u>	<u>10000</u>	<u>5400</u>	<u>10400</u>	<u>2700</u>	<u>28500</u>

1/ Housing Investment Guaranty (HIG)

2. DISBURSEMENT SCHEDULE BY YEARS

COMPONENTS	Year #1			Year #2			Year #3			Year #4		Year #5		T O T A L			GRAND TOTAL
	AID	GDP1/	OTHER2/	AID	GOP	OTHER	AID	GOP	OTHER	AID	GOP	AID	GOP	AID	GOP	OTHER	
<u>I. PRODUCTIVE & SUPPORTING ENTERPRISES</u>																	
A. Small Businesses	370	130		725	170		585	160		675	170	645	170	3000	800		3800
B. Agro-Industrial	75	20		700	320		700	320		725	340	1000	400	3200	1400		4600
C. Industrial Sites		900			800			700							2400		2400
D. Training of Workers/Small Businessmen	10			30	50		30	50		30	50		50	100	200		300
<u>II. HOUSING & TOWN INFRASTRUCTURE</u>																	
A. Housing		500	3000		800	1600		100	800						1400	5400	6800
B. Transport Terminals	500	200		1000	200		600	200		400	200			2500	600		3300
C. Sewerage Systems		500			800			1000			900		500		3700		3700
D. Recreational/Cultural Activities		300			300			300							900		900
<u>III. TECHNICAL ASSISTANCE & TRAINING</u>																	
A. Institutional Training		14		39	37		32	27		21	12	13	10	105	100		205
B. Technical Assistance	341			550			105			78		21		1095			1095
<u>IV. ADMINISTRATIVE EXPENSES</u>		325			260			280			280		255		1400		1400
GRAND TOTAL	<u>1296</u>	<u>2889</u>	<u>3000</u>	<u>3044</u>	<u>3737</u>	<u>1600</u>	<u>2052</u>	<u>3137</u>	<u>800</u>	<u>1929</u>	<u>1952</u>	<u>1679</u>	<u>1385</u>	<u>10000</u>	<u>13100</u>	<u>5400</u>	<u>28500</u>

LEGEND:

1/ Includes GOP and Participants.

2/ Housing Investment Guaranty.

3. TRAINING AND TECHNICAL ASSISTANCE SUMMARY

Activ- ity	Inst.	Technical Assistance and Training	Advisors		Training	
			Ext.	Int.	Int.	Ext.
			(Person Months)			(\$000)
1	MIPPE	Urban planner/envIRON. Impact Advisor	1			
		Urban Development Admin. Advisor	6			
		Municipal Administration Advisor	6			
		Municipal Tax Administration Advisor	12			
		URBE Impact Study	6			
		a. Impact Study Designer	(2)			
		b. Impact Evaluator	(4)			
		Special Studies/Future Project Development 11 Training				50
2	COFINA /MIDA	Subproject Development Specialists:	25	6		
		COFINA	(10)			
		MIDA	(15)	(6)		
		Training			37	79
2	MICI	Short-term Management Advisors	10	9		
		Industrial Park Designer	3			
		Small Business Credit Systems Advisor	6			
		Training			7	12
3	MIVI/ BHN	Info. Systems and Doc. Advisor (MIVI)	15			
		Urban Planning Advisor (MIVI)	12			
		Site Planning Advisor (MIVI)	12			
		Environmental Protection Advisor (MIVI)	2			
		Training (MIVI)				20
		Financial Management Advisor (BHN)	12			
		Internal Auditing Advisor (BHN)	6			
3	IDAAN	Sewage Treatment Advisors (2)	3			
3	INAC	Artisan Products Market Advisor	3			
TOTAL			151	15	44	161
Costing:						
Advisors (Ext):	151 Person/Months at \$7,000/Month (Aver.)		=	\$1,057,000		
(Int):	15	" " " \$2,500/ " "	=	38,000		
Training (Ext):			\$	161,000		
(Int):			\$	44,000		
TOTAL				\$1,300,000		

4. TECHNICAL ASSISTANCE AND TRAINING PLAN AND BUDGET

INSTITUTION	Year 1		Year 2		Year 3		Year 4		Year 5		Short-Term T.A.		Long-Term T.A.		Int. Trng. \$000	Ext. Trng. \$000	Grand Total \$000	
	P/M	\$000	P/M	\$000	P/M	\$000												
I. <u>MPPE-URBE OFFICE</u>																		
A. <u>Short-Term T.A.</u>																		
Urban Development Administration	3	21	3	21							6	42						42
Urban Environmentalist	1	7									1	7						7
Municipal Administration	3	21	3	21							6	42						42
Urbe Impact Studies											6	42						42
Special/Future Development Studies					4	28	6	42	3	21	6	42						42
B. <u>Long-Term T.A.</u>											11	77						77
Municipal Tax Administration			12	84														84
C. <u>Training</u>													12	84				84
External				20		20		10										50
Internal																		50
II. <u>MICI</u>																		
A. <u>Short-Term T.A.</u>																		
Program Promotion & Publicity	3	21									3	21						21
Financial Consultant to Small Businesses*	2	5	1	2							3	7						7
Small Business Credit Systems*			6	15							6	15						15
Design of Loan Applications	2	14									2	14						14
Analysis of Loan Applications	2	14	1	7	1	7					4	28						14
Loan Preparation	3	21									3	21						21
Small Business Mgt. Procedures & Practices	2	14	1	7	1	7					4	28						21
Industrial Park Designer			3	21							4	28						28
B. <u>Training</u>											3	21						21
Internal		7																7
External				12											7			12
III. <u>MIDA</u>																		
A. <u>Short-Term T.A.</u>																		
Meat Processing	3	21									3	21						21
Oil & Fat Extraction	3	21									3	21						21
Fruit & Vegetable Juices			3	21							3	21						21
Sugar Derivative Industry*			3	8							3	8						8
Animal Feed					3	21					3	21						21
Milk Industry*							3	8			3	8						8
Generalist, Agro-Industries					3	21					3	21						21
B. <u>Training</u>											3	21						21
Internal		7		7		7		8		8								7
External				15		15		15		15					37			60

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4. TECHNICAL ASSISTANCE AND TRAINING PLAN AND BUDGET

COMPONENTS	Year 1		Year 2		Year 3		Year 4		Year 5		Short-Term T.A.		Long-Term T.A.		Int. Trng.	Ext. Trng.	Grand Total
	P/M	\$000	P/M	\$000	P/M	\$000	\$000	\$000	\$000								
IV. COFINA																	
A. Short-Term T.A. Loan Promotion Development	4	28	3	21	3	21					10	70					70
B. Training External				12		7										19	19
V. NIVI																	
A. Short-Term T.A. Environmentalist	2	14									2	14					14
B. Long-Term T.A. Information Systems & Documentation	3	21	12	84									15	105			105
Urban Planning	4	28	8	56									12	84			84
Site Planning	4	28	8	56									12	84			84
C. Training External					10	10										20	20
VI. BHM																	
A. Short-Term T.A. Internal Auditing			6	42							6	42					42
B. Long-Term T.A. Financial Management	3	21	9	63									12	84			84
VII. IDAAN																	
A. Short-Term T.A. Planner/Ecologist	2	14									2	14					14
Sanitary Engineer	1	7									1	7					7
VIII. INAC																	
A. Short-Term T.A. Marketing Artisan Products			3	21							3	21					21
Sub-Totals:																	
Short-Term T.A.	36	243	36	207	15	105	13	78	3	21	103	654					
Long-Term T.A.	14	98	49	343									63	441			
Training - Internal		14		7		7		8		8							
Training - External		0		69		52		25		15					14		
GRAND TOTAL		355		626		164		111		44						161	1300

NOTE: All T.A. is costed at \$7,000/month except local T.A. (e) which is \$2,500/month.

costs of the sewerage systems (\$3,700,000), recreational/cultural centers and activities (\$900,000), and the industrial parks (\$2,400,000).

Loan funds will also be used to finance costs of an URBE impact study and a study for alternative financial/management operations of the small business loan program.

2. Recurring Costs of the Project

With a few minor exceptions, most of the inputs of the Project represent non-recurring costs to the GOP. In the infrastructure component of the Project, where the GOP has committed the majority of its contribution, the occupants or users will cover any recurring costs for housing, sewerage, and industrial parks. Any recurring costs for recreational/cultural centers will be covered by the municipalities, central government, and fees paid by the users of the facilities.

The credit program for agro-industries and transport terminals will be self-supporting, and the cost of the periodic technical assistance provided to COFINA by MIDA will be miniscule in relation to the entire MIDA budget. Recurring annual costs to MICI for managing the small business loan program will be \$100,000 of which \$50,000 represents currently employed personnel working full-time in the small business loan program and \$50,000 represents currently employed personnel working on other projects and part-time in the small business loan program. As discussed in the Technical Analysis, during the life of the Project, alternative ways of financing this program will be studied, which may result in no, or reduced, recurring costs to the GOP. It is planned that there will be no recurring costs under technical assistance. Recurring institutional training costs will be minimal and readily absorbable by the GOP in its operating budget for training. The workers/small businessmen training program will continue beyond the life of the Project if demand warrants it. The ongoing costs of the program will be part of CENAFORP's regular budget, and this budget is financed by a nationwide educational tax levied on employers and employees. As previously explained, since administrative expenses are primarily in support of life of Project activities, the principal ongoing cost of the Project itself will be the residual URBE staff (annual cost of \$85,000) already employed by MPPE. Its work will be involved with developing other regional growth and service center projects.

In summary, this Project for the most part does not include activities which require recurring costs to be assumed by the GOP in order to maintain it. Consequently, those costs which may be incurred will be minimal and will not represent a tangible constraint on GOP finances.

3. Five-year Disbursement Schedule

The schedule is shown in Table 2. It represents accrued expenditures and is in agreement with the Project Paper Facesheet.

B. IMPLEMENTATION PLAN

1. Administrative Arrangements for Project Implementation

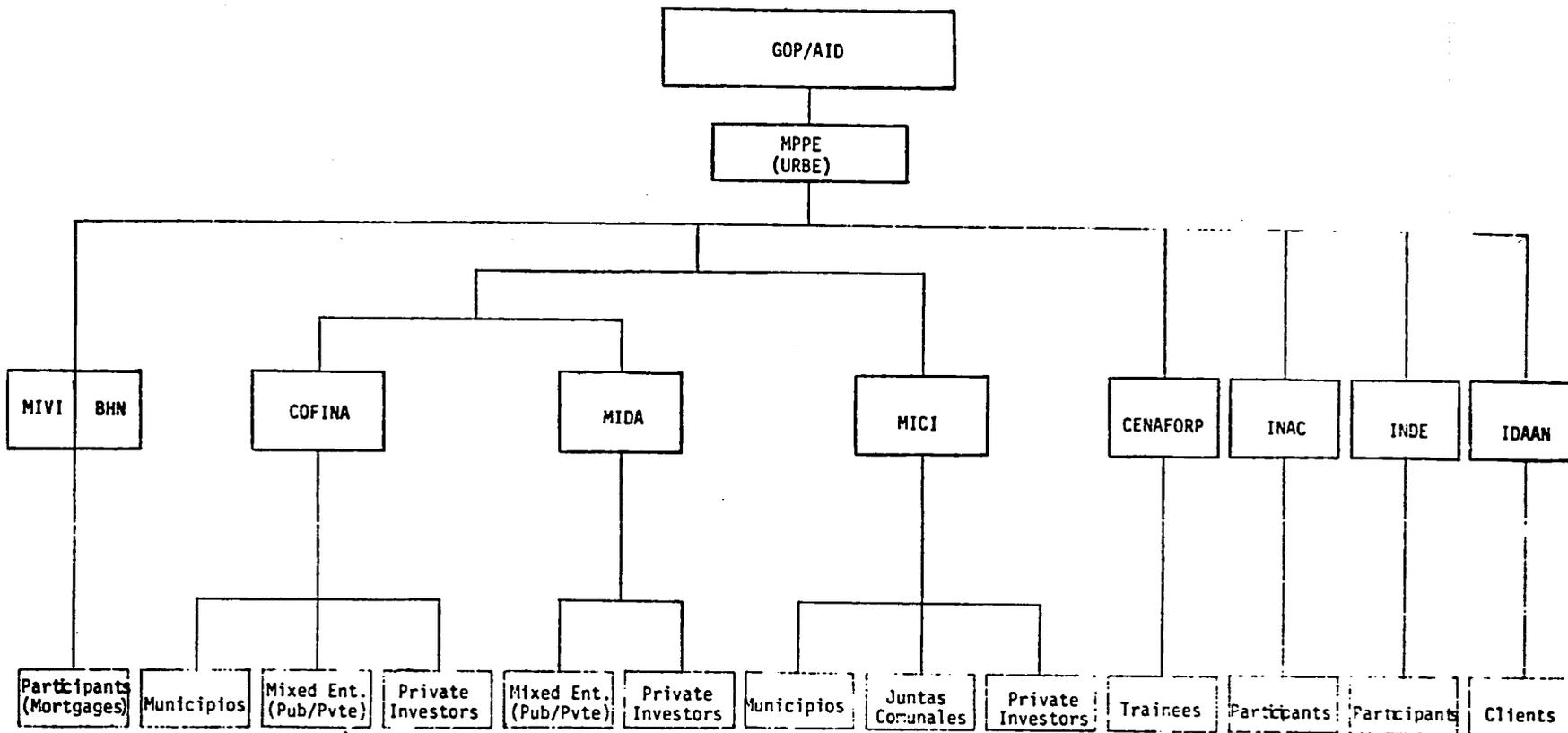
The Borrower will be the Government of Panama, and the principal executing agencies will be the Ministry of Planning and Economic Policy (MPPE), National Finance Corporation (COFINA), Ministry of Commerce and Industry (MICI), Ministry of Agricultural Development (MIDA), National Housing Bank (BHN), and the Ministry of Housing (MIVI). Other implementing agencies under the Project are the National Water and Sewerage Institute (IDAAN), National Training Center (CENAFORP), National Cultural Institute (INAC) and the National Institute of Sports (INDE). Project funds for the three principal types of subprojects - productive activities, infrastructure and housing - will be disbursed through intermediate credit institutions (COFINA, MICI, and BHN, respectively).

The Ministry of Planning will play the role of overall GOP coordinator during Project implementation. MPPE has been the principal agency involved in designing the Project, both on a conceptual level and in detailed activity design. MPPE's central role within the Government (control of overall planning, coordination of external assistance and the budget) makes it a logical focus for overall Project planning and coordination responsibilities.

During implementation, its responsibilities will consist principally of ensuring that sufficient budgetary funds are provided to GOP implementing agencies, arranging external training and technical assistance for all implementing agencies, spot-checking implementing agency performance, and carrying out progress and impact evaluations. In addition, MPPE will be involved in planning subsequent programs designed to continue the process of growth and service center development initiated under this Project.

MPPE /UD will serve as the technical secretariat for MPPE's monitoring and coordinating responsibilities during Project implementation, reporting directly to the Minister and Vice

ADMINISTRATIVE ARRANGEMENTS
Rural Growth and Service Centers (URBE)



Minister of Planning. As such, it will coordinate technical inputs from other divisions and departments within the Ministry of Planning, e.g., budget, sectoral planning, PRODIAR, in addition to the activities of other GOP agencies involved in the Project.

Apart from the coordinating, budgetary, and evaluation functions described above, MPPE/UD will also be responsible for promoting the URBE Project in the media, preparing the agenda for meetings of the Coordinating Committee (see below), and raising for consideration of the latter implementation problems or concerns as necessary.

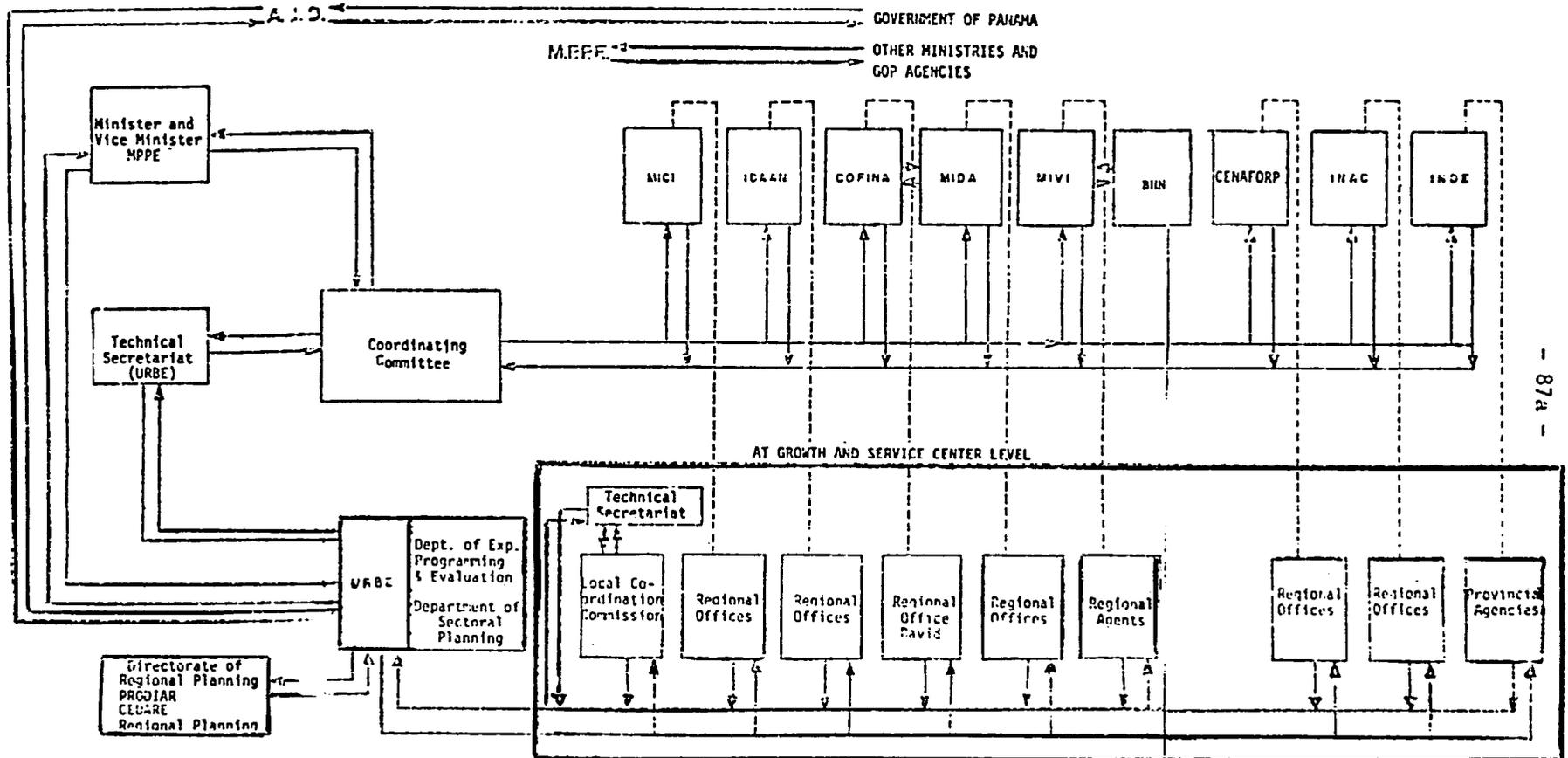
A Coordinating Committee will be established at the working level composed of the Vice Minister of Planning and Economic Policy (chair), MPPE's Director of Regional Planning and Coordination, representatives of COFINA and IDAAN, Director of the Directorate of Agro-industries, MIDA, or his designee, Director General for Industry, MICI, or his designee, the Director General of Programming and Budget, MIVI, or his designee, and a representative of the BHN. The Coordinating Committee will, among other things:

- (a) approve annual investment and operating budgets for the Project, as proposed by MPPE/UD (technical secretariat);
- (b) analyze and approve any changes in annual Project plans; and
- (c) evaluate Project progress on the basis of reports prepared by MPPE/UD and make recommendations to improve Project performance.

Coordinating Committee members will be responsible for keeping their respective heads of agencies informed of Project developments.

In each of the eight growth or service centers, a planning junta will serve as the local Project committee. Members of the junta will include the mayor, local officials, regional representatives of government sectoral agencies, a representative of the business community, and one or more representatives of the public at large. The provincial planner (who reports to MPPE) will sit on the planning junta in an ex-officio capacity. The junta will work with MPPE in preparing master (guide) town development plans and with MIVI in their detailed physical elaboration. It will maintain overall coordination of Project activities at the level of the center, identify implementation problems, and call upon MPPE/UD for assistance as needed. It is at this organizational level that the populations of each center will have access to Project apparatus in a formal sense through the locally elected GOP representatives and representatives of the public at large and by making individual or group concerns known to the planning junta.

FUNCTIONAL DIAGRAM - URBE PROJECT



2. USAID Monitoring and Administrative Responsibilities

a. Monitoring Responsibilities

The USAID Capital Development Office will monitor the Project 1/ and will assist the GOP with contracting and procurement under the loan. It will review plans and specifications for direct portions of the loan - principally technical assistance and training, training for workers and small businessmen and special studies - and maintain close contact with the intermediate credit institutions for non-direct portions of the loan. The office, assisted by other divisions of the Mission as appropriate, will periodically inspect construction progress, ensure that disbursement/reimbursement requests conform to AID regulations, that sound financial control methods are followed, and that provisions of the loan agreement and implementation letters are satisfactorily met.

USAID, in addition, will review small business/industry and agro-industrial subloans as follows: Prior to final approval by MICI for loans of \$15,000 and above, the Mission will review the subloan file to determine the subloan's adherence to pre-established Project criteria and the quality of the financial, economic and technical analyses. If the Mission approves the proposed subloan, MICI will disburse to the sub-borrower. If the Mission finds fault with the subloan, it will so notify MICI which may decide to resubmit the subloan after redesign as the case requires. The Mission will exercise the review function for one year from the date of approval of the first subloan. At the close of the period, the Mission will decide whether MICI's performance warrants further monitoring. Each month, MICI will submit a reimbursement request for all subloans made during the period; a duplicate of the reimbursement request will be forwarded to MPPE/UD for its approval.

For agro-industries and transport terminals, the Mission will review each proposed subloan, again for conformity to pre-established Project criteria, and for the quality of financial, technical, and economic analyses undertaken by MIDA and COFINA. The USAID review will occur following final approval by COFINA's credit committee but prior to execution of the subloan

1/ RHUDO/PAC will have primary responsibility for monitoring the performance under the Housing Investment Guaranty in accordance with pre-established procedures (see p. 27 of Annex II-I for details). However, the Mission's Capital Development Office will review implementation of the housing component periodically as part of its overall monitoring responsibility for the entire Rural Growth and Service Centers Project.

document. USAID will have authority to recommend design or analytical modifications, and COFINA may resubmit the subloan for Mission approval at a later date. COFINA will submit reimbursement requests as subloans are made with a copy to MPPE/UD as in the case of small business/industry subloans. At the end of 12 months from the date the first subloan is submitted by COFINA to the Mission for approval, the Mission will decide whether or not to continue its review function or limit it to, for instance, subloans over \$250,000.

b. Disbursement Procedures

A five-year disbursement period will be needed for the Development Loan, principally to permit the GOP to fully draw down loan funds for the Project's productive activities in agro-industry and small business/industry.^{1/} Both activities represent substantially new departures for the two intermediate credit institutions involved. COFINA's experience to date - and bearing in mind that the public development bank is less than three years old - has been overwhelmingly in non-agricultural industry located in or near the Panama-Colon corridor. MICI, despite 12 years of experience, has loaned a total of just over \$500,000 restricted to small industries and a few repair facilities, and close to half its subblending has been concentrated in the metropolitan region. Both institutions will require technical assistance and training, and MICI will need to undertake a promotional campaign for its new subblending fund; it has seldom advertised or solicited small industry loans during its dozen years and will need now to inform prospective clients that its portfolio is being expanded to include commercial and service enterprises.

Funds will be disbursed through COFINA and MICI by means of an initial advance which will be adjusted quarterly, based upon anticipated disbursement schedules. Funds for the transport terminals will be administered by COFINA. Disbursements for other activities financed under the loan - e.g., worker/small businessmen training, studies and evaluations, and training and technical assistance - will be made in accordance with standard AID procedures.

It is anticipated that funds for the Project's shelter component will be disbursed over a three-year period. Funds will be disbursed by the U.S. investor to BHN for payment to MIVI, upon presentation of vouchers. MIVI will disburse funds to its regional offices (also on presentation of vouchers) for payment for land, materials, labor and contractor work in place.

No elements of this loan are acceptable for use of the fixed amount reimbursement (FAR) method.

^{1/} See five-year disbursement plan in Section IV.A.

c. 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 the Loan Agreement. It is anticipated that most goods and services procured under the Loan will be contracted directly by the Borrower, with AID's prior concurrence.

Appropriate reports will be obtained concerning procurement requirements, including 50/50 shipping and source/origin. These reports and requirements will be monitored by the Office of Development Planning and the Controller's Office through review of vouchers and supporting documentation submitted in substantiation of reimbursement requests.

Contracting under the shelter component of the Project will be done by MIVI in accordance with GOP practices. In all cases, AID (through RHUDO/Panama) will approve bid and contracting procedures, pre-bid estimates and final contracts, in accordance with standard HIG program procedures.

C. EVALUATION PLAN

Evaluation of the URBE Project will take place at the output and purpose/goal levels. Evaluation at the output level will be carried out on a regular basis and will involve AID/W, Mission and GOP personnel. These evaluations will cover such issues as:

- (a) utilization of loan (drawdowns);
- (b) timeliness and nature of counterpart contributions;
- (c) relevance and effectiveness of the supporting technical assistance activities;
- (d) effectiveness of institutional arrangements and coordination (including both AID and GOP arrangements);
- (e) extent of local level participation in Project implementation; and
- (f) assessment of individual subprojects in terms of compliance with lending criteria and effectiveness in implementation, outputs such as number of jobs, shelter, etc.

These output level evaluations will be carried out annually by a team consisting of representatives of major participating agencies, namely AID, MPPE, MICI, MIDA, and COFINA. If, in preparation for an annual evaluation it is considered advisable to have an

outside individual or firm conduct the review in consultation with the regular evaluation or project team, this will be arranged by mutual consent of the USAID and GOP. Further, as necessary and appropriate, the project team will conduct ad hoc or unscheduled evaluations to address specific problems that come up during the course of implementation and require in-depth assessment.

Goal and purpose level evaluation also is important to overall Project assessment, especially since the developmental approach of URBE is relatively new. Not only is it a regional development strategy; it is based also on integration of rural and urban development through identification and promotion of growth and service centers considered to be pivotal to the rural development and overall economic growth of the regions. Through USAID and GOP collaboration, the program combines emphasis on general economic stimulation of the regions and specific targeting of poverty groups for assistance. In addition, the project is closely integrated with a number of other ongoing and proposed development activities in the region (see Section II.A.4. "GOP On-going and Planned Programs Addressing Project Area Major Constraints, page 4). This close integration complicates project specific goal and purpose level evaluation because several of these activities have highly complementary purposes and goals; on the other hand, this provides an opportunity for fruitful information exchange. Components of the purpose and goal evaluation for the project covered in this PP will draw upon information developed in these related development activities.

Two goal and purpose evaluation approaches will be utilized: total project impacts and global changes in the centers and region. Total project impacts will be assessed by integrating direct project impacts from the output level evaluation with indirect project impacts. Direct project impacts address such issues as:

- (a) number of jobs at different skill levels directly generated by subprojects;
- (b) number of shelters provided at each income level;
- (c) number of new sewer connections;
- (d) amount of private investment induced directly by subprojects;
- (e) increased local participation in planning process; and
- (f) utilization of new transport terminals and cultural and recreational facilities.

Indirect project impacts include secondary benefits such as: increased agricultural output and incomes resulting from the increased demand of agro-processing enterprises; income, consumption and demand multipliers induced by project generated employment; and improved access of rural populations to essential urban services resulting from the construction and efficient operation of new transportation terminals. Indirect project impacts will be appraised using appropriate methodologies such as economic and social multipliers and linkages and possibly input-output coefficients. These methodologies will be used with available data from output level evaluations, project monitoring activities, including disbursement records, audit reports, borrowers reports, and other sources including information related to the multiplier effects of subprojects. The indirect project impacts to be evaluated will include, but not be limited to:

- (a) total employment and income generation in the region, in the centers, and for the target group;
- (b) increased demand and production of agricultural commodities;
- (c) increased access and utilization of urban-based services (health centers, education facilities, markets, etc.);
- (d) increased and improved shelter for the total population and for the target group;
- (e) increased demand and utilization of agricultural inputs;
- (f) improvements in the number, variety, and quality of services and functions provided by centers; and
- (g) improvements in overall quality of life of the total population and the target group in the centers and the region as a whole.

Although assessment of these indirect impacts will be difficult because the gestation period exceeds the Project time frame, the evaluation will enable the Mission and GOP to assess: who in the target group (and beyond) has benefitted and in what ways; if all major constraints to target group participation were adequately anticipated in the Project design; and what the effects of the Project have been on groups not located in the immediate Project area or identified to be principal beneficiaries in the growth and service centers and their areas of influence. This socio-economic impact analysis together with

data collected at regular intervals over the life of the Project will be used to improve target group participation in subsequent phases of Panama's growth and service center development program.

Global changes in the centers and the region during the project period will be evaluated using available information and estimates to make simple before-after comparisons of employment levels and distribution, housing quality indicators, agricultural productivity, urban-rural linkages, rural access to urban based services, etc. This relatively rough evaluation will be influenced by activities outside the scope of this project, especially considering that the \$30 million project funds will be disbursed over five years in a region with an estimated annual gross product of \$300-\$400 million.^{1/}

On the other hand, this evaluation will provide useful information on the extent to which the process set in motion by this and related projects is taking hold, intensifying and spreading. In addition, the information will be useful in the design and implementation of subsequent phases of Panama's growth and service center development program.

During the first year of the Project, a technical consultant or team will be contracted to assist MPPE and USAID with the design of an appropriate evaluation approach and plan to address the goal and purpose level questions. The design will include an evaluation framework, specification of appropriate analytical methodologies and the technical skills required to conduct the analysis, identification and tabulation of benchmark data, recommendation of an appropriate time frame for the evaluation and a projection of costs.

While the time frame for this evaluation is to be determined by the evaluation design group, the work cannot commence until there has been sufficient implementation under the Project to generate an overall impact in the regions covered. This would suggest a probable starting date no earlier than the third year of Project implementation and quite possibly very close to the end of the first URBE Project. The Office of Urban Development, Development Support Bureau, has offered to assist with the initial design of goal and purpose level evaluation which, as noted, will be carried out during the first year of Project implementation.

The first regular evaluation of the Project at the output level is planned for November 1979 and at twelve-month intervals thereafter.

1/

See Eighmy and Garcia, pp. 4, 55, 34.

D. CONDITIONS; COVENANTS AND NEGOTIATING STATUS

1. Conditions Precedent to Signing the HIG Agreement (\$5.4 million)

The National Housing Bank (BHN) shall provide, in form and substance satisfactory to AID, evidence that it has the necessary administrative authority and responsibility to carry out its role in the Project and that it has adequately planned for its future financial development. This evidence shall consist, inter alia, of duly approved internal regulations, an external audit of BHN's financial position, and a plan for development of the Bank as a self sustaining financial institution.

2. Conditions Precedent to Disbursement of the AID Development Loan (\$10 million)

a. Condition Precedent to disbursement for agro-industries:

COFINA shall submit, in form and substance satisfactory to AID, a copy of its subblending regulations including project and subborrower eligibility criteria and an implementation plan for training workers required in Loan-funded agro-industries.

b. Conditions precedent to disbursement for the small business and industry activity:

(1) MICI shall submit, in form and substance satisfactory to A.I.D., a copy of its subblending regulations including project and subborrower eligibility criteria and an implementation plan for training small businessmen.

(2) Evidence that MICI has contracted competent technical assistance to aid in promoting the small business program.

c. Condition precedent to disbursement for transport terminals:

Borrower shall submit in form and substance satisfactory to A.I.D., detailed architectural and engineering plans and specifications and final feasibility studies.

d. Condition precedent to second year disbursement:

After the end of the first full calendar year of implementation or such other date to which A.I.D. agrees, Borrower shall submit, in form and substance satisfactory to A.I.D., evidence that at least one town plan has been approved by a municipal council.

3. Conditions Precedent to Disbursement of HIG:

a. Evidence that BHN has contracted competent technical assistance in internal auditing and financial management.

b. Evidence of progress by BHN in implementing new management functions, including, inter alia, collection of mortgage payments from subborrowers, and cash disbursement procedures.

4. Special Covenants

a. Maintenance of Small Business Fund

Except as A.I.D. may otherwise agree in writing, the GOP agrees that it will maintain the level of the fund at no less than \$3.4 million for at least 10 years after the end of the loan.

b. Borrower Contribution

The GOP agrees that of its counterpart contribution to the project:

(1) No more than \$900,000 will be considered as contributing to costs related to cultural and recreational facilities and activities; and

(2) No less than \$800,000 will be provided for sub-lending to agro-industries and small businesses and industries.

c. Small Business Credit Mechanism

The GOP agrees to submit to A.I.D. after the end of the second full calendar year of implementation, the results of a GOP study on small business credit mechanisms in the growth and service centers and a plan for increasing the availability of long-term credit to small businesses.

d. Use of Subloan Repayments

The GOP agrees to utilize repayments of principal from A.I.D.-funded subloans only for those purposes for which A.I.D. loan funds are authorized.

e. Project Evaluation

The GOP agrees to establish with A.I.D. a joint evaluation program which will include, during the implementation of the Project: evaluation of progress toward attainment of the objectives of the Project; identification and evaluation of problem areas or constraints which may inhibit such attainment; assessment of how such information may be used to help overcome such problems; and evaluation, to the degree feasible, of the development impact of the Project.

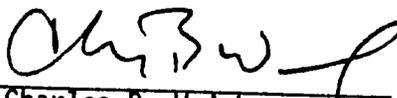
5. Other Conditions

The loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

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

I, Charles B. Weinberg, the principal officer of the Agency for International Development in Panama, having taken into consideration among other factors, the maintenance and utilization of projects in Panama previously financed or assisted by the United States, do hereby certify that in my judgment Panama has the technical capability and the physical, financial, and human resources to utilize and maintain effectively the proposed loan of ten million United States dollars (\$10,000,000) and Housing Investment Guaranty of five million four hundred thousand United States dollars (\$5,400,000) from the Government of the United States of America to the Government of Panama for the development of eight rural growth and service centers in the Central and Western Regions of Panama and a system capable of continuing the process of developing such centers throughout Panama.

This judgment is based on the facts presented in the Project Paper and the Mission's previous experience with the Ministries of Planning and Economic Policy, Commerce and Industry and Agricultural Development as well as experience with loans to other autonomous and semi-autonomous agencies of the Government of Panama.



Charles B. Weinberg
Director, USAID/Panama

May 15, 1978
Date

5C(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 COUNTRY

1. FAA Sec. 116. Can it be demonstrated that contemplated 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? -Yes.

2. FAA Sec. 481. 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. The Government of Panama is actively cooperating with U.S. and international agencies in the control of illicit drugs and narcotics traffic.

3. FAA Sec. 620(a). 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? Yes. Panama does not furnish assistance to Cuba. Panamanian flag carriers do carry cargo to and from Cuba. A Secretarial Determination was signed on 6/30/75 waiving the application of this section.

4. FAA Sec. 620(b). If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement? Yes, it has been so determined.

5. FAA Sec. 620(c). 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? The GOP is not known to be indebted under any of these circumstances to any U.S. citizen for goods and services furnished or ordered.

6. FAA Sec. 620(e) (1). 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.

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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? Adequate measures have been taken to protect U.S. property.
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? U.S. - Panama agreement relating to investment guarantees entered into force March 8, 1962.
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, One vessel was seized in early 1974.
- a. has any deduction required by Fishermen's Protective Act been made? No.
- b. has complete denial of assistance been considered by AID Administrator? Such a denial was considered by A.I.D. Administrator and deemed not in the U.S. interest.
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? (a) No
(b) 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?" Yes, as reported in annual report on implementation of Sec. 620(s).

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14. FAA Sec. 620(t). 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? No.
15. FAA Sec. 620(u). 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? Panama is not delinquent with respect to dues, assessments, or other obligations to the U.S. for the purposes of Article 19 of the Charter.
16. FAA Sec. 620A. Has the country granted sanctuary from prosecution to any individual or group which has committed an act of international terrorism? No.
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? No.
18. FAA Sec. 669. Has the country delivered or received nuclear reprocessing or enrichment equipment, materials or technology, without specified arrangements on safeguards, etc.? No.
19. FAA Sec. 901. Has the country denied its citizens the right or opportunity to emigrate? No.
- B. FUNDING CRITERIA FOR COUNTRY
1. Development Assistance Country Criteria Yes.
- 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.
- 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. The GOP is implementing a broad range of agricultural programs, including farm credit, land development & resettlement schemes, & improved food distribution and storage.

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(2) Creating a favorable climate for foreign and domestic private enterprise and investment.

Panama's Banking Law of 1970, the use of the U.S. Dollar as legal tender, and the complete freedom of international payments and exchange transactions combine to create a favorable climate for foreign and domestic private enterprise and investment.

(3) Increasing the public's role in the developmental process.

The GOP continues to encourage grass roots participation in the development process. For example, it has strengthened local gov'ts involvement in determining national priorities, policies, & programs; encouraged local initiative thru the establishment of community committees in health & education; and actively promoted the development of cooperatives.

(4) (a) Allocating available budgetary resources to development.

The Mission has concluded that development goals and programs in the 1976-1980 National Development Plan for economic and social development are reasonable.

(b) Diverting such resources for unnecessary military expenditure and intervention in affairs of other free and independent nations.

Panama's military expenditures continue to represent a small percentage of the national budget. Panama has not intervened in the 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.

In recent years GOP has effected tax reforms to significantly increase public revenues; provided public land for group farming schemes; and has attempted to maintain an open dialogue with the private sector.

(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.

The Government is clearly responding in an effective manner to the development needs of its people, particularly in the areas of agriculture, health, education, and housing.

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?

Yes.

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?

No.

2. Security Supporting Assistance Country
Criteria

a. FAA Sec. 502B. 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? N/A

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

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? N/A

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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%)?

a) The loan was included in A.I.D. FY 78 Congressional Presentation.
b) 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?

Yes
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?

No further legislative action is required to accomplish the loan's purpose.
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)?

N/A
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?

Yes.

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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?
- This project cannot be executed as part of an international regional project. Although the project is not designed with a view to promoting regional development programs, it may well serve as a model in other developing countries. Panama is not a newly independent country.
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.
- The loan should aid directly all of the items mentioned with the exception of (a), (c) and (f)
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).
- It is anticipated that a portion of the technical assistance and most of the equipment for the project will be procured from U.S. private sector sources.
9. FAA Sec. 612(b); 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.
- Not applicable. The currency used in Panama is the U.S. Dollar although it is denominated a "Balboa." There is no U.S. owned "local currency."
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency and, if so, what arrangements have been made for its release?
- Not applicable.

B. FUNDING CRITERIA FOR PROJECT1. 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?

The project is designed to increased the capacity of two rural economic growth centers and selected market towns in two priority regions to provide essential services for the small-farm agricultural sector.

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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; | Through this project, poor farmers will become better integrated into the market economy. Poor town residents and farm families will benefit from increased job opportunities resulting from the creation and expansion of town-based public and private enterprises financed through the project. |
| (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: | N/A |
| (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; | N/A |
| (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 |

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(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)?

The Ministry of Planning and Economic Policy has agreed to provide a counter-part contribution in excess of 25% of total project cost.

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?

No

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.

This loan will contribute towards the achievement of objectives (1), (2), (3), (5) and (6) by providing small loans, agro-industrial credit and infrastructure, and public enterprises and contribute towards the achievement of objective (4) by providing increased public services such as housing, potable water and service systems.

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.

This loan directly recognizes and utilizes the needs, desires and capacities of the population and of the implementing agencies.

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g. FAA Sec. 201(b)(2)-(4) and -(8); Sec. 201(e); 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?

The project will provide the resources and assistance necessary to measure the productive capacity of various rural towns thus contributing to a self-sustained economic growth. The project is directly related and consistent with other GOP development activities and is expected to make a significant contribution toward the achievement of long-range objectives. The PP provides detailed analysis of the project'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.

This project will have no foreseeable adverse effects on the U.S. economy or areas of labor surplus. Assistance will be furnished in a manner consistent with improving 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.

Financing for this activity from alternative sources is not available.

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.

There are reasonable prospects of repayment. The terms are both reasonable and consistent under the applicable U.S. and Panamanian laws.

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?

The Borrower has made an application for loan financed assistance in this activity and there have been assurances 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?

Yes.

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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?

All loan proceeds will be channeled through the National Bank of Panama to procure goods and services primarily from private sources.

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?

Not applicable.

3. Project Criteria Solely for Security Supporting Assistance

Not applicable

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

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. The project will result in integration of a section of Panama into the mainstream of Panamanian economic and political life and will serve as a model for replication in other areas both within Panama and in other LA countries.

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.



República de Panamá

Ministerio de Planificación y Política Económica

PROGRAMA URBE - AID

Panamá,

No.19-URBE

ACTION	
TO	008
DUE	= 15-78
TAKEN	78-1024

5/15/78

Señor
 Charles B. Weinberg
 Director de la Agencia para el
 Desarrollo Internacional
 E. S. D.

OFF	ACT	INF
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ODP	X	
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C&R		

Señor Director:

Como es de su conocimiento, desde el año de 1975, nuestro Gobierno ha estado desarrollando el Programa (URBE) a fin de Fortalecer los centros urbanos del interior del país. El objetivo central del programa es generar nuevas fuentes de trabajo y por consiguiente, aumentar el ingreso de la población pobre de estos centros y también, aumentar la capacidad de estas ciudades para prestar todo tipo de servicios a las áreas rurales bajo su influencia.

Este programa es parte integral de la Estrategia de Desarrollo Regional de nuestro Gobierno y está basado en el deseo de lograr un crecimiento nacional mas balanceado, en forma tal que se frene la migración hacia la Región Metropolitana y se logre una mayor participación del pobre tanto urbano como rural en el desarrollo del país.

La Institución a su digno cargo nos ha asistido en el diseño del Proyecto URBE a partir del año de 1976, a través del financiamiento de recursos humanos y de Asistencia Técnica para los estudios necesarios para preparar los documentos Preliminar, Interino y Final requeridos para obtener el financiamiento del proyecto.

RECEIVED

MAY 10 1978

PK 210/PANAMA

A fin de ejecutar la primera fase del Proyecto URBE en los centros de crecimiento de David y Chitré-Los Santos y en los centros de servicios de Puerto Armuelles, La Concepción, Santiago, Aguadulce y Las Tablas; el Gobierno de Panamá, por este medio formaliza la solicitud de préstamo a la AID por B/.10.0 millones y de Fondos Garantizados para la Vivienda (HIG) por B/.5.4 millones.

Los fondos del préstamo de la AID serán usados para financiar parcialmente lo siguiente:

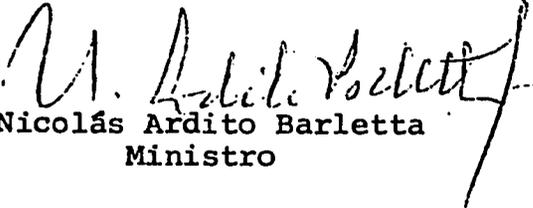
- Crédito para pequeños negocios	B/. 3.0 millones
- Crédito para la agroindustria	3.2
- Terminales de Transporte Terrestre	2.5
- Adiestramiento de trabajadores especializados y pequeños empresarios	0.1
- Desarrollo Institucional	<u>1.2</u>
TOTAL	B/.10.0 millones

El Gobierno de Panamá contribuirá con B/.10.4 millones de balboas y los Municipios involucrados y el sector privado y beneficiarios con un estimado de B/.2.7 millones.

Así mismo, solicito a usted que el financiamiento proveniente de fondos propios de la AID sea en los términos acordados previamente a saber: Un préstamo a 20 años, incluyendo un período de gracia de 7 años y a un interés anual del 2% durante el período de gracia y 3% durante la amortización.

Anticipamos que el financiamiento HIG será realizado de acuerdo a términos similares a aquellos que han sido recientemente negociados entre la AID y el Gobierno de Panamá.

De usted atentamente,


Nicolás Ardito Barletta
Ministro

REPUBLIC OF PANAMA
Ministry of Planning and Economic Policy
PROGRAMA URBE-AID

ANNEX I - C
Page 3 of 4

No.19-URBE

Mr. Charles B. Weinberg
Director
Agency for International Development
Panama, R. P.

Dear Mr. Director:

As you are aware, since 1975 the Government of Panama has been developing a program - the URBE Program - to strengthen selected growth and service centers in the interior of the country. The objective of the program is to improve the employment and income generating capacity of these centers to increase their ability to serve surrounding agricultural areas.

This program forms an integral part of the Government's regional development strategy which is based on the desire for a more balanced national growth, a decrease in migration to the metropolitan region and greater participation by the rural and urban poor in the development of our nation.

AID has assisted in the development of the URBE program since 1976 by providing technical and financial resources for studies related to the URBE program and to the preparation of such documents as the PRP and interim report.

In order to undertake the first phase of the URBE program in the growth centers of David and Chitré-Los Santos and six service centers (Puerto Armuelles, La Concepción, Santiago, Las Tablas and Aguadulce), the Government of Panama formally requests a loan from AID for U.S. \$10.0 million and a Housing Investment Guaranty of U.S. \$5.4 million. AID loan funds would be used to partially finance the following:

Credit for small businesses/industries	\$3.0 million
Credit for agro-industries	3.2 "
Training of workers/small businessmen	.1 "
Transport terminals	2.5 "
Institutional development	1.2 "
	<hr/>
	\$10.0 million

The Government of Panama will contribute \$10.4 million and municipalities and private investors an estimated \$2.7 million.

We request that the loan from AID be provided under previously accepted terms, to wit: a 20-year loan including a seven-year grace period at an annual interest rate of 2% during the grace period and 3% during the period of amortization.

-2-

We anticipate that the HIG will be made available according to terms similar to those under which recent Housing Investment Guaranties have been negotiated between AID and the Government of Panama.

Sincerely,

Nicolás Ardito Barletta
Minister

DRAFT PROJECT AUTHORIZATION

For: PANAMA - Rural Growth and Service Centers

Project No. 525-0185

Pursuant to the authority vested in the Administrator, Agency for International Development (A.I.D.) by the Foreign Assistance Act of 1961 as amended, (The Act) and the delegations of authority issued thereunder, I hereby authorize the establishment of a Loan pursuant to Section 103 of the Act to the Government of Panama (Borrower) of not to exceed ten million United States Dollars (\$10,000,000). The Loan will assist in financing the United States dollar and local costs of a project to strengthen the employment and income generating and rural service capacity of growth and service centers in the Central and Western Regions of Panama and to establish a system capable of continuing the process of developing such centers throughout Panama. The Loan shall be subject to the following terms and conditions:

1. Interest and Terms of Repayment

Borrower shall repay this Loan to A.I.D. in United States dollars within twenty (20) years of the date of the first disbursement under the Loan, including a grace period of not to exceed ten (10) years. Borrower shall pay to A.I.D. in United States dollars interest at the rate of two percent (2%) per annum during the grace period and three percent (3%) per annum thereafter on the outstanding undisbursed balance of the Loan and unpaid interest.

2. Other Terms and Conditions

a. Source and Origin of Goods and Services

Except for ocean shipping, goods and services financed under the Loan shall have their source and origin in Panama or countries included in A.I.D. Geographic Code 941, provided, however, that marine insurance may be financed under the Loan only if it is obtained on a competitive basis, and any claims thereunder are payable in freely convertible currencies. Ocean shipping financed under the Loan shall be on flag carriers of the United States or Panama.

b. Conditions Precedent to First Disbursement

Prior to the first disbursement under the Loan, or to the issuance by A.I.D. of documentation pursuant to which disbursement will be made, the Borrower will, except as otherwise agreed in writing, furnish to A.I.D. in form and substance satisfactory

to A.I.D.:

(i) An opinion of the Procurador General of Panama that the Agreement has been duly authorized or ratified by, and executed on behalf of, the Government of Panama, and that it constitutes a valid and legally binding obligation of the Borrower in accordance with all of its terms;

(ii) A statement of the name of the person holding or acting in the office of the Borrower for purposes of the Loan, and of any additional representatives, together with a specimen signature of each person specified in such statement.

c. Condition Precedent to Disbursement for Agro-Industry

Prior to any disbursement under the Loan, or to the issuance by A.I.D. of any documentation by which disbursement will be made under the Loan for financing agro-industrial enterprises, the Borrower will, except as otherwise agreed in writing by A.I.D., furnish to A.I.D., in form and substance satisfactory to A.I.D., a copy of COFINA's subblending regulations which shall include project and subborrower eligibility criteria which shall govern use of Loan funds sublent for agro-industries and an implementation plan for training workers required in Loan-funded agro-industries.

d. Conditions Precedent to Disbursement for Small Business/Industry

Except as otherwise agreed in writing by A.I.D., prior to the issuance by A.I.D. of any documentation by which disbursement will be made under the Loan for financing the small business/industry activity, the Borrower shall furnish to A.I.D., in form and substance satisfactory to A.I.D.:

(i) A copy of Ministry of Commerce and Industry (MICI) subblending regulations including project and subborrower eligibility criteria which shall govern use of Loan funds sublent for small businesses and industries and an implementation plan for training small businessmen.

(ii) Evidence that MICI has contracted competent technical assistance to aid in promoting the small business program.

e. Condition Precedent to Disbursement for Transport Terminals

Except as otherwise agreed in writing by A.I.D., prior to the issuance of any commitment documents or any disbursements under the Loan for financing transport terminals, the Borrower shall furnish to A.I.D., in form and substance satisfactory to A.I.D., detailed architectural and engineering plans and specifications and final feasibility studies.

f. Condition Precedent to Second Year Disbursement

Except as otherwise agreed in writing by A.I.D., prior to any disbursement after December 31, 1979, the Borrower shall submit to A.I.D., in form and substance satisfactory to A.I.D., evidence that at least one town plan has been approved by a municipal council in one of the Project's growth and service centers.

3. Special Covenants

Except as A.I.D. may otherwise agree in writing, the Borrower will covenant, that:

a. The level of the small business/industry fund will be maintained at no less than \$3.4 million for at least 10 years after final disbursement of the Loan.

b. Of the Borrower's contribution to the Project, not more than \$900,000 will be considered as contributing to costs related to cultural and recreational facilities and activities, and no less than \$800,000 will be provided for sublending to agro-industries and small businesses and industries.

c. By December 31, 1980, the results of a study conducted by Borrower on small business credit mechanisms in the growth and service centers and a plan for increasing the availability of long-term credit to small businesses and industries will be submitted to A.I.D.

d. Repayments of principal from Loan-funded subloans will be utilized only for those purposes for which Project funds are authorized.

e. It will establish with A.I.D. a joint evaluation program which will include, during the implementation of the Project, evaluation of progress toward attainment of the objectives of the Project; identification and evaluation of problem areas or constraints which may inhibit such attainment; assessment of how such information may be used to help overcome such problems; and evaluation, to the degree feasible, of the development impact of the Project.

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

GUARANTY AUTHORIZATION

Provided from: Housing Investment Guaranty Authority

Panama: National Mortgage Bank of Panama

Pursuant to the authority vested in the Assistant Administrator, Bureau for Latin America, by the Foreign Assistant Act of 1961, as amended (FAA), and the delegations of authority issued thereunder, I hereby authorize the issuance of guaranties pursuant to Section 222 of the FAA of not to exceed five million four hundred thousand dollars (\$5,400,000) in face amount, assuring against losses of not to exceed one hundred percentum (100%) of loan investment and interest with respect to loans by eligible U. S. investors acceptable to A.I.D. made to finance housing projects in Panama.

This guaranty shall be subject to the following terms and conditions:

1. Term of Guaranty: The loan shall extend for a period of up to thirty years (30) from the date of disbursement of the first installment of the loan, including a grace period on the repayment of principal not to exceed ten (10) years. The guaranty of the loan shall extend for a period beginning with the first disbursement of the loan and shall continue until such time as the Investor has been paid in full pursuant to the terms of the loan.
2. Interest Rate: The rate of interest payable to the Investor pursuant to the loan shall not exceed the allowable rate of interest prescribed pursuant to Section 223 (f) of the FAA and shall be consistent with rates of interest generally available for similar types of loans.
3. Government of Panama Guaranty: The Government of Panama shall provide for a full faith and credit guaranty to A.I.D. in United States dollars assuring against any and all losses to A.I.D. by virtue of A.I.D.'s guaranty to the Investor or from non-payment of the guaranty fee.

- 2 -

4. Fee: The fee of the United States shall be payable in dollars and shall be one-half of one percentum (1/2%) per annum of the outstanding guaranteed amount of the loan plus the fixed amount of \$54,000 to be paid as A.I.D. may determine upon disbursement of the loan.

5. Other Terms and Conditions: The guaranty shall be subject to such other terms and conditions as A.I.D. may deem necessary.

Assistant Administrator
Bureau for Latin America

Date

STATUTORY CHECKLIST

PANAMA

Banco Hipotecario Nacional de Panama

Section 222 (b)

The proposed guaranty will enable financing of self-liquidating housing projects in Latin America for lower income families and persons as provided for in Section 222 (b) (3).

Section 222 (c)

The total face amount of guaranties issued, outstanding at any one time, shall not exceed \$1,030,000,000.

Section 223 (a)

The A.I.D. guaranty fee has been determined by A.I.D. in accordance with the authority delegated by the President.

Section 223 (f)

The maximum rate of interest allowable to the eligible U. S. investor, to be prescribed by the Administrator, will not be more than one percent above the current rate of interest applicable to housing mortgages issued by the Department of Housing and Urban Development.

Section 223 (h)

No payment may be made under any guaranty issued for any loss arising out of fraud for misrepresentation for which the party seeking payment is responsible.

Section 223 (j)

1) Panama is a country that is presently receiving development assistance under Chapter 1 Part 1 of the Act.

2) The proposed Housing Guaranty will be coordinated with and complementary to other development assistance to Panama.

- 2 -

3) The proposed Housing Guaranty will demonstrate the feasibility and suitability of particular kinds of housing and financial institutional arrangements.

The project is designed and planned by A.I.D. so that at least ninety percent (90%) of the face value of the proposed guaranty will be issued for housing suitable for families with incomes below the median income (below the urban median income for the housing in urban areas) in Panama.

The \$5,400,000 housing guaranty will be authorized in Fiscal Year 1978. The face value of guaranties issued (i.e. authorized) with respect to Panama in this fiscal year will not exceed \$25 million. It is planned that the average face value of all housing guaranties issued in any fiscal year shall not exceed \$15 million.

Section 238 (c)

The guaranty will cover only lenders who are "eligible investors" as defined in this section of the Act at the time the guaranty is issued.

Section 620/620A

There is no available information as to facts which would prohibit the furnishing of assistance to Panama.

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

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

Life of Project:
From FY 78 to FY 83
Total U.S. Funding \$15.4 million
Date Prepared: 5-16-78

Project Title & Number: Rural Growth and Service Centers (URBE)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p>Further the socio-economic development of two priority regions of the country with emphasis on increasing employment and income opportunities for the poor population in key market towns and surrounding rural areas.</p>	<p>Measures of Goal Achievement:</p> <p>Increased employment and income generated by the Project benefiting primarily the poorer segment of the population in the target area.</p>	<p>Project Reports:</p> <p>GOP project reports. Records of GOP implementing Agencies. Audit Reports Project evaluations Field trips and inspections</p>	<p>Assumptions for achieving goal targets:</p> <p>The development of the growth and services centers continues to be a high priority of the GOP.</p> <p>Panama continues to enjoy a stable political environment.</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 78 to FY 83
Total U.S. Funding \$15.4 million
Date Prepared: _____

Project Title & Number: Rural Growth and Service Centers (URBE)

PAGE 2

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Project Purpose: (B-1)</p> <p>Set in motion a process that will significantly increase the employment and income generating and rural service capacity of selected growth and service centers in the Central and Western Regions of Panama</p>	<p>Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2)</p> <ul style="list-style-type: none"> - An improved technical capacity within the GOP for planning and implementing programs for the development of growth and service centers as evidenced by the routine generation, revision, approval implementation, and evaluation of town plans with full participation by the appropriate central and local government agencies and authorities. - An improved coordinating mechanism within the GOP for planning and implementing growth and service centers development programs evidenced by the establishment of a fully operational coordinating committee chaired by the Ministry of Planning and with adequate representation by the appropriate participating agencies which among other things: <ul style="list-style-type: none"> (a) approve investment and operating budgets for the project; (b) analyze and approve revisions in project plans and budgets; (c) monitor and evaluate progress and approve changes to improve project performance. 	<p>(B-3)</p> <p>Project monitoring and evaluation documents and reports.</p> <p>GOP Project Reports</p> <p>Field trips and inspections.</p>	<p>Assumptions for achieving purpose: (B-4)</p> <p>High level GOP officials and personnel devote adequate time to the Project.</p> <p>Interagency coordination develops as planned.</p>

PROJECT DESIGN SUMMARY
 LOGICAL FRAMEWORK

Life of Project: _____
 From FY 78 _____ to FY 83 _____
 Total U.S. Funding \$15.4 million
 Date Prepared: 6/1/78

Project Title & Number: Rural Growth and Service Centers (URBE)

PAGE 2

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION:	IMPORTANT ASSUMPTIONS
<p>Project Purpose: (B-1)</p>	<p>Conditions that will indicate purpose has been achieved: End-of-Project status. (B-2) <u>continued</u></p> <ul style="list-style-type: none"> - The establishment of Planning Advisory Committees in each center which participate in the development and design process of the town plans working closely with the Ministries of Planning and Housing. - Annual sales generated by agri-business enterprises at an approximate level of \$8.5 million. - Annual sales generated by small businesses and industries at an approximate level of \$6.5 million. - Employment generated by the project ranges between 2,700 - 3,500. 	<p>(B-3)</p>	<p>Assumptions for achieving purpose: (B-4)</p>

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 78 to FY 83
Total U.S. Funding \$15.4 million
Date Prepared: 6/1/78

Project Title & Number: Rural Growth and Service Centers (URBE)

PAGE 4

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS						MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Outputs	Implementation Target (Type and Quantity)							Assumptions for providing inputs:
	<u>Total</u>	<u>Years</u>						
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>		
- New internal audit and financial management units in BHN operation	2	-	2	-	-	-	Project Reports Disbursement Records	Project inputs are made available on a timely basis.
- New and expanded agro-industrial enterprises	14	1	3	3	3	4	Audit Reports GOP Project Reports	Capable GOP personnel are assigned and maintained to implement the various components during the life of the project.
- New and expanded small business enterprises	100	14	23	20	22	21	Borrowers Reports	
- Transport terminals completed and operational	3	-	1	1	1	-	Records of Implementing Agencies	
- Industrial areas or parks completed and operational	2	-	1	1	-	-	GOP Building Permits and Other Records	
- Sewer systems completed and operational	2	-	-	1	-	1	Field Visits and Inspections	
- Recreational and cultural facilities completed and operational	11	3	4	4	-	-		
- Shelter solutions for low income families completed	2186	291	1126	769	-	-		
- Person months of technical assistance provided	166	50	85	15	13	3		

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project: _____
From FY 78 to FY 83
Total U.S. Funding \$15.4 million
Date Prepared: 5-16-78

Project Title & Number: _____

PAGE 4

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS						MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Inputs:	Implementation Target (Type and Quantity) Y E A R:						Project reports:	Assumptions for providing inputs:
	<u>Total</u>	<u>1st.</u>	<u>2nd.</u>	<u>3rd.</u>	<u>4th.</u>	<u>5th.</u>		
1. AID Development Loan Funds	10.0	1.3	3.0	2.1	1.9	1.7	Disbursement Records	
a- Credit Programs	6.2	0.4	1.4	1.3	1.4	1.7	GOP Budget	
b- Infrastructure	2.5	0.5	1.0	0.6	0.4	-	Audit Reports	
c- Technical Assistance	1.1	0.4	0.5	0.1	0.1	-	GOP project reports	
d- Training	0.2	-	0.1	0.1	-	-		
2. AID HIG LOAN FUNDS	5.4	0.8	3.0	1.6	-	-		
a- Mortgage Credit	5.4	0.8	3.0	1.6	-	-		
3. Domestic Resources	13.1	2.7	3.4	3.5	2.2	1.3		
a- Credit Programs	2.2	0.2	0.5	0.5	0.5	0.5		
b- Housing & Infrastructure	9.2	2.2	2.5	2.6	1.3	0.6		
c- Technical Assistance	-	-	-	-	-	-		
d- Training	0.3	-	0.1	0.1	0.1	-		
e- Administrative Expenses	1.4	0.3	0.3	0.3	0.3	0.2		
Total	<u>28.5</u>	<u>4.8</u>	<u>9.4</u>	<u>7.2</u>	<u>4.1</u>	<u>3.0</u>		

525-185

UNCLASSIFIED

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

PROJECT PAPER

Proposal and Recommendations
For the Review of the
Bilateral Assistance Subcommittee

PANAMA - Rural Growth and Service Centers (ANNEX II - B-M)

AID/BAS-002

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E.O. 11652: N/A

TAGS:

SUBJECT: DAEC REVIEW OF GROWTH AND SERVICE CENTERS (URBE)
PROJECT INTERIM REPORT

REF: 77 STATE 142796

1. THE INTERIM REPORT WAS REVIEWED ON JANUARY 6, 1978,
AND THE FOLLOWING GUIDANCE IS PROVIDED TO ASSIST THE
MISSION IN PREPARING THE PP.

2. STRATEGY FOR GROWTH AND SERVICE CENTER DEVELOPMENT.
THE DAEC WAS CONCERNED THAT THE PROJECT APPEARS TO BE A
ONE-SHOT EFFORT AIMED AT ONLY STRENGTHENING SELECTED
GROWTH AND SERVICE CENTERS IN THE CENTRAL AND WESTERN
REGIONS. THE MISSION IS REQUESTED TO DEFINE A BROADER
STRATEGY FOR DEVELOPMENT OF ALL GROWTH AND SERVICE CENTERS,
PRESENT AND PROJECTED, WITHIN THE CONTEXT OF LONGER RANGE
DEVELOPMENT OF THESE TWO RTFIGRS. THE RSEE OCE HIS PROJECT
IN INITIATING THE PROCESS OF GROWTH AND SERVICE CENTER
DEVELOPMENT SHOULD BE ANALYZED AND THE INSTITUTIONAL
STRUCTURE THROUGH WHICH DEVELOPMENT OF THE CENTERS WILL BE
PLANNED AND CARRIED OUT SHOULD BE EXAMINED. THE PP SHOULD
IDENTIFY WEAKNESSES IN THAT STRUCTURE, SET APPROPRIATE
INSTITUTIONAL DEVELOPMENT OBJECTIVES AND SHOW HOW THEY WILL
BE ACHIEVED THROUGH THE PROJECT. FINALLY, THE PP SHOULD

DISCUSS THE EVENTUAL STRENGTHENING OF LINKAGES BETWEEN
PRODIAR AND THE STRUCTURE THAT WILL BE DEVELOPED TO
FACILITATE GROWTH AND SERVICE CENTER DEVELOPMENT.

3. URBAN-RURAL LINKAGES. ALTHOUGH THE FLOW DATA NEEDED
TO PERMIT A SYSTEMATIC AND COMPREHENSIVE ANALYSIS OF
LINKAGES BETWEEN THE GROWTH AND SERVICE CENTERS AND THEIR
AGRICULTURAL HINTERLANDS ARE NOT AVAILABLE, A QUALITA-
TIVE DESCRIPTION OF KEY LINKAGES SHOULD BE INCLUDED IN THE
PP. IDENTIFICATION OF THESE LINKAGES SHOULD BE BASED ON
SECONDARY STUDIES DONE TO DATE. THE LACK OF FLOW DATA CAN
BE PARTIALLY ADDRESSED THROUGH SUBPROJECT IMPLEMENTATION
BY INCLUDING COLLECTION AND ANALYSIS OF SUCH DATA (E.G.,

VOLUMES OF PRODUCE SOLD IN PUBLIC MARKETS; ORIGIN AND DESTINATION OF PASSENGERS AND CARGO HANDLED THROUGH BUS TERMINALS) AS AN INTEGRAL PART OF SUBPROJECT DESIGN. THE MISSION SHOULD INCLUDE A PLAN FOR DEVELOPMENT OF FLOW DATA IN THE PP, AND SHOW HOW THIS DATA WILL IMPROVE THE INFORMATION BASE FOR PLANNING SUBSEQUENT EFFORTS AIMED AT STRENGTHENING GROWTH AND SERVICE CENTERS.

4. RELATION TO RURAL MUNICIPAL DEVELOPMENT LOAN (525-T-244). THE DAEC WAS CONCERNED ABOUT THE PROBLEMS THE NATIONAL BANK (BNP) HAS HAD IN IMPLEMENTING THE MUNICIPAL DEVELOPMENT (FODEM) LOAN. BECAUSE THE BNP WILL ALSO HAVE A ROLE IN IMPLEMENTING THE PROPOSED PROJECT, THE PP SHOULD INCLUDE AN EVALUATION OF PROGRESS IN RESOLVING PROBLEMS (LACK OF A PROJECT MANAGER, LACK OF CAPACITY TO PROVIDE TRAINING AND TA TO THE MUNICIPALITIES, INADEQUATE HIGH LEVEL SUPPORT, ETC.) CAUSING SLOW IMPLEMENTATION OF THE FODEM LOAN. IF THESE PROBLEMS HAVE BEEN RESOLVED BY THE TIME OF PP SUBMISSION, POTENTIAL DUPLICATION BETWEEN THE FODEM LOAN AND THE URBE LOAN COULD BE AVOIDED BY PROGRAMMING THE UNDISBURSED CREDIT FUNDS IN THE MUNICIPAL DEVELOPMENT LOAN TO FINANCE FOR SUBPROJECTS IN TOWNS OTHER THAN THE GROWTH AND SERVICE CENTERS THAT WILL BE STRENGTHENED UNDER THE URBE PROJECT. IF FODEM'S EXISTING PROBLEMS HAVE NOT BEEN RESOLVED, THE REMAINING FUNDS IN THAT LOAN COULD ALTERNATIVELY BE USED FOR THE MUNICIPAL INFRASTRUCTURE PROJECTS PROPOSED FOR FINANCING UNDER THE URBE PROJECT. MISSION SHOULD BE AWARE THAT THIS LATTER SOLUTION IMPLIES THAT THE PURPOSE OF LOAN 244 (ENHANCED CAPABILITY OF RURAL MUNICIPIOS) WOULD NOT BE ACHIEVED, AND A PAF AMENDMENT MAY BE REQUIRED TO PERMIT THE USE OF THE UNDISBURSED BALANCE AS A COMPLEMENT TO THE URBE LOAN.

5. SELECTION CRITERIA FOR MUNICIPAL INFRASTRUCTURE SUBLOANS. THE PP SHOULD INCLUDE SELECTION CRITERIA FOR MUNICIPAL INFRASTRUCTURE SUBLOANS.

6. TARGET GROUP DESCRIPTION. IT WAS RECOGNIZED THAT THE LATE RECEIPT OF A CONSULTANT STUDY DID NOT PERMIT MORE THAN A SUMMARY DESCRIPTION OF THE TARGET GROUP TO BE INCLUDED IN THE INTERIM REPORT. A MORE COMPLETE DESCRIPTION OF THE TARGET GROUP SHOULD BE INCLUDED IN THE PP. IN DESCRIBING THE TARGET GROUP AND SUBGROUPS, THE PP SHOULD DISTINGUISH BETWEEN PRIMARY AND SECONDARY BENEFICIARIES (E.G., RURAL POOR, TOWN POOR, ENTREPRENEURS/MANAGERS) OF THE BROAD CATEGORIES OF PROJECT TYPES (AGRO-INDUSTRY, SMALL BUSINESS, AND MUNICIPAL INFRASTRUCTURE). THE PP SHOULD THEN DESCRIBE, AND TO THE EXTENT POSSIBLE QUANTIFY, THE BENEFITS EACH SUBGROUP IS EXPECTED TO RECEIVE FROM THESE SUBPROJECT TYPES.

7. CREDIT DEMAND. THE LIST OF AGRO-INDUSTRIAL SUBPROJECTS IN THE INTERIM REPORT INDICATES A POTENTIAL DEMAND FOR CREDIT RESOURCES WHICH IS SMALLER THAN THE PROPOSED AMOUNT OF THE SUBLENDING FUND. FURTHERMORE, THERE APPEARS TO BE LITTLE BASIS FOR THE AMOUNT OF CREDIT REQUIRED FOR SMALL

BUSINESSES. THE DAEC RECOMMENDED THAT THE LIST OF ILLUSTRATIVE AGRO-INDUSTRIAL PROJECTS (I.E., THOSE HAVING PRE-FEASIBILITY STUDIES) BE EXPANDED TO PROVIDE A BETTER JUSTIFICATION FOR THE AMOUNT OF CREDIT NEEDED. THE SUBPROJECTS IDENTIFIED SHOULD EXCEED THE AMOUNT OF CREDIT REQUESTED BY A COMFORTABLE MARGIN TO ALLOW FOR PROJECTS THAT PROVE TO BE UNFEASIBLE. IT WAS ALSO SUGGESTED THAT THE SUBPROJECT ELIGIBILITY CRITERION WHICH WOULD ELIMINATE FROM CONSIDERATION THOSE SUBPROJECTS HAVING A COST PER JOB CREATED IN EXCESS OF DOLS. 5,000 BE STUDIED FURTHER. THIS CRITERION SHOULD BE RELATED ONLY TO THOSE JOBS DIRECTLY CREATED, WHICH IMPLIES AN INCREASE IN THE PROPOSED LIMIT.

8. INTEREST RATES. THE DAEC NOTED THAT THE INTEREST RATES THAT WOULD BE CHARGED ON PRODUCTIVE SUB-LOANS (7 PER CENT ON SMALL BUSINESS LOANS AND 8 - 9 PER CENT ON AGRO-INDUSTRIAL LOANS) ARE BELOW THE COMMERCIAL RATES GENERALLY CHARGED IN PANAMA (10 - 12 PER CENT). WHILE IT WAS RECOGNIZED THAT THIS PROJECT IS NOT AN APPROPRIATE VEHICLE THROUGH WHICH TO EXPECT A RATIONALIZATION OF THE ENTIRE INTEREST RATE STRUCTURE IN PANAMA, SOME UPWARD MOVEMENT ON THE PROPOSED RATES IS EXPECTED TO BE ACHIEVED THROUGH THE PROJECT.

9. ENVIRONMENTAL IMPACT. THE RESULTS OF A POST-DAEC MEETING TO DISCUSS THE INITIAL ENVIRONMENTAL EXAMINATION (IEE) OF THE PROJECT HAVE BEEN COMMUNICATED TO THE MISSION

VIA ZALLMAN/SAENZ TELCON OF 1/12/78. THE PURPOSE OF THIS PARA IS TO CONFIRM THE INFORMATION THUS TRANSMITTED. IT WAS CONCLUDED THAT THE IEE CONTAINED INSUFFICIENT INFORMATION ON WHICH TO BASE THE RECOMMENDED ACTION (I.E., NEGATIVE DETERMINATION). ADDITIONAL STUDY SHOULD BE MADE OF THE ASPECTS DISCUSSED BELOW. AND THE IEE SHOULD BE RESUBMITTED.

----- A. EFFECTS OF AGRO-INDUSTRIAL PROJECTS. THE INTERIM REPORT PROPOSES TO HAVE ALL SUBPROJECTS MEET QUOTE BASIC ENVIRONMENTAL STANDARDS UNQUOTE. WHAT DO THESE STANDARDS COVER (E.G., AIR, WATER, NOISE POLLUTION)? WHAT STANDARDS WOULD BE APPLIED IN EACH OF THESE AREAS? WHAT IS THE STATUS OF ADOPTION OF THE STANDARDS BY THE GOP? WHAT IS THE INSTITUTIONAL CAPACITY OF NIDA TO STUDY THE ENVIRONMENTAL IMPACT OF PROPOSED SUBPROJECTS AND THE CAPACITY OF THE GOP TO ENFORCE EXISTING REGULATIONS? WHAT KIND OF TECHNICAL ASSISTANCE WILL BE NEEDED TO ENSURE ADEQUATE DEVELOPMENT OF NIDA'S CAPACITY TO STUDY ENVIRONMENTAL EFFECTS AND THE GOP'S CAPACITY TO TAKE ACTION AGAINST OFFENDERS? WHAT IS THE ROLE OF THE MUNICIPALITY IN APPROVING SUBPROJECTS, AND ARE THE MUNICIPIOS CONCERNED ABOUT THE RESULTING ENVIRONMENTAL EFFECTS?

----- B. SEWERAGE SUBPROJECTS. WHAT IS IDAAN'S CAPABILITY TO DESIGN ENVIRONMENTALLY SOUND SEWERAGE SYSTEMS? SPECIFICALLY, WITH REGARDS TO THE PROPOSED PROJECT IN PENONOME, THE APPROPRIATENESS OF IMHOFF TANKS SHOULD BE COMMENTED ON, AND AN ESTIMATE OF THE BOD LEVEL (OR OTHER APPROPRIATE INDICATOR OF EFFECTIVENESS OF TREATMENT) THAT THIS SOLUTION WOULD ACHIEVE SHOULD BE STATED. CONCERN WAS EXPRESSED (1) THAT AN INCREASED VOLUME OF PARTIALLY TREATED SEWAGE MAY BE MORE HARMFUL THAN THE CURRENT FLOW OF UNTREATED WASTE AND (2) THAT CONSIDERATION SHOULD BE GIVEN TO OTHER POSSIBLY MORE APPROPRIATE DESIGN SOLUTIONS. THE EXISTENCE OF A MAINTENANCE PLAN FOR SEWAGE TREATMENT FACILITIES SHOULD BE DETERMINED, AND IDAAN'S CAPACITY TO MAINTAIN THESE FACILITIES SHOULD BE ASSESSED.

----- C. INDUSTRIAL PARKS. A DESCRIPTION OF THE SITE CHARACTERISTICS FOR THE INDUSTRIAL PARKS SHOULD BE INCLUDED THE IEE SHOULD CLARIFY WHETHER THE SAME ENVIRONMENTAL STANDARDS WILL BE APPLIED TO ALL AGRO-INDUSTRIES LOCATING IN THESE SITES, WHETHER OR NOT FINANCED THROUGH THE PROJECT. HOW WILL THE CUMULATIVE EFFECTS OF POLLUTANTS EMITTED BY SEVERAL INDUSTRIES BE EVALUATED IN APPROVING SUB-PROJECTS?

----- D. HOUSING. NO ASSESSMENT OF IMPACTS WAS INCLUDED IN THE IEE. THE REVISED IEE SHOULD EVALUATE THE EFFECTS OF THE PROPOSED HIG COMPONENT, AND THE POTENTIAL FOR INCREASED MIGRATION THAT MAY RESULT FROM THE PROJECT SHOULD BE COMMENTED ON.

ENVIRONMENTAL IMPACT MITIGATION MEASURES IDENTIFIED AND BRIEFLY DISCUSSED IN THE IEE SHOULD BE INCLUDED AS PROJECT DESIGN ELEMENTS AND SHOULD BE MORE FULLY DESCRIBED IN THE PP. AID/W UNDERSTANDS THAT SER/H ENVIRONMENTAL CONSULTANT BOYER IS NOW IN PANAMA AND WILL PREPARE REVISED IEE. WE UNDERSTAND THAT THE MISSION WILL FUND THE ADDITIONAL COSTS ATTRIBUTABLE TO BOYER'S EVALUATION OF THE NON-HIG ASPECTS OF THE PROJECT'S ENVIRONMENTAL IMPACT.

10. THIS GUIDANCE SUPPLEMENTS INFORMATION PREVIOUSLY PROVIDED IN PRP REVIEW CABLE (REF A). VANCE

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SUBJECT:GROWTH AND SERVICE CENTERS PROJECT

A. PER PREVIOUS DISCUSSIONS WITH MISSION, THE FOLLOWING PROVIDES SUPPLEMENTAL GUIDANCE ON THE SUBJECT PROJECT, AND SUMMARIZES THE RESULTS OF THE PRP REVIEW.

----AS YOU ARE AWARE, INTENSIVE REVIEW OF SUBJECT PROPOSAL AS A FY 1978 LOAN WAS APPROVED. HOWEVER, AN INTERIM REPORT (IR) WAS ALSO REQUESTED, WHICH SHOULD FOCUS PRIMARILY ON THE FOLLOWING CONCERNS:

--1. PROJECT DESIGN. THE DAEC AGREED THE PROPOSED PROJECT COULD HAVE POSITIVE EFFECTS ON PANAMA'S RURAL DEVELOPMENT EFFORTS, AND COULD COMPLEMENT THE PLANNED INTEGRATED RURAL DEVELOPMENT PROJECT BY PROVIDING SERVICES THAT ARE NECESSARY TO THE SUCCESS OF THAT PROGRAM. HOWEVER, THERE WAS CONCERN THAT THE PRP DID NOT PROVIDE A CLEAR BASIS FOR DETERMINING THE FEASIBILITY OF THE PROJECT DESIGN. THE INTERIM REPORT SHOULD IDENTIFY THE CRITERIA THAT WILL BE USED IN SELECTING THE GROWTH AND SERVICE CENTERS AND EXPLAIN THE BASIS FOR SELECTING THE CRITERIA, GIVEN THE PROJECT AIM OF STRENGTHENING URBAN/RURAL

LINKAGES. THE IR SHOULD THEN DESCRIBE THESE LINKAGES AND SHOW HOW DEFICIENCIES IDENTIFIED WILL BE TRANSLATED INTO FINANCIABLE ACTIVITIES. THE MISSION SHOULD ALSO EXAMINE WHAT, IN ADDITION TO THE INFRASTRUCTURE SUGGESTED IN THE PRP, WILL BE REQUIRED FOR CENTERS TO ATTRACT INDUSTRY; AND WHAT WILL BE THE BASIS FOR DETERMINING THE MAGNITUDE OF RESOURCES NEEDED.

2. SUBPROJECTS. THE PRP CONTAINS ILLUSTRATIVE CATEGORIES OF SUBPROJECTS THAT MAY BE FINANCED UNDER THE LOAN. THE IR SHOULD INCLUDE THE CRITERIA THAT WILL BE

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USED IN SELECTING SUBPROJECTS FOR FINANCING, AND FOR DETERMINING ELIGIBILITY OF SUBBORROWERS. IN ADDITION, THE IR SHOULD PROVIDE AN ILLUSTRATIVE LIST OF THE TYPES OF SUBPROJECTS THAT COULD BE FINANCED UNDER THE PROPOSED CRITERIA. EMPLOYMENT GENERATING CHARACTERISTICS OF THESE ILLUSTRATIVE SUBPROJECT TYPES SHOULD BE DISCUSSED AND RELATED TO TARGET GROUP BENEFITS.

3. TARGET GROUP. THE IR SHOULD INCLUDE A SUMMARY DESCRIPTION OF THE TOWN POOR WHO WILL FORM PART OF THE PROJECT'S TARGET GROUP. THE SUMMARY SHOULD INCLUDE THE BENCHMARKS THAT WERE USED TO DETERMINE THE ABSOLUTE AND RELATIVE POVERTY DEFINITIONS. THE RURAL POOR DESCRIPTION CONTAINED IN THE AGRICULTURAL SECTOR ASSESSMENT, AUGMENTED BY FURTHER TARGET GROUP ANALYSIS REQUIRED BY THE AGRICULTURAL ASSESSMENT DAEC REVIEW CABLE, SHOULD SUFFICE; HOWEVER, ADDITIONAL STUDY WILL BE NEEDED OF RURAL POOR WHO ARE NOT FARMERS. THE EXPECTED BENEFITS TO THE TOWN AND NON-FARM RURAL POOR SUB-GROUPS SHOULD BE QUANTIFIED. AT A MINIMUM, THE EXTENT OF UNEMPLOYMENT AND AN ESTIMATE OF THE NUMBER OF JOBS (FULL-TIME, PART-TIME, SEASONAL, ALL YEAR) SHOULD BE QUANTIFIABLE BY THE TIME OF IR SUBMISSION. INDIRECT BENEFITS MAY BE DISCUSSED QUALITATIVELY.

4. LOAN LEVEL AND GOP COUNTERPART. THE IR SHOULD INCLUDE A FIRMER BASE FOR THE PROPOSED FUNDING LEVEL. THIS MIGHT BE PARTIALLY DONE THROUGH A CREDIT DEMAND ANALYSIS FOR THE ILLUSTRATIVE PROJECT TYPE. THE EXPECTED USE OF GOP COUNTERPART FUNDS SHOULD ALSO BE EXPLAINED IN MORE DETAIL. CONSIDERATION SHOULD BE GIVEN TO GOP FINANCING OF PROJECTS OR SUBPROJECT TYPES THAT WOULD NOT BE ELIGIBLE FOR AID FINANCING.

B. IN PREPARING THE PP, THE MISSION SHOULD ADDRESS THE FOLLOWING ADDITIONAL DAEC CONCERNS:

1. PLANNING ACTIVITY. IT WAS NOTED THAT THE EFFORT OF BRINGING TOGETHER RURAL AND TOWN DEVELOPMENT UNDER A REGIONAL PLANNING FRAMEWORK WAS A UNIQUE FEATURE OF PROJECT. IT IS NOT YET CLEAR HOW THE TOWN PLANNING PROCESS WILL FIT INTO THE REGIONAL PLANNING PROCESS, NOR HOW THESE RELATE TO THE POLITICAL PROCESS. BECAUSE THE PLANNING ACTIVITY WOULD BE AN ESSENTIAL ELEMENT IN ENSURING PROJECT REPLICATION (I.E., BY DEVELOPING A CONTINUING PROCESS AIMED AT SYSTEMATICALLY UPGRADING RURAL TOWNS AFTER THE AID-SUPPORTED PROJECT TERMINATED), THE PP SHOULD INCLUDE A FULL DESCRIPTION OF HOW THE PLANNING PROCESS WILL OPERATE. IN PREPARING THE PP, THE MISSION IS ENCOURAGED TO INCLUDE ASSISTANCE TO THE GOP TO DEVELOP ITS PLANNING CAPABILITY.

2. IMPLEMENTATION ARRANGEMENTS. THE CHOICE OF COFINA AS THE PRINCIPAL IMPLEMENTING AGENCY FOR THIS PROJECT SHOULD BE CAREFULLY CONSIDERED, GIVEN ITS LACK OF EXPERIENCE IN PLANNING AND FINANCING OF MUNICIPAL PROJECTS, AND ITS ORIENTATION TOWARD LARGE ENTERPRISES. THE DAEC QUESTIONED WHETHER THE PROJECT COULD BROADEN

THE ROLE OF THE CENTRAL BANK'S MUNICIPAL DEVELOPMENT DIVISION BEYOND THE SUBPROJECT FINANCING UNDER LOAN NO. 525-T-044. IN ADDITION, THE ROLE OF THE MINISTRY OF HOUSING'S PHYSICAL PLANNING OFFICE IN THE TOWN PLANNING PROCESS WAS UNCLEAR. THE PP SHOULD DESCRIBE THE INSTITUTIONAL ARRANGEMENTS FOR PROJECT IMPLEMENTATION IN DETAIL. AND PROVIDE A POSITIVE RATIONALE FOR THE ROLE

ASSIGNED TO EACH IMPLEMENTING AGENCY.

3. HIG COMPONENT. THE USE OF HIG FUNDS FOR FINANCING THE HOUSING COMPONENT APPEARS FEASIBLE. HOWEVER, A DESCRIPTION OF THE SPECIFIC USES OF HIG FUNDS SHOULD BE GIVEN TO DETERMINE SUITABILITY OF HIG FINANCING.

4. FUNDING CATEGORY. THE PROJECT IS IN THE F AND N CATEGORY IN THE FY 78 CONGRESSIONAL PRESENTATION. THIS WOULD NOT PRECLUDE SOME SECTION 126 FUNDING AND AID/W WILL TRANSMIT A CONGRESSIONAL NOTIFICATION, IF NEEDED, AT THE TIME OF THE PP SUBMISSION. VANCE

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ANNEX II - B

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SUBJECT: FY 1978 ABS

RESULTS OF REVIEW JUNE 28 FOLLOWS:

1. PID - REFORESTATION AND RESOURCE PROTECTION:

PID IS DISAPPROVED PRINCIPALLY BECAUSE PROJECT PRESENTS INSURMOUNTABLE DIFFICULTIES IN TERMS OF CONGRESSIONAL MANDATE. THOUGH LAND EROSION RECOGNIZED AS SERIOUS PROBLEM, THE PROJECT WOULD DELIVER DIRECT BENEFITS TO EXTREMELY SMALL PORTION OF RURAL TARGET GROUP, I.E., FAMILIES OF 1500 LABORERS ENGAGED IN REFORESTATION WORK. INDIRECT INCOME BENEFITS TO TARGET GROUP FARMERS FROM TIMBER WOULD BE LONG IN COMING. MOREOVER, ONE WOULD ANTICIPATE SOME RELOCATION OF FARMERS TO OTHER AREAS AS GOVERNMENT CONSOLIDATES LANDS IN LARGE-SCALE REFORESTATION AREA, AS HAS OCCURRED IN BAYANO RESERVOIR WATERSHED. THIS WOULD DIMINISH EVEN FURTHER THE NUMBER OF INDIRECT BENEFICIARIES. FOR THESE REASONS, AND BECAUSE OF EMPHASIS ON LONG-TERM COMMERCIAL ADVANTAGES OF REFORESTATION, PROJECT APPEARS MORE APPROPRIATE FOR IDB OR WORLD BANK FINANCING.

TECHNICAL ASSISTANCE PROPOSED IN PID APPEARS INSEPARABLE FROM GENERAL OBJECTIVES OF REFORESTATION PROGRAM AND THUS SUFFERS FROM SAME DIFFICULTIES WITH RESPECT TO AID MANDATE. MOREOVER, FAO HAS EMERGED AS MAJOR FOCUS OF INTERNATIONAL TECHNICAL ASSISTANCE IN FORESTRY AND SHOULD BE ENCOURAGED TO EXPAND ITS WORK IN THIS FIELD IN PANAMA.

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AS POSSIBLE ALTERNATIVE, A.I.D./W WOULD BE PREPARED TO CONSIDER A MODEST GRANT PROJECT ADDRESSING THE LAND EROSION PROBLEM WITH EMPHASIS ON ACTIVITIES DIRECTLY BENEFITING THE SMALL FARMER TARGET GROUP. FOR EXAMPLE, A PILOT PROJECT TO BUILD UP THE INSTITUTIONAL CAPACITY OF THE MINISTRY OF AGRICULTURE (INCLUDING BUT NOT NECESSARILY LIMITED TO THE DEPARTMENT OF RENEWABLE RESOURCES) TO CARRY OUT PROGRAMS TO PROMOTE IMPROVED LAND USE CONSERVATION, MINOR IRRIGATIONS, AS WELL AS IMPROVED SOIL CONSERVATION PRACTICES, FOR UPLAND AREAS INCLUDING SMALL-SCALE FORESTATION, TREE CROPS, ETC. THIS WOULD REQUIRE A NEW PID, TO BE RECEIVED BY END OF FIRST WEEK AUGUST IF IT IS TO BE INCLUDED IN BUREAU AUGUST 16 SUBMISSION TO PPC.

EMPLOYMENT-GENERATION FEATURE OF MISSION PROPOSAL IS ATTRACTIVE, THOUGH INSUFFICIENT IN ITSELF TO JUSTIFY THE PID. PL 480 TITLE II FOOD FOR WORK IS POSSIBLE RESOURCE TO APPLY IN RURAL WORKS PROGRAMS (E.G. REFORESTATION). MISSION MAY WISH TO EXPLORE USE OF FOOD FOR WORK RESOURCES IN PANAMA TO STIMULATE REFORESTATION AND OTHER CONSERVATION MEASURES IN INTEGRATED RURAL DEVELOPMENT DISTRICTS AND PACIFIC WATERSHED AREA. PLEASE ADVISE IF THIS IS FEASIBLE WITHIN GUIDELINES CONTAINED STATE 146039 ON PL 480 TITLE II PROGRAMMING.

ALTHOUGH REFORESTATION LOAN PID IS DISAPPROVED, BUREAU STANDS READY TO CONSIDER ANY NEW MISSION PID SUBMISSION BY USAID FOR FY 1978 EVEN THOUGH WE CANNOT ASSURE USAID OF ITS APPROVAL. POSSIBILITIES FOR LOANS MIGHT INCLUDE EXPANSION OF INTEGRATED RURAL DEVELOPMENT PROGRAM OR RURAL PROJECTS CONSISTENT WITH A.I.D. PROGRAM STRATEGY. BECAUSE BUREAU IS REQUIRED TO COMPLETE FY 1978 PROGRAM REVIEW BY MID-AUGUST, WE ASK THAT ANY NEW PID SUBMISSION BE RECEIVED IN A.I.D./W NLT AUGUST 9.

2. PID - URBAN DEVELOPMENT -- SECONDARY CITIES.

PID IS TENTATIVELY APPROVED SUBJECT TO THE FOLLOWING CONSIDERATIONS AND MISSION RESPONSE THERETO.

PROPOSAL GENERATED CONSIDERABLE DISCUSSION IN CONTEXT OF RECENT AGENCY POLICY DETERMINATION ON URBAN DEVELOPMENT. (SEE AIDTO CIRC A-334 AND HANDBOOK TRANSMITTAL MEMO NUMBER 2:5 DATED 6/4/76.) A.I.D. POLICY FAVORS REGIONAL SERVICE CENTER CONCEPT, STRESSING LINKAGES BETWEEN RURAL TARGET GROUP AND SECONDARY URBAN CENTERS. ACTIVITIES WHICH A.I.D. WOULD PREFER TO FINANCE TO MAKE SUCH LINKAGES MORE PRODUCTIVE INCLUDE REGIONAL PLANNING, MARKETS, SLAUGHTER HOUSES, TRANSPORT TERMINALS, ETC. --

PRECISELY THE ACTIVITIES FINANCED UNDER PANAMA MUNICIPAL DEVELOPMENT LOAN AND OTHER LA LOANS WITH "MARKET TOWNS" RATIONALE. TO THE EXTENT THAT PID PROPOSES SUCH FINANCING IT IS CLEARLY WITHIN AGENCY GUIDELINES. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE FROM PID WHAT PORTION OF THE LOAN WOULD FINANCE THESE KINDS OF ACTIVITIES OR THE MORE TRADITIONAL URBAN DEVELOPMENT ACTIVITIES SUCH AS WATER, SEWAGE, ELECTRICITY, PARKS, STREET PAVING. TO THE EXTENT THAT THE ACTIVITIES PROPOSED ARE SERVICE CENTER ACTIVITIES, THEY WOULD ALREADY BE ELIGIBLE FOR FINANCING UNDER THE MUNICIPAL DEVELOPMENT LOAN. ALSO, IT IS NOT CLEAR HOW MUNICIPAL DEVELOPMENT INSTITUTE WOULD FIT INTO PLANNING AND ADMINISTRATION OF ACTIVITIES PROPOSED IN PID. WE KNOW YOU SHARE OUR CONCERNS THAT THIS FLEDGLING INSTITUTION NOT BE UNDERCUT.

IN CONCENTRATING ON ASPECTS OF PROPOSAL WHICH APPEAR TO BE OUTSIDE THE SERVICE CENTERS/MARKET TOWNS RATIONALE, REVIEW SESSION REVEALED THAT AGENCY IS MOVING CAUTIOUSLY IN THIS AREA, WITH THE IMPERATIVE THAT URBAN DEVELOPMENT PROGRAMS WHICH WE SUPPORT MUST PROMOTE DIRECTLY THE INTERESTS OF THE URBAN POOR. WHILE THERE ARE NO HARD AND FAST RULES, EVOLVING A.I.D. POLICY WOULD APPEAR TO FAVOR URBAN PLANNING, PILOT ACTIVITIES TO STIMULATE SMALL, LABOR-INTENSIVE ENTERPRISES AND THEREBY CREATE JOB OPPORTUNITIES, INSTITUTIONAL DEVELOPMENT FOR BROADER PARTICIPATION OF THE URBAN POOR, EXPANSION OF HEALTH AND EDUCATION SERVICES, ETC. REGARDING CONVENTIONAL PUBLIC SECTOR URBAN INVESTMENT -- WATER, TRANSPORT, SEWAGE, ELECTRICITY -- THE FOLLOWING CONCERNS WERE EXPRESSED IN THE ABS REVIEW:

-- A.I.D. RESOURCES ARE TOO LIMITED TO UPGRADE OR INSTALL CITY-WIDE SYSTEMS.

-- THE A.I.D. MANDATE WOULD LIMIT OUR ROLE STRICTLY TO EXTENDING SERVICE TO LOW-INCOME NEIGHBORHOODS.

-- IN ASSOCIATING WITH ANY INVESTMENT PROGRAM OF THIS KIND WE MUST BE SENSITIVE TO THE TENDENCY FOR BENEFITS TO FLOW TOWARD FAMILIES STANDING HIGHER IN THE INCOME DISTRIBUTION, E.G., ELECTRICITY TO THOSE WHO CAN AFFORD TO HOOK-UP, PURCHASE APPLIANCES, AND PAY ECONOMIC RATES.

-- RECENT A.I.D. POLICY CITED ABOVE SUGGESTS HIGH RESOURCES APPROPRIATE THESE PURPOSES. THE HOPE IS TO USE HIGH WITH INCREASING FLEXIBILITY TO FINANCE RANGE OF URBAN SERVICES WHICH IMPACT ON THE ENVIRONMENT OF LOW-INCOME URBAN DWELLERS.

OTHER POINTS RAISED WITH RESPECT TO URBAN ASSISTANCE INCLUDED: IMPORTANCE OF INVOLVING LOCAL PEOPLE IN THE PLANNING PROCESS; NEED FOR EXPERTISE ON RURAL LINKAGES (ALONG WITH URBAN PLANNING EXPERTISE) IN CONDUCTING ANALYSIS AND FEASIBILITY WORK LEADING TO A PROJECT; AND THE POTENTIAL PITFALLS OF SEPARATING URBAN PLANNING AREAS FROM POLITICAL JURISDICTIONS.

WOULD APPRECIATE MISSION COMMENTS AND PROPOSED MODIFICATIONS OF THE PID IN LIGHT OF THE ABOVE CONSIDERATIONS. WE WOULD ALSO APPRECIATE CLARIFICATION OF PROJECT RATIONALE, I.E. SERVICE CENTER/MARKET TOWNS CONCEPT, OR RESOLUTION OF URBAN POOR PROBLEMS, OR SOME COMBINATION OF BOTH. IF SERVICE CENTER CONCEPT IS TO BE MAIN THRUST, THEN EXPLANATION OF WHY THIS IS NOT ALREADY COVERED UNDER MUNICIPAL DEVELOPMENT LOAN IS NEEDED.

WITH RESPECT TO SIZE OF LOAN, WE HAVE THE FOLLOWING OBSERVATIONS WHICH SUGGEST THAT LOAN MAY BE LESS THAN THE DOLLARS 10 MILLION PROPOSED:

-- WE WOULD NOT BE INTERESTED IN URBAN DEVELOPMENT PER SE. WE EXPECT THAT NOT ALL THE INVESTMENTS CONTEMPLATED IN THE PID WOULD FIT EITHER A STRICT URBAN POOR FOCUS OR A SERVICE CENTER/MARKET TOWNS RATIONALE,

-- PROPOSED LEVEL OF DOLLARS 10 MILLION, WHEN COMBINED WITH GOP CONTRIBUTION OF DOLLARS 10 MILLION, WOULD APPEAR HIGH IN RELATION TO ABSORPTIVE CAPACITY OF UNCLASSIFIED

GROWTH CENTERS AND SERVICE CENTERS IDENTIFIED. PLEASE DESCRIBE TO EXTENT POSSIBLE ACTIVITIES TO BE FINANCED, GIVING US A BETTER IDEA OF FEASIBLE LOAN AMOUNT.

FINALLY, ASSUMPTIONS MISSION USED IN PREPARATION OF PANAMA 4513 (REQUESTING TDY HELP) WOULD APPEAR TO NEED MODIFICATION IN LIGHT OF:

-- POLICY GUIDANCE ON PID PROVIDED THIS MESSAGE, AND

-- THE FACT THAT PREPARATION OF PRP WOULD REQUIRE PRELIMINARY INFORMATION ALONG LINES SUGGESTED LATER IN THIS MESSAGE FOR "URBAN POOR ASSESSMENT".

RE USAID'S REQUEST IN PANAMA 4513 FOR TDY ASSISTANCE, A.I.D./W PROPOSES ERIC CHEYWYND, TA/UD, TO ASSIST MISSION TO DEVELOP SCOPE OF WORK FOR CONSULTANT TEAM TO ASSIST MISSION TO DEVELOP PRP AND SECTOR ASSESSMENT, IF REQUIRED. CHEYWYND IS AVAILABLE JULY 18-21. PLEASE ADVISE.

3. APPLICABILITY OF MISSION DAP.

CENTRAL A.I.D. GUIDANCE (AIDTO A-286 DATED 5/20/76) REACHED USAID AFTER THE ABS WAS PREPARED. THEREFORE, THE ABS COULD NOT CONTAIN A DISCUSSION (REQUESTED IN THE CENTRAL GUIDANCE) OF STEPS NECESSARY TO BRING THE EXISTING DAP UP TO STANDARD IN TERMS OF THE NEW REQUIREMENTS. THIS QUESTION WAS CONSIDERED IN THE ABS REVIEW SESSION. WOULD APPRECIATE MISSION ACTION TO THE FOLLOWING THOUGHTS ON ITS DAP PROCESS TO DATE:

A. DAP PART I (SUBMITTED NOVEMBER 1973) -- ALTHOUGH CIRCUMSTANCES HAVE CHANGED SOMEWHAT SINCE THE DAP -- MOST NOTABLY AS A RESULT OF THE OIL PRICE INCREASES -- IT IS OUR JUDGMENT THAT THE OVERVIEW SECTION OF THE DAP REMAINS LARGELY VALID. HOWEVER, IN RESPONDING TO THIS CABLE, MISSION SHOULD PROVIDE RATIONALE FOR ENTERING NEW SECTOR OF ASSISTANCE (URBAN DEVELOPMENT/URBAN POOR). WHY NOT STICK EXCLUSIVELY TO AGRICULTURE, EDUCATION AND HEALTH? ON WHAT BASIS DOES THE MISSION JUSTIFY AN EXPANSION OF THE NUMBER OF SECTORS OF OUR INVOLVEMENT, GIVEN THE LIKELIHOOD THAT PANAMA WILL

ACHIEVE A PER CAPITA GNP OF DOLLARS 1000 BY 1978? THOUGH THIS CABLE TENTATIVELY APPROVES URBAN PID, FINAL APPROVAL WILL DEPEND ON SATISFACTORY RESPONSES TO THESE QUESTIONS, AS WELL AS TO QUESTIONS ON THE PROJECT ITSELF.

B. GUIDANCE ON DAP REVISION URGES MISSIONS TO UNDERTAKE AS THEIR HIGHEST PRIORITY FOR STUDY "THE IDENTIFICATION OF PRIORITY GROUPS FOR U.S. ASSISTANCE BASED UPON AN ANALYTICAL DESCRIPTION OF THE COUNTRY'S POOR MAJORITY". THE QUESTION OF WHETHER THE PANAMA MISSION HAS MET THIS REQUIREMENT GOES TO THE ADEQUACY OF THREE SECTOR ASSESSMENTS WHICH THE MISSION HAS COMPLETED IN THE PAST TWO YEARS: EDUCATION (APRIL 1975); HEALTH (DECEMBER 1975); AND AGRICULTURE (MARCH 1976).

THE EDUCATION ASSESSMENT FOCUSED PRIMARILY ON THE STRENGTHS AND WEAKNESSES OF THE FORMAL EDUCATION SYSTEM. THE SPECIAL NEEDS OF CHILDREN WHO DO NOT ATTEND SCHOOL OR WHO DROP OUT AFTER SEVERAL YEARS WERE NOT SINGLED OUT FOR ANALYSIS. ADMITTEDLY, THIS GROUP REPRESENTS A MINORITY IN PANAMA (UNLIKE MOST DEVELOPING COUNTRIES). HOWEVER, THIS MINORITY CLEARLY CONSTITUTES SOME PORTION OF THE A.I.D. TARGET GROUP IN PANAMA. NON-FORMAL EDUCATION PROGRAMS BENEFITTING THIS GROUP COULD BE AN AREA FOR FUTURE ASSISTANCE, YET THE ASSESSMENT DOES NOT PROVIDE A FULL ANALYTICAL BASIS ON WHICH TO PROCEED. MISSION SHOULD ADVISE IF FURTHER ANALYSIS WOULD BE FRUITFUL.

THE AGRICULTURE ASSESSMENT PROVIDES A ROUGH QUANTITATIVE PICTURE OF THE POOR MAJORITY (RURAL) TARGET GROUP IN PANAMA. THE DESCRIPTION SUGGESTS THAT ABOUT 40,000, OR ABOUT ONE-THIRD OF THE 105,000 FARM FAMILIES IN PANAMA ARE ENGAGED IN ESSENTIALLY SUBSISTENCE AGRICULTURE AND HAVE CASH INCOME ON THE ORDER OF 300-500 BALBOAS PER ANNUM. CHARACTERISTICS OF THIS GROUP ARE DESCRIBED. HOWEVER, THE ASSESSMENT DOES NOT ANALYZE IN DETAIL VARIOUS CONSTRAINTS TO SMALL FARMER DEVELOPMENT. THE MISSION IS UNDERTAKING FURTHER ANALYSIS IN CONNECTION WITH THE ASSESSMENT (WHICH HAS NOT BEEN FINALLY APPROVED) AND THE INTEGRATED RURAL DEVELOPMENT LOAN (TQ AND FY 1977), WHICH WILL SHED MORE LIGHT ON THE UNIQUE PROBLEMS OF THE RURAL TARGET GROUP.

THE HEALTH SECTOR ASSESSMENT AND THE HEALTH DELIVERY SYSTEMS LOAN PP PROVIDE A REASONABLY DETAILED PROFILE OF THE HEALTH CHARACTERISTICS OF RURAL PEOPLE IN PANAMA. ON BALANCE, IT APPEARS THAT ANALYTICAL WORK IN THE HEALTH SECTOR DOES ALL THAT ONE WOULD ASK OF IT IN TERMS OF ITS CONTRIBUTION TO AN "ANALYTICAL DESCRIPTION OF THE POOR MAJORITY."

C. THE "DAP PROCESS" HAS NOT ADDRESSED THE NEEDS AND CHARACTERISTICS OF THE URBAN POOR. A SECTOR ASSESSMENT IS NOW INDICATED IN VIEW OF TENTATIVE APPROVAL OF URBAN DEVELOPMENT PID. ABS REVIEW SESSION PROVIDED FOLLOWING GUIDANCE WITH RESPECT TO ASSESSMENT:

-- ANALYSIS SHOULD DEAL WITH URBAN POOR NATIONWIDE. FOCUS SHOULD BE OUTSIDE PANAMA CITY/COLON, BUT ROLE OF THESE MAJOR CENTERS IN TOTAL PICTURE SHOULD BE ADDRESSED.

-- ANALYSIS SHOULD EXPLORE RELATIONSHIP OF RURAL AND CITY POVERTY PROBLEMS AND THE PRIORITY OF POSSIBLE REMEDIAL PROGRAMS. RURAL POOR/URBAN POOR COMPARISON SHOULD BE PROVIDED SO THAT U.S. ASSISTANCE TO URBAN AREAS DOES NOT WIDEN RURAL/URBAN DISPARITIES.

-- ANALYSIS SHOULD IDENTIFY URBAN TARGET GROUP BY REGION AND CITY. IT WAS NOT CLEAR IN THE PID, FOR EXAMPLE, THAT THE CITIES CHOSEN CONTAINED ANY SIGNIFICANT NUMBERS OF URBAN POOR.

WE HOPE TO COOPERATE CLOSELY WITH MISSION IN DEVELOPING SCOPE OF WORK FOR ASSESSMENT. WE RECOGNIZE THAT WE WILL ALL BE ENTERING A NEW AREA OF SUBSTANCE IN THIS ANALYTICAL EFFORT.

4. GRANT FUNDING.

PLEASE PROVIDE GRANT ASSISTANCE PROJECTIONS UNDER "LONG-RANGE PROGRAM PLAN" FOR FY 1979-82.

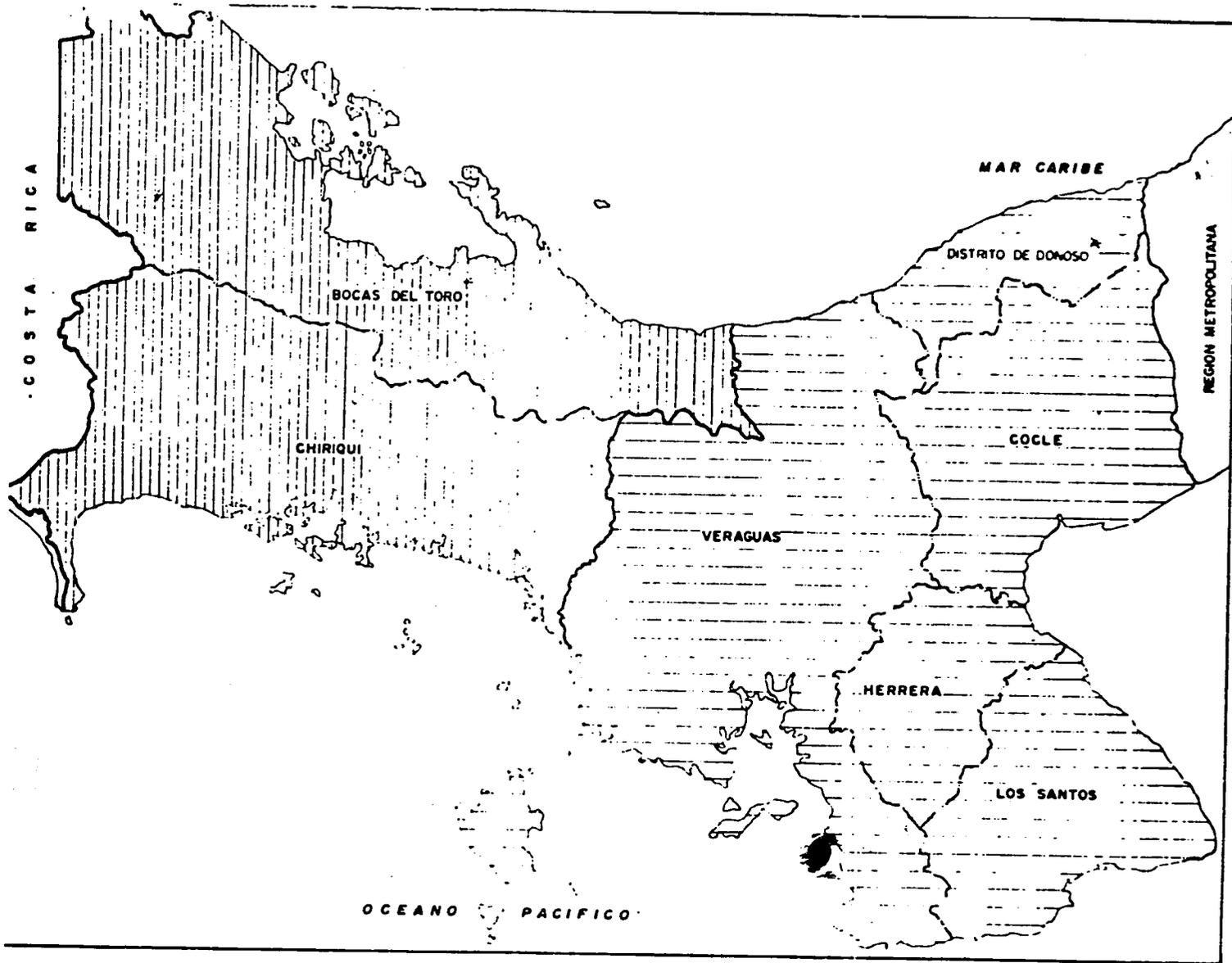
5. AGRICULTURAL DEVELOPMENT SUPPORT AND AGRICULTURAL TECHNICAL SUPPORT.

PLEASE SUPPLY MORE REALISTIC FIGURES IN LIGHT OF:

-- ANALYSIS LEADING TO INTEGRATED RURAL DEVELOPMENT LOAN WILL BE COMPLETE IN FY 1977.

-- DISAPPROVAL OF REFORESTATION PID.

PRESENT FIGURES APPEAR VERY HIGH FOR BOTH FY 1977 AND FY 1978. KISSINGER



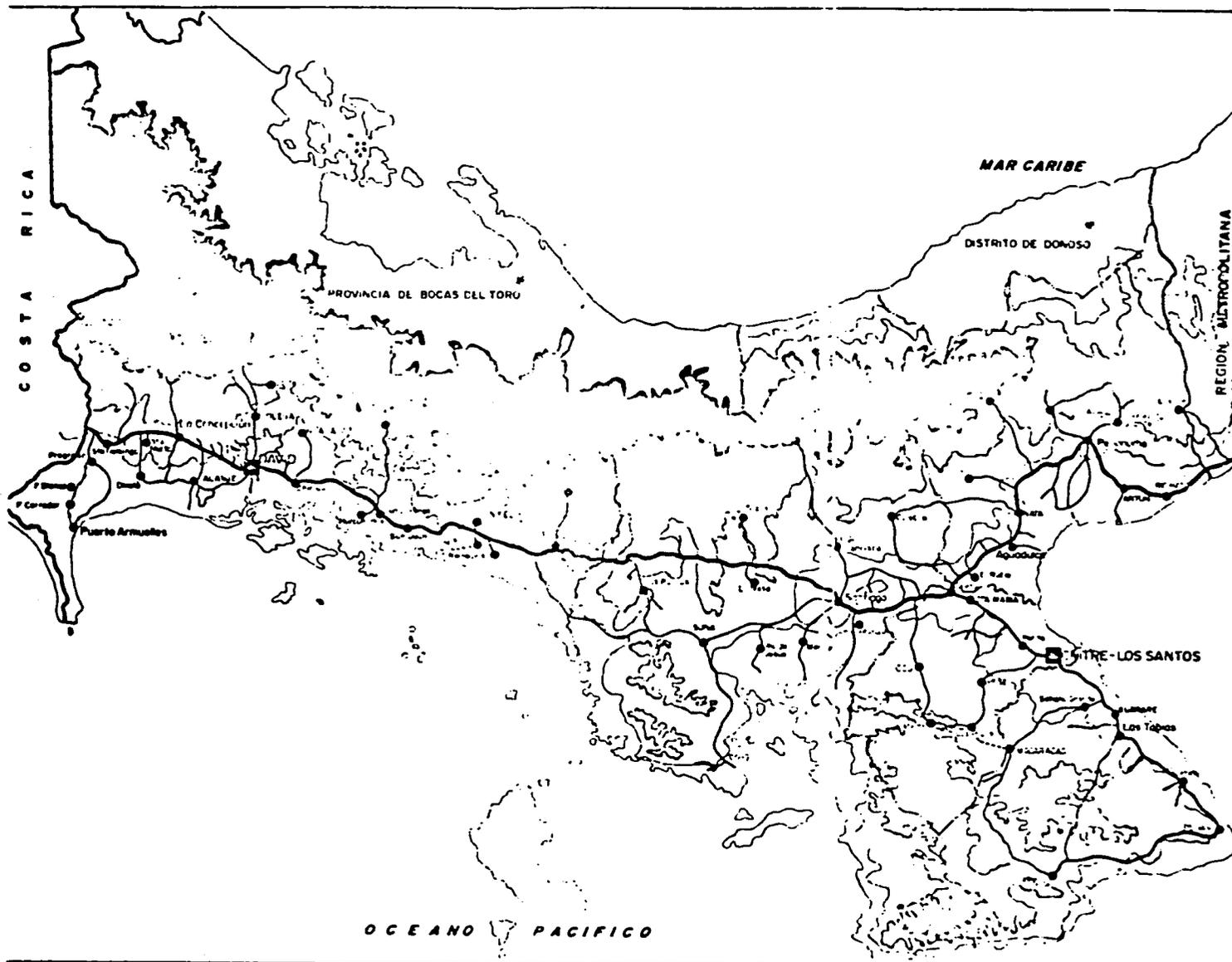
AREA DE ESTUDIO

LEYENDA

- LIMITE INTERNACIONAL
- - - - LIMITE PROVINCIAL
- LIMITE REGIONAL
- ||||| REGION OCCIDENTAL
- REGION CENTRAL
- * Areas no incluidas en el Estudio

ANNEX II-C
MAP 1

ESCALA: 1:500,000	FECHA: Mayo, 1978
FUENTE: Servicio de Planeación y Política Económica Proy. No. 1-788-A-0	



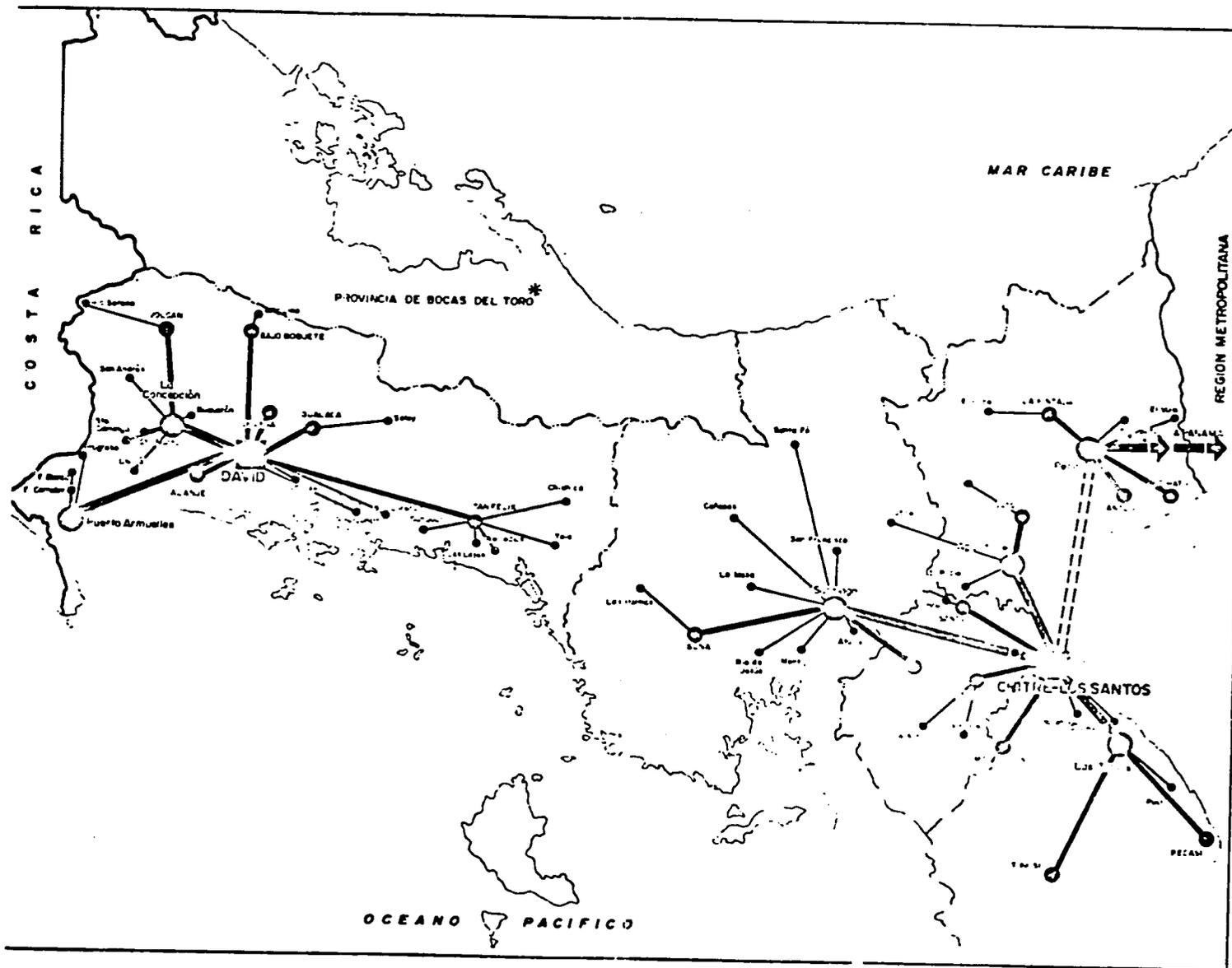
**ESTRUCTURA ESPACIAL
DE LOS LUGARES POBLADOS,
DEL AREA DE ESTUDIO
LA RED VIAL EXISTENTE
Y LOS FACTORES TOPOGRAFICOS
QUE INFLUYEN**

- LEYENDA**
RED VIAL
- CARRETERA DE INGENIERIA VIAL
 - CARRETERA DE ASFALTO
 - CARRETERAS DE ASFALTO-REGEDOS
 - - - CAMINOS DE TIERRA

- TOPOGRAFIA**
- Más de 1000 metros
 - 1000 metros
 - 500 metros
 - Menos de 500 metros
- ← Línea no incluida en el Estado

**ANNEX II-C
MAP 2**

ESCALA 1:1,000,000
 FECHA Mayo, 1970
 FUENTE: Dirección de Planificación y Estudios Geográficos
 Proyecto URB-1-110



MALLA DE INTERRELACIONES FUNCIONALES ACTUALES DE LOS COMPONENTES DEL SISTEMA ESPACIAL URBANO DEL AREA DE ESTUDIO

INTERRELACIONES FUNCIONALES ACTUALES

- DE NIVEL I A NIVEL II
- DE NIVEL II A NIVEL III
- DE NIVEL III A NIVEL IV
- INTERRELACION FUNCIONAL POTENCIAL

JERARQUIAS DE LOS CENTROS URBANOS SEGUN SU TAMAÑO FUNCIONAL

- PRIMER NIVEL
- SEGUNDO NIVEL
- TERCER NIVEL
- CUARTO NIVEL

* Areas no incluidas en el Estudio

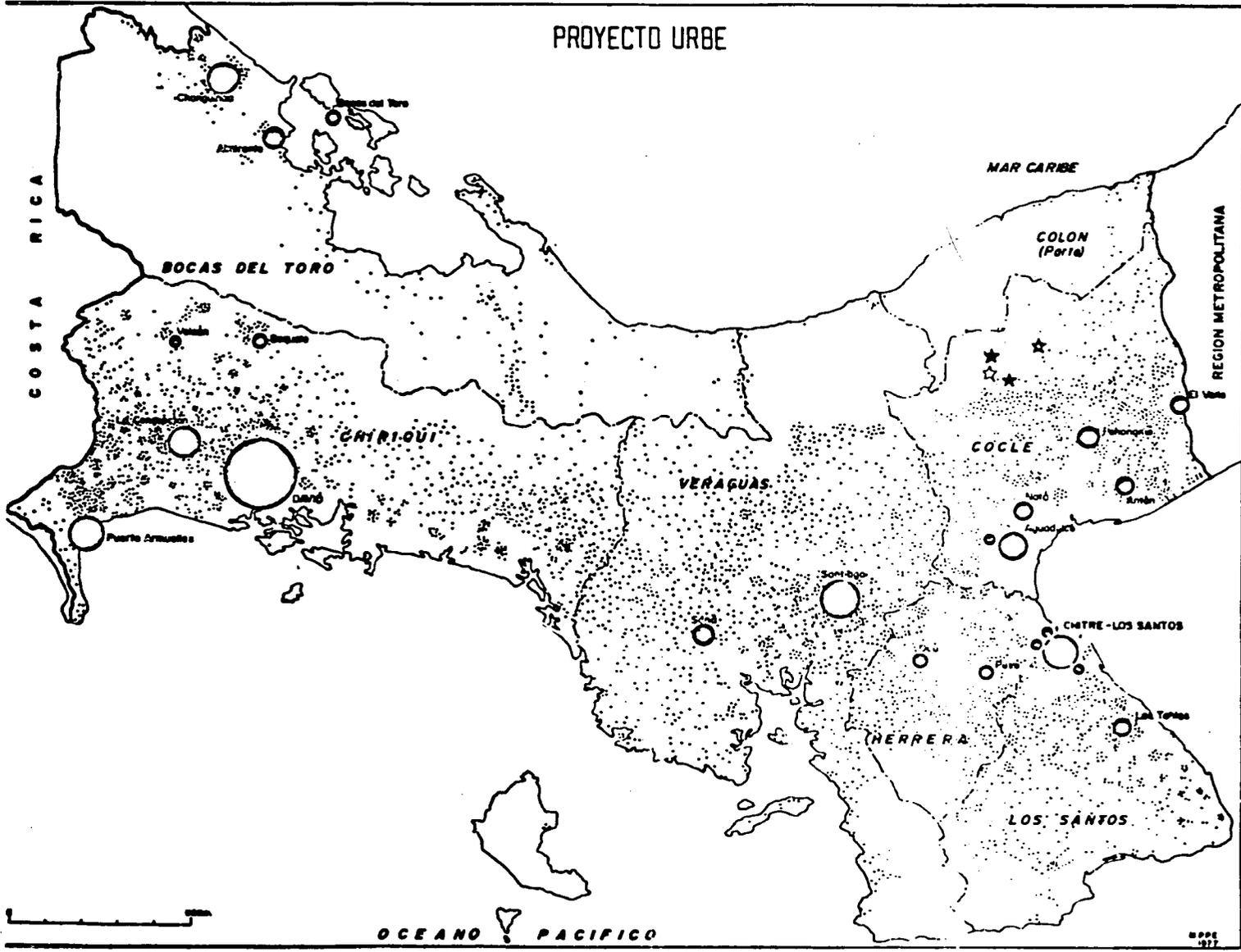
ANNEX II-C
MAP 3

ESCALA 1:100,000

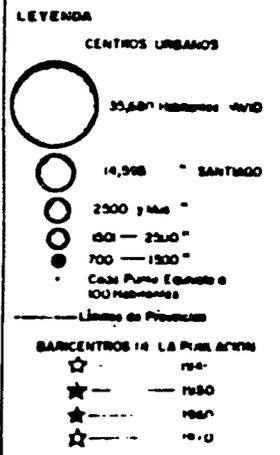
FECHA: Mayo, 1978

FUENTE: Instituto de Planificación y Política Económica
Proyecto L-006 S-10

PROYECTO URBE



DISTRIBUCION GEOGRAFICA DE LA POBLACION CENSO 1970



ANNEX II-C
MAP 4

Fuente: Censo de Población y Vivienda de Costa Rica en los Censos de 1940, 1950, 1960, 1970



OCEANO PACIFICO

1977

Table 1.

CONSOLIDATED CASH FLOW OF SMALL BUSINESS LOANS (\$000's)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
INFLOWS										
AID Loan Funds	370	725	585	675	645					
GOP Funds	65	85	80	85	85					
Reinvestments						770	770	770	810	810
INTEREST PAYMENTS										
Loans in year 1		32	32	26	19	13	5	2		
2			61	61	48	36	23	12	3	
3				50	50	40	29	19	9	3
4					57	57	45	33	22	11
5						55	55	43	32	22
6							58	58	46	34
7								58	58	46
8									58	58
9										58
10										61
PRINCIPAL REPAYMENTS										
Loans in year 1			84	84	83	83	51	21		
2				153	153	153	152	102	43	
3					127	125	125	125	86	33
4						144	142	142	141	95
5							140	138	138	137
6								147	147	147
7									147	147
8										147
9										147
10										147
1% Administrative Fee	4	8	7	8	7	8	8	8	8	8
Sub-totals	439	850	849	1142	1274	1484	1603	1678	1748	1759
OUTFLOWS										
Loans	435	810	665	760	730	770	770	770	810	810
Annual Balance	4	40	184	382	544	714	833	908	938	949
Cumulative Balance	4	44	228	610	1154	1098	1161	1299	1427	1566
Less: Reinvestments	0	0	0	0	770	770	770	910	810	
Net Cumulative Balance	4	44	228	610	384	328	391	489	617	
LOAN PORTFOLIO	406	1162	1699	2169	2487	2702	2812	2857	2911	2961

Table 2

SMALL BUSINESS LOANS BETWEEN \$1,000 - \$10,000 (\$000's)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
INFLOWS										
AID Loan Funds	115	185	145	185	170					
GOP Funds	20	25	20	10	25					
Reinvestments						210	210	210	210	210
INTEREST PAYMENTS										
Loans in year 1		10	10	8	5	3				
2			16	16	12	8	4			
3				13	13	9	6	3		
4					15	15	11	7	4	
5						15	15	11	7	4
6							16	16	12	8
7								16	16	12
8									16	16
9										16
10										16
PRINCIPAL REPAYMENTS										
Loans in year 1			32	32	32	32				
2				50	50	50	50			
3					40	39	39	39		
4						47	46	46	46	
5							47	46	46	46
6								50	50	50
7									50	50
8										50
9										50
10										50
Sub-totals	135	220	223	314	362	428	444	444	457	462
OUTFLOWS										
Loans	135	210	165	195	195	210	210	210	210	210
Annual Balance	0	10	58	119	167	218	234	234	247	252
Cumulative Balance	0	10	68	187	354	362	396	410	447	489
Less: Reinvestments	0	0	0	0	210	210	210	210	210	210
Net Cumulative Balance	0	10	68	187	144	152	176	200	237	
LOAN PORTFOLIO	128	328	453	556	619	651	669	688	696	700

Assume: One year grace period, 8% interest, repayment in 4 years, 5% of loans are uncollectible.

Table 3

SMALL BUSINESS LOANS BETWEEN \$10,000 - \$20,000 (\$000's)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
<u>INFLOWS</u>										
AID Loan Funds	135	300	240	250	275					
GOP Funds	20	10	35	25	10					
Reinvestments						310	310	310	310	310
<u>INTEREST PAYMENTS</u>										
Loans in year										
1		12	12	9	7	5	2			
2			24	24	19	14	9	5		
3				21	21	17	12	8	4	
4					21	21	17	12	6	4
5						22	22	17	13	9
6							24	24	19	14
7								24	24	19
8									24	24
9										24
10										
<u>PRINCIPAL REPAYMENTS</u>										
Loans in year										
1			30	30	29	29	29			
2				59	59	59	59	59		
3					53	52	52	52	52	
4						53	52	52	52	52
5							55	54	54	54
6								59	59	59
7									59	59
8										59
9										59
10										
Sub-totals	155	322	341	418	494	582	643	676	678	687
<u>OUTFLOWS</u>										
Loans	155	310	275	275	285	310	310	310	310	310
Annual Balance	0	12	66	143	209	272	333	366	368	377
Cumulative Balance	0	12	78	221	430	392	415	471	529	596
Reinvestments	0	0	0	0	310	310	310	310	310	310
Cumulative Balance	0	12	78	221	120	82	105	161	219	
LOAN PORTFOLIO	147	442	673	845	975	1077	1125	1144	1163	1175

Assume: One year grace period, 8% interest, repayment in 5 years, 5% of loans are uncollectible.

Table 4

SMALL BUSINESS LOANS BETWEEN \$20,000 - \$50,000 (\$000'000)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
INFLOWS										
AID Loan Funds	120	240	200	240	200					
GOP Funds	25	50	25	50	50					
Reinvestments						250	250	250	250	290
INTEREST PAYMENTS										
Loans in year										
1		10	10	9	7	5	3	2		
2			21	21	17	14	10	7	3	
3				16	16	14	11	8	5	3
4					21	21	17	14	10	7
5						18	18	15	12	9
6							18	18	15	12
7								18	18	15
8									18	15
9										18
10										21
PRINCIPAL REPAYMENTS										
Loans in year										
1			22	22	22	22	22	21		
2				44	44	44	43	43	43	
3					34	34	34	34	34	33
4						44	44	43	43	43
5							38	38	38	37
6								38	38	38
7									38	38
8										38
9										38
10										
Sub-totals	145	300	278	402	411	466	508	550	605	602
OUTFLOWS										
Loans	145	290	225	290	250	250	250	250	290	290
Annual Balance	0	10	53	112	161	216	258	300	315	312
Cumulative Balance	0	10	63	175	336	302	310	360	385	407
Less: Reinvestments	0	0	0	0	250	250	250	290	290	
Net Cumulative Balance	0	10	63	175	86	52	60	70	95	
LOAN PORTFOLIO	131	392	573	768	893	974	1018	1025	1052	1086

Assumptions: One year grace period, 8% interest, repayment in 6 years, 10% of loans are uncollectible.

Table 5

CONSOLIDATED CASH FLOWS FOR AGRO-INDUSTRIAL LOANS (\$000's)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
INFLOWS										
AID Loan Funds	75	700	700	725	1000					
GOP Funds		100	100	100	100					
Reinvestments						150	700	750	750	850
INTEREST PAYMENTS										
Loans in year 1		6	6	5	4	2	1			
2			65	65	61	51	43	33	25	18
3				64	64	59	49	40	31	21
4					66	66	60	51	41	32
5						89	89	82	69	56
6							12	12	10	7
7								56	56	51
8									60	60
9										60
10										60
PRINCIPAL REPAYMENTS										
Loans in year 1			14	14	14	13	13			
2				50	100	100	99	99	72	50
3					65	105	105	104	104	77
4						68	108	108	107	107
5							81	141	141	141
6								27	27	27
7									65	95
8										74
9										
10										
1% Fee										
Sub-Totals	<u>76</u>	<u>814</u>	<u>893</u>	<u>1031</u>	<u>1485</u>	<u>705</u>	<u>1367</u>	<u>1511</u>	<u>1566</u>	<u>1735</u>
OUTFLOWS										
Loans	75	800	800	825	1100	150	700	750	750	850
Annual Balance	1	14	93	206	385	555	667	761	816	885
Cumulative Balance	1	15	108	314	699	1104	1071	1082	1148	1183
Less: Reinvestments	0	0	0	0	150	700	750	750	850	
Net Cumulative Balance	1	15	108	314	549	404	321	332	298	
LOAN PORTFOLIO	68	788	1494	2173	2984	2833	3057	3253	3412	3606

Table 6

AGRO-INDUSTRIAL LOANS BETWEEN \$50,000 - \$150,000 (\$000's)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
INFLOWS										
AID Loan Funds	75	150	150	125	200					
GOP Funds										
Reinvestments						150	150	200	200	200
INTEREST PAYMENTS										
Loans in year	1									
2		6	6	5	4	2	1			
3			12	12	10	7	5	2		
4				12	12	10	7	5	2	
5					10	10	8	6	4	2
6						16	16	13	10	6
7							12	12	10	7
8								12	12	10
9									16	16
10										16
PRINCIPAL REPAYMENTS										
Loans in year	1									
2			14	14	14	13	13			
3				27	27	27	27	27		
4					27	27	27	27	27	
5						23	23	23	22	22
6							36	36	36	36
7								27	27	27
8									27	27
9										36
10										
Sub-totals										
	<u>75</u>	<u>156</u>	<u>182</u>	<u>195</u>	<u>304</u>	<u>285</u>	<u>325</u>	<u>390</u>	<u>393</u>	<u>405</u>
OUTFLOWS										
Loans	75	150	150	125	200	150	150	200	200	200
Annual Balance	0	6	32	70	104	135	175	190	193	205
Cumulative Balance	0	6	38	108	212	197	222	212	205	210
Less: Reinvestments	0	0	0	0	150	150	200	200	200	
Net Cumulative Balance	0	6	38	108	62	47	22	12	5	
LOAN PORTFOLIO	68	203	324	396	508	553	562	602	643	675

Assume: One year grace period, 9% interest, repayment in 5 years, 10% of loans are uncollectible.

Table 7

AGRO-INDUSTRIAL LOANS BETWEEN \$150,000 - \$300,000 (\$000's)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
INFLOWS										
AID Loans Funds										
GOP Funds	-	150	250	300	300					
Reinvestments							250	250	250	250
INTEREST PAYMENTS										
Loans in year 1										
2										
3			12	12	10	8	6	4	2	
4				20	20	17	13	10	7	3
5					24	24	20	16	12	8
6						24	24	20	16	12
7										
8								20	20	17
9									20	20
10										20
PRINCIPAL REPAYMENTS										
Loans in year 1										
2										
3				23	23	23	22	22	22	
4					38	38	38	37	37	37
5						45	45	45	45	45
6							45	45	45	45
7										
8										
9									38	38
10										38
Sub-totals		150	262	355	415	179	463	469	514	533
OUTFLOWS										
Loans		150	250	300	300	0	250	250	250	250
Annual Balance	0	0	12	55	115	179	213	219	264	283
Cumulative Balance	0	0	12	67	182	361	324	293	307	340
Less: Reinvestments	0	0	0	0	0	250	250	250	250	
Net Cumulative Balance	0	0	12	67	182	111	74	43	57	
LOAN PORTFOLIO		135	360	607	816	710	785	861	899	921

Assume: One year grace period, 9% interest, repayment in 6 years, 10% of loans are uncollectible.

Table 8

AGRO-INDUSTRIAL LOANS BETWEEN \$300,000 - \$500,000 (\$000's)

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>
INFLWS										
AID Loans Funds										
GOP Funds	-	400	300	300	500					
Reinvestments		100	100	100	100					
INTEREST PAYMENTS										
Loans in year 1							300	300	300	400
2										
3			41	41	41	36	32	27	23	18
4				32	32	32	29	25	22	18
5					32	32	32	29	25	22
6						49	49	49	43	38
7										
8								24	24	24
9									24	24
10										24
PRINCIPAL REPAYMENTS										
Loans in year 1										
2										
3										
4					50	50	50	50	50	50
5						40	40	40	40	40
6							40	40	40	40
7								60	60	60
8										
9										30
10										
Sub-totals	-	500	441	473	755	239	572	644	651	788
OUTFLOWS										
Loans		500	400	400	600	0	300	300	300	400
Annual Balance										
Cumulative Balance	0	0	41	73	155	239	272	344	351	388
Less: Reinvestments		0	41	114	269	508	480	524	575	563
Net Cumulative Balance	0	0	0	0	0	300	300	300	400	563
LOAN PORTFOLIO		450	810	1170	1660	1570	1710	1790	1870	2010

Assume: Two year grace period, 9% interest, repayment in 9 years, 10% of loans are uncollectible.

Table 9

CORPORACION FINANCIERA NACIONAL
BALANCE DE SITUACION
PROYECTADO A 12 AÑOS (1976-1987)

ACTIVOS	REALIZADO											
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Efectivo en Caja y Bancos	37,288	318,463	609,723	630,248	638,793	363,686	603,688	606,834	523,323	604,870	328,847	217,316
Depositos a Plazo Fijo	1,830,000	3,133,000	1,300,000	1,800,000	2,300,000	2,600,000	3,000,000	3,300,000	3,700,000	4,000,000	4,300,000	4,600,000
Banco del Estado	1,890,000	1,830,000	1,870,000	1,630,000	1,770,000	1,730,000	1,680,000	-1,080,000	4,880,000	1,470,000	1,410,000	1,320,000
Préstamos por Cobrar - Solo	163,100	2,273,398	11,144,300	19,528,132	27,309,234	33,324,489	42,823,078	50,197,812	57,119,070	63,788,444	70,087,624	77,418,780
Interés por Recibir	21,401	48,879	34,184	80,041	118,102	138,378	181,424	224,137	233,288	284,874	312,348	342,384
Subvenciones por Recibir	174,947	179,734	184,300	187,300	188,000	188,000	188,000	188,000	188,000	188,000	188,000	188,000
Inversiones en Acciones	2,300	18,980	2,320,270	4,282,300	6,446,188	8,483,380	8,434,638	10,804,188	11,382,688	11,438,788	11,488,888	11,538,988
Otro Activo	34,186	174,736	-	-	-	-	-	-	-	-	-	-
Mobiliario y Equipo - Solo	13,414	70,337	78,032	83,743	84,639	83,723	10,627	73,321	71,400	71,400	71,400	71,400
TOTAL ACTIVO	4,230,836	8,164,011	17,411,307	28,421,037	38,996,730	49,033,836	58,323,618	68,674,094	74,349,376	81,318,678	88,323,421	93,847,889
PASIVOS												
Reservaciones Varias	31,848	23,180	-	-	-	-	-	-	-	-	-	-
Depositos a Plazo Fijo	300,000	330,000	-	-	-	-	-	-	-	-	-	-
Subvenciones Anticipadas	80,331	-	-	-	-	-	-	-	-	-	-	-
Préstamos por Pagar	73,808	942,328	8,369,308	16,746,337	24,431,438	31,413,713	37,133,163	41,603,793	44,873,883	46,878,191	48,871,236	49,318,282
TOTAL PASIVO	467,187	1,297,748	8,369,308	16,746,337	24,431,438	31,413,713	37,133,163	41,603,793	44,873,883	46,878,191	48,871,236	49,318,282
PATRIMONIO												
Capital Aportado	3,622,973	6,780,141	8,182,000	10,248,621	13,668,111	14,861,611	17,423,611	20,178,211	23,114,411	26,274,611	28,864,611	30,388,311
Utilidades Retenidas	167,864	483,112	848,837	1,423,099	2,077,188	2,781,123	3,736,444	4,995,890	6,080,630	6,184,478	11,888,316	12,328,603
TOTAL PATRIMONIO	3,790,837	6,888,253	9,030,837	11,671,720	15,745,299	17,642,734	21,159,055	25,174,101	29,195,041	32,459,089	40,752,927	42,716,915
TOTAL PASIVO Y PATRIMONIO	4,230,836	8,164,011	17,411,307	28,421,037	38,996,730	49,033,836	58,323,618	68,674,094	74,349,376	81,318,678	88,323,421	93,847,889
VALOR DE ACTIVOS FINANCIEROS		1,842,000	16,848,000	23,820,800	26,880,800	43,108,000	50,306,188	58,700,000	64,388,000	68,888,000	68,428,128	61,888,388

Table 9

**COMPAÑIA FINANCIERA NACIONAL
ESTADO DE RESULTADOS PROYECTADOS A 10 AÑOS (1978-1987)**

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
INGRESOS										
Intereses y Comisiones avanzadas:	819,920	1,820,900	2,058,453	3,753,067	4,394,173	5,379,276	6,125,916	6,827,359	7,324,553	8,216,724
Intercambios	-----	-----	-----	-----	215,156	341,343	445,187	494,615	583,332	632,539
transferencias Corrientes	650,000	590,000	512,000	400,000	274,000	253,000	257,000	250,000	250,000	232,000
TOTAL DE INGRESOS	1,477,920	2,510,900	3,370,453	4,161,667	5,083,329	5,970,621	6,822,103	7,507,904	8,264,295	9,099,309
GASTOS										
Intereses Pagados y Costos de Financiamiento	340,764	906,070	1,667,847	2,300,529	2,834,243	3,299,090	3,632,432	3,821,062	3,871,863	3,924,697
Costos Generales y Administrativos	702,324	940,764	1,050,917	1,155,576	1,250,772	1,332,287	1,415,903	1,478,572	1,550,469	1,632,633
TOTAL DE GASTOS	1,043,088	1,846,834	2,718,764	3,456,105	4,085,015	4,631,377	5,048,335	5,299,634	5,422,332	5,557,330
UTILIDAD NETA	434,832	664,066	651,689	705,562	998,314	1,339,244	1,773,768	2,208,270	2,841,963	3,541,979

SELECTED INTEREST RATES - PANAMA

1. Private Sector Commercial Banks

Commercial bank rates in Panama fluctuate between 10% and 12% with commissions and service charges increasing these rates by an additional 2%. Banks loan for 3 years but more commonly loan on a shorter, overdraft basis. As much as 60% down may be required; loans to larger firms located in or near Panama City predominate.

2. National Bank of Panama (BNP)

The BNP's Municipal Development Fund loans at 8% with a one-time .5% charge for technical assistance. Repayment periods run to 20 years with the average being 10 years; grace periods may extend to five years, but two is normal with an interest rate for the grace period of 4%.

3. Ministry of Industry and Commerce (MICI)

The Industrial Development and Productivity Department of MICI makes loans up to \$15,000 to small industrial investors.* (Ceiling was raised from \$10,000 to \$15,000 in early 1978.) MICI loans from \$1,000-\$10,000 at 7%; loans for fixed assets may be made for five years with a six months grace period and for working capital for three years with a three months grace period. For loans in the \$10,000-\$15,000 class, MICI loans at 7% with an additional 1% charge for technical assistance. A fee for administrative costs is levied according to subloan size per the following schedule:

\$	1 - 5,000	0%
	5,001 - 7,000	0.4%
	7,001 - 8,500	0.5%
	8,501 - 10,000	0.6%
	10,001 - 15,000	0.7%

4. National Finance Corporation (COFINA)

COFINA's terms vary according to the size and type of industry and its location. COFINA currently is loaning at 8-1/2%-10% and may add up to 1% for technical assistance. To date, COFINA has tended to maintain higher interest rates (9%-10%) for industries located in Panama City and Colon. Loans can be made for 15 years with a grace period to three years but, on the average, loans are made for five-seven years with a one-year grace period. Funds

*Note: Funds for the small industry program are held by the BNP which serves only as a depository.

from credit lines from U.S. banks are relent at London Interbank Offer Rates (LIBOR) plus 3% for medium and large industries and LIBOR plus 2% for small industries.

5. National Mortgage Bank (BHN)

The BHN loans at between 5% and 10% for 20-25 years through MIVI or the Savings and Loans. The BHN does not make direct loans to the public except in the case of the HIG loan to the Nuevo Chorrillo Cooperative. The so-called thirteenth-month money, collected by the National Social Security Bank (Caja de Seguro Social) and deposited with the BHN at 1%, is loaned by the latter to MIVI.

6. Ministry of Housing (MIVI)

MIVI lends at 7% for rural housing and 9% for urban areas for 25 years. The principal source of local money for MIVI projects is the so-called thirteenth month money.

7. Other

- a. National Savings Bank (Caja de Ahorros) loans at 9% for 15 years and 10% for 10 years. Although 9% is the legal maximum interest rate the Bank may charge, administrative costs may increase the cost of its money to 12%.
- b. National Social Security Bank (Caja de Seguro Social) loans at 7-9% for 20-25 years and charges no commissions.
- c. Credit Unions loan at 12% for four years - two to three years is the average.
- d. Savings and Loans (there are currently five) have a 9% legal maximum interest rate plus a 1% administrative fee and repayment within 25 years.

MINISTERIO DE COMERCIO E INDUSTRIAS
PROGRAMA DE FINANCIAMIENTO PARA LA PEQUEÑA INDUSTRIA

* * * *

REGLAMENTO DE PRESTAMOS

PANAMA, R. de P.

— 1977 —

REPUBLICA DE PANAMA

MINISTERIO DE COMERCIO E INDUSTRIAS

RESUELTO NUMERO 264 DEL 28 DE ABRIL DE 1977

EL MINISTRO DE COMERCIO E INDUSTRIAS

en uso de sus facultades legales,

CONSIDERANDO:

1. Que en el año de 1965 se creó el Programa de Financiamiento para la Pequeña Industria, con el fin de estimular la creación, desarrollo y progreso de la Pequeña Industria en base a la Asistencia Financiera;
2. Que este Programa se creó como un Programa Piloto, mediante un pequeño aporte inicial para la operación del Programa.
3. Que como consecuencia de los resultados alcanzados, el Programa ha venido consolidándose y recibiendo mayores aportaciones para su operación.
4. Que se hace necesario implantar un Reglamento de Préstamo, para que el trámite de solicitudes y su aprobación cumplan con los requisitos establecidos, como medida para un mejor desarrollo del Programa.

RESUELVE:

1. Aprobar el presente Reglamento de Préstamo como medida para lograr un mejor desarrollo de las actividades del Programa de Financiamiento para la Pequeña Industria, cuyo texto es el siguiente:

CAPITULO I

SUJETO Y OBJETIVOS DEL FINANCIAMIENTO

Artículo 1.1 Prestatarios Elegibles.

- a. El Programa de Financiamiento solo tramitará solicitudes de Préstamos presentadas por personas naturales con plena capacidad para contratar.
- b. El solicitante de un préstamo deberá estar dedicado directamente a su taller o empresa manufacturera en pequeña escala. Para corroborar lo anterior el solicitante deberá presentar la licencia de operación del establecimiento.
- c. El Programa de Financiamiento no atenderá solicitudes de préstamos provenientes de funcionarios del Ministerio de Comercio e Industrias, ni de aquellas personas que se encuentren dentro del segundo grado de consanguinidad o primero de afinidad con funcionarios de este Ministerio.

Artículo 1.2 Objetivos del Financiamiento.

- a. Fomentar en base a la asistencia financiera y técnica, la creación, desarrollo y progreso de la pequeña industria.
- b. Lograr un aumento en el volúmen de empleo.
- c. Utilización de insumos nacionales.
- d. Estimular la sustitución de importaciones e incrementar las exportaciones.
- e. Lograr el beneficio económico y social del país.

CAPITULO II

NATURALEZA DEL FINANCIAMIENTO

Artículo 2.1 Forma de Financiamiento.

El Programa podrá financiar operaciones mediante la concesión de préstamos a pequeños industriales manufactureros cuyo activo fijo no exceda de B/.50,000.00 y ocupen un máximo de 29 empleados. En determinados casos se podrá extender el beneficio a empresas de servicios, atendiendo la naturaleza específica del proyecto siempre que se trate de una actividad directamente relacionada con la industria manufacturera.

Artículo 2.2 Cuantía del Crédito.

- a. El monto de los préstamos que otorga el Programa de Financiamiento es de B/.10,000.00 y el monto mínimo de B/.1,000.00, pero cuando se trate de préstamos para capital de trabajo únicamente, el monto máximo es de B/.5,000.00.
- b. A empresas que se inician, el Programa puede financiar hasta el 90 o/o de la inversión que contemple el proyecto.
- c. A empresas en operación el Programa puede financiar hasta el 85 o/o de la inversión que contemple el proyecto.

Artículo 2.3 Destino del Crédito.

Los préstamos otorgados por el Programa de Financiamiento, pueden ser invertidos en lo siguiente:

- a. La adquisición y/o instalación de maquinaria y equipo. En estos casos el interesado deberá presentar por lo menos dos (2) cotizaciones, mediante facturas pro-forma expedidas por las casas comerciales que venden la maquinaria o el equipo que se desee adquirir.

b. Capital de trabajo.

Estos préstamos se concederán para proporcionar el capital de operación durante un período determinado, el cual podría cubrir solo hasta dos (2) meses.

c. Inversiones fijas a la adquisición y/o ampliación de edificaciones industriales.

En estos casos el interesado deberá presentar un presupuesto de materiales y mano de obra, en el que debe aparecer tanto la firma como el número de cédula de quien lo prepara.

CAPITULO III

CONDICIONES PARA EL FINANCIAMIENTO

Artículo 3.1 Reproductividad económica.

El financiamiento deberá proporcionarse básicamente para proyectos específicos de carácter productivo y sólo en aquellos casos en que la rentabilidad de la inversión quede claramente establecida dentro de la vida económica del proyecto.

Artículo 3.2 Experiencia del solicitante.

Sólo se otorgará financiamiento a aquellas personas con suficiente conocimiento y experiencia para desarrollar el proyecto motivo de la solicitud.

CAPITULO IV

TRAMITE DE LAS SOLICITUDES

Artículo 4.1 Presentación de solicitudes.

Las solicitudes deben ser presentadas por las personas directamente interesadas en el préstamo y a través de formularios especiales proporcionados por el Jefe de la Sección de Asistencia Financiera.

Los formularios de solicitud de préstamo solo se entregarán cuando se haya cumplido con la entrevista técnica al prestatario y se haya efectuado la visita de inspección al taller ó donde se proyecte instalar el mismo.

El formulario de solicitud de préstamo contendrá toda la información que debe ser proporcionada por el interesado, para poder iniciarse la tramitación de la solicitud.

Las informaciones contenidas en las solicitudes, como cualquier otra información sobre la solvencia moral y económica del solicitante serán estrictamente confidenciales.

Artículo 4.3 Impedimento para autorizar financiamiento.

No se podrá autorizar ninguna operación de crédito si en el expediente respectivo no aparece el estudio de factibilidad que respalde la solicitud de préstamo, el que debe mostrar la rentabilidad del proyecto y el ingreso neto de la empresa.

Artículo 4.4 Derecho de trámite.

Toda solicitud aprobada por un monto mayor de B/.5,000.00 deberá pagar un derecho de trámite, que de acuerdo a la escala de los montos será la siguiente:

- a.- Monto de B/.5,000.00 a B/.7,000.00 0.4 o/o
- b.- Monto de B/.7,001.00 a B/.8,500.00 0.5 o/o
- c.- Monto de B/.8,501.00 a B/10,000.00 0.6 o/o

Este derecho debe ser cancelado al momento del desembolso del préstamo.

Artículo 4.5 Rechazo de Solicitudes.

El Programa rechazará las solicitudes de préstamos que no reúnan los requisitos señalados por este Reglamento, así como las que procedan de personas que tengan obligaciones de préstamos con el Programa cuya amortización no se haya cubierto en más de un 60 o/o, ó de aquellas personas que tengan un historial crediticio poco recomendable, ó de deudores morosos del Programa.

CAPITULO V

ADMINISTRACION Y SANEAMIENTO DE LA CARTERA

Artículo 5.1 Control y Vigilancia.

En los contratos de préstamos firmados entre el Programa y el prestatario se estipulan las cláusulas necesarias para proteger al Programa en cualquiera de los casos en que éste debe o desee ejercer sus derechos.

Artículo 5.2 Vencimiento.

Los contratos de préstamos otorgados por el Programa deberán contener una cláusula donde se especifique que considerarán vencidos y el pago total de la obligación será exigible en cualquiera de los siguientes casos:

ciones proporcionadas por el interesado, al formular la solicitud de préstamo.

- c.- Si el deudor se opusiera a la inspección de las inversiones o de los bienes o se negara a proporcionar los informes o facilidades que el Programa le solicite en relación con los mismos.
- d.- Si el deudor dejara transcurrir un mes sin dar aviso escrito de los deterioros sufridos por los bienes o de cualquier hecho que pueda disminuir su valor o comprometer su dominio.
- e.- Si el deudor, sin permiso escrito del Programa, gravase o enajenase a favor de terceros los bienes objetos del préstamo.
- f.- Si el deudor cayese en concurso de acreedores o se decretara sequestro o embargo sobre alguno de sus bienes.
- g.- Si el deudor tomara medidas administrativas o financieras que a juicio del Programa afecten la solidez de la empresa o amenacen las posibilidades de recuperación normal del crédito del Programa.
- h.- En todo los casos en que el deudor incumpla el pactado lícitamente o faltare a las estipulaciones señaladas en el contrato.

CAPITULO VI

TERMINOS DE FINANCIAMIENTO

Artículo 6.1 Plazo.

Se presenta a continuación una escala en los montos de los préstamos para considerar su plazo de amortización dependiendo del destino del crédito.

- a. En préstamos para la adquisición de activos fijos:

a.1	Monto de B/.1,000.00 a B/. 2,000.00	hasta	2 años
a.2	" 2,001.00 a 5,000.00	"	2 1/2 años
a.3	" 5,001.00 a 7,000.00	"	3 1/2 años
a.4	" 7,001.00 a 10,000.00	"	5 años
- b. En préstamos para capital de trabajo:

b.1	Monto de B/.1,000.00 a B/. 4,000.00	hasta	2 años
b.2	" 4,001.00 a 5,000.00	"	3 años
- c. En préstamos mixtos el plazo de amortización nunca será mayor de 5 años, ni menor de 2 años.

Artículo 6.2 Intereses.

Los préstamos otorgados por el Programa devengan intereses anuales del 7 o/o sobre saldos. Esta tasa podrá variar, dependiendo del mercado de capital en determinado momento.

Artículo 6.3 Seguro.

Desde el momento del otorgamiento de un préstamo, el Programa suscribirá y mantendrá una póliza de seguro sobre la vida del prestatario. El costo de esta póliza será amortizado por el Programa mediante el pago de primas mensuales que son estimadas en base al 0.06 o/o de los saldos.

El costo de este seguro se deducirá por adelantado al momento del desembolso del préstamo.

Toda persona mayor de 50 años deberá presentar un certificado de salud, para cumplir exigencias de la Compañía de Seguro.

Artículo 6.4 Garantía.

La garantía que exige el Programa es la personal de un fiador ó co-deudor el cual deberá trabajar preferiblemente en el Gobierno. De trabajar en la empresa privada deberá tener un mínimo de dos (2) años de servicio en la empresa que expide el certificado de trabajo.

El (los) salario (s) del fiador (es) o co-deudor (es) de un préstamo, deberá corresponder al siguiente orden en los montos solicitados:

a.- Para un monto de B/. 1,000.00 a B/. 2,000.00	B/. 300.00 ó más.
b.- " " " " 2,001.00 " 3,000.00	400.00 "
c.- " " " " 3,001.00 " 5,000.00	500.00 "
d.- " " " " 5,001.00 " 7,000.00	650.00 "
e.- " " " " 7,001.00 " 8,000.00	700.00 "
f.- " " " " 8,001.00 " 10,000.00	800.00 "

Todo certificado de trabajo correspondiente a un empleado público será enviado a la Contraloría General de la República para la investigación respectiva de posibles descuentos que se estuviesen practicando en el momento de la solicitud del préstamo.

Ningún funcionario del Ministerio de Comercio e Industrias, podrá constituirse como fiador de un préstamo.

Artículo 6.5 Períodos de Gracia.

El período de gracia en los préstamos otorgados por el Programa puede ser:

- En préstamos para la adquisición de Activos Fijos . . . Hasta 3 meses
- En préstamos para Capital de Trabajo hasta 2 meses
Estos términos estarán a criterio del Programa de acuerdo al monto de los préstamos.
- Durante el período de gracia solo se cobrarán los intereses correspondientes al período fijado y los mismos deben ser pagados mensualmente.

Artículo 6.6 Desembolso del Crédito.

El Programa realizará el desembolso del crédito en forma oportuna y procederá a efectuarlo una vez se formalice la operación ciñéndose a las cláusulas establecidas en el contrato.

El desembolso se efectuará mediante cheques girados a favor de las casas comerciales, compañías ó personas que presten sus servicios y de acuerdo a las partidas correspondientes al plan de inversión, evitándose hasta donde sea posible la entrega de partidas a nombre del prestatario.

CAPITULO VII

CONSTITUCION DEL COMITE DE CREDITO

Artículo 7.1 Funcionarios integrantes.

El Comité de Crédito estará constituido por las siguientes personas:

- El Director General de Industrias.
- El Director del Departamento de Fomento y Productividad Industrial.
- El Jefe de la Sección de Asistencia Financiera.

Artículo 7.2 Ratificación del préstamo.

Toda solicitud de préstamo que haya sido debidamente aprobada por el Comité de Crédito del Programa, deberá ser sometida a la ratificación y aprobación por parte del Señor Ministro ó del Vice-Ministro de Comercio e Industrias, según el caso.

Artículo 7.3 Funciones del Comité de Crédito.

Las funciones del Comité de Crédito serán las de estudiar cada solicitud, mediante la evaluación del estudio de factibilidad que acompañe a la misma, para luego decidir por mayoría, su aprobación o negación. De faltar alguna documentación que deba acompañar a una solicitud o de ser necesario alguna investigación adicional a juicio del Comité de Crédito, la solicitud podría considerarse pendiente para otra reunión.

Artículo 7.4 Fecha en que se reunirá el Comité de Crédito.

El Comité de Crédito deberá reunirse los días jueves de la segunda y cuarta semana de cada mes. Sin embargo, de no haber solicitudes listas para ser presentadas al Comité de Crédito en las fechas señaladas, esta reunión se podrá posponer.

CAPITULO VIII

OTRAS DISPOSICIONES

Artículo 8.1 Trámite de solicitudes en el interior.

Toda solicitud recibida en el área del interior, deberá ser tramitada en la Dirección Regional del Ministerio, de acuerdo a su ubicación.

Una vez tramitada una solicitud de préstamo, deberá ser enviada a la Oficina Central del Programa en Panamá, junto con el respectivo estudio de factibilidad, para ser sometida a la consideración del Comité de Crédito. Este, una vez aprobada o negada una solicitud de préstamo, deberá comunicarlo a la Dirección Regional respectiva.

Las Direcciones Regionales cuentan con la documentación relacionada al trámite de solicitudes, lo mismo que lo relacionado a la fase de recuperación.

Se hace énfasis en la responsabilidad que atañe a cada Dirección Regional en el buen desarrollo del Programa, tanto en la parte de otorgamiento de los préstamos como en la recuperación de los mismos.

Artículo 8.2 Implantación del Reglamento.

Este Reglamento es efectivo a partir de su aprobación por parte del señor Ministro de Comercio e Industrias, y podrá ser modificado o ampliado a juicio de éste.

REGISTRESE Y CUMPLASE.

LIC. JULIO E. SOSA B.
Ministro de Comercio e Industrias

LIC. ARNULFO ROBLES H.
Vice-Ministro de Comercio e Industrias

C O R P O R A C I O N F I N A N C I E R A N A C I O N A L
G E R E N C I A D E A D M I N I S T R A C I O N Y C R E D I T O
E V A L U A C I O N D E P R O Y E C T O S
G U I A G E N E R A L

I. EVALUACION DE ASPECTOS GENERALES:

1.1. Antecedentes: Breve reseña histórica, mencionando estudios e investigaciones previas, dificultades tropezadas y estado actual de proyecto.

Qué alcance y qué importancia tiene el proyecto. Prioridad de la empresa - Pronunciamientos del Comité de Gerencia.

1.2. Solicitud: Monto, Plazo y Condiciones.

1.3. Destino del préstamo, aporte accionario o aval. (Cronograma de desembolsos).

II. EVALUACION DE ASPECTOS ADMINISTRATIVOS:

2.1. Breve reseña histórica de las actividades de la Empresa: Nombre, clase de Sociedad, Ubicación, fecha de constitución y de iniciación de actividades, objeto, capital social, etc.

2.2. Accionistas y/o promotores: Nacionalidad de los accionistas.

2.3. Directorio.

2.4. Dirección ejecutiva y organización administrativa.

2.5. Obreros y Empleados.

2.6. Referencias Bancarias y Comerciales.

2.7. Políticas Administrativas: Fianzas, compras, ventas, producción, inventarios y personal.

III. EVALUACION DE ASPECTOS TECNICOS:

3.1. Especificaciones Técnicas de los productos.

3.2. Proceso Tecnológico: Diagrama del proceso, alternativas del proce

- 2 -

so, descripción del proceso.

- 3.3. Local y disposición de la Planta.
- 3.4. Materias primas y materiales secundarios: Origen y precios, características y análisis, consumo anual, naturaleza del abastecimiento.
- 3.5. Balance de Materias y de Energía.
- 3.6. Patentes.
- 3.7. Maquinarias y equipos auxiliares.
- 3.8. Programas de producción y de implementación.

IV. EVALUACION DE ASPECTOS ECONOMICOS:

- 4.1. Mercado
 - 4.1.1. Productos: Usos y especificaciones comerciales.
Bienes competitivos y/o sustitutivos.
 - 4.1.2. Area del Mercado
 - 4.1.3. Análisis de la demanda
 - 4.1.4. Análisis de la oferta (Planes de expansión de la competencia)
 - 4.1.5. Precios
 - 4.1.6. Proyección de la demanda y de los precios, participación en el mercado.
 - 4.1.7. Comercialización
 - 4.1.8. Política Económica
 - 4.1.9. Conclusiones del estudio del mercado.
- 4.2. Localización y Tamaño
 - 4.2.1. Localización - criterios utilizados
 - 4.2.2. Tamaño, criterios utilizados.
- 4.3. Presupuesto de Ingresos y Gastos.

- 3 -

- 4.4. Punto de Equilibrio
- 4.5. Análisis de sensibilidad de costos e ingresos
- 4.6. Plan de Inversiones y cronograma de inversiones.

V. EVALUACION DE ASPECTOS FINANCIEROS:

- 5.1. Balance General de Apertura
- 5.2. Recursos Financieros: Cuadro de fuentes y usos de fondos.
- 5.3. Proyección de los Estados de Pérdidas y Ganancias.
- 5.4. Flujo de Caja para los primeros 18 meses de vida del proyecto
Flujo de Fondos.
- 5.5. Capacidad de pago (índice de cobertura, otros)
- 5.6. Tasa interna de retorno y Beneficio Costo actualizado.
- 5.7. Análisis de sensibilidad de los índices de rentabilidad.
- 5.8. Rentabilidad para el accionista, para el proyecto y para la empresa.
- 5.9. Plan de amortización de la deuda.
- 5.10. Política de dividendos
- 5.11. Justificación de la tasa de capitalización de utilidades.

VI. BENEFICIOS DEL PROYECTO A LA ECONOMIA

- 6.1. Valor Agregado.
- 6.2. Insumos nacionales.
- 6.3. Efectos en Balanza de Pago.

VII. EVALUACION DE ASPECTOS ADMINISTRATIVOS - GARANTIAS:

- 7.1. Situación legal de la empresa: Constitución, transformación, capacidad de contratar y otorgar garantía.
- 7.2. Situación legal de los bienes: Adquisiciones, disposiciones legales específicas y providencias aconsejables.
- 7.3. Otros aspectos legales (tributarias, crediticias, etc.)
- 7.4. Garantías.

SOCIAL SOUNDNESS ANALYSIS

Methodology: The URBE Project will involve a complex of activities that will take place in eight growth and service centers widely dispersed throughout the Central and Western Regions of Panama. These growth and service centers, in combination with their surrounding hinterlands, provide a geographically broad and culturally diverse field of study.

In consultation with AID/W, the Mission developed a case study methodology for the Social Soundness Analysis in which three centers were analyzed in some detail. The three towns selected were David and Chitré-Los Santos (the Project's two growth centers) and Santiago (a service center). They were selected because they will receive the highest proportion of Project funds; they are located in three geographically, culturally, and economically distinct regions; and all except one Project component (sewerage treatment facilities) will be developed at each of the three sites. Each is also the capital and largest urban area in its respective province.

The following analysis is based on the three case studies conducted over the period January to April 1978 by a local contract sociologist, and an analysis of urban-rural poverty in Panama undertaken by a demographic geographer under an AID/Washington contract.^{1/} The analysis also draws upon material gathered for earlier social soundness analyses, data available from the GOP, and first-hand observations of the USAID staff collected during a series of visits to the growth and service centers during 1977-78.

I. DESCRIPTION OF THE TARGET POPULATION

A. ETHNIC CHARACTERISTICS

The target group for the URBE Project are the poor of Panama's interior, defined as its central and western regions. Within that group are two distinct subgroups - the urban poor who will be the Project's principal beneficiaries and the rural poor who can be divided into farm and non-farm poor. While the rural poor will benefit directly from the Project in some measure (jobs for the un- or underemployed farm and non-farm poor, better access to public markets and other facilities through transport terminals to be constructed), they will, in the main, be indirect beneficiaries through the stimulus to agricultural production anticipated from new or expanded agro-industries.

^{1/} Thomas H. Eighmy and Augustin Garcia L., Mapping the Poverty Line in Western Panama, Checci and Company, Washington, D. C., December 1977 (Contract AID/afr-C-1141, Work Order No. 19).

The population of Panama's interior can be described broadly as mestizo. This ethnic group comprises the majority of Panama's population and forms what could be called tentatively a "Panamanian culture". They are Spanish speaking and Catholic. This group, however, is not ethnically homogeneous. In the provinces of Chiriquí, Veraguas, Herrera and southern Coclé, the mestizo population derives from Indian and Spanish ethnic and cultural antecedents; even within this region, however, differences can be great, depending on the degree to which ethnic intermarriage has occurred. In the Azuero (location for the service center of Las Tablas and both an influence on and influenced by the growth center of Chitré-Los Santos), Spanish ethnic and cultural influences predominate while in the highlands of Coclé, north of the Penonomé service center, the majority of the population is ethnically Indian although cultural patterns are definitely Spanish.

Blacks in the Project area tend to be concentrated around the Gulf of Parita - that is, in the region containing the service center, Aguadulce, and the Chitré-Los Santos growth center - and in some areas along the coastline of the Province of Chiriquí. Unlike the West Indian blacks brought to Panama beginning in the mid-19th century by the U.S. and French to work in construction projects or on banana plantations in Bocas del Toro, the majority of blacks in the Project area are "colonial blacks," descendants of the slaves brought to the Isthmus by the Spaniards who have now become thoroughly acculturated and for all practical purposes have disappeared as a coherent group.^{1/}

Although no major studies on prejudice have been conducted in Panama, whites and light skinned mestizos enjoy a higher status than blacks, Indians and dark skinned mestizos.

B. LOCATION SPECIFIC OBSERVATIONS

While this analysis will attempt to address the target group without frequent reference to regional differences, the following sketch of the area of influence of each of the three case study centers provides a brief introduction to the distinct socio-economic structure of each area.

1. The Area of Influence of David ^{2/}

The general pattern of settlements in the rural area surrounding David is primarily dispersed farms with a scattering of

^{1/} By contrast, a majority of West Indian blacks have remained in the Panama-Colón corridor, isolated as an ethnic group through adherence to cultural patterns - i.e., religious and linguistic - which are in direct contrast to those of the majority of the population.

^{2/} See Maps 3 and 4, Annex II - C.

small villages. Most of the communities are isolated from one another and from the growth center of David. The decade of the 1960's saw an annual growth rate of the rural population of only 1.96% (considerably lower than the rate of natural increase, which averaged 3% during the decade), with many rural inhabitants emigrating to David or to other urban centers in the country (especially the Panama metropolitan area). While most of the rural population is mestizo, there is a small but influential group of ranchers, plantation owners and businessmen descended from West European immigrants who settled in David from the late 19th century on. This group, with large agricultural and commercial holdings, lives in or near David and exerts political and economic power in the region.

See Tables 1 and 2 for poverty statistics defined in terms of per capita income and surrogate income indicators.

2. The Area of Influence of Santiago

The Province of Veraguas, of which Santiago is capital, is almost entirely rural with 78% of the population engaged in agriculture. Veraguas ranks next to lowest in literacy for Panama's nine provinces, and its only other urban concentration of any size outside of Santiago is Soná with 4,000 inhabitants.

The rural areas surrounding Santiago began to experience a decline in their population growth rate in the 1950's, and by the 1960's the rate of growth in rural areas had dropped to 1.53%. The rate of natural increase during that period was again 3%, but as in Chiriquí, large numbers of rural inhabitants (equal numbers of men and women, mostly between the ages of 15 and 34, and with no or at best incomplete primary education) migrated to Santiago, and, in greater numbers, to the metropolitan corridor. During the decade of the sixties, the city of Santiago grew by 67% while the rural population increased by only 15%.

The Ministry of Agricultural Development (MIDA) was relocated from Panama City to Santiago in 1973 which has increased the frequency of Panama-Santiago contact.

See Tables 3 and 4 for a statistical description of poverty in Santiago and the remainder of Veraguas Province.

3. The Area of Influence of Chitré-Los Santos

With more than 23,000 inhabitants (1970), Chitré-Los Santos is the largest urban area in the two provinces of Herrera and Los Santos that comprise the "Azucero Peninsula" and the fourth largest in the Republic. Both provinces are pre-eminently

agricultural with, however, lands best suited for cultivation concentrated in only a few areas, many of which have been converted to pastureland. Slash and burn agriculture is common. Cattle-raising is a major occupation in both provinces, with Herrera ranking second and Los Santos third in milk production among the nine provinces in the country.

Rural settlements in Los Santos and Herrera are primarily small, individual farms, sometimes with rural communities of up to 500 people, and a few larger towns. The family unit in Herrera averages 5 members; in Los Santos, the average is 4 members.

Herrera grew at an annual rate of 2.10% in the 1950's, and 1.74% in the 1960's. Los Santos experienced an annual growth rate of 1.4% during the 1950's and 0.12% during the decade of the 1960's. In both cases, the decline in the growth rate was due to migration to urban areas; almost 90% of those who left the two provinces migrated to Panama City. By the 1960's, the growth rate of the rural population was only .12% in Los Santos and a mere 0.02% in Herrera. In contrast, the urban center of Chitré-Los Santos expanded at a rate of 33% between 1960 and 1970. By 1970, unemployment in Chitré-Los Santos had reached 8.7%, and a number of "shanty towns" had sprouted around the fringes of the town, on private and municipal lands.

Service and commerce sectors are prominent in the economy of Chitré-Los Santos, and the center plays a major role in the wholesale marketing of agricultural produce in the Central Provinces.

See Tables 5, 6 and 7 for statistical indicators of urban and provincial poverty in the two provinces.

C. THE URBAN POOR

During the internal migrations of the 1960's, David, Santiago and Chitré-Los Santos were focal points for migrants seeking improved employment opportunities, better educational facilities for their children, and a more complete and varied life style. While the rate of population growth in the provinces encompassed by the URBE Project declined in the 1960's and 1970's because of migration to the Panama-Colón corridor, the growth and service centers continued to grow at a rate significantly higher than the rate of natural growth. That is, growth in the urban centers attributable to the birth rate was compounded by growth due to an influx of rural migrants. Although the growth of these centers was far less than the dramatic increase experienced by the City of Panama, it nonetheless taxed the ability of such urban areas as David, Santiago and Chitré-Los Santos to provide employment and basic facilities and services for the new migrants.

Unemployment soared, available housing could not meet the demand generated by the newcomers, and by the early 1970's, a sizeable and clearly recognizable "urban poor" had emerged.

The "urban poor" in the URBE target population are essentially rural semi-skilled and unskilled workers: artisans, manual laborers, household servants, vendors, and those engaged in personal services occupations. They are culturally and socially "marginal" in that they have in large degree severed their ties with rural life, but have not been completely integrated into the economic and social life of the urban centers. They are the 9-13% (depending on the city) whose per capita yearly earnings fall below the "poverty line" of \$150 per capita in 1969 dollars. Their living conditions fall below the acceptable parameters as defined by the aggregate poverty index established for Panama's interior in 1977. 1/

The urban poor live in slums or otherwise inadequate housing conditions either sharing basic facilities such as water and toilets or without any access at all. Many do not have electricity. To provide some specific examples, of approximately 4,000 housing units in Santiago at the time of the 1970 census, about 300 were "improvised" (dirt floors, walls of timber, cardboard, zinc, clay and other discarded materials) or were units with shared facilities (water, toilets, baths), rents between \$10-\$40 per month, and three or more persons to a room. It is estimated that at present approximately 3,500 people in Santiago live in some such 650 "casas brujas."

David has several peri-urban squatter settlements established since the 1960's. The government has prevented the erection of improvised housing within the city limits and has sought to provide basic facilities to already established barriadas; homes in the latter now often have latrines but few have access to water and electricity.

There are five "shanty towns" 2/ located on the fringes of Chitré which, according to a survey sponsored by the Ministry of Housing in 1976, include 112 housing units with a population of about 505 people. The units are in poor condition without access to a sewerage system and only limited access to electricity. More than 70% have dirt floors and walls of cardboard, timber, zinc, clay and various other discarded materials. Of families living in these shanty towns, 61% have two to five members while 14% have eight or more. Employed persons are unskilled laborers, manual workers, farmers, and domestic servants, many in temporary jobs and often earning no more than \$100-\$200 a month to support a five-member family.

1/ Op. cit., Eighmy.

2/ La Rejoya, Las Peñitas, Corazón de María, El Rosario and San Martín.

About 66% of the slum dwellers moved to Chitré-Los Santos during the past ten years, over two-thirds emigrants from within Herrera Province and the remainder from the provinces of Veraguas and Los Santos. Their reasons for emigrating to Chitré-Los Santos, in order of priority, were the need for employment, family situations, and the need for housing. Improvised housing on illegally occupied lands within the urban area is expected to increase unless steps are taken to provide affordable homes to low-income migrants.

Literacy and school attendance are low in all three of the urban areas studied, particularly given the relative accessibility of schools. While employment opportunities may be greater, rural migrants, their prior experience limited to small rural farms, do not possess the necessary skills to enter into a labor market where approximately 90% of the jobs are outside of the agricultural sector (as in the three urban centers included in the USAID-funded case studies).

Women fare particularly poorly in the work world statistics of the Republic's interior, in part because of the much greater propensity for females than for males to migrate to urban areas, their lack of job skills, and because they are entering the work force in larger numbers now. ^{1/} While the overall unemployment rate in each of the three urban centers is high, it is actually much higher among women than men. The 1970 unemployment rate in David, for instance, was 6.4% for men and 15.4% for women. These data do not, of course, reflect underemployment experienced by males (as seasonal workers) and females (unemployed for long period between jobs as domestics).

D. THE RURAL POOR

The rural poor included in the target population for the URBE Project can be divided into (1) rural farmers, either working individual plots or engaged in rural cooperative agriculture; and (2) the non-farm rural poor.

1. Rural Farmers

a. Individual Producers

The rural farm poor in the URBE Project area are largely mestizo agriculturalists on small farms (minifundios). Half of the rural farmers cultivate plots less than five hectares in size, and upwards of three-quarters of the rural farmers in the Project area are estimated to not have title to their land.

^{1/} The percentage of economically active females in Panama rose from 17.5% in 1950 to 22.0% in 1970.

Many of the rural farmers divide their time between their small farms and occasional work as jornaleros (day-laborers), supplementing the production of their farms with cash income from work in cattle ranches, sugar mills, coffee plantations and orchards.

Three-quarters of the rural farms in the target area produce exclusively for domestic consumption, and even on those farms where the excess produce is sold, revenues are low: in the David area, cash income on one-third of the farms is less than \$50 annually, and another third averages between \$50 and \$300 annually. Of those farmers who sell excess produce in Herrera, 40% earn less than \$50 per year; 30% in Los Santos earn less than \$50 annually.

b. Communal Farmers

Communal farming enterprises can be found in each of the three areas studied. The number varies from 11 in Los Santos Province and 21 in Herrera to 43 in the Province of Chiriquí and 70 in Veraguas.

The two types of communal farming organizations are "Asentamientos" and "Juntas Agrarias". ^{1/} These agricultural organizations were initiated by the Panamanian government in 1969 in an attempt to improve the economic status of the minifundista, particularly in isolated rural areas. Their purpose is to organize the rural poor, who either have no land or who have very small plots of land whose cultivation is economically unfeasible, into cooperative enterprises. The organization is designed to concentrate the dispersed population and make it possible for the central government to provide them with basic facilities and services -- water, electricity, roads, schools and medical care. Credit and technical assistance are provided to the groups, and members are trained in skills needed to direct an autonomous, cooperative enterprise.

Within the asentamientos and juntas agrarias there are both communal lands (including most of the land) where modern methods of production have been introduced resulting in increased agricultural production; and small individual plots where farmers practice traditional methods of cultivation. In practice, the poor quality of the lands cultivated by these organizations has resulted in less than ideal production levels.

^{1/} The two enterprises are similar in organization and operations and differ only on landownership of members: farmers in asentamientos were originally landless but are provided land through associating with an asentamiento while members of juntas agrarias own land but are virtually without access to other inputs.

In certain cases, the unavailability of land has forced cooperative members to "borrow" land for communal use. The result is that farmers continue to devote a large portion of their time to private plots and continue to seek temporary or permanent sources of income outside the asentamiento or junta agraria. Underutilization of labor in these communal enterprises -- few require more than 120 work days per laborer per year -- encourages farmers to seek outside employment at daily wages of \$2 - \$4.50.

Two additional forms of communal labor -- for projects of short duration -- are common in Panamá. The junta is a short, intensive cooperative effort (with no exchange of money) for the purpose of completing a specific project such as clearing a field or constructing a house. The peonada is similar, but lasts for more than one day, and the host incurs the debt of labor that must be returned at some future date.

2. Non-Farm Rural Poor

The non-farm rural poor in the URBE target group are probably the least prosperous category among the rural poor. Their employment status is unstable, and their irregular income derives mainly from precarious, irregular employment as jornaleros. They find seasonal or temporary employment, with wages for a day's labor fluctuating between \$2 and \$4.50. Often, however, workers are paid by volume (of sugar cane cut, boxes of produce filled) in lieu of a fixed daily wage. The most common sources of employment for these day laborers are cattle ranches or banana, sugar, and coffee plantations.

While "non-farm" describes the most salient economic characteristic of this category of the rural poor -- that is, their livelihood depends almost exclusively on economic activity other than subsistence agriculture - fieldwork for the case studies revealed that the non-farm rural poor usually do occupy and cultivate a very small parcel of land, from which they derive some of their basic food necessities. It is to this small plot of land that they return after harvest. In the Azuero region, for example, non-farm rural laborers can be found cutting sugar cane during the harvest but invariably return to their small subsistence parcels at the conclusion of the harvest season.

As in rural areas throughout Panama, the woman's role includes raising children and keeping the house, but she also provides agricultural labor to the family farm and contributes to family income through handicrafts, small animal breeding (principally poultry and swine) and vegetable growing.

II. PARTICIPATION, BENEFITS, CONSTRAINTS

The ways in which the target population will participate in

and benefit from the URBE Project will be direct or indirect according to the particular Project activity. In addition, as might be expected of a Project designed to promote the development of entire urban/rural-hinterland areas, the target population will not be the sole beneficiaries of Project activities. While groups other than the target population (entrepreneurs, middle managers) will participate in and benefit from the Project, analysis of the anticipated impact of the Project indicates that there will be a reduction of the gap between rich and poor in the Project area as a result of planned activities. The Project should, in fact, improve the quality of life of the urban poor, including those rural migrants who take up residence in the eight urban areas during the life of the Project, and it should benefit the rural poor by stimulating the demand for small farmer production and by strengthening the capacity of the Project towns to provide improved socio-economic facilities and services to the rural folk in their surrounding areas of influence. Ultimately, it is hoped that the Project will set in motion a process which will help to integrate the poor of Panama's rural interior into the economic, social and political mainstream of the Republic.

The following section examines anticipated participation, benefits, and constraints in regard to each Project element - town planning process; productive and supporting enterprises - agro-industries, small business/industries, industrial sites and worker/small entrepreneur training; and housing and town infrastructure - transport terminals, sewerage systems, and recreational and cultural activities.

A. Town Planning Process

One of the most important benefits from the Project should be the assumption of a greater role in local development by local people, an increase, if one will, of citizen competence,^{1/} in the ability to perceive and solve problems (or to arrange for their solution) at the local level, thereby diminishing dependence on the primate city or, in the case of Panama, the metropolitan corridor. If one accepts the premise that the "primary task of a development programme is to help the client system to increase its control of its environment,"^{2/} then the town planning process to be established under the URBE Project has significant development potential.

^{1/} Gabriel A. Almond and Sidney Verba, The Civic Culture, Boston: Little, Brown and Company, 1965.

^{2/} Eric J. Miller, Towards a Model for Integrated Rural Development in Latin America, Tavistock Institute of Human Relations, London, 1977.

The town planning process calls for local participation in the planning of municipal development through two bodies, the Planning Junta and the Consejo Municipal. While it is unlikely that members of the target population will figure among the local officials and representatives of government agencies who will comprise the Planning Juntas, participation - at least indirectly through their elected representantes who form the Consejo Municipal (city council) - will give the target population a voice in the planning of municipal development. In practice, the Planning Junta will act as an advisory body to the Consejo Municipal, but it will be the responsibility of the latter to formulate and adopt a local plan, in collaboration with the Ministries of Planning and Housing.

Past experience has shown that constituents can exert great pressure on their elected representantes in effecting local projects and securing needed services, among them water and sewerage systems, street lights and roads. Thus, while the target population will not participate directly in deliberations on town development plans, they are expected to make their desires known through their representantes.

The inclusion of representatives of the target population in the development planning process as a step toward self-determination by the poorest groups represent progress whose significance should not be under-estimated. Development planning is usually carried out by bureaucrats - usually high level bureaucrats located in the capital city - and the transfer of some decision-making authority to the local level is an important innovation. In the past, the target population (even when previously consulted) has been faced usually with a development scheme as a fait accompli. Its active involvement is expected normally only in the implementation of a plan or project but not in the incipient or planning phase.

The precise form of participation by the target population is expected to evolve during the life of the Project. What can be said at this stage is that the Project represents a positive step toward helping the "client system to increase its control of its environment" by making formal provision for local public participation in the development process.

B. Productive Enterprises

1. Agro-industries

Subloans will directly benefit (a) the owners and managers of new or expanded agro-industrial enterprises, and (b) the unemployed and underemployed urban poor and non-farm rural poor who will be employed directly in Project-financed agro-industries. The planned \$4.6 million investment in the latter should generate about 750-100 new jobs. It will also

result in an increased demand for agricultural raw materials. The impact upon the rural poor should be great since agro-industries will be linked with, in most cases, increased demand for the agricultural production of significant numbers of rural small holders.

Other indirect beneficiaries of this Project component will be the owners and operators of vehicles and other transportation facilities - e.g., service stations, transportation cooperatives - involved in the movement of agricultural produce from production sites to processing plants and from the latter to markets and export facilities.

Industrial infrastructure areas to be established under the Project in David and Chitré-Los Santos will provide jobs in the construction of facilities and factories and, later, jobs in the factories/businesses themselves to be located centrally near low-income housing projects and with easy access to transportation.

The Project will encourage maximum participation by the target population in two ways. First, one of the sub-lending criteria for the ICI for the agro-industrial component will require that subprojects must demonstrate a clear benefit to the target group, preferably through employment generation and linkages with small-holder agriculture.

The second way in which the Project will seek to facilitate target group participation is through the provision of skills training to be directly linked with the establishment or expansion of agro-industries. Such training will be provided for actual and potential employees of agro-industries receiving subloans under the Project. Examples of the kind of training that may be provided are grading and sorting of agricultural produce; quality testing; and the installation, operation and maintenance of agro-processing machines. Women, who outnumber men in the growth and service centers and who are economically handicapped by the lack of work skills, should benefit significantly from the training and follow-on job opportunities to be provided under the Project.

2. Small Business

Subloans for small businesses/industries (to \$50,000) will directly benefit (a) small business owners and (b) the unemployed and underemployed urban poor and rural migrants. Projects financed to date by the MICI loan fund have created on an average more than one permanent job for each \$2,000 invested. According to the selection criteria established for small business activities and the volume of projects to be financed, 750-1300 jobs, estimating conservatively, should be created during the Project.

While certain of the jobs generated will clearly require skilled labor (carpentry, welding, and auto repair, for instance), other jobs - e.g., the manufacture of clothing, candles, and pasta - will require semi-skilled and even unskilled labor.

Apart from being direct beneficiaries, the target population - urban and rural poor - will also benefit indirectly from the small business/industry component in that many of these activities will improve access, often at a reduced cost, to goods and services required by them.

It is expected that women will benefit from the small business/industry component as both employees and owners/manager. Manufacture of clothing and preparation of food-stuffs (candies and pastas) are traditionally sources of employment for the female labor force, and employment in bakeries (as salespersonnel if not as bakers) similarly is a role usually filled by women.

Training will be provided under the Project to both men and women in skilled and semi-skilled job categories and in the management of small businesses and industries. This and training for agro-industrial jobs should enable more women to enter non-traditional job categories.

The job skills training element may be structured as an apprenticeship program under which trainees would be remunerated (at partial or full wages) while enrolled in a training program. Urban and rural poor would be given preference for limited training spots with special attention to male or female heads of households. Through the training component, the Project would ensure that target group-members obtain the skills required for new jobs to be generated by the small enterprise component as well as by new agro-industries.

C. Housing and Town Infrastructure

1. Shelter Solutions

Housing solutions to be financed by the Project will benefit families in the 10th to 49th percentile of income distributions in each growth and service center, and over a third are earmarked for families in the 10th to 20th percentile. Current shelter conditions for the latter are described on pp.5-6.

New or improved shelter and an improved environment will be the primary benefits to the target group under the HIG loan with secondary benefits of a social character such as recreational facilities provided through community organizations which tend to be created or, if already in existence, extend

their reach when new residential areas are created. It is also anticipated that the housing program will generate jobs for the target group either directly in construction or in subsidiary enterprises. 1/

Beneficiaries in the 10th to 30th percentile ranges of the income distribution include laborers, construction workers, domestics, taxi drivers, and factory workers whose modest incomes are sufficiently regular to allow them to amortize the low-cost shelter solutions envisioned under the shelter component of the URBE Project. Many families in these income ranges presently occupy (and in some cases rent) crowded temporary dwellings on land which they do not own. Conditions in such dwellings impose severe social, cultural, and sanitary constraints on their occupants.

Beneficiaries in the 30th to 49th percentile ranges of the income distribution will also include teachers, skilled craftsmen, nurses, mechanics, public and private sector clerical workers, skilled factory workers, and small scale entrepreneurs. Many of these beneficiaries are presently renting deteriorated or otherwise unsatisfactory units or lodging with other families. Over 200 own lots but have not been able to obtain long-term financing for home construction.

In all of the growth and service centers, MIVI has found that such groups are attempting to improve their shelter conditions through community organizations. Membership rolls in these organizations and in cooperatives in Puerto Armuelles, Concepción and Santiago, and applications for housing already in MIVI's regional branches in the growth and service centers, have been drawn on in identifying the target population.

Approximately one quarter of the shelter solutions will be affordable by families in each of the four deciles below the median. As the target population for HIG lending includes all families below the median income level, approximately 25% of the URBE Project shelter solutions have been allocated to families with incomes between the 40th and 49th percentile.

1/ According to the Economic Analysis, which uses Strassman's approximation of four to five years of combined on-site and indirect employment for every \$10,000 investment in housing construction, the Project's shelter component will generate 680 jobs over an estimated four-year "life of Project" for construction activities.

This is especially important as the URBE Project will have to provide shelter for the variety of middle level management, sub-professional employees, technicians, and skilled workers needed in the agro-industrial enterprises to be established in the growth and service centers. It is expected that the private market will be induced to provide housing for the upper level management and professional staff who will be responsible for the agro-industries.

In determining affordability, Project designers have borne in mind that families at lower income levels generally spend a smaller percentage of income for shelter and have devised the following table as a guide to determining affordability:

<u>Decile</u>	<u>Percentage of Income for Shelter</u>
10-20th	7% - 15%
20-30th	10% - 18%
30-40th	18% - 21%
40-50th	20% - 25%

In all cases, families will have schools, medical services, recreational facilities and public transportation within convenient access whereas in their former location all of these were not conveniently available, and, where possible, new housing sites will be located near new sources of employment in the growth and service centers or will otherwise be located in such a way so as to serve the shelter needs of workers in existing or new productive enterprises expected to be established under the URBE Project. Long-term social benefits will result from more sanitary and less crowded living conditions and from proximity to educational, work, medical, recreational and other facilities.

2. Transport Terminals

At the present time, safe and orderly movement of agricultural products and people in the Project area is impeded by the lack of a well organized regional and local transportation system including bus terminals. Daily, buses, trucks, chivas and vans coverage near the central plazas and public markets of Project towns creating serious parking problems, conflicting traffic movements between vehicles and pedestrians, traffic congestion, and a state of general chaos.

New transport terminals in David, Chitré-Los Santos will benefit all target subgroups whose dependence on low-

cost transportation is near absolute. 1/

The terminals will complement an improved road network (being addressed by on-going and planned activities with IDB and AID assistance) and the increase in land transportation that new or better roads will make possible. The end result will mean for the target population a reduction in travel time and cost; improved market access for (a) subsistence farmers needing to transport their small surpluses to market for cash income and (b) producers selling raw materials to agro-industrial plants; improved access to new employment in agro-industries and small businesses and industries for the non-farm rural poor and urban poor; and improved access to (a) health and educational facilities, (b) commercial establishments for the purchase of farm supplies, tools and equipment and other necessities, (c) other public and private services, and (d) recreational and cultural facilities.

The target group - the urban poor, in particular - will also benefit from the jobs to be generated in constructing the transport terminals and the long-term employment to be generated by the service/commercial facilities at or near each terminal.

3. Sewerage Systems

Environmentally sound sewerage systems will benefit all residents in the two service centers - Penonomé and Puerto Armuelles - where they are to be constructed. Both systems currently suffer from inadequate geographic coverage and inadequate septic tank capacity causing constant overflow, particularly during the long rainy season. The resulting stream and creek contamination creates serious health hazards for residents of both communities.

Apart from health benefits, the construction of sewerage systems will generate employment in the two service centers where the subprojects are to be located, the number of jobs dependent on the type of treatment facilities to be selected. Most of the jobs will be in the unskilled labor category, and

1/ Terminals will be optimally located pursuant to the guide plans for each center's development to be completed by the end of 1978, and they will provide ticket vending areas, sanitary facilities administrative offices, storage facilities, and small retail commercial and services establishments, none of which now exist.

will provide a source of employment for urban poor with minimal education and training.^{1/}

4. Cultural and Recreational Facilities and Activities

Improvement of five cultural centers and sports facilities in all the growth and service centers is part of the URBE effort to make the selected market towns more attractive to present and future inhabitants and to provide a minimum of the amenities generally available only in the larger cities of the metropolitan area which tends to increase the latter's attractiveness to potential rural migrants.

Tangible economic benefits will be realized, also, through the generation of jobs in constructing community facilities, in the small number of long-term operations and maintenance jobs to be created, and, most importantly, through the creation of informal employment in handicrafts. Un- and under-employment is high in Panama's interior and by providing handicraft instruction (complemented by marketing assistance)^{2/} to the un- and underemployed in the Project area, the GOP hopes to provide income earning opportunities to the rural and urban poor, most of whom will be women since women dominate handicrafts production in Panama.

There has been an intensive effort during the past few years to encourage development of national handicrafts in Panama, and to find new markets for handicrafts both within Panama (for the growing tourist trade in Panama City and, increasingly, in the country's interior) and elsewhere. During the recent GOP emergency employment program, thousands of women were

^{1/} It is estimated that construction of Project infrastructure (excluding housing) will generate four to five years of direct and indirect employment for every \$20,000 of investment or a minimum of 400 semi-skilled jobs over the estimated four-year "life of Project" for construction activities.

^{2/} Past experience has shown that the primary obstacle to the success of handicrafts projects has been the lack of an adequate marketing and retail outlet system, a potential constraint which will be addressed by providing marketing assistance to the implementing agency (INAC) and the possible establishment of a handicraft cooperative in the Project area similar to one recently established in the metropolitan corridor by the AID-financed Municipal Development Fund.

trained in a variety of traditional and new handicraft techniques. While their labor in this area is rarely full-time, the profits provide at least an additional source of family income, and in some cases the only source of cash income.

III. SPREAD EFFECTS

The effects of the URBE Project will extend beyond its immediate beneficiaries. Spread effects are, in fact, at the heart of this Project - by making investments in the kinds of activities and facilities which will have significant multiplier effects on the income and well-being of the rural and urban poor. Benefits will accrue beyond those residents in the eight centers and their immediate rural environs as the Project sets in motion a process that will increase over time the income and improve the quality of life of all who live within the areas of influence of the centers.

The Project will begin to redress the long-standing development imbalance between the transit zone and the remainder of the country. It represents but the first step in what is viewed by the GOP as a multi-stage, regionally based development strategy which includes also the agriculturally oriented integrated rural development program and health and education inputs. It will benefit those Panamanians who do not participate in the resource and service rich metropolitan corridor and who do not as yet participate to any real degree in the economic, social and political development of their country. Finally, the Project should establish a process whereby local populations become more articulate in defining their development needs and more aggressive in securing the resources - local, provincial, national, private or public - to achieve them.

TABLE No. 2 PROVINCE OF CHIRIQUI: POVERTY INDICATORS FOR THE DISTRICT OF DAVID AND THE REST OF THE PROVINCE

INDICATORS	DISTRICT OF DAVID		REST OF THE PROVINCE	
	NUMBER	%	NUMBER	%
Total				
Population (1970)	58,997	100.0	236,154	100.0
School Age Population 7-15 years old	11,227	19.0	30,335	12.8
Economically Active Population 10 years of age and Over	19,296	32.7	53,421	22.6
Total Occupied Dwellings	11,008	100.0	30,906	100.0
Poverty Indicators				
Improvised Dwellings	150	1.3	494	1.5
Tenements	909	8.2	2,316	7.5
Dwellings with Dirt Floor	2,752	25.0	15,682	50.7
Dwellings without Sanitary Services	935	8.4	11,968	38.7
Dwellings without Water	5,151	46.8	21,810	70.5
Dwellings without Electricity	3,841	34.9	22,168	71.7
Dwellings without Bathrooms	4,942	44.9	23,512	76.0
Dwellings without Refrigerators	7,522	68.3	28,811	93.2
Dwellings without Television	6,887	62.5	28,792	93.1
Dwellings without Radio	2,782	25.2	12,538	40.5
Dwellings without Sewing Machines	6,341	57.6	21,464	69.4
Illiterates over 10 years of age (a) ...	5,124	12.5	38,715	34.1
Non-Students 7-15 years of age (b)	1,222	1.1	11,444	27.4
Subsistence Farmers (c)	3,324	71.1	26,059	57.6
Unemployed	2,152	11.2	3,782	7.1

	DAVID	REST OF THE PROVINCE
(a) <u>Total Population 10 years of age and Over</u>	40,896	113,630
(b) <u>School Age Population 7-15 years old</u>	12,449	41,779
(c) <u>Total Number of Persons Employed in Agricultural Farms</u>	4,678	45,242
(*) <u>Refers to agricultural laborers who do not receive payment in cash.</u>		

Table # 2 ESTIMATES OF THE POVERTY LINE IN THE REPUBLIC OF PANAMA AND IN THE PROVINCE OF CHIRIQUI BASED ON A HOUSEHOLD SURVEY DATED JULY, 1975

	Republic	Province of Chiriquí		
	of Panama	Total	Urban Area	Rural Area
1) Population, Year 1975	1,507.412	232,848	60,768	172,080
2) Families, Year 1975	308,108	45,840	11,856	33,984
3) Average Family Size = $\frac{(1)}{(2)}$	4.89	5.08	5.13	5.06
Annual Income (In Balboas)				
4) Median of the Family, Year 1975	1,770.72	1,201.24	2,301.00	968.51
5) Average per capita, Year 1975	561.24	352.32	581.40	271.44
6) Population below the "poverty line": Income per capita: B/ 212.78, Year 1975 a/	443,398	91,072	7,988	83,084
7) Percentage of the population below B/ 212.78 per capita, Year 1975: 19 : $\frac{(6)}{(1)} \times 100$	29.4	39.1	13.1	48.3

a/ The figure of B/ 212.78 is derived from the poverty line estimated to the year 1969: B/ 150.00 as income per capita, adjusted to an annual inflation rate of 6 percent. See: Eighmy, Thomas "Mapping the poverty line in Western Panama. MIPPE, December 1977, Chapter III, Section C, pages 34-37.

TABLE No. 3 PROVINCE OF VERAGUAS: POVERTY INDICATORS FOR THE DISTRICT OF SANTIAGO AND THE REST OF THE PROVINCE

INDICATORS	DISTRICT OF SANTIAGO		REST OF THE PROVINCE	
	NUMBER	%	NUMBER	%
<u>Total</u>				
Population (1970).....	36,558		115,291	100.0
School Age Population 7-15 years old.....		?		
Economically Active Population 10 years of age and Over.....	7,334	?	19,718	17.1
Total Occupied Dwellings.....	6,927	100.0	22,226	100.0
<u>Poverty Indicators</u>				
Improvised Dwellings.....	227	3.27	77	0.34
Tenements.....	279	4.02	73	0.33
Dwellings with Dirt Floor.....	3,809	5.50	19,568	88.04
Dwellings without Sanitary Services.....	2,112	30.5	17,820	80.17
Dwellings without Water.....	2,085	30.1	18,337	82.50
Dwellings without Electricity.....	4,516	65.2	20,998	94.47
Dwellings without Bathrooms.....	4,489	64.8	21,130	95.06
Dwellings without Refrigerators.....	5,829	84.14	21,670	97.49
Dwellings without Television.....	5,871	84.75	21,766	97.93
Dwellings without Radio.....	2,385	34.43	11,223	50.49
Dwellings without Sewing Machines.....	5,065	73.11	18,939	85.21

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INDICATORS	DISTRICT OF SANTIAGO		REST OF THE PROVINCE	
	NUMBER	%	NUMBER	%
Illiterates over 10 years of age (a) ...	5,739	22.95	38,174	51.09
Non-Students 7-15 years of age (b)	738	9.14	8,051	40.83
Subsistence Farmers (c)	8,012	64.26	44,494	77.27
Unemployed	552	4.75	816	2.15

	DISTRICT	REST OF THE PROVINCE
(a) Total Population 10 years of age and Over	25,004	74,719
(b) School Age Population 7-15 years old	7,334	19,718
(c) Total Number of Persons Employed in Agricultural Farms	12,468	57,579

TABLE No. 4

ESTIMATES OF THE POVERTY LINE IN THE REPUBLIC OF PANAMA AND IN
THE PROVINCE OF VERAGUAS BASED ON A HOUSEHOLD SURVEY DATED
JULY, 1975

	Republic	Province of Veraguas		
	of Panamá	Total	Urban Area	Rural Area
(1) Population, Year 1975	1,507,412	131,500	19,720	11,780
(2) Families, Year 1975	308,108	25,520	3,380	22,140
(3) Average Family Size \Rightarrow (1)/(2)	4.89	5.15	5.83	5.05
<u>Annual Income (In Balboas)</u>				
(4) Median of the Family, Year 1975	770.72	613.32	2,960.40	539.52
(5) Average per capita, Year 1975	561.24	190.08	614.28	115.20
(6) Population below the "poverty line": Income per capita: B/ 212.78, Year 1975 a/	443,398	94,674	1,878	92,196
(7) Percentage of the population below B/ 212.78 per capita, Year 1975: (6)/(1) . 100	29.4	72.0	9.5	82.5

a/ The figure of B/ 212.78 is derived from the poverty line estimated to the year 1969: B/ 150.00 as income per capita, adjusted to an annual inflation rate of 6 percent. See: Eighmy, Thomas "Mapping the poverty line in Western Panama. MIPPE, December 1977, Chapter III, Section C, pages 34-37.

TABLE # 20 :

PROVINCE OF HERRERA: INDICATORS OF POVERTY FROM DISTRICT OF CHITRE AND REST OF THE PROVINCE

INDICATORS	District of Chitré		Rest of the Province	
	Number	Percentage	Number	Percentage
Population (1970)	20,109		52,440	100.0
School age population 7-15 years	3,484		9,687	18.5
Population Economically Active of 10 years old and over	7,568		16,393	31.3
Occupied Housing	4,176	100.0	10,886	100.0
<u>Poverty Indicators</u>				
Improvised housing units	65	1.6	44	0.4
Housing with shared facilities	631	15.1	89	0.8
Housing with dirt floor	666	15.9	8,010	73.6
Housing without sanitary facilities	109	2.6	5,597	51.4
Housing without potable water	63	1.5	6,264	57.5
Housing without electricity	1,258	30.1	9,509	87.4
Housing without bath	1,374	32.9	9,630	88.5
Households without refrigerator	2,638	63.2	10,226	93.9
Households without T.V.	2,575	61.7	10,335	94.9
Households without radio	865	20.7	4,625	42.5
Households without serving machines	2,553	61.1	8,861	81.4
Illiterate (10 years old and over) 1/	1,624	11.0	13,758	39.0
Non students (7-15 years) 2/	252	7.2	2,396	24.7
Subsistence farmers 3/	819	50.6	17,031	69.7
Unemployed 4/	650	8.6	562	3.4

	District of Chitré	Rest of the Province
1/ Total population of ten years old and over	14,790	35,307
2/ School age population 7-15 years	3,484	9,687
3/ Total population occupied in exploitation	1,618	24,450
4/ Population economically active of 10 years old and over	7,568	16,393

TABLE # 6 : 1 :

PROVINCE OF LOS SANTOS: INDICATORS OF POVERTY FROM DISTRICT OF LOS SANTOS AND REST OF THE PROVINCE

INDICATORS	District of Los Santos		Rest of the Province	
	Number	Percentage	Number	Percentage
Population (1970)	<u>16,692</u>		<u>55,688</u>	<u>100.0</u>
School age population 7-15 years	2,959		10,130	18.2
Population Economically Active of 10 years old and over	5,658		18,755	33.7
Occupied Housing	<u>3,805</u>	<u>100.0</u>	<u>12,781</u>	<u>100.0</u>
<u>Poverty Indicators</u>				
Improvised housing units	14	0.4	37	0.3
Housing with shared facilities	108	2.8	153	1.2
Housing with dirt floor	1,653	43.4	6,828	53.4
Housing without sanitary facilities	959	25.2	5,112	40.0
Housing without potable water	814	21.4	5,614	43.9
Housing without electricity	2,948	77.5	9,725	76.1
Housing without bath	2,555	67.1	8,727	68.3
Households without refrigerator	3,287	86.4	11,261	88.1
Households without T.V.	3,389	89.1	11,780	92.2
Households without radio	1,254	33.0	4,377	34.2
Households without serving machines	2,814	74.0	9,373	73.3
Illiterate (10 years old and over) <u>1/</u>	2,914	24.3	12,043	30.6
Non students (7-15 years) <u>2/</u>	331	11.2	1,796	17.7
Subsistence farmers <u>3/</u>	3,484	57.3	14,519	62.3
Unemployed <u>4/</u>	365	6.5	609	3.2

	District of Los Santos	Rest of the Province
<u>1/</u> Total population of ten years old and over	11,994	39,332
<u>2/</u> School age population 7-15 years	2,959	10,130
<u>3/</u> Total population occupied in exploitation	6,076	23,299
<u>4/</u> Population economically active of 10 years old and over	5,658	18,755

TABLE # 7

PROVINCES OF HERRERA AND LOS SANTOS: POVERTY LINE ESTIMATES BASED UPON 1975 HOUSEHOLD. EXPEDITURE SURVEY, BY AREA

D E T A I L	Republic of Panamá	Province of Herrera			Province of Los Santos		
		Total	Urban Area	Rural Area	Total	Urban Area	Rural Area
(1) Population, year 1975	1,507,412	79,904	24,896	55,008	79,992	7,632	72,360
(2) Families	308,108	16,376	5,504	10,872	18,312	1,824	16,488
(3) Family Size = (1)/(2)	4.89	4.95	4.52	5.06	4.37	4.18	4.39
<u>Annual Income</u>							
(4) Median Family, 1975	1,770.72	883.92	1,749.96	666.24	1,080.48	4,585.65	958.32
(5) Mean per capita, 1975	561.24	269.76	538.08	148.32	358.68	729.84	319.56
(6) Population below "Poverty Line": \$ 212.78 per capita, 1975 <u>a/</u>	443,398	40,606	4,117	36,489	33,697	680	33,017
(7) % below \$ 212.78 per capita, 1975 = (6)/(1)	29.4	50.8	16.5	66.3	42.1	8.9	45.6

a/ The sum \$212.78 is derived from the poverty line estimated for the year 1969, \$150.00 per capita income, adjusted to an inflation annual rate of 6%. See : Eighmy, Thomas "Mapping the Poverty Line in Western Panamá", Panamá, MIPPE, Chapter III, Section C pags 34 to 37.

URBE PROJECT - SHELTER COMPONENTTABLE OF CONTENTS

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URBE PROJECT: SHELTER COMPONENT

(Project No. 525-HG-010)

I. DESCRIPTION OF THE PROJECTA. PROJECT PURPOSE

The shelter component supports the URBE Project's concentration of resources in selected Growth and Service Centers as a means of encouraging the integrated development of surrounding rural areas by providing improved infrastructure, transportation and marketing services, facilitating the growth of agro-industries, and generating an increase in related employment opportunities. As an integral part of this concentration of resources, the shelter component has the following purposes:

1. The improvement of shelter conditions for a broad range of families below the median income levels of the Growth and Service Center towns. This requires that appropriate shelter solutions be provided for middle level management, sub-professional employees, technicians, and skilled workers, who are crucial to the success of the polar center approach, as well as for the lower-income residents and rural migrants expected as a result of the URBE Project.

2. Contribute to improving the GOP's institutional capacity to plan and develop Growth and Service Centers by providing for orderly town growth and efficient land use, particularly with regard to environmental and related quality of life factors among low-income residents.

3. To strengthen both the financial position and institutional capability of the National Mortgage Bank (BHN) by a) providing it with a pool of mortgage assets from low-income groups which can be used to collateralize the issuing of cedulas or participation contracts which BHN can sell in the secondary market, and b) with technical assistance to improve BHN's financial management systems and internal auditing capability.

B. PROJECT OUTPUTS1. Shelter Solutions

The shelter component of the URBE Project will provide a total of approximately 2186 individual shelter solutions, ranging from serviced sites to completed two-bedroom units on urbanized lots. The project includes the six basic solutions identified below and described in the Design Standards and Cost Estimates.

- 2 -

Section of the Technical Analysis:

URBE PROJECT - SHELTER COMPONENTSHELTER SOLUTIONS

<u>Type of Solution</u>	<u>Cost Range</u>	<u>No. of Solutions</u>	<u>Required Investment</u>
1. Serviced Sites	\$ 550	400	\$ 220,000
2. Home Improvement Loans	\$1,000	200	200,000
3. Urbanized Lots	\$1,500-1,650	420	685,500
4. Units on Serviced Land Owned by Beneficiary	\$2,000	95	190,000
5. Units with Water and Latrine	\$3,000-3,200	335	1,046,000
6. Completed 2 bdrm. Units on Urbanized Lots	\$4,700-5,700	<u>736</u>	<u>3,870,200</u>
	TOTALS	2,186	\$6,211,700*

These shelter solutions will be distributed among the eight regional Growth and Service Centers to support the development of each center on the basis of estimated demand and affordability. Solutions envisioned for the sub-projects in the following table are identified by numbers 1 through 6, corresponding to the types of solutions listed above.

* This figure does not include allowance for inflation, which has been added to the Total Cost figure in the Financial Input Section of the Project Description, and the Summary Cost Estimate and Financial Plan.

- 3 -

URBE PROJECT: SHELTER COMPONENTSUMMARY OF SHELTER SOLUTIONS

Growth and Service Center/ Sub-Projects	No. of Solutions	Type of Solution	Cost per Solution	Level of Investment
<u>David</u>	<u>650</u>			<u>\$1,857,500</u>
Paraiso	300	6	\$5,400	1,620,000
16 de Diciembre	250	1	550	137,500
David (ciudad)	100	2	1,000	100,000
<u>Santiago</u>	<u>405</u>			<u>593,500</u>
Paso de Las Tablas	150	1	550	82,500
Santiago (ciudad)	100	2	1,000	100,000
Juan XXIII	105	5	3,200	336,000
Primavera (final)	50	3	1,500	75,000
<u>Chitre-Los Santos</u>	<u>466</u>			<u>1,858,200</u>
Agallito No. 2	60	4	2,000	120,000
La Peñita	106	6	5,700	604,200
Chitre-Los Santos (ciudad)	100	6	5,200	520,000
Los Santos	30	6	5,200	156,000
Chitre-Estadio	50	6	5,200	260,000
Chitre-Estadio/ El Rosario	120	3	1,650	198,000
<u>Puerto Armuelles</u>	<u>50</u>			<u>240,000</u>
Puerto Armuelles	50	6	4,800	240,000
<u>Concepcion</u>	<u>50</u>			<u>160,000</u>
Concepcion	50	5	3,200	160,000

- 4 -

Growth and Service Center/ Sub-Projects	No. of Solutions	Type of Solution	Cost per Solution	Level of Investment
<u>Aguadulce</u>	<u>250</u>			<u>\$ 795,000</u>
Pozo Azul I	100	6	\$4,700	470,000
Pozo Azul II	100	3	1,650	165,000
Nata	50	5	3,200	160,000
<u>Penonome</u>	<u>200</u>			<u>397,500</u>
Las Delicias II	150	3	1,650	247,500
Las Delicias III	50	5	3,000	150,000
<u>Las Tablas</u>	<u>115</u>			<u>310,000</u>
Las Tablas	50	5	3,000	150,000
El Sesteadero	20	4	2,000	40,000
Peña Blanca	15	4	2,000	30,000
Guarare	30	5	3,000	90,000
GRAND TOTALS	<u><u>2186</u></u>			<u><u>\$6,211,700*</u></u>

Taken together, the shelter solutions envisioned under this component of the URBE Project will serve the housing needs of families with a broad range of incomes. Of the total 2186 solutions, approximately 25% will be affordable by families in each of the four deciles between the 10th and 50th percentiles of income distribution.

* This figure does not include allowance for inflation, which has been added to the Total Cost figure in the Financial Input Section of the Project Description, and the Summary Cost Estimate and Financial Plan.

The problem of holding in Centers teachers, technicians, skilled craftsmen, secretaries and other essential skills of between the fortieth and forty-ninth income percentile is related to the housing problem. Relatively little housing has been built in Centers for families at this level. Type 6 solutions are principally for such families whose role in local development is important.

2. Institutional Capability (MIVI)

The program will increase the capability of the Ministry of Housing (MIVI) to plan and implement replicable low-income groups. This will be achieved through both the planning and implementation of the URBE Project shelter solutions and the provision of technical assistance. The initial focus of this TA will include:

a. The development of a housing and urban development information system for collecting and storing the wide variety of data available within MIVI, the National Bank of Panama, the University of Panama, and the Department of Statistics and Census. The development of such a system will improve MIVI's capability in program planning, budgeting, and project design, and guide MIVI in its policy decisions.

b. The improvement of MIVI's urban planning capability through the re-organization and re-structuring of the urban planning directorate which is presently being augmented by the return to MIVI of 6 professionals who are completing advance training.

c. The improvement of MIVI's site planning capability through the establishment of sound criteria for site selection and design which take account of topographic conditions, vegetation, and drainage and provide for efficient land use, which is essential in lowering the cost of shelter solutions for low-income groups.

d. The development of MIVI's capability in environmental protection through the provision of participant training in the environmental aspects of project design and implementation.

MIVI proposes establishing the position of Environmental Protection Officer, for whom environmental training abroad would be provided.

3. Institutional Capability (BHN)

The increased institutional capability of the National Mortgage Bank (BHN) to serve the long-term housing finance needs of low-income families. This will be achieved through the provision of technical assistance in the following areas:

a. The development of an internal auditing capability on the part of the BHN through the creation of an Auditing Department which will establish appropriate auditing procedures and controls as well as financial operations auditing procedures for savings and loan institutions. This will strengthen BHN in its efforts to raise additional capital for housing finance from the banking sector which requires regular internal auditing as a condition for lending to BHN.

b. The strengthening of BHN's financial management capability by establishing a financial accounting system; improving its procedures in mortgage portfolio management, the preparation of financial statements and projections; and developing a system for issuing securities against its portfolio in the capital market.

C. PROJECT INPUTS

1. Financial

The total cost of the shelter component of the URBE Project will be \$7,235,000, to be provided as follows:

USAID/Technical Assistance	\$ 445,000
USAID/Housing Guaranty Loan	\$5,400,000
Host Country	<u>\$1,390,000</u>
T o t a l	\$7,235,000

The available funding will be utilized among the various components of the project as follows:

- 7 -

	<u>USAID</u>	<u>Host Country</u>	<u>Total</u>
Serviced Sites	\$ 170,000	\$ 50,000	\$ 220,000
Home Improvement	200,000	--	200,000
Urbanized Lots	585,500	100,000	685,500
Units on Serviced Land Owned by Beneficiary	1,149,000	86,800	1,236,000
Units with Water and Latrine	339,000	371,000	710,000
Completed Unit on Urbanized Lot	<u>2,394,180</u>	<u>776,200</u>	<u>3,160,200</u>
Sub-Total	\$4,837,880	\$1,373,820	\$6,211,700
Plus Inflation	<u>562,120</u>	<u>16,180</u>	<u>578,300</u>
	\$5,400,000	\$1,390,000	\$6,790,000
Technical Assistance	<u>424,000</u>	<u>--</u>	<u>424,000</u>
TOTALS	<u>\$5,824,000</u>	<u>\$1,390,000</u>	<u>\$7,214,000</u>

2. Technical Assistance

AID will make available a total of \$445,000 as part of the URBE Project Development Loan to finance approximately 60 persons/months of technical assistance. The variety of shelter solutions to be provided in the eight Growth and Service Centers constitutes an institutionally demanding program. Considerable medium- and short-term technical assistance will be essential for MIVI and the BHN to plan and implement the shelter component's sub-projects, and based on this experience to develop the institutional capability to plan and implement similar projects. The following technical expertise will therefore be provided as part of the shelter component of the URBE Project:

a. MIVI:

i. Technical assistance on the housing and urban

development information system will consist of an assessment of available information as compared to MIVI's needs; advice on the organization and operation of the system; training for MIVI information system staff. A total of 15 person/months of appropriate technical expertise will be required.

ii. Technical assistance in the organization of MIVI's urban planning staff, and establishing the structure and procedures for its administration will require a total of 12 person/months of an experienced senior level urban planning consultant to be provided over an 18 month period as follows: 4 months in the field, followed by 2 months out, 3 months in, 2 months out, 3 months in, 2 months out, 2 months in. MIVI itself has suggested such a sequence to facilitate impact evaluation while discouraging too great a dependence on the consultant.

iii. To assist MIVI in improving its site planning capability, the services of a site planner/design specialist will be provided to help formulate standard plans for several site design types, advise on the preparation of plans for specific sub-projects and help oversee their implementation, and train MIVI counterparts. This will require a total of 12 person/months to be phased over an 18 month period similar to the sequence identified above the urban planning specialist.

iv. To assist MIVI in establishing an environmental protection capability, the designated Environmental Protection Officer will receive approximately 9 months of advanced training in the U. S. An additional 2 person/months of short-term environmental consultant services will be made available to the Environmental Protection Officer after the U. S. training to assist in the preparation of guidelines and establishment of regulations and procedures for MIVI projects.

b. BHN

i. To assist BHN to develop its internal auditing capability, the services of a public accountant with experience in management analysis will be provided to advise on the establishment, organization, and operations of an auditing department, and to assist the Department of Supervision of S&Ls in preparing for S&L institutions a procedures manual for their financial operations auditing. This activity will require a total of 4 person/months, three months of which will be devoted to establishing an audit department and preparing the S&L procedures manual with one month of follow up activity after these systems have been instituted.

ii. Technical assistance to strengthen BHN's financial management capability will be provided by a senior level financial management expert with experience in financial economics or public accounting for housing finance systems. The services of this expert will be provided for 12 person/months on a resident basis to assure coordination of the variety of financial management activities recommended to BHN. Specifically, the resident financial management advisor will assist the Department of Accounting and Budgeting to set up a financial accounting system, to improve billing and collections procedures and delinquency control, and to establish guidelines for the preparation of financial statements, ratios and reports. The advisor will also assist the Department of Financial Control in preparing procedures manuals for making financial projections of investments, re-investments, and FHA reserves, and assist in developing systems for the marketing, redemption and liquidity requirements of securities issues offered by BHN in the capital market. (See page 37: Technical Assistance Cost Breakdown).

II. PROJECT SPECIFIC ANALYSES

A. ECONOMIC FEASIBILITY

1. Shelter construction, unlike many other development activities, has strong positive economic benefits for developing economies in that it creates a demand for finished building materials and the raw materials needed to produce them. This is particularly true in Panama which meets nearly all of the demand for building materials from domestic secondary (manufacturing) and primary (extractive) industries. As the shelter solutions designed for the URBE Project will use domestically produced materials exclusively, the linkages to the domestic economy will be especially strong, with the resultant multiplier effects. In such a case, leakages out of the domestic economy are minimized. The positive economic benefits of the shelter investment to be provided under the URBE Project could be further maximized if the materials used in construction are produced in the industrial areas being established for the Growth and Service Centers, and the raw materials for their manufacture extracted from the surrounding region. This argues persuasively for encouraging the establishment of such small scale enterprises as concrete block production, lumber milling, etc. as part of the URBE Project's industrial development effort.

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2. One very important aspect of shelter production and investment in the URBE Project is the increased direct and indirect employment expected to result from construction and related activities. A wide range of figures has been reviewed in attempting to measure the number of direct and indirect jobs which result from shelter investment. The rule of thumb developed by Strassman in "Employment Generation through Residential Construction in Rio de Janeiro" (Michigan State, Oct. 1975) and "The Employment Effects of Housing in Mexico" (I.L.O., 1974), has been applied to the present project: every \$10,000 of investment in housing construction generates approximately 4 to 5 person-years of combined on-site and indirect employment. For the total shelter investment of \$6.79 million included in the URBE Project, this yields a range of approximately 2,700 to 3,400 person-years of employment. Considering that the level of shelter production activity has been relatively low in the Growth and Service Centers, and that unemployment and under-employment have been relatively high, the employment generation effects of the URBE Project investment will significantly increase the income levels of many of the target beneficiaries. The resulting multiplier effects of this increased income, in terms of the increased demand for goods and services in the Growth and Service Centers, directly supports the URBE Project's objective of spurring development activity outside the Panama City-Colon metropolitan area.

3. As all of the proposed solutions will be financed with medium and long-term loans, the shelter component of the URBE Project offers additional economic benefits in terms of financial development. The extension of institutional credit and collection facilities to the Growth and Service Centers allows project beneficiaries—who previously have not had access to long-term credit—to establish credit relationships with the formal financial sector. This is essential for fully integrating the population outside the major metropolitan area into the modern economy. The increasing financial sophistication which thus occurs has the potential for encouraging project beneficiaries to save within the formal sector, rather than to hold liquid assets outside of the money economy.

B. TECHNICAL ANALYSIS

1. Site Selection

Sub-projects for the shelter component of the URBE Project were chosen to support the concentration of resources in the selected Growth and Service Centers by providing a variety of shelter solutions appropriate to the needs of each center. Sub-projects have preliminarily been selected to meet the following criteria:

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a. Sub-projects will help alleviate existing land use problems which currently contribute to the deterioration of the environment and/or restrict the central place functions of each Growth and Service Center.

b. Sub-projects will address housing problems of low-income families in Growth and Service Centers and in peripheral areas of these centers.

c. Sub-projects will serve the shelter needs of workers in existing or new productive enterprises expected with URBE Project activities.

The total number of 2,186 shelter solutions was established in consultation with the Ministries of Housing and Planning on the basis of requests already on file with MIVI, and on the basis of projected needs to support the development of new industries.

These needs include:

i. Shelter solutions for re-locating shanty dwellers squatting in road or utility rights of way or on other marginal sites.

ii. Home improvement loans for families who have started but not yet completed their homes with financing from informal sources;

iii. Housing on land identified and available adjacent to agro-industrial infrastructure to support industrial development;

iv. Housing on lots owned by individual families for whom long-term financing has not been available.

Land is available for the sub-projects in all locations at prices compatible with the cost constraints which exist for low-income families. In some locations, land presently owned by MIVI or the municipalities is available.

2. Design Standards and Cost Estimates

The costs of sub-projects have been estimated on the basis of 1978 cost data, to which an inflation factor of approximately 7.5% per annum has been added on the undisbursed portions

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of the project financing during a three year period of implementation. Project design has taken account of both estimated demand and the borrowing capacity of target beneficiaries. Project cost estimates are based on the following design criteria:

Type 1 - Serviced Sites

Serviced sites are to be provided to families whose incomes preclude their being able to purchase completed units. Lots of 300 sq. m. or less will be served with water connections to property lines and face on gravel roads. Electricity is not included in costs but may be obtained on an individual basis. Beneficiaries will receive legal title to the lots and be expected to construct temporary shelters which will be improved as their incomes rise.

Type 2 - Home Improvement Loans/Core Units

This solution provides a basic core unit to families living in squatter dwellings, or makes loans available to families who own their land and need to complete or up-grade their units. The core units will be 36 sq. m., with concrete floors, galvanized sheet metal roofing, cement block walls without plaster finishing. Beneficiaries will provide interior partitions, windows and doors. This solution has been satisfactorily demonstrated by MIVI in David.

Type 3 - Urbanized Lots

Urbanized lots fronting on gravel roads or walkways will be no larger than 300 sq. m., and will have water, sewer connections and electrical provided up to the property line. Beneficiaries will be expected to construct temporary shelters which will be up-graded as funds become available.

Type 4 - Units on Serviced Land Owned by Beneficiary

For families who already own land served by water and sewer systems or latrines, units of 45 sq. m. will be provided which contain two bedrooms, living-dining room, and kitchen. Electrical service will be arranged by the owner.

It is to be noted that for this project IRHE has agreed to establish a procedure whereby the cost of electrical installation will be paid for through the monthly electrical bills of consumers.

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Type 5 - Unit with Water and Latrine

This solution includes a 45 sq. m. unit with two bedrooms, living-dining room, kitchen, and latrine. Lots will be no larger than 300 sq. m., will be serviced with potable water and electricity, and will front on gravel access roads.

Type 6 - Completed Two Bedroom Unit on Urbanized Lot

This solution provides 45 sq. m. units, with two bedrooms, living-dining room, kitchen and WC. Lots of not more than 300 sq. m. will be serviced with electricity, water and sewer systems and roads. In some cases units of this type will be provided on land already owned by beneficiaries.

The following table gives a preliminary cost breakdown for each of the six shelter solutions identified above:

PRELIMINARY COST ESTIMATES

<u>ITEM</u>	<u>COST PER SOLUTION</u>	<u>NO. OF SOLUTIONS</u>	<u>TOTAL COSTS</u>
<u>Type 1 - Serviced Sites</u>			
Land	\$150.00	400	\$ 60,000
Surveying/Certification of Title	75.00	400	30,000
Water System	150.00	400	60,000
Roads (gravel surface)	<u>175.00</u>	<u>400</u>	<u>70,000</u>
Type 1 - Total	\$550.00	400	\$220,000
<u>Type 2 - Home Improvement</u>			
Loan per unit or Core unit w/concrete floor and metal roof (36.0 sq. m.)	<u>\$1,000.00</u>	<u>200</u>	<u>\$200,000</u>
Type 2 - Total	\$1,000.00	200	\$200,000

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<u>ITEM</u>	<u>COST PER SOLUTION</u>	<u>NO. OF SOLUTIONS</u>	<u>TOTAL COSTS</u>
<u>Type 3 - Urbanized Lots</u>			
Land	\$ 250.00	370	\$ 92,500
Sewage System	1,000.00	370	370,000
Water System	150.00	370	55,500
Roads, Walks, Drainage	<u>250.00</u>	<u>370</u>	<u>92,500</u>
	\$1,650.00	370	\$610,500
With water system already in place	<u>\$1,500.00</u>	<u>50</u>	<u>75,000</u>
Type 3 - Total	\$1,500-1,650	420	\$685,500
<u>Type 4 - Unit on Serviced Land Owned by Beneficiary</u>			
Unit Construction Cost (2 bdrms./Living room/ Kitchen/porch)	<u>\$2,000.00</u>	<u>95</u>	<u>\$190,000</u>
Type 4 - Total	\$2,000.00	95	\$190,000
<u>Type 5 - Unit with Water and Latrine</u>			
Unit Construction Cost (2 bdrms./Living room/ Kitchen with Sink/ Electricity/Latrine and shower)	\$2,600.00	205	\$533,000
Water System	150.00	205	30,750
Roads/Drainage	250.00	205	51,250
Land	<u>200.00</u>	<u>205</u>	<u>41,000</u>
	\$3,200.00	205	\$656,000
On Land Owned by Beneficiary	<u>\$3,000.00</u>	<u>130</u>	<u>\$390,000</u>
Type 5 - Total	\$3,000-3,200	335	\$1,046,000

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<u>ITEM</u>	<u>COST PER SOLUTION</u>	<u>NO. OF SOLUTIONS</u>	<u>TOTAL COSTS</u>
<u>Type 6 - Completed Unit on Urbanized Lot</u>			
Unit Construction Cost (2 bdrms./Living Room/ Kitchen/Wc/Electricity	\$3,500.00	180	\$ 630,000
Water System	150.00	180	27,000
Sewage System	\$1,000.00	180	\$ 180,000
Roads/Drainage	250.00	180	45,000
Land	<u>300.00</u>	<u>180</u>	<u>54,000</u>
	\$5,200.00	180	\$ 936,000
On Serviced Land Owned by Beneficiary	\$4,800	50	\$ 240,000
	4,700	100	470,000
On Higher Cost Land	\$5,400	300	\$1,620,000
	<u>5,700</u>	<u>106</u>	<u>604,200</u>
Type 6 - Total	\$4,700-5,700	736	\$3,870,200
T O T A L		<u>2186</u>	<u>\$6,211,700</u>
Inflation Factor			<u>\$ 578,300</u>
TOTAL PROJECT COST			<u>\$6,790,000</u>

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Inflation on these types of construction has been projected by MIVI at 7.5% per annum. The inflation factor added to the project cost estimate above is based on the assumption that the project will be completed over a three year period, according to the disbursement schedule in the Implementation Plan.

3. Employment

No complex or unproven construction techniques will be used and no specialized construction skills will be required for the shelter solutions proposed. Unskilled labor will be drawn primarily from the target beneficiaries of the URBE Project, many of whom are presently unemployed or under-employed. On-site training of these laborers should lead some to "skilled" status, thereby permitting some workers to improve their earning capacity. Where self-help construction is involved, families may utilize the newly-learned skills of their neighbors for building or improving their dwellings, as also may target beneficiaries who have permanent employment.

4. Building Materials

While the shelter component of the URBE Project envisions improving and up-grading traditional building materials and methods, virtually all of the materials to be used during construction are domestically produced. Existing expertise within MIVI will be utilized for design and construction technology in order to maximize replicability for local conditions. Both materials and technology will be selected to facilitate community participation both in self-help construction and the provision locally of such building materials as sand, gravel, stone and lumber.

C. ADMINISTRATIVE ANALYSIS

1. Ministry of Housing (MIVI)

Created under Law No. 9 (January 1973), MIVI is authorized to formulate and implement housing and urban development policy, and to guide in the formation of policy for private investments in these areas. MIVI exercises this authority through an organization structured to handle the broad range of activities for which it is responsible. Three of MIVI's eight branches are located in URBE Project Growth and Service Centers (David, Chitre and Santiago), and a sub-branch is in Penonome. The MIVI branches in these centers are staffed by 36 permanent employees.

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Of the total of MIVI's 2,400 employees, 922 are considered permanent staff, and the remainder are on contract. MIVI's professional staff includes 56 architects and 20 engineers.

MIVI's stated mandate is to provide housing to families most in need. Its programs include four main types of shelter solutions: 1) serviced lots with core units; 2) completed single-family units; 3) multi-family units; and 4) community up-grading. Within these broad categories, MIVI has 10 proto-type solutions, reflecting the wide range of income groups served by its programs, and the flexible construction and urbanization standards required to do so.

Between 1975/76 and the end of 1977, MIVI was responsible for the construction of almost 12,000 shelter solutions in 25 project areas. Approximately one-quarter of these units were priced below \$5,000, well within the range proposed for the URBE Project. Within the past two years, MIVI has completed small scale projects in five of the eight Growth and Service Centers, and finds demand in these towns to be many times the available supply.

While its production record is clearly outstanding, much of MIVI's management and administration is being borne by the relatively few professionals at the top. It has need at present to develop better housing and urban development information systems to guide its leadership in making informed policy decisions which will affect the shelter conditions of many thousands of Panamanian families during the next several years. It must re-organize and re-structure its urban planning directorate to incorporate into its activities the planners now returning to MIVI after advanced studies. In addition, its approach to site planning has fallen behind recent developments in the field, which precludes its being able to make the most efficient use of the land and infrastructure which it develops. While it has begun to express real concern for the environmental impacts of its activities, it lacks qualified professionals trained to make the necessary assessments. The technical assistance to be provided to MIVI as part of the URBE Project is designed to address these needs, and will significantly strengthen the capacity of this institution to better plan and implement projects which meet the shelter needs of Panama's low-income families.

2. National Mortgage Bank (BHN)

The National Mortgage Bank (BHN) was created under Law No. 10 of January 25, 1973, with a mandate from the Panamanian Constitution, to facilitate the financing of national housing programs and to implement financial and other national housing

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policies as established by the Ministry of Housing. BHN is both the financing arm of MIVI, (which has final approval for its loans to the private sector), and the regulatory agency for the savings and loan system. The BHN's policies and administrative procedures are formulated by an Executive Committee composed of the Minister of Housing, who is its chairman, the Minister of Planning and Economic Policy, the Minister of Labor, the General Manager of the National Bank of Panama, and the General Manager of the BHN. While day-today administration and management of BHN's operations are the responsibility of its General Manager, supported by a staff of 94 including 24 professionals, administrative authority is firmly held by the Executive Committee, whose chairman, for example, must sign even the smallest checks. A management analysis of BHN, undertaken for RHUDO/Panama, revealed that its generally inefficient administration is the result of its lack of internal control, (e.g. there is no internal audit department, and BHN has very weak financial management systems), as well as ineffective policy direction from the Executive Committee which does not meet on a regular basis. Thus while the Executive Committee retains primary authority, its irregular exercise of this authority tends to contribute to the administrative difficulties apparent from analysis of the institution.

Despite this, BHN has been active in financing housing programs in Panama. For the year ending Dec. 1977, the Bank financed units with a total value of \$46.3 million. While this included urban and rural housing projects and housing cooperative activities throughout the country, the principal focus of BHN financing was the Panama City-Colon metropolitan area where 95% of its investment activities was concentrated. Through the savings and loan system, BHN has financed 1,298 units, valued at \$12.4 million, of which 309 units were domestically financed, and the remaining 989 financed with AID loans. BHN also supports cooperative housing efforts and is presently financing 700 units being built by the Nuevo Chorrillo Cooperative in Arraijan.

Insufficient information is presently available from BHN for a complete analysis to be made of its financial condition, in part because its own internal financial management and auditing systems are inadequate for its current operations. Nevertheless, BHN has made preliminary estimates of its projected position over the next several years, which indicate that the Bank will incur a deficit of approximately \$4.8 million on its operations in 1978. These are to be off-set by anticipated capital in-flows and available reserves which BHN projects are to be over \$30 million by year end. BHN estimates that its current operating balance will

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record a \$1.2 million surplus in 1979, increasing to \$6.9 million by 1981, largely as a result of increased interest earnings from activities now under way or projected.

This kind of improvement in BHN's financial condition appears possible if it is able to correct numerous administrative and managerial problems. BHN concurs in the need to improve and appears willing to do so. While the technical assistance to be provided to the Bank under the URBE Project is designed to encourage and facilitate this process, BHN will need the full support of its Executive Committee for progress to be achieved. AID will require that the following actions be taken in order to strengthen BHN's institutional capability to handle the HG loan financing:

a. The Executive Committee must permit the General Manager to exercise greater operational and management responsibility. This is to be accomplished by the adoption of a set of internal regulations (reglamento) which do not presently exist, and will include authority to establish operational and management procedures, to commit and disburse funds up to a pre-established maximum, and to manage the mortgage portfolio held in its name. (At present, MIVI is registering all its mortgages in order to be able to transfer to BHN the mortgages it holds in the name of MIVI's predecessor agency, IVU). While such a delegation of authority to the General Manager is permitted by the BHN's organic law, no such delegation has ever been issued, and there is in practice a variety of encumbrances which preclude BHN's internal leadership from fulfilling its role, chief among them being the absence of a reglamento. For BHN to develop into the effective housing finance institution which it was established to be, the Executive Committee must provide operational authority to the Bank's management, retaining for itself only overall policy control and approval of major commitments or obligations of funds.

b. The Executive Committee in delegating such authority must direct its General Manager to establish the internal controls which are essential for the efficient operation of the BHN. This includes establishing and permanently staffing an Internal Audit Department, having the BHN's financial statements audit by outside auditors on a regular annual basis, and instituting the variety of financial management procedures and controls recommended in the several management analyses undertaken on behalf of RHUDO and forwarded to BHN.

c. For BHN to be able to attract capital into the housing finance market, the process of transferring mortgages from MIVI to BHN should be completed as quickly as possible.

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Holding title to these mortgages will allow BHN to offer for sale in the secondary market cedulas or participation certificates backed by its entire mortgage portfolio.

d. The Executive Committee should begin to set in motion the process by which the management of collections on mortgages held by BHN is transferred to it from MIVI. As a banking institution, BHN should have responsibility for its own collections. This transfer should be undertaken after BHN's management has moved to strengthen its internal operations, and can be easily achieved by transferring the collections staff of MIVI to BHN.

III. FINANCIAL PLAN

A. COST RECOVERY

Both MIVI and BHN operate on the basis of full cost recovery to the maximum extent possible. Interest rates on BHN financed projects range from 7% to 9.5% depending on the source of funds. BHN's investment funds are derived from the Social Security Fund (known as the Thirteenth Month Fund), portfolio repayments, and domestic and foreign loans. The Thirteenth Month money is loaned to BHN by the Social Security Bank at 3% for 10 years, with repayments by BHN of principal and interest earmarked for the Social Security Bank's programs of old age, injury, and death.

The costs of all project solutions will be financed by BHN for terms of 10 to 25 years depending on the cost of the solutions and the ability of target beneficiaries to pay. The interest rate on these loans will be sufficient to cover the interest cost on the HG loan, plus an administrative fee of 0.75% which has been determined reasonable through experience with this same fee on the Nuevo Chorrillo Project. Downpayments of 5 to 10% of the sales price will be made by beneficiaries for units costing \$2,000 and above. Beneficiaries who receive serviced or urbanized lots will be expected to erect temporary shelter in lieu of making cash down-payments.

B. Summary Cost Estimate and Financial Plan

The following table is based on the preliminary cost estimates included in the Technical Analysis, and contemplates and allows for an annual inflation rate of 7.5% on the undisbursed portion of project funds during a 36-month period of implementation. The table includes \$490,000 in beneficiary cash down-payments, as noted above.

URBE PROJECT: SHELTER COMPONENTSUMMARY COST ESTIMATEAND FINANCIAL PLAN

(in thousands of U.S. dollars)

<u>Source of Funds</u>	<u>Serviced Sites</u>	<u>Home Improvement</u>	<u>Urbanized Lots</u>	<u>Unit on Land Owned by Beneficiary</u>	<u>Unit with Water and Latrine</u>	<u>Unit on Urbanized Lot</u>	<u>Technical Assistance</u>	<u>Sub-Totals</u>
AID/DL	--	--	--	--	--	--	424	445.00
AID/HC	170	200	585.5	1,149.2	339	2,394.18	--	4,837.00
GOP	50	--	100.0	--	300	450.00	--	900.00
Beneficiary Down-Payments	--	--	--	86.8	71	316.02	--	473.82
Sub-totals	\$220	200	685.5	1,236.0	710	3,160.20	424.	6,635.7
							Plus inflation factor:	578.3
							TOTAL	<u>\$7,214.0</u>

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C. AFFORDABILITY BY TARGET GROUP

Based on the available income distribution data for eight regional Growth and Service Centers, the shelter solutions to be provided under the URBE Project will be affordable by families ranging from the 10th to the 50th percentiles of the distributions, as summarized in the table below:

URBE PROJECT - SHELTER COMPONENTNumber and Percentage Share of Shelter Solutionsand Total Investment by Decile of Income Distribution

<u>Decile</u>	<u>No. of Solutions</u>	<u>Percent of Total</u>	<u>Level of Investment</u>	<u>Percent of Total</u>
10-20th	650	29.7%	\$ 560,000	9.0%
20-30th	470	21.5%	984,000	15.8%
30-40th	510	23.3%	1,875,500	30.2%
40-50th	<u>556</u>	<u>25.4%</u>	<u>2,792,200</u>	<u>45.0%</u>
Totals	2,186	100.0%	\$6,211,700	100.0%

As can be seen in the table approximately one quarter of the shelter solutions will be affordable by families in each of the four deciles below the median. As the target population for HG lending includes all families below the median income level, approximately 25% of the URBE Project shelter solutions have been allocated to families with incomes between the 40th and 50th percentiles. This is especially important as the URBE Project will have to provide shelter for the variety of middle level management, sub-professional employees, technicians, and skilled workers needed in the agro-industrial enterprises to be established in the Growth and Service Centers. It is expected the private market will be induced to provide housing for the upper level management and professional staff who will be responsible for the agro-industries.

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Beneficiaries in the 30th to 50th percentile ranges of the income distribution will also include teachers, skilled craftsmen, nurses, mechanics, public and private sector clerical workers, skilled factory workers, small scale entrepreneurs, etc. Many of these beneficiaries are presently renting deteriorated or otherwise unsatisfactory units or lodging with other families. Over 200 own lots but have not been able to obtain long-term financing for home construction.

Beneficiaries in the 10th to 30th percentile ranges of the income distribution include laborers, construction workers, domestics, taxi drivers, factory workers, etc. whose modest incomes are sufficiently regular to allow them to amortize the low-cost shelter solutions envisioned under the shelter component of the URBE Project. Many families in these income ranges presently occupy (and in some cases rent) crowded temporary dwellings on land which they do not own. Conditions in such dwellings impose severe social, cultural, and sanitary constraints on their occupants.

In all of the Growth and Service Centers, MIVI has found that such groups are attempting to improve their shelter conditions through community organizations. Membership rolls in these organizations and in cooperatives in Puerto Armuelles, Concepcion and Santiago, and applications for housing already in MIVI's regional branches in the Growth and Service Centers, have been drawn on in identifying the target population.

The following table includes calculations of affordability which have been made for each of the shelter component's sub-projects. As families at lower income levels generally spend a smaller percentage of income for shelter, in determining affordability the following general criteria have been used:

<u>Decile</u>	<u>Percentage of Income for Shelter</u>
10-20th	7% - 15%
20-30th	10% - 18%
30-40th	18% - 21%
40-50th	20% - 25%

It will be noted from the following table that for Chitre-Los Santos families in the 30th to 40th percentile range have relatively high incomes, and thus will be able to spend 25% of income for the shelter solutions provided.

While an annual inflation rate of 7% over the life of the project is estimated, wages, depressed for some time, are expected to increase at about equal pace during the anticipated economic upswing over the same period. As result, the Target Group is expected to remain unchanged.

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URBE PROJECT: SHELTER COMPONENTAFFORDABILITY OF SUB-PROJECTS BY DECILE

(based on income distribution of each town)

	<u>Cost of Solution</u>	<u>No. of Solutions</u>	<u>Monthly Payment</u>	<u>Loan Terms</u>	<u>Percentage of Income for Housing</u>	<u>Affordability by Decile</u>
<u>DAVID</u>						
Paraiso	5,400	300	44.16	10%/25 yrs.	24%	40 - 50th
16 de Diciembre	550	250	7.27	10 years	7%	10 - 20th
David (ciudad)	1,000	100	13.22	10 years	10%	20 - 30th
<u>SANTIAGO</u>						
Paso de las Tablas	550	150	7.27	10 years	6%	10 - 20th
Santiago (ciudad)	1,000	100	13.22	10 years	11%	10 - 20th
Juan XXIII	3,200	105	29.34	5%/20 yrs.	18%	20 - 30th
Primavera (final)	1,500	50	19.82	15 years	16%	10 - 20th
<u>CHITRE-LOS SANTOS</u>						
Agallito No. 2	2,000	60	21.49	15 years	16%	20 - 30th
La Peñita	5,700	106	46.62	10%/25yrs.	24%	40 - 50th
Chitre-Los Santos (ciudad)	5,200	100	42.53	10%/25 yrs.	25%	30 - 40th
Los Santos	5,200	30	42.53	10%/25 yrs.	25%	30 - 40th
Chitre-Estadio	5,200	50	42.53	10%/25 yrs.	25%	30 - 40th
Chitre-Estadio						
El Rosario	1,650	120	17.73	15 years	13%	20 - 30th
<u>PUERTO ARMUELLES</u>						
Pto. Armuelles	4,800	50	41.44	10%/25 yrs.	23%	40 - 50th
<u>CONCEPCION</u>						
Concepcion	3,200	50	26.17	10%/25 yrs.	25%	40 - 50th
<u>AGUADULCE</u>						
Pozo Azul I	4,700	100	38.44	10%/25 yrs.	21%	30 - 40th
Pozo Azul II	1,650	100	17.73	15 years	15%	10 - 20th
Nata	3,200	50	29.34	5%/20 yrs.	18%	20 - 30th
<u>PENONOME</u>						
Las Delicias II	1,650	150	15.92	20 years	18%	30 - 40th
Las Delicias III	3,000	50	24.53	10%/25 yrs.	25%	40 - 50th
<u>LAS TABLAS</u>						
Las Tablas	3,000	50	24.53	10%/25 yrs.	21%	30 - 40th
El Sestadero	2,000	20	17.37	10%/20 yrs.	18%	20 - 30th
Peña Blanca	2,000	15	17.37	10%/20 yrs.	18%	20 - 30th
Guarare	3,000	30	24.53	10%/25 yrs.	21%	30 - 40th

IV. IMPLEMENTATION PLAN

A. BORROWER

The borrower on the HG loan will be the National Mortgage Bank (Banco Hipotecario Nacional - BHN), which will receive loan disbursements from the U. S. investor and deposit the loan proceeds in a separate account in the National Bank of Panama (BNP). The Ministry of Finance and the Treasury will sign the Host Country Guaranty. The HG Implementation Agreement will also be signed by the Minister of Housing.

The BHN will have the responsibility of paying out the loan funds as required by the Ministry of Housing, assisting in the preparation of documentation required by each sale of a shelter solution and servicing the mortgages during the life of the loan.

The borrower on the Development Loan funds included in the shelter component of the URBE Project for Technical Assistance will be the Government of Panama. This program will be executed through the Ministry of Planning and Economic Policy.

B. IMPLEMENTING AGENCY

The primary implementing agency of the shelter component of the URBE Project will be the Ministry of Housing (MIVI) which will be responsible for the design and execution of all sub-projects. In accordance with GOP practices, MIVI will contract with private construction firms or will perform construction work force account, and will be responsible for the provision of infrastructure services. In all cases, AID will approve bid and contracting procedures, pre-bid estimates and financial contracts, in accordance with standard practice in HG programs.

C. DISBURSEMENTS

1. DL disbursements will be administered in accordance with regular practices as set out in the URBE Project Paper.

2. In the case of the Housing Guaranty Loan, agreements will be executed between AID and the U. S. Investor (Contract of Guaranty), the Borrower and Investor (Loan Agreement), and AID and the GOP (Host Country Guaranty).

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3. Funds will be disbursed by the U. S. investor to BHN for payment to MIVI, upon presentation of vouchers. MIVI will disburse funds to its Regional Offices (also on the presentation of vouchers) for payment for land, materials, labor and contractor work in place. MIVI's Regional Offices will also be responsible for assigning units to beneficiaries, arranging for mortgage documentation, and maintaining records adequate to show income data, source of employment, and family composition of beneficiaries.

4. BHN will assign a representative to each MIVI's Regional Offices to assist in the compilation of records and to provide collection supervision for the individual loans.

D. MONITORING AND EVALUATION

1. The shelter component of the URBE Project will be monitored by RHUDO/Panama utilizing the project cash flow and monitoring procedures established by the AID Office of Housing. The RHUDO will be responsible for certifying that all conditions precedent have been met before disbursements will be authorized.

2. Annual evaluations will be made jointly by AID, MIVI and BHN to monitor overall progress as compared with the schedule in the Program Delivery Plan which will be included in the Implementation Agreement. Comparison will also be made against the following baseline measures:

Shelter

Backlog of housing applications in MIVI files at each center. Effective demand at each center.

Urban Development

Number of town plans completed. Number of individual vacant lots built upon. Relationship of newly constructed projects to community facilities and employment sources. Number of spontaneous units on road rights of way or other intolerable locations in each center.

Employment

Direct employment at each center. Self-help person hours invested.

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Additionally, periodic evaluation will be made of non-quantifiable elements such as institution building and community participation. Post completion evaluation will gauge user life quality, user reactions to shelter solution design and the community development process, financial performance, program replication, institutional progress, and the impact of projects on urban development.

E. IMPLEMENTATION SCHEDULE

The shelter component will follow the implementation schedule set forth in the URBE Project Paper. The shelter component will be implemented over a period of 36 months, with project funds expended according to the following table, worked out by MIVI and RHUDO.

URBE PROJECT - SHELTER COMPONENT

PROJECT EXPENDITURE TABLE

(in millions of U. S. dollars)

	<u>USAID</u>	<u>GOP</u>	<u>Beneficiaries</u>	<u>Totals</u>
1978	0.8	0.1	-	0.9
1979	3.0	0.3	0.2	3.5
1980	<u>1.6</u>	<u>0.5</u>	<u>0.29</u>	<u>2.39</u>
TOTALS	5.4	0.9	0.49	\$ 6.79

F. CONDITIONS

AID will require that the following conditions precedent are met before execution of the HG loan agreement:

1. BHN must establish a set of internal operating regulations (reglamentos) delegating full administrative, operational, and management authority to the General Manager and the management staff, which details the specific responsibilities and powers of BHN's management. These regulations must be

approved by a full meeting of the Executive Committee which will thereby commit itself to creating within BHN the management functions necessary for efficient operations. The specific procedures to be established in the regulations are contained in the Administrative Analysis section of this paper (pages 16 to 20), and in the recommendations previously forwarded to BHN by RHUDO as a result of the several management analyses conducted for it.

2. An external audit of BHN's present financial position must be conducted by a qualified CPA firm. This will require a thorough analysis of BHN's books and records.

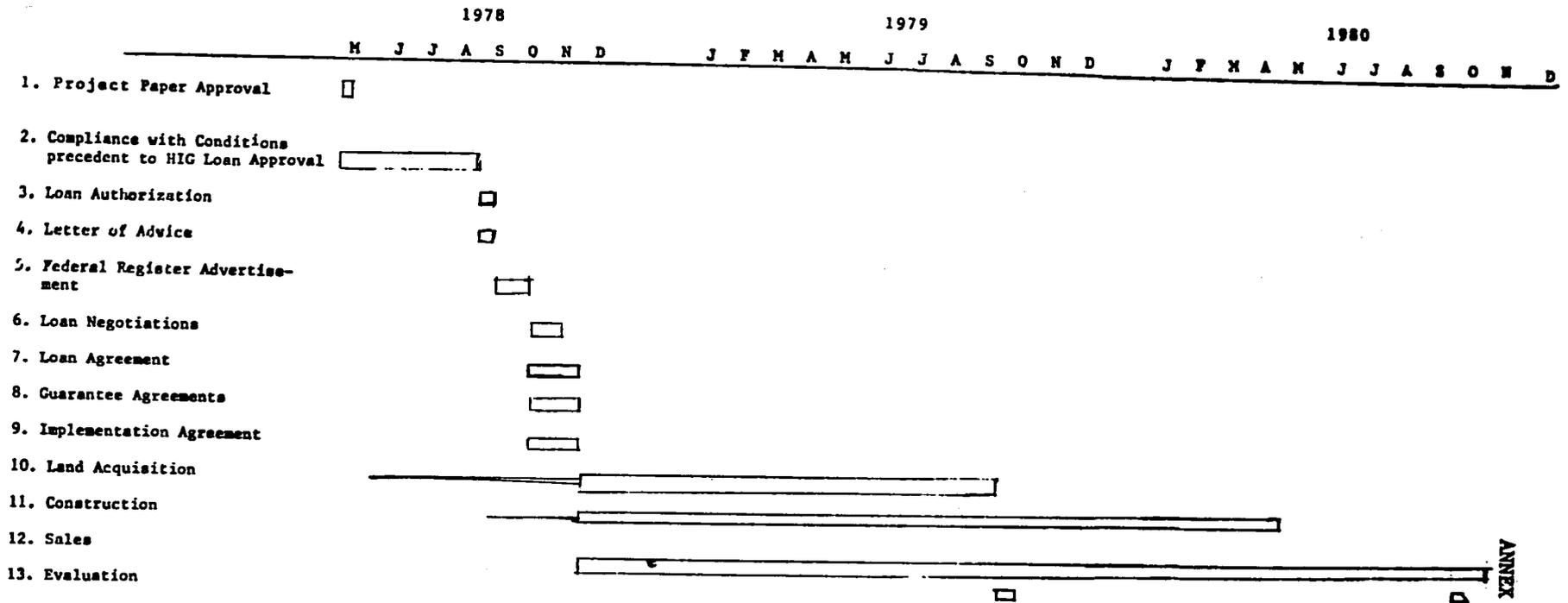
3. Based on this external audit, BHN will be required to present to AID a financial plan which details the actions BHN will take in order to put itself in a sound financial position. This plan will include a realistic estimate of available resources and earnings, as well as a schedule specifying the target dates which will be met in implementing BHN's financial plan. Such a plan of action is considered essential for BHN to demonstrate its ability to operate on a sound financial basis.

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URBE PROJECT - SHELTER COMPONENTTECHNICAL ASSISTANCE COST BREAKDOWN

1. <u>TECHNICAL ASSISTANCE FOR MIVI:</u>		
a.	Housing and Urban Development Information System 15 person/months at \$7,000/mo.	\$105,000
b.	Urban Planning 12 person/months at \$7,000/mo.	84,000
c.	Site Planning 12 person/months at \$7,000/mo.	84,000
d.	Environmental Protection -Participant training in US: 9 person/months -Short-term technical expertise: 2 person/months at \$7,000/mo.	<u>14,000</u>
		\$312,000
2. <u>TECHNICAL ASSISTANCE FOR BHN:</u>		
a.	Internal Auditing 4 person/months at \$5,000/mo.	\$ 28,000
b.	Financial Management 12 person/months at \$7,000/mo.	<u>84,000</u>
	T O T A L	<u>\$424,000</u>

URBE HOUSING COMPONENT IMPLEMENTATION



LOG - FRAME, URBE/HIG

Narrative Summary	Verificable Indicators	Means of Verification	Important Assumptions
<p>Goal: -Contribute to development of growth and service centers outside the Panama City-Colon corridor</p>	<p>Measures of Goal Achievement: -Availability of shelter has attracted sub-professional and skilled, semi-skilled and unskilled workers within the HIG target population group necessary to the functioning of target towns as growth and service centers. -GOP planning capacity developed in conjunction with project has resulted in plans for orderly development of target growth and service centers. -Pilot or demonstration effect of successful HIG-financed shelter projects results in replication by public and/or private sector agencies.</p>	<p>-Comparison of base line data with 1980 census data. -Field visits</p>	<p>Assumptions for Achieving Goals: -Continued GOP commitment to developing centers. -Continued GOP commitment to low income shelter. -Completed planning and construction of shelters resulting in environmental improvements. -GOP commitments to and execution of planned development of centers.</p>
<p>Project Purposes: -Support GOP efforts to reduce the housing problem of low income families in growth and service centers. -Help improve centers as functioning growth poles and as human settlements. -Strengthen financial position and institutional capability of BHN.</p>	<p>End of Project Status: -Completed shelters for low income families in centers. -Housing provided for workers at productive enterprises in centers. -Development plans and zoning or other control systems established with force of law in centers. -Secondary mortgage market functioning. -BHN financial position sound.</p>	<p>-Comparison of base line data with 1980 census data. -GOP project reports. -GOP building permits and other records. -Audit reports -Inspections</p>	<p>Assumptions for Achieving Purposes: -URBE objectives in economic development of centers will be realized. -Effective demand is sustained for shelter solutions offered. -Completed town development plans applied to project location and construction. -BHN complies with reform measures recommended. -BHN implements secondary mortgage market.</p>
<p>Outputs: -Shelters solutions for low income families. -Rationalized use of urban land -New internal audit and financial management units in BHN. -Functioning secondary mortgage market.</p>	<p>-Total of 2,186 low income units completed. -Total of 70 Ha. of land used according to urban plans.</p>	<p>-Project reports: -Disbursement records -Borrowers reports. -Municipal and MIVI records. -Audit reports.</p>	<p>Assumptions for Achieving Outputs: -Adequate construction industry capacity in centers. -Land can be obtained and used according to development plans. -Effective market for solutions.</p>
<p>Inputs: 1- A.I.D. a) HIG loan b) Technical Assistance c) Program Administration 2- GOP a.- Counterpart funds b.- Land c.- Labor, self-help d.- Overhead and staff support.</p>	<p>1- a.- \$5.4 million b.- \$424,000 c.- RHUDO/PSA 2 - a.- \$0.9 millions b.- \$350,000 est. c.- \$437,000 est. d.- \$874,000 est.</p>	<p>Means of verification: -Loan agreement -Disbursement records -Borrowers reports -RHUDO project monitoring</p>	<p>Important Assumptions: -Authorization of HIG loan. -Granting of TA funds -Authorization of local funds -Land can be procured within price convenient for program</p>

DEPARTMENT OF STATE LA/DR-IEE-78-16
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

ENVIRONMENTAL THRESHOLD DECISION

Location : Panama
Project Title : Rural Growth and Service Centers
Funding : FY 1978 - U.S. DL \$10.0 million; HIG 4.2 million,
Panama 12.7 million - TOTAL \$26.9 million
Life of Project : Five Years

Mission Recommendation:

Based on the Initial Environmental Examination, the Mission has concluded that the project will not have a significant effect on the human environment and therefore recommends a Negative Determination.

The Latin America Bureau's Environmental Committee has reviewed the Initial Environmental Examination for this project and concurs in the Mission's recommendation for a Negative Determination.

AA/LA Decision:

Pursuant to the authority vested in the Assistant Administrator for Latin America under Title 22, Part 216.4a, Environmental Procedures, and based upon the above recommendation, I hereby determine that the proposed project is not an action which will have a significant effect on the human environment, and therefore, is not an action for which an Environmental Impact Statement or an Environmental Assessment will be required.

Edward W. Coy
for Assistant Administrator
for Latin America

April 13, 1978
Date

Clearances:
DAEC Chairman: MBrown *J. P. H. B.*
Environmental Advisor: R. Otto *Otto*



Initial Environmental Examination

Project Location: Panama

Project Title: Rural Growth and Service Centers

Funding: FY 1978 U. S. DL \$10.0 million
HIG 4.2 million
Panama 12.7 million
TOTAL \$26.9 million

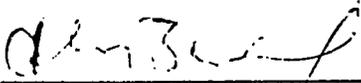
Life of Project: Five years

IEE Prepared by: Jeffory G. Boyer
Environmental Consultant
National Savings and Loan League

Date: February, 1978

Environmental Action Recommended:

Based upon the following environmental examination, I recommend that the Rural Growth and Service Centers Project be given a Negative Determination, thus requiring no further environmental review.

Concurrence:  Date: March 31, 1978
Charles B. Weinberg
Mission Director

Assistant Administrator's Decision:

Signature: _____ Date: _____

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I. BACKGROUND INFORMATION

A. Description of Existing Environmental Conditions

1. Identification of the Proposed URBE Program's Target Area

The URBE program is geographically focused on the Central and Western Regions of Panama. Within these two regions, the AID/GOP development activities will be concentrated specifically in the provinces of Chiriqui, Veraguas, Los Santos, Herrera and Coclé. The location and relative size of these provinces are shown in Figure 1. Within each of these provinces the principal urban center (seat) and some secondary cities have been selected for development improvements. These population centers include Puerto Armuelles, La Concepción and David (Chiriqui Province), Santiago (Veraguas Province), Las Tablas (Los Santos Province), Chitré (Herrera Province), Aguadulce and Penonomé (Coclé Province).

The target area of the URBE program comprises a total land area of almost 42,000 square kilometers. The estimated population residing in this area in 1970 was slightly more than 694,800 persons. Of this total population, only 22 percent or approximately 120,000 inhabitants were living in the urban centers identified above.

2. Description of Existing Environmental Conditions and Development Problems

The project area contains a wide diversity of physical, social, economic and political conditions. Despite the regional and inter urban differences that exist among the towns and provinces, they nevertheless share a common set of environmental problems and development constraints. These include: (1) low agricultural land productivity; (2) widely dispersed population; (3) inadequate level of basic infrastructure and public services; (4) limited employment opportunities; and (5) out-migration to the Metropolitan Region of Panama-Colon. Each of these notable features is briefly described below to present a comprehensive overview of conditions in this part of Panama's interior.

FIRST, the lands in Panama with the highest agricultural capability (Class II and III) represent a total 850,000 hectares or only 11 percent of the country's land area. Roughly 60 percent of these lands are located within the project area. However, these potentially productive soils represent only 12 percent of the project area and the remaining land area (88 percent) is not generally suitable for annual crop production. Within the

project area, the Class II and III lands are concentrated primarily in the coastal plain areas between Puerto Armuelles and David (Chiriquí) and from Santiago (Veraguas) east along the eastern shore of the Azuero Peninsula (Herrera and Los Santos) and north to the Aguadulce area (Coclé). Appendix A identifies graphically the agricultural land capability of Panama's soils.

SECONDLY, the spatial distribution of the target area's population is dispersed among an inordinately large number of small population centers. While only 1970 Census data are presently available, the demographic profile of the regions' human settlement pattern has not significantly changed. In 1970, there existed more than 7,000 populated areas of which 97 percent were predominantly small rural settlements of less than 500 inhabitants. The population of these places represented 60 percent of the target area's total population. In addition, another 25 percent of the population resided in places between 500-5,000 persons while only 15 percent were located in larger urban centers. Appendix B shows the spatial distribution and relative size of Panama's population.

THIRDLY, the basic infrastructure and public services required to serve the target area's rural and urban populations either do not exist or are inadequate to serve even present economic and social needs. A few examples are offered in illustration:

The existing network of roads permits only limited access to large, potentially productive areas and those areas served with road access frequently are not accessible during the rainy season. In addition, facilities for the marketing and storage of farm products are severely limited, overcrowded and not organized to effectively serve current regional needs. The limitations on getting farm products to market and the opportunities of readily selling them act as severe disincentives for small farmers to increase productivity and for new settlers to migrate into potentially productive areas without road access.

The principal mode of transportation commonly used by small farmers and urban dwellers is the bus. It serves not only for personal mobility but also as the primary means for subsistent farmers to transport their small surpluses to market for cash income. The safe and orderly movement of agricultural products and people is impeded by the lack of a well organized regional and local transportation system including bus terminals. Trucks and buses daily converge on the towns of David, Chitré-Los Santos, and Santiago near the central plazas and public markets creating serious parking problems, conflicting traffic movements between vehicles and pedestrians, traffic congestion, and a state of general chaos.

FOURTHLY, as a result of the highly dispersed nature of the target area's population and the limited agricultural productivity of the regions' soils, present employment opportunities are limited except for subsistence farm production. An analysis of

the average size farm indicates the majority are less than 10 hectares. Consequently, it is estimated that the agricultural production for 50 percent of the population is at the subsistence level and outside the formal market economy. The urban centers of David, Santiago, Chitre-Los Santos and Penonome have offered only a limited number of jobs because of a whole series of production and marketing constraints which have restricted the regions' development.

FIFTHLY, the previously described physical, social and economic conditions have had a significant effect on the target area's migration. Under present circumstances, the two regions do not have the capacity to retain their population in place. Between 1950-1970, Census data indicate that approximately 140,000 persons migrated to other places outside the region. While migration trends are believed to have stabilized somewhat, the target population continues its out-migration at a current rate of slightly less than 5,000 persons per year. This migration flow is directed towards the Province of Panama, primarily Panama City and surrounding satellite communities such as La Chorrera, Arraijan, San Miguelito and Tocumen.

B. Identification of Target Population

Since the proposed actions of the URBE program are focused on the improvement of selected growth and service centers, the direct beneficiaries of the program will be the urban population residing in these areas. The population centers designated to be recipients of the GOP/AID rural development activities include: (1) Puerto Armuelles, La Concepcion and David (Chiriqui); (2) Santiago (Veraguas); (3) Las Tablas (Los Santos); (4) Chitre-Los Santos (Herrera); and (5) Aguadulce and Penonome (Coclé). Equally if not more significantly, the URBE program will benefit the lives of the target area's rural population. This group encompasses the subsistent farm families living in the hinterlands which at present are marginally or not at all integrated into Panama's formal agricultural economy.

Of the target area's total population (694,860 persons) the urban-rural split is roughly 22 percent and 78 percent respectively. Average family size for both groups is 5 persons. Based upon a 1975 household income-expenditure survey, median family income was estimated to be \$2,186 for urban families and \$763 for rural families. When adjusted to 1969 dollar equivalents, incomes amounted to \$1,541 and \$538 respectively or \$409 and \$152 mean per capita income. For comparative purposes, Panama's national median family income and mean per capita income in 1969 amounted to \$395 and \$210 respectively.

C. Summary of GOP Regional Development Strategy

The current GOP strategy, which has a strong regional focus, stresses two major objectives: (1) a higher rate of economic growth, and (2) a wider distribution of the benefits of this growth. These objectives have been translated into government policies and commitments aimed at the reduction of income and development disparities between the Metropolitan Region of Panama City-Colon and the rural-based interior regions of the country. Concomitantly, it is anticipated that GOP strategy will alleviate the flow of migrants from the interior to the overcrowded and underserved Panama City-Colon corridor.

To implement its regional approach to the economic integration of the country's population and natural resources, the GOP has divided the country into four regions. These are: (1) the Metropolitan Region; (2) the Eastern Region; (3) the Central Region; and (4) the Western Region. Because the Central and Western Regions contain 45 percent of Panama's total population and a major portion of its agricultural lands, they have been given priority in the GOP's rural development program.

D. Proposed USAID/PANAMA Actions and Implementing Institutions

The objectives of the URBE program are first, to strengthen the capacity of selected growth and service centers in the designated Central and Western Regions of Panama in order to better serve the rural population in surrounding hinterlands and, second, to improve the socio-economic base of the urban centers themselves to become attractive investment centers.

The three principal areas of proposed development activity are: (1) Municipal infrastructure, such as public markets and storage facilities, transport terminals, sewerage improvements and agro-industrial infrastructure; (2) productive commercial/industrial enterprises-small businesses and agro-industrial operations; (3) housing solutions for below median income families. The financial investment required to implement the proposed URBE program is estimated to be \$26.9 million. The proposed sources of funding are:

AID Development Loan	\$10.0 million
AID Housing Guaranty	4.2 million
SUB-TOTAL AID	\$14.2 million
Government of Panama	10.0 million
Municipalities	2.7 million
SUB-TOTAL HOST COUNTRY	\$12.7 million
TOTAL INVESTMENT	\$26.9 million

All Project funds, except those GOP funds earmarked for sewerage, will be channelled through intermediate credit institutions (ICIs). Selection of subprojects to be financed by the ICIs under the URBE program will be governed by rigorous eligibility criteria which will assure (a) benefits to the target group, (b) required levels of technical, financial and economic analysis, and (c) adherence to such requirements as geographical location, environmental soundness, and willingness of sub-borrower(s) to accept technical assistance.

Because over two years' effort to date has gone into the design of the URBE program, much is known already about the needs of the eight growth and service centers from the standpoint of both the municipalities and the Central Government. Detailed town plans, to be developed during the Project's first phase, will help confirm or replace already identified needs and will be particularly useful in assigning them priorities. For planning purposes and to provide as firm a basis as possible for the financial requirements of the Project, the GOP and USAID have worked with an illustrative group of municipal infrastructure subprojects which was drawn up in consultation with the municipalities. Not all may be financed under the URBE program and others may fall out and be replaced by subprojects which are of higher priority to the centers and/or which adhere more closely to funding eligibility criteria.

The following section describes in detail the proposed development components of the URBE program, bearing in mind the provisional nature of the subprojects included under the municipal infrastructure component. Also included are possible locations for the actions described, cost estimates, and the institutional/administrative arrangements for their implementation. Appendix C outlines the program's preliminary financial plan. Additional information on URBE is contained in the Interim Report, Rural Growth and Service Centers, prepared by USAID/Panama and dated December 20, 1977.

1. Description of Sub-Program Components

a. Municipal Infrastructure

The following illustrative or provisional infrastructure subprojects fall into several categories: public markets and storage facilities, transport terminals, agro-industrial infrastructure and sewerage.

Improvement of Public Markets and Storage Facilities

Public markets and accompanying storage facilities are being proposed for Chitré-Los Santos, Penonomé and Santiago in the Central Region and the service centers of Puerto Armuelles and La Concepción in the Western Region. Presently, no central market exists in Chitré-Los Santos and while the remaining four urban centers have facilities, they are located in physically deteriorated structures, with limited operating and storage space, almost no refrigeration, little room for expansion and most are poorly located to serve local and regional demand. To correct these deficiencies, the URBE program proposes to provide

an estimated \$1.2 million and the GOP an estimated \$700,000 for the renovation and/or new construction of market and storage facilities.

The existence of functional, well-designed public markets in these towns will effectively link, in part, small agricultural producers in the rural hinterlands to low-income residents of the towns, providing the latter with essential agricultural produce at competitive prices and the farmer with cash income. An additional benefit expected is that areas where these markets are located will become attractive locations for complementary commercial activities, providing some urban employment as well as essential goods for rural producers and townspeople.

. Transport Terminals

Transport terminals are being proposed for David, Chitré and Santiago. The existing transport operations in these towns are either dispersed or concentrated geographically near the central downtown areas of these urban centers. They are often no more than overcrowded parking lots, with no administrative organization and no physical facilities beyond parking areas. Their physical location in built-up commercial business areas served by narrow streets and conflicting traffic movements (vehicular and pedestrian) poses nuisances and public safety hazards. To remedy these problems, new sites will be selected and facilities constructed to provide a coordinated local and regional transportation service system. Benefits expected to be achieved include reduction of travel time and costs, improved accessibility (personal mobility and agricultural goods) between the market towns and hinterlands, better service delivery and greater access to non-farm employment. The proposed facilities would cost an estimated \$3.0 million of which AID and the GOP would finance \$2.0 million and \$1.0 million, respectively.

. Agro-Industrial Infrastructure

Two industrial areas are being proposed in Chitré and David. Infrastructural services planned for central industrial sites are expected to include access roads, potable water, sewerage, electricity and the availability of administrative, commercial, banking and insurance services. Users of these industrial areas are anticipated to be agro-processing and light manufacturing activities. In addition to supporting URBE project objectives of employment generation and utilization of local agricultural products, it is anticipated that these areas will contribute to efficient land use in the two urban centers. Provision of these services is estimated to cost upwards of \$2.4 million and would be wholly financed by the GOP.

. Sewerage *

Two new sewerage collection and treatment facilities are planned for the urban centers of Las Tablas and Penonomé. The existing system (septic tanks) in these towns, constructed in the mid-1930's, serve roughly 20 and 45 percent of their respective populations. The remaining unsewered areas utilize private septic tanks or pit latrines which are malfunctioning because of poor soil and/or high water tables. The community

As the IEP was being readied for forwarding to AID/Washington, the Ministry of Planning informed the Mission of the possibility of IDE financing of the Las Tablas sewerage system. Should this sewer and sewerage improvement be reprogrammed for another service center, the Mission will examine carefully the environmental consequences of the substitute facilities being proposed.

sewerage systems are now underdesigned for present population requirements and are essentially providing little or no effective treatment of the sewage. The construction and operation of new facilities are expected to mitigate present and future health hazards and environmental pollution problems. The GOP expects to finance the construction of the sewerage improvements at an estimated cost of \$1.7 million each or a total of \$3.4 million.

b. Productive Commercial and Industrial Enterprises

Two types of productive activities are expected to be financed by the project. These include: (1) loans to small businesses either to finance start-up and operating costs or to expand existing enterprises. Such subloans will not exceed \$50,000 and are to be directed towards the stimulation of small, labor-intensive enterprises and improvements of goods and services for rural farmers; and (2) loans to agro-industrial enterprises. Such subloans will not exceed \$500,000 and must demonstrate a clear benefit to the target group, preferably through employment generation and linkages with small-holder agriculture. Stimulation of new commercial and industrial activities is expected to expand the economic base of all the growth and service centers and the smaller rural towns.

Financing of the project's productive subloans is to be shared by AID and the GOP with \$2.7 million in AID funds and a \$1.3 million GOP contribution directed to small businesses and \$2.5 million from AID and \$1.3 million from the GOP earmarked for agro-industrial enterprises.

c. Housing Solutions

A variety of alternative housing programs are proposed in the eight growth and service centers. The identified needs of the low income target group include: (1) shelter solutions for relocating shanty dwellers squatting in road rights of way; (2) home improvements for families who have started but not completed their homes with financing from informal sources; (3) housing on land identified and available adjacent to agro-industrial infrastructure to support industrial development; and (4) housing on lots owned by individual families for whom long-term financing has not been available. A preliminary estimate of housing demands among the eight urban centers is 2,090 units. Project size ranges between 30 and 200 units. Housing costs will range from \$150 (urbanized lots) to \$5,700 (new two-bedroom unit). Affordable solutions will be determined by socio-economic surveys of the target population. The housing component of the URBE program will be financed through a \$4.2 million Housing Investment Guaranty () and \$1.9 million in GOP funds.

Several anticipated benefits are expected as a result of the housing activities including the support of social and economic base objectives, improved environmental conditions, institution building and improvement of urban planning capacity within the GOP's Planning and Housing Ministries.

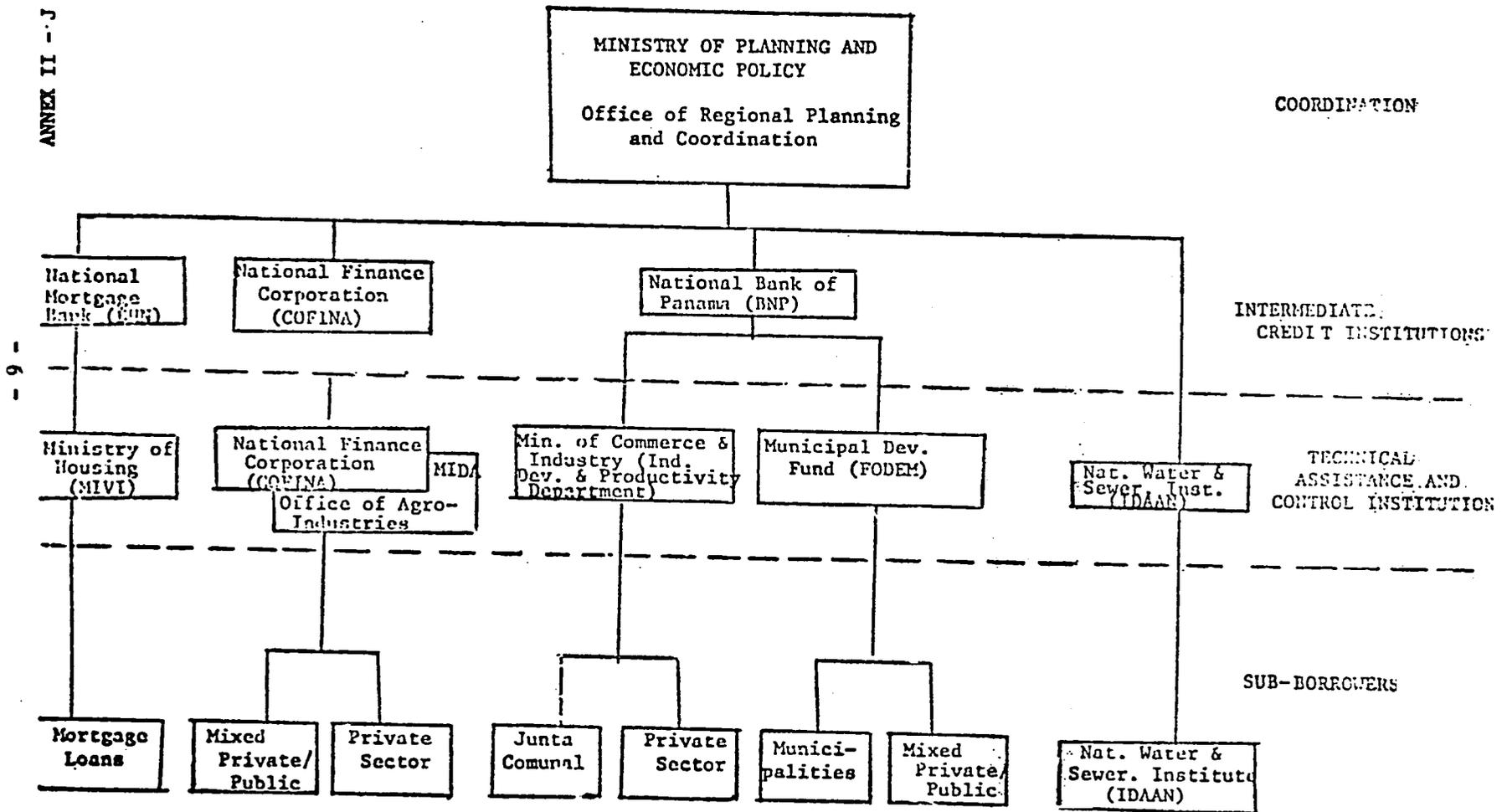
2. Proposed Institutional Arrangements

The institutional arrangement designed for the implementation of the URBE program is based upon a four-tier structure (See Figure 2) with

FIGURE 2

PROPOSED INSTITUTIONAL ARRANGEMENTS

ANNEX II -- J



the Ministry of Planning and Economic Policy on the 1st tier, responsible for overall program coordination. On the 2nd tier are the three intermediary credit institutions (ICIs) which will be responsible for the disbursement of project funds for all subprojects except the proposed sewerage improvements which will be handled directly by the National Water and Sewerage Institute (IDAAN). The 3rd tier identifies the agencies which will be responsible for subproject implementation. The 4th tier comprises a range of potential sub-borrowers who will be selected on the basis of pre-established criteria.

In the proposed institutional scheme, funds for infrastructure subprojects, excluding sewerage, will be channeled through the Municipal Development Fund of the National Bank of Panama (BNP), with the Fund providing technical assistance and implementation guidance. Funds for productive subprojects will be managed by two ICIs: (a) funds for small businesses will be channeled through the BNP with technical assistance and implementation oversight provided by the Industrial Development and Productivity Department of the Ministry of Commerce and Industry (MICI); (b) funds for agro-industrial enterprises will be channeled through the National Finance Cooperation (COFINA), a public development bank, with technical assistance and implementation oversight shared by COFINA and by the Directorate of Agro-Industry in the Ministry of Agricultural Development (MIDA). Housing program funds will be channeled through the National Mortgage Bank (BHN) with technical assistance and implementation responsibility assigned to the Ministry of Housing. The National Water and Sewerage Institute (IDAAN) will be wholly responsible for sewerage infrastructure under the Project.

3. Areas of Planned Technical Assistance

In support of the URBE program's development objectives and institutional arrangements, a number of areas have been identified where technical assistance is needed to strengthen GOP institutional capacity. A few types of technical support in these selected areas are described below.

a. Infrastructure Sub-Projects:

Technical assistance to improve municipal efficiency and the quality of services. Specific areas to be addressed by the staff of the Municipal Development Fund will be the administrative and financial organization and operation of the growth and service centers and of any infrastructure subprojects undertaken by the URBE program.

b. Agro-Industries:

Technical assistance and training will be provided to develop basic environmental standards and capability of MIDA and COFINA to evaluate potential project effects.

c. Housing Sub-Projects:

Technical support will be sought to strengthen MIVI's capacity to carry out its urban planning and community assistance functions.

d. Small Business Enterprises:

Technical assistance funds are planned to be used to upgrade the technical staff and capabilities of MICI. Additional technical positions will be created and will include an industrial engineer and a financial analyst.

II. ENVIRONMENTAL IMPACT IDENTIFICATION AND EVALUATION

The following section of the IEE sets forth the reasonably foreseeable effects that the proposed URBE program will have on the physical and human environment in the Central and Western Regions of Panama. In order to make this environmental determination, AID/PANAMA and the GOP undertook a month-long investigation to analyze the country's urban/regional growth process, status of its environmental controls and development standards, and the technical capability and practices of Panamanian institutions responsible for environmental protection. To become acquainted with the target area's environmental conditions and development problems and their potential implications for the URBE program, field visits were made to each of the proposed eight growth and service centers. In addition to inspections of potential sites for various sub-program components, interviews were conducted with municipal officials, regional representatives and technical personnel of GOP implementing agencies to gain further insight into development constraints, priorities, general environmental sensitivity and specific concerns and technical capabilities.

The process of assessing the potential environmental effects of the URBE program was based upon an analysis of these basic questions:

1. What environmental concerns are most likely to be affected by each of the URBE sub-program components?
 2. Will the cause and effect (causal) relationship between the identified areas of environmental concern and the URBE sub-program components potentially result in a significant effect on the physical and human environment?
 3. Can any identified potential areas of significant change, if adverse, be mitigated by proposed or recommended environmental control measures and do the GOP's implementing agencies have the technical capacity and capabilities to effectively carry out these mitigating measures?
- A. Identification of Specific Environmental Concerns Related to URBE Sub-Program Components

A detailed and comprehensive set of environmental concerns has been selectively developed, after completion of extensive field investigations and interviews with appropriate GOP institutions and their technical personnel. While the list of concerns in each respective sub-program area could have been expanded possibly to include other factors, this was not done because the identified concerns represent the most sensitive environmental issues which are indigenous to the URBE program's target area. This list was used as the basis for identifying potentially significant impact areas and to evaluate the GOP's capacities to deal with these problem areas.

1. Infrastructure Sub-Projects (Sub-projects presented are illustrative only. Similar lists will be drawn up for municipal infrastructure sub-projects which are selected during Project implementation for URBE financing.)
 - a. Public Markets - Environmental Concerns
 - . General Criteria to be Used in Site Selection Process
 - . Technical Capacity and Capabilities of GOP Institutions to Carry out Their Implementation Responsibilities
 - . Extent of Potential Economic and Social Effects on Consumer and Small Businesses Resulting from Possible Relocation of Existing Public Markets to New Locations
 - . Level of Consideration Given to Potential Public Safety Problems between Vehicular and Pedestrian Traffic Movements
 - . Compatibility of Preliminary Sites with Existing and Future Planned Land Uses
 - . Probable level of Improved Environmental Health Conditions
 - . Solid Waste Collection and Disposal Service
 - b. Transport Terminals - Environmental Concerns
 - . General Criteria to be Used in Site Selection Process
 - . Technical Capacity and Capabilities of GOP Institutions to Carry out Their Implementation Responsibilities
 - . Level of Consideration Given to Potential Conflicts between Interregional and Local Traffic Movements
 - . Problems of Highway Accessibility
 - . Relationship to Planned Local Circulation System
 - . Compatibility of Terminals to Existing and Future Planned Land Uses - Traffic Volumes, Turning Movements, Noise and Aesthetics
 - . Frequency, Level of Service and Costs of Public Transportation to Local Urban Users and Small Farmers in Hinterlands.

- c. Industrial Infrastructure - Environmental Concerns
 - . General Criteria to Be Used in Site Selection Process
 - . Technical Capacity and Capabilities of GOP Institutions to Carry out Their Implementation Responsibilities
 - . Level of Consideration Given to Potential Health Problems from Industrial Activities
 - . Public Standards and Controls to Avoid or Mitigate Industrial Nuisances - Noises, Odors, Air Pollution and Vehicular Traffic
 - . Migrational Impacts Resulting from Potential Increased Employment Generation
 - . Design Standards and Level of Water Pollution Control of Industrial Projects
- d. Sewerage - Environmental Concerns
 - . General Criteria to Be Used in Site Selection Process
 - . Technical Capacity and Capabilities of GOP Institutions to Carry out Their Implementation Responsibilities
 - . Level of Consideration Given to Existing Sewage Discharges and Potential Health and Environmental Effects
 - . Anticipated Increase in Sewerage Effluent to be Discharged from Proposed Construction of Community Wastewater Collection and Treatment Facilities
 - . Potential Loss or Damage to Freshwater Fishery Resources by Project
 - . Potential Health Hazards Resulting from Water Pollution by Project
 - . Adequacy of Public Standards and General Practices Related To:
 - Location of Septic Tank Systems
 - Soil Percolation Testing
 - Design of Filtration Fields
 - Distance between Residential Dwellings and Point of Effluent Discharge and Contaminated Watercourses
 - Industrial Discharges
 - . Environmental Considerations in Determining Desirable Effluent Standards and Selection of Wastewater Treatment Systems

- Operation and Maintenance Capabilities of Wastewater Treatment Systems
2. Housing and Urban Planning Sub-Program
- a. Housing - Environmental Concerns
 - General Criteria to Be Used in Site Selection Process
 - Technical Capacity and Capabilities of GOP Institutions to Carry out Their Implementation Responsibilities
 - Potential Loss or Damage to Environmentally Sensitive Areas, Particularly Aquifer Recharge Areas, Water Courses and Adjacent Stream Valleys.
 - Social and Economic Effects of Relocating Selected Groups of Squatters
 - Adequacy of Design Standards and Practices Related to the Size and Location of Septic Tank Filtration as well as the Distance between the Point of Discharge and Location of Residential Dwellings
 - b. Urban Planning - Environmental Concerns
 - Technical Capacity and Capability of GOP Institutions to Carry ^{out} Their Implementation Responsibilities
 - Identification of Environmentally Sensitive Areas such as Wetlands, Marshes, Flood-prone Areas, Steep Slopes, Aquifer Recharge Areas, Historic and/or Archaeologic Resources and Prime Agricultural Lands
 - Development of Practical and Effective Methods to Protect and Conserve Environmentally Sensitive Areas
 - Control of Land Use Compatibility between Different Activities
 - Establishment of a Hierarchy of Streets and Highways and Other Infrastructure Services to Support Future Land Use Densities
 - Preservation of Active and Passive Recreational Areas
 - Design of Effective Implementation Tools and Standards (e.g., zoning, building codes) to Assist Municipalities in Implementation of Urban Planning.
 - Conservation and Rehabilitation of Older Residential Neighborhoods.

3. Agro-Industrial and Small Business Enterprise Sub-Program

a. Agro-Industrial - Environmental Concerns

- . General Criteria to Be Used in Site Selection Process
- . Technical Capacity and Capabilities of GOP Institutions to Carry out Their Implementation Responsibilities
- . Level of Consideration Given to Potential Health Problems from Industrial Activities
- . Public Standards and Controls to Avoid or Mitigate Industrial Nuisances - Noises, Odors, Air Pollution and Vehicular Traffic
- . Potential Migrational Impacts Resulting from Increased Employment Generation
- . Design Standards and Level of Water Pollution Control of Industrial Projects

b. Small Business Enterprises - Environmental Concerns

- . General Criteria to Be Used in Site Selection Process
- . Technical Capacity and Capabilities of GOP Institutions to Carry out Their Implementation Responsibilities
- . Land Use Compatibility

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B. Analysis of the Probable Significant Effects of the URBE Program Given the Standards, Practices and Technical Capabilities of and Proposed Technical Assistance to the GOP's Implementing Institutions

An overall assessment of the URBE program's potential areas of environmental impact concludes that the probability of significant effects are minimal and only one environmental concern deserves special consideration. The finding is based upon the following determinations:

1. The environmental setting of the proposed development activities is in established urban settlement areas which have been largely disturbed and do not contain unusual natural features or unique environmentally sensitive areas;
2. The nature of the sub-projects will not represent an introduction of totally new land use activities, but rather in most cases, a better organization and siting of improved infrastructure, public services and employment activities;
3. The geographic distribution and individual size of sub-projects will avoid potentially significant environmental disturbances of existing physical, social and economic conditions found in the selected growth and service centers;
4. The program will not result in a major cumulative environmental impact, given the type and scale of proposed development actions and the set of existing environmental conditions in each growth and service center as well as the whole Central and Western Regions;
5. A sufficiently clear recognition of potential problems and environmental concerns exists within the GOP's implementing institutions and their technical staffs to provide reasonable assurance that appropriate analysis and mitigating measures will be incorporated into each sub-project review and approval process and
6. The coordination role and overall program evaluation responsibilities of the Ministry of Planning will provide a "check and balance" mechanism to ensure that proposed environmental guidelines and standards will be applied during sub-project feasibility analysis, acceptance of loan applications, and implementation stages.

From the list of identified areas of environmental concern (Section II A), the one major issue involves the potential environmental effects which may be caused by the program's individual project (housing, industrial parks, industrial enterprises) and communitywide wastewater collection and treatment facilities. It is believed that the present extent of urban development in each of the

growth and service centers necessitates improved control of waste-waters or potentially serious environmental health problems are likely to occur. However, Panama's total lack of baseline water quality data prevents a quantitative analysis of the project's potential effects on the target area's water resources. It is believed that the URBE program's potential water pollution impacts are controllable and, thus, will not cause a significant effect because:

1. The program's sub-projects will not be geographically concentrated in a few urban centers to cause a major increase in sewage flows above existing or anticipated future levels;
2. Given the stage of economic development of each of the eight urban centers and the nature of the proposed actions, the URBE program will not have a major growth inducement effect;
3. The implementing GOP agency, IDAAN, is taking appropriate environmental steps in the feasibility and design stages of the two proposed wastewater treatment systems (Las Tablas and Penonomé) to avoid or to minimize the potential occurrence of significant water quality degradation; and
4. The URBE program's technical assistance package includes provisions for strengthening IDAAN's institutional capabilities in selected areas to enable it to effectively implement the proposed projects with minimal environmental risks.

Appendix E presents the detailed findings of the impact evaluation of the sewerage projects.

C. Special Environmental Measures to be Incorporated into the URBE Program Design

To improve the URBE program's overall planning and implementation process and to further protect and enhance the environmental quality of the eight growth and service centers both now and in the future, a series of environmental recommendations has been formulated. They are positive steps intended to strengthen the GOP's program planning, design and execution and help alleviate any significant effects. These recommendations address principally the GOP's institutional capabilities and limitations in the environmental control field. These are specific actions designed to assist the GOP's implementing agencies to better carry out their defined roles and responsibilities (See Appendix D). They are based upon an evaluation of each GOP agency's present capacity and technical capabilities to perform these duties. The recommended measures have been discussed with each appropriate GOP institution and have their concurrence. In addition, they have been incorporated into the URBE program's planning and design process.

Ministry of Planning (MPPE)

To assist MPPE in carrying out its coordination role and its responsibility for the overall evaluation of the URBE program's probable impacts, it is recommended that the proposed guidelines and/or performance standards to be used by GOP's implementing institutions include an environmental component. The environmental guidelines should identify potential problems or concerns to be considered in all stages of project development-feasibility, site selection, project design and implementation. It is suggested that the specific environmental concerns identified in Section II A of the IEE be considered for incorporation or use in developing this material.

To strengthen MPPE's technical capabilities in the area of environmental planning and impact evaluation, it is recommended that short-term technical assistance be provided. Specific objectives to be accomplished would include coordination with GOP implementing agencies, conducting a short seminar on identification of environmentally sensitive areas and project impact evaluation, and assisting in the design of the environmental guidelines.

National Water and Sewer Institute (IDAAN)

To assist IDAAN in finalizing its feasibility studies on providing wastewater collection and treatment systems in the urban centers of Las Tablas and Penonomé and in selecting a preferred method of treatment and final site for the treatment facilities, it is recommended that short-term technical assistance be provided in this area. Further, it is suggested that special consideration be given to establish effluent standards commensurate with environmental, public health and cost criteria. Selection of the preferred treatment systems in both towns should be based in part upon consideration of long-term operation and maintenance costs, system reliability, and flexibility to meet improved standards of treatment in the future.

To strengthen IDAAN's technical capability and capacity to effectively operate and maintain these proposed treatment facilities, it is recommended that technical assistance be provided in this area. In conjunction with a formal training program on plant operation and maintenance, it is recommended that a reporting and inspection system be established to assure efficient operation and maintenance of these facilities.

Due to the widespread failure of community septic tank systems in the target area, it is recommended that a special committee be convened by MPPE and IDAAN to examine the causes of these malfunctioning systems. In addition, corrective measures should be established to prevent the likely occurrence of these same problems in the URBE program's sub-projects. In the case of existing MIVI housing projects to which URBE

units will be added, it is recommended that an inspection of their sewerage systems be undertaken. A determination should be made of their operational efficiency and whether additional new housing units would create any health hazards or be exposed to any environmental health problems.

Ministry of Health

The project plan review process requires that appropriate GOP agencies evaluate the potential environmental health risks associated with a proposed development application. To assist each of the URBE program's implementing agencies in considering potential environmental impacts associated with industrial land uses, sewerage treatment facilities, etc., it is recommended that close coordination between MPPE and the Ministry of Health be maintained. Further, it is suggested that they participate in studying the problem of failing septic tanks and in the formulation of appropriate preventative measures.

III. THRESHOLD RECOMMENDATION

The preceding environmental analysis has concluded that among the potential areas of impact associated with the proposed actions of the URBE program, there will be no significant changes expected to occur in the human environment. In addition, the evaluation found a relatively high level of concern and sensitivity to development impacts. While GOP institutional capabilities in general are somewhat limited in the environmental control field, the URBE program will offer participating institutions the appropriate technical assistance to enable them to effectively implement the proposed actions with minimal environmental risks.

Based on these findings, it is recommended that the URBE program be given a Negative Determination, thus requiring no further environmental review.

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URBE PROGRAM
PRELIMINARY FINANCIAL PLAN
(In Millions of Dollars)

	Total		AID/HIG		Domestic Resources			
	Amt.	%	Amt.	%	Amt.	%	GOP	Other
I. <u>ECONOMIC ACTIVITIES</u>	<u>8.0</u>	<u>29.7</u>	<u>6.1</u>	<u>43.0</u>	<u>1.9</u>	<u>15.0</u>	<u>0.5</u>	<u>1.</u>
Small Businesses	3.6	13.4	3.0	21.1	0.6	4.7	0.2	0.
Agro-Industries	4.4	16.3	3.1	21.9	1.3	10.3	0.3	1.
II. <u>INFRASTRUCTURE</u>	<u>11.0</u>	<u>40.9</u>	<u>3.4</u>	<u>23.9</u>	<u>7.6</u>	<u>59.8</u>	<u>6.6</u>	<u>1.</u>
Public Markets	1.9	7.1	1.2	8.4	0.7	5.5	0.5	0.
Agro-Industrial Areas	2.5	9.3	-	-	2.5	19.7	1.9	0.
Transportation Terminals	3.1	11.5	2.2	15.5	0.9	7.1	0.7	0.
Sewerage Systems	3.5	13.0	-	-	3.5	27.5	3.5	-
III. <u>HOUSING</u>	<u>6.1</u>	<u>22.7</u>	<u>4.2</u>	<u>29.6</u>	<u>1.9</u>	<u>15.0</u>	<u>1.6</u>	<u>0.</u>
IV. <u>TECHNICAL ASSISTANCE AND TRAINING</u>	<u>1.0</u>	<u>3.7</u>	<u>0.5</u>	<u>3.5</u>	<u>0.5</u>	<u>3.9</u>	<u>0.5</u>	<u>-</u>
V. <u>ADMINISTRATIVE COSTS</u>	<u>0.8</u>	<u>3.0</u>	<u>-</u>	<u>-</u>	<u>0.8</u>	<u>6.3</u>	<u>0.8</u>	<u>-</u>
Project Total	<u>26.9</u>	<u>100.0</u>	<u>14.2</u>	<u>100.0</u>	<u>12.7</u>	<u>100.0</u>	<u>10.0</u>	<u>2.7</u>
%	<u>100.0</u>	<u>-</u>	<u>52.8</u>	<u>-</u>	<u>47.2</u>	<u>-</u>	<u>37.2</u>	<u>10.0</u>

APPENDIX D

IDENTIFICATION AND DETAILED DESCRIPTION OF THE SPECIFIC ROLES AND TECHNICAL RESPONSIBILITIES OF THE URBE PROGRAM'S IMPLEMENTING INSTITUTIONS

The following describes the primary role and specific responsibilities of each proposed participating institution.

A. Ministry of Planning and Economic Policy (MPPE)

The Ministry's Office of Regional Planning and Coordination will assume responsibility for overall supervision and coordination of all program activities. In addition, it will review proposed small business and agro-industrial subprojects. A representative of Planning will sit on the credit committees of both BNP and COFINA in an ex officio capacity.

Other specific implementing actions which MPPE will take include:

1. Preparation of general criteria which will serve as guidelines for the development and execution of sub-projects by the implementing agencies;
2. Participation with MIVI in the preparation of development plans for each growth and service center;
3. Assisting implementing agencies with the evaluation of potential sub-project impacts during feasibility stage of project development; and
4. Assure that adequate technical assistance and training programs are designed and carried out by appropriate implementing agencies.

B. Intermediate Credit Institutions (ICIs)

The three ICIs will review proposed sub-projects on the basis of pre-established criteria and financial feasibility. They will assist sub-borrowers to prepare loan requests and be responsible for loan recuperation and the preparation of periodic financial reports to be submitted to the Ministry of Planning and AID.

C. Implementing Agencies

1. Municipal Development Fund (FODEM)

The implementation responsibility of FODEM involves assisting the individual municipalities in preparing technical studies associated with the planning and design of infrastructure sub-projects. Specific technical studies to be prepared by FODEM in support of the municipal infrastructure sub-projects will include:

- . Detailed feasibility studies;
- . Final site selection;
- . Plans and Specifications; and
- . Technical assistance and training of municipal personnel for the efficient administration of the sub-projects

2. Ministry of Housing (MIVI)

MIVI's primary role within the URBE program is basically two-fold: (a) the preparation of detailed town development plans with coordination from MPPE; and (b) the implementation of shelter solutions in each of the designated growth and service centers. Specific technical operations which MIVI will undertake to accomplish these objectives will include:

- . Coordination of planning effort with municipal authorities to assure their participation and approval of urban development plans;
- . Feasibility investigations of proposed shelter sites and final site selection;
- . Preliminary and final site plans;
- . Preparation of socio-economic study of target population and selection of housing beneficiaries; and
- . Implementation of a community participation program

3. Ministry of Agricultural Development (MIDA) and the National Finance Corporation (COFINA)

It is anticipated that MIDA and, possibly, COFINA will share responsibilities for the implementation of the two agro-industrial infrastructure projects and separate industrial enterprises. Specific technical tasks required to be carried out will include:

- . Contact and promotional work with potential investors;
- . Preparation of loan proposals
- . Pre-feasibility or market studies;
- . Detailed site investigations and engineering feasibility;

- . Final site selection;
- . Preparation of preliminary and final site plans;
- . Building specifications; and
- . Technical assistance in business administration and financial control.

4. Ministry of Commerce and Industry (MICI)

MICI will be responsible for the preparation and processing of loans and related studies in support of small business enterprises. In carrying these tasks, its technical responsibilities will include preparation of:

- . Pre-feasibility studies;
- . Preliminary site investigations and approval of final site selection;
- . Building specifications; and
- . Technical assistance in business administration and financial control.

5. National Water and Sewerage Institute (IDAAN)

IDAAN will be solely responsible for all aspects associated with the planning, design, construction and operation-maintenance of the proposed wastewater collection and treatment systems in Penonome and Las Tablas. In addition, it will be responsible for the review and evaluation of the sewerage plans for all other sub-projects. Specific technical studies and related implementation actions will include:

Environmental planning and engineering feasibility studies;

Preliminary and final plans and specifications for all sewerage collection and treatment facilities; and

Operation and maintenance of proposed sewerage systems.

APPENDIX E

ENVIRONMENTAL IMPACT EVALUATION OF THE URBE PROGRAM'S PROPOSED SEWERAGE
SUB-PROJECTS

I. SUMMARY OF EXISTING CONDITIONS AND PROPOSED PROJECT ACTIONS

A. Penonomé

1. Existing Sewerage Treatment Systems

The existing sewerage treatment system for Penonomé was constructed in 1936. It consists of a collection system serving 20 percent of the town's populated area (45 percent of the population) and three septic tanks which discharge their effluent to tributaries of the Rio Zarati (See Figure 1 for location of existing system). Currently, the entire sewerage system is overloaded. Although the physical state of the collection system is good, the pipes are undersized to handle the present volume of sewage, especially during the rainy season. In addition, maintenance of these overloaded lines is complicated because they often cross private property. The septic tanks, because of their inadequate size, now only partially retain solids, allowing virtually untreated sewage to flow to nearby streams in the Zarati watershed. One septic tank discharges to a stream flowing through a densely populated area of 600 houses, and another discharges at a point below a popular town swimming area.

The remaining 55 percent of the town's population rely on individual septic tanks for waste disposal. Surface runoff from these systems is causing water pollution in nearby streams as the area's soils are not permeable enough to absorb the effluent.

Both the situation of the town's treatment facilities and individual on-site systems are causing water quality problems which endanger the natural and human environment.

2. Proposed Sewerage Treatment System

The proposed sewage treatment system for Penonomé consists of a collection system covering 75 percent of the town's land area, and a treatment facility located on the Rio Zarati. Figure 2 identifies the area served by the proposed system and two potential locations of the treatment facility. The southernmost part of the town in the vicinity of the Interamerican Highway will not be served by the new sewerage

system because of topographic conditions. Inhabitants of this area are expected to rely on individual methods of sewage disposal - pit latrines and/or septic tanks.

It is anticipated that the existing system will be totally replaced. The new collection system will be constructed to accommodate the projected year 2000 flows and the treatment facility will be built to handle flows until the year 1990. Average daily flow for the design year 1990 is projected to be .67 MGD, based upon projected residential, industrial and agricultural land uses and infiltration.

The feasibility study for the Penonomé system considered three types of treatment: (1) septic tanks; (2) Imhoff tanks; and (3) oxidation lagoons. These treatment techniques were compared on the basis of land area, required cost and BOD reduction. Table 1 summarizes this comparison.

TABLE 1

Alternative Systems	Area (HA)	Cost/B	BOD Reduction (%)	
			Min	Max
Septic tanks	2.00	189,008	15	20
Imhoff tanks	0.05	176,745	35	45
Oxidation lagoons	5.40	280,284	90	95

Although a final decision has not been made on type of treatment, it is anticipated that the total system cost will be approximately \$1.7M. Capital costs will be recovered through valorization taxes. Operation and maintenance costs will be collected for all users through the town's current water supply billing system.

B. Las Tablas

1. Existing Sewerage Treatment Systems

The existing sewerage treatment system for Las Tablas was constructed in 1934 and consists of a collection system serving approximately 30 percent of the town's population area, and one septic tank which discharges to the Quebrada Ermita. Figure 3 illustrates the service area of the existing system. Both the collection system and septic tank are overloaded, especially during the rainy season due to a large infiltration problem. Maintenance of the collection system is often difficult due to an insufficient number of manholes and the fact that many of the lines are located on private property.

The septic tank no longer has adequate capacity to allow the required retention time for the settling of solids, and frequently acts as a pipe discharging raw sewage to the Quebrada Ermita.

Inhabitants of the remaining 70 percent of the town's land area rely on septic tanks and latrines for sewage disposal. In most areas impermeable clay soils do not allow for adequate treatment of wastes, causing ponding of partially treated sewage in densely populated neighborhoods, and runoff of wastes into nearby streams.

Development in some areas of the town has been limited because of the inadequacy of existing individual and community septic tanks. Conditions in the Quebrada Ermita below the discharge point of the town septic tank are septic and mosquito breeding and bad odor problems have been reported in areas located near the Quebrada. Finally, potential health hazards are created as the contaminated waters of the Quebrada Ermita flow to the Rio Perales, where the town's new water intake is located.

2. Proposed Sewerage Treatment System

The proposed wastewater system for Las Tablas will consist of a collection system serving 100 percent of the town's population and a treatment facility located on the Quebrada Ermita. Figure 3 identifies the proposed location of the new collection system and treatment facility. The collection system will be constructed to accommodate the town's projected population for the year 2000. It is anticipated that this new system will utilize 15 percent of the old collection system.

The treatment facility will be designed for the year 1990. Projected 1990 sewage flows are .6MGD. The specific type of treatment system to be utilized has not been finally selected. Three types of treatment facilities are being considered in the feasibility study for the Las Tablas system: (1) septic tanks; (2) Imhoff tanks; and (3) several types of lagoon systems. These treatment facilities are compared on the basis of costs and percentage reduction of BOD, coliform bacteria and suspended solids. Table 2 below summarizes the comparative relationship of these alternatives.

TABLE 2 -29-

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<u>Alternative Treatment System</u>	<u>BOD (%) Reduction</u>	<u>Coliform (%) Bacteria Reduction</u>	<u>Suspended Solids Reduction (%)</u>	<u>Cost (B)</u>
Septic tanks	15-20	40-60	40-60	119,100
Imhoff tanks	30-40	40-60	40-60	129,500
Lagoon system	75-95	80-99	90	79,490

Although the final decision has not been made as to type of treatment, it is anticipated that the total collection and treatment system will cost approximately \$1.7M. Capital and O&M costs will be recovered in the same manner projected for Penonomé.

II. IDENTIFICATION AND EVALUATION OF IMPACTS

The environmental consequences of the proposed sewer systems for Las Tablas and Penonomé are discussed in this section. The potential environmental impacts have been analyzed according to the three basic phases of project implementation: (1) design; (2) construction; and (3) operation and maintenance.

Within each category the significance of the probable impacts on both the natural and human environment is evaluated on the basis of the expected duration (short and long-term) of the impacts and whether they will be of a beneficial or adverse nature.

A. Evaluation of Project Design Impacts

Feasibility studies for both the Las Tablas and Penonomé systems have been completed by IDAAN. In both studies, sizing of the proposed system is based on topographical considerations, population projections, projected waste flows (taking into account domestic, industrial and agricultural use and infiltration), community needs, land requirements and costs. In both studies, three primary treatment alternatives are evaluated in terms of costs, land requirements and treatment levels. Selection of the final treatment alternative has not been performed, as yet. Design of the entire proposed system will be based on standards established by the Panamanian chapter of the Asociación Interamericana de Ingeniería Sanitaria. The design year for collection systems is 2000, while the design year for treatment facilities is 1990. In addition, both studies set forth methods for recuperation of both capital and O&M costs.

In their present stage, designs for the two sewage treatment systems appear to be both technically sound and sensitive to community needs, and should present no future adverse impacts. However, investigations of appropriate treatment levels for effluent discharges to the Rio Zarati in Penonomé and the Quebrada Ermita in Las Tablas are needed prior to final design and project approval. To avoid or mitigate potential adverse environmental, social or economic impacts, it is recommended that these investigations include:

1. Evaluations of stream flow, water quality and water use in both the Rio Zarati and the Quebrada Ermita to assess each stream's assimilative capacity;
2. Thorough analysis of each treatment alternative's BOD removal capabilities;
3. Evaluations of the operational effectiveness and maintenance requirements of each proposed system; and

4. Analysis of trade-offs between ~~em~~ costs versus long-term environmental impacts.

B. Evaluation of Project Construction Impacts

Project construction will create effects on both the natural and human environment; however, these impacts should be short-term in duration and primarily of a beneficial nature. Construction of the collection systems and treatment facilities will have beneficial short-term effects on the local economy of the towns through the generation of employment opportunities. Much of the construction work will require the use of manual labor and should assist in alleviating existing unemployment and underemployment problems. Identified adverse short-term impacts will be associated with community disruptions. Traffic patterns will be altered, nuisances of noise and dust created, and possibly some safety hazards could occur in more heavily populated areas.

Construction of treatment facilities will most likely generate few adverse impacts on the human environment as proposed facility sites in both towns are located far from inhabited areas. Any adverse impacts on the natural environment will result from increased sediment loading to streams located near construction sites; however, these impacts will be minimal in relation to the current water quality of these streams.

In summary, the adverse short-term construction impacts mentioned above may be largely mitigated by proper time phasing of planned work, careful use of construction equipment and safety precautions. All of these adverse impacts are insignificant when compared to the serious long-term environmental consequences of taking no action.

C. Evaluation of Project Operation and Maintenance Impacts

1. Water Resources

Potentially significant water pollution problems may exist in the Quebrada Ermita watershed in Las Tablas, and the Rio Zarati watershed in Penonomé due to overloaded town sewage treatment systems and malfunctioning individual on-site disposal systems. In certain areas of each watershed conditions are almost septic, causing death to both fish and aquatic plants, and terrestrial plant and animal life is endangered by raw sewage runoff.

Construction of a new and/or expansion of already existing sewage collection systems for both towns will be quite beneficial as they will eliminate the immediate adverse environmental health dangers from malfunctioning individual systems. The long-term impacts from the operation of treatment facilities discharging larger quantities of effluent at

a single point are largely unknown due to the lack of specific information on the assimilative capacity of receiving streams. However, any potentially significant adverse impacts will be mitigated when IDAAN collects and evaluates appropriate environmental information and incorporates these findings into final project designs.

2. Land Use

Development potential is limited to some extent in both Las Tablas and Penonomé due to the overloaded capacity of existing collection systems, and the inability of soils to handle wastes from individual on-site systems. Construction of enlarged collection systems and treatment facilities in both towns may have some beneficial impacts on land use as these new systems will allow greater development of each town's land area for both residential and industrial uses. They will assist in establishing a more orderly and compact pattern of land development. However, their growth inducement effects will be minimal as the principal obstacle to regional development are economic factors.

3. Socio-Cultural

(a) Community character

Construction of a new sewage collection and treatment system for Las Tablas and Penonomé will create a more aesthetically pleasing atmosphere in the heavily populated areas of Las Tablas and Penonomé. This should have a positive long-term impact in terms of community image and provide incentive for further community improvements.

(b) Public Health

Although no specific data exist on the incidence of waterborne diseases in the towns of Las Tablas and Penonomé, it is known that illnesses involving diarrhea and intestinal parasites are among the principal causes of disease in Panama especially in rural areas due to lack of adequate water supply and sanitation facilities. Officials in both towns report that there have been no waterborne disease outbreaks in recent years; however, they feel that chances of such an outbreak are high. Runoff from malfunctioning on-site disposal systems, and discharges from malfunctioning community septic tanks are polluting streams in densely populated neighborhoods, and creating serious health hazards.

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Construction of sewage collection systems in both towns will have beneficial long-term impacts as they will eliminate runoff from faulty on-site disposal systems and, thereby, help to prevent health hazards in heavily populated areas. Construction of new treatment facilities will eliminate the discharges of large quantities of raw sewage from town septic tanks.

4. Economic Impacts

The construction of sewage treatment systems for Las Tablas and Penonomé will require that the users of the system pay for both capital and operation and maintenance costs. It is anticipated that capital costs will be recovered through town valorization taxes, and O&M costs will be collected through each town's water supply billing system.

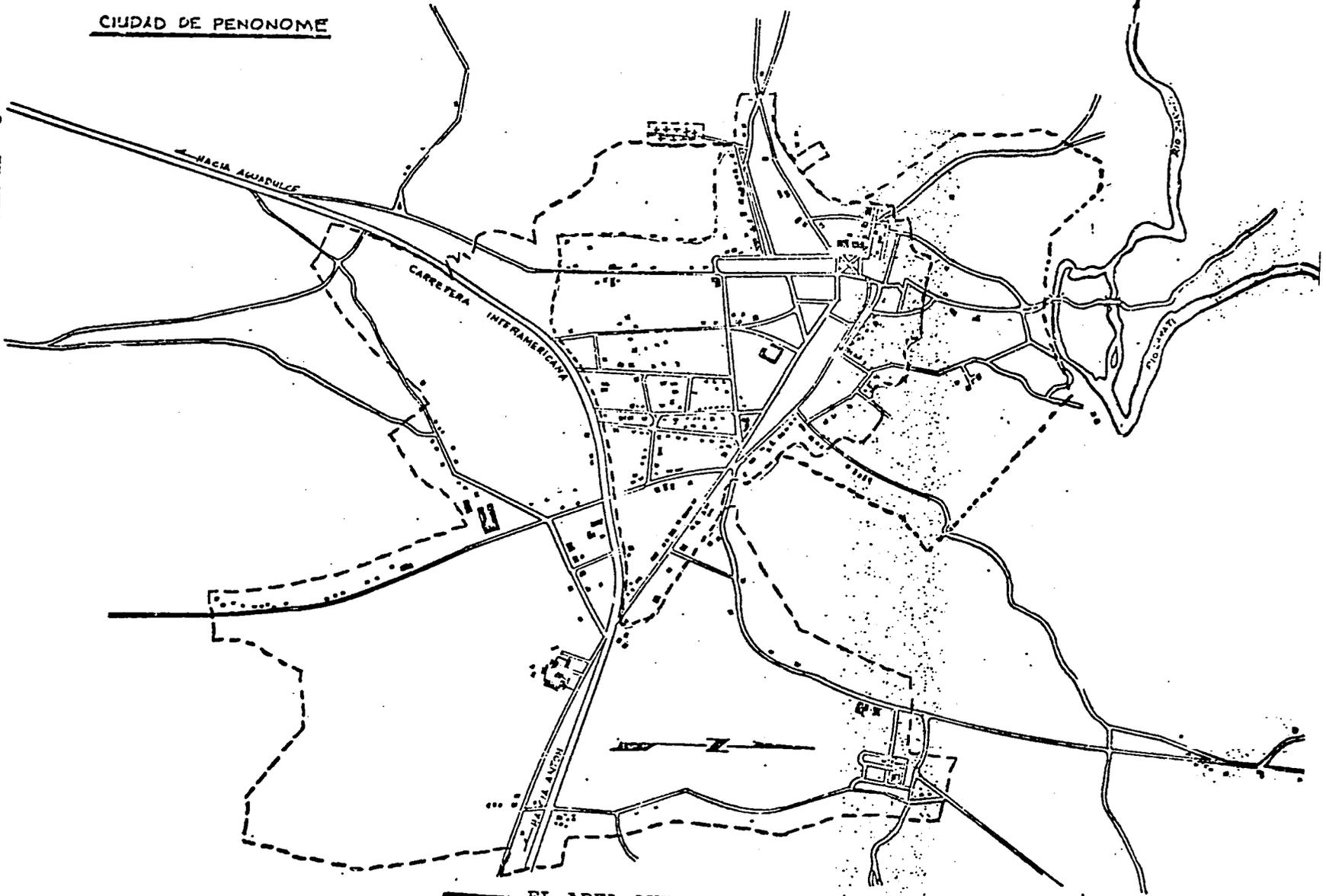
The added cost to users may be considered an adverse economic impact; however, it must be noted that inhabitants of both towns have indicated a willingness to pay such costs to eliminate existing unsightly and environmentally hazardous conditions. However, a beneficial impact on income expenditures may result in the long-term construction of collection systems in each town which will stimulate more compact development patterns, making the provision of other community services such as water supply and electricity less costly.

Construction of new sewage collection systems for Las Tablas and Penonomé will create a beneficial long-term impact in terms of land values as the value of property outside the service area of existing systems will increase. Also, in a more indirect manner, property values will increase as elimination of unsightly, malodorous conditions may provide incentive for landowners to undertake further property improvements.

CIUDAD DE PENONOME

ANNEX II - J

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EL AREA QUE CUBRE EL SISTEMA DE ALCANTARILLADO EXISTENTE

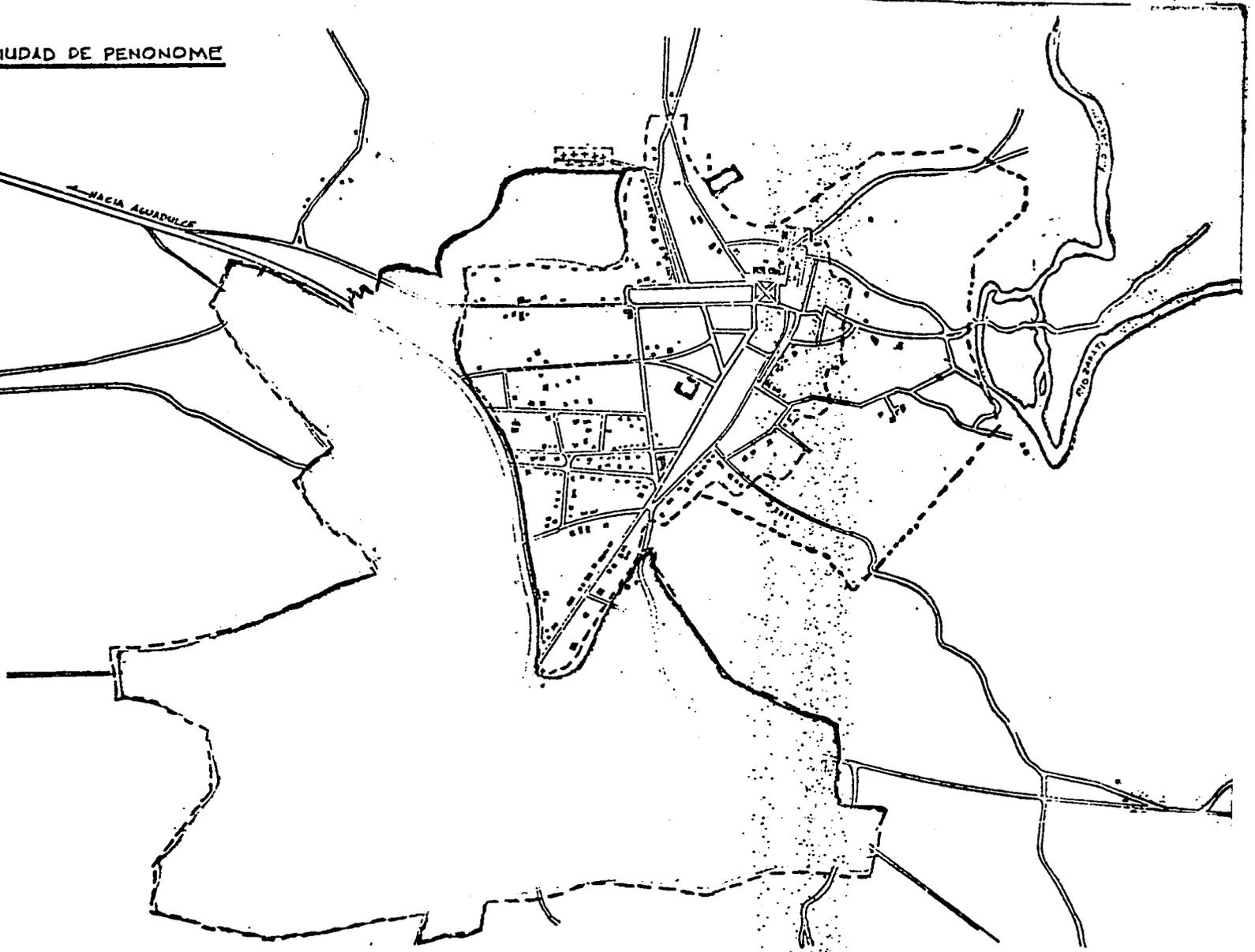
APPENDIX E
FIGURE 1

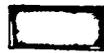
CIUDAD DE PENONOME

ANNEX II - J

HACIA AGUADULCE

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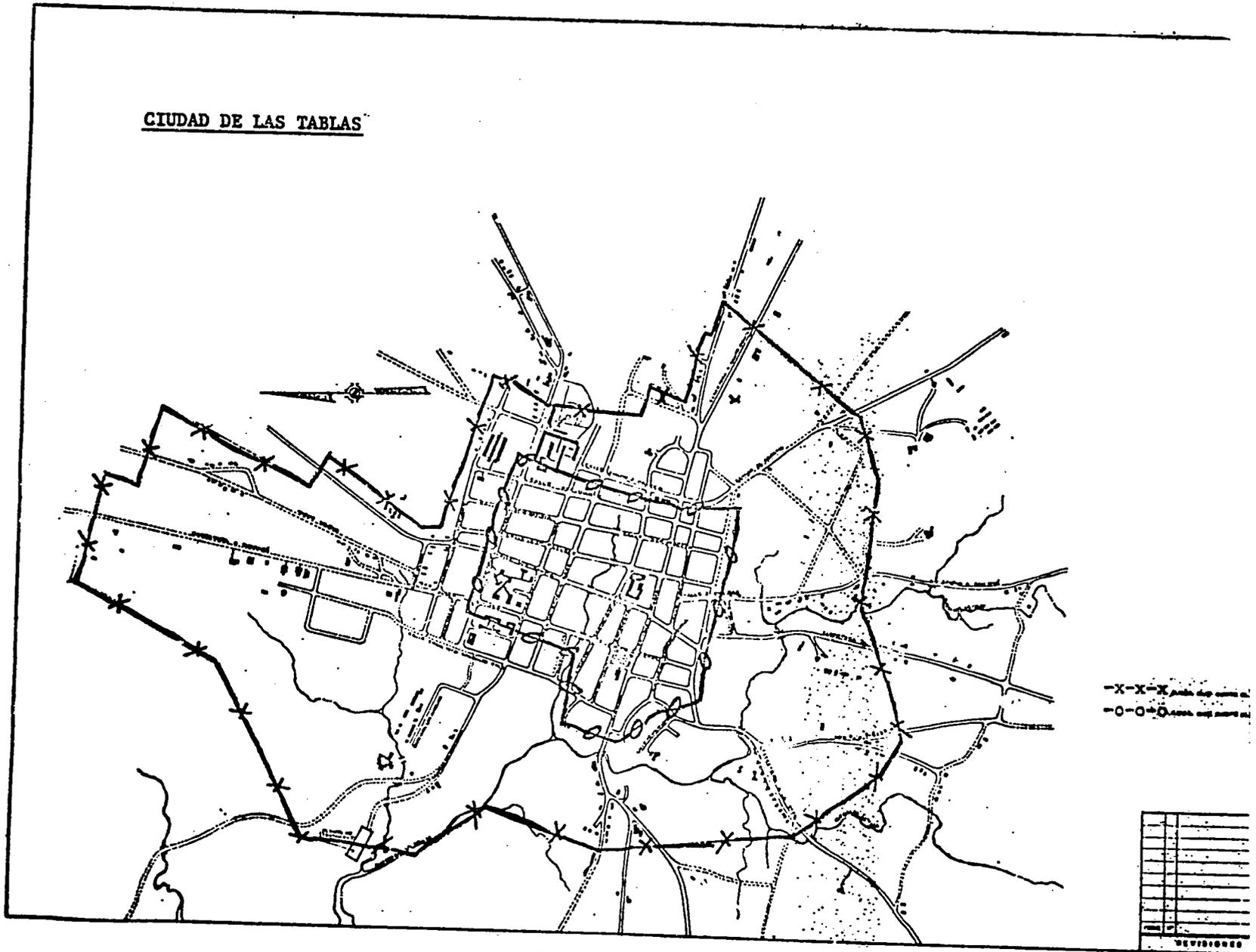


 EL AREA QUE CUBRE EL SISTEMA DE ALCANTARILLADO PROYECTADO

APPENDIX E

FIGURE 2

CIUDAD DE LAS TABLAS



APPENDIX E
FIGURE 3

Future Extensions of the URBE Program

The extensive regional analysis undertaken in preparation for URBE has indicated the need for the GOP to extend service center designation and facilities to three more small settlements at a later phase of the URBE program. These prospective new URBE centers have been termed "Incipient Service Centers" and tentatively identified as Soná, San Felix-Remedios-Las Lajas and Almirante. These incipient service centers must be considered from the point of view of access by the rural population to service facilities. Soná with its urban population of 4,085 has problems of access. It is not part of an interconnected road network to the degree that the other eight URBE places are. The upgrading of the national highway system and the construction of the Inter-American Highway in effect have by-passed Soná which had formerly been on the main road between Veraguas and Chiriqui Provinces. Soná, as a service center, would serve a large area.

San Felix-Remedios-Las Lajas individually are not properly urban places by the census identification. Nonetheless, the three considered together exceed the definition of urban place. The level of services provided in the three places is rather low. However, they are located approximately half way between David and Santiago and very close to the Inter-American Highway. In the future, there will be penetration routes into the mountainous region to the north and access roads to the copper mines at Cerro Colorado. These new routes will provide an extra economic focus to this area. The San Felix-Remedios-Las Lajas area provides an opportunity for urban planning in advance of unplanned development which is unique in the URBE area and which can support URBE program goals.

The case of Almirante and Bocas del Toro Province is somewhat more complex. The provincial capital, Bocas del Toro, is located on an island with the resultant problems of access to the mainland populated area. The island itself is small with limited agricultural production. Changuinola, another urban place defined by the Census, is in reality semi-urban in character. Being the home for workers on the banana plantations, the "urban population" is dispersed over a large area and relatively few services are present. Access problems are also severe. A plantation railroad running parallel to a motorable road connects it to the coast. On the other hand, Changuinola District also includes Almirante, which possesses certain advantages as an urban service center beyond those of Changuinola and Bocas del Toro. Almirante is linked by road and railroad with the banana plantation areas in Changuinola. It has port facilities. More importantly, it will be the terminus of the future transisthmian highway which is being pushed north from David and which will link Bocas del Toro Province with the rest of the country by motorable road for the first time.

There exists also in the URBE region the possibility of a new or upgraded "growth center." Chitre as a growth center commands an area of influence more extensive in area and with greater population than that of David although the population of the Chitre-Los Santos urban growth center is smaller. However, much of the service area of Chitre as a growth center is in fact included in the area of influence of the Santiago service center. Government and private investment in Santiago, the city's central location within the URBE populated area, the density of its surrounding population and its position at some distance from Chitre and David provide indications that a future census of commerce and industry will reveal Santiago to have achieved growth center status in its own right. That is, in the future, it will be shown to provide an array of goods and services essentially equivalent to David and Chitre-Los Santos, and to be acting as a net destination for migrants. This will have to be taken into account as the URBE program evolves over time.

RURAL GROWTH AND SERVICE CENTERS (URBE)

Preliminary Master Guide Plan

for

Chitré - Los Santos

Summary English Version

May, 1978

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INTRODUCTION

1. As part of the technical inputs required for the URBE/AID Project Paper, the General Development or Guide Plan for the Growth Center of Chitré-Los Santos is to be considered an innovative methodological effort to develop a model or "pilot project" for conducting other similar studies for the other centers included in the URBE Program.
2. The general framework delineating the basis for this study and its objectives, respond to the following needs:
 - a. The implementation of an activity leading to the achievement of one of the stated purposes of the URBE Program which is to plan for the orderly improvement of the physical, social and cultural aspects of the selected towns and an increase in their capacity to absorb new economic activities and population growth.
 - b. To produce an analytical model that will serve as a guideline for the rational organization of the urbanized areas of the towns and for orienting as well as promoting economic investments by the private and public sectors.
 - c. Provide Local Governments with the necessary administrative instruments to implement the proposed activities and with technical assistance at the municipal level to involve the local authorities as active participants in the process of town development.
 - d. Provide a description and an analysis in physical-spatial terms of the present conditions and potential of the twin cities of Chitré-Los Santos as a Growth Center capable of providing adequate services to its area of influence.
 - e. Provide up-to-date regional and urban information for the purpose of analyzing the urban-rural links within the sub-region.
3. Previous urban planning efforts for the District of Chitré include a 1966 study prepared by the Ministry of Housing entitled "Document for Development Control". This document was approved on August 5, 1966, by Municipal Agreement No. 21 which reads as follows:

Agreement No. 21:

"Whereby the rules and regulations of urban development are established, as part of the Official Plan for Chitré, La Arena and Monagrillo, and general provisions are set forth for the progressive planning of the physical growth of the District."

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Although this document has been a useful instrument for land use control, its restrictive nature, i. e. zoning requirements and general regulations for physical development, which is characteristics of traditional zoning laws, makes it extremely rigid under the present circumstances.

The proposals set forth in this document, specifically those related to land use planning, should be considered within a flexible framework wherein decisions are made on the basis of criteria that promote urban development recognizing the need to periodically adjust changes which constantly affects and modifies the rural-urban interrelationship.

Other cooperative efforts within the area of physical planning are the Master Plan outlines for several urban centers in the country (including Chitré-Los Santos) prepared by the Ministry of Planning and Economic Policy and the Ministry of Housing in July 1975. These plans were developed as part of the URBE work program and have served as a source of basic information which in certain instance have been up-dated.

4. The new approach developed by the URBE Program visualizes the urban center or growth center (as in the case of Chitré-Los Santos) as a center of attraction which aside from promoting a greater concentration of population will gradually diversify its services, including those provided to the population within its area of influence.
5. It should be noted that the urban community boundaries of Chitré, La Arena and Monagrillo, and those for the urban center of Los Santos, were established by the Land Assessment Office of the Ministry of Treasury, in accordance with Articles Nos. 13 and 14, Law No. 63, dated July 31, 1973, which states the following:

Article No. 13: "The review and approval of lotification, sub-division, merger and urbanization plans, as well as the demarcation of urban areas for fiscal and development purposes, will be effected by the Land Assessment Office in coordination with the technical divisions of the Ministry of Housing."

Article No. 14: "The Municipalities may request the demarcation of areas for future urban development of those populated areas with over five hundred (500) inhabitants, as determined by the Statistics and Census Bureau of the Comptrollers Office of the Republic."

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The demarcation procedures for said area(s) will be established by the Land Assessment Office in collaboration with the Ministry of Housing and will be executed in coordination with the respective Municipalities."

The demarcation of these areas for future urban development is known traditionally as "ejidos" (public land). This term appears in the plans to indicate the limits of urban areas. In the case of Chitré, including the "Corregimientos" of La Arena and Monagrillo, the total area so delimited consists of 1,548 hectares; and for the urban area of Los Santos, 289 hectares.

CHAPTER I

SUMMARY OF BACKGROUND AND CONCLUSIONS

- Scope and Objectives
- General Evaluation
- Diagnosis
- Favorable Conditions
- Unfavorable Conditions
- The Future City

Scope and Objectives

6. This document is a Master Plan which provides general guidelines for physical planning. It considers the use of land and its interrelationship with activities in the town for the purpose of creating better opportunities and facilities for a more rational and harmonious development that will promote the general welfare of its inhabitants.

7. The general and preliminary ideas set forth in this document include two important considerations:

First, the basic information provided makes it possible to undertake a series of analyses related to the future development of the area in accordance with specified objectives of the URBE Program.

This document includes a general analysis which lays the basis for the establishment of land use and development guidelines and for conducting a more comprehensive and detailed study in the future.

8. Second, because this is a general and preliminary outline of the issues, it is subject to discussion by the interested parties involved in planning. Its adoption depends on the approval of the community that will be the direct beneficiary of this planning effort.

Consequently, the main purpose of this document is to promote and facilitate an exchange of opinions by offering a general description of needs, physical problems and the potential for development of Chitré-Los Santos.

General Evaluation

9. The twin cities of Chitré-Los Santos have been identified in previous studies as a growth center for the entire Central Region of the URBE/AID Project. Consequently, the magnitude of its functions and different level of services must be considered within this context.
10. The definition of "ejidos" (areas for the future development of urban areas) established by the Land Assessment Office is both advantageous and flexible for the future development of this Growth Center. The boundaries fixed for the areas and its topography allow numerous possibilities for physical expansion

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in any direction. Extensive pasture areas, vacant lots and other underutilized areas surrounding the urbanized or more developed areas constitute significant land reserves which will gradually cede in their present functions for more productive and effective urban uses and activities.

The regional services and functions rendered by the Chitré-Los Santos Center have been divided into four levels, each with its corresponding "working area" in terms of population and area of influence.

11. The relatively rapid growth experienced by Chitré-Los Santos during recent past years has produced a series of significant changes and improvements in its physical and economic structure. This dynamic rapid urban development is characteristic of present day tendencies and fully justifies the need for the proposed "Master Plan" which can serve as a guide to planning the orderly physical development of the future city.
12. Currently there are a series of ongoing and planned projects which will further contribute to the urban development of Chitré Los Santos. Among these projects are those initiated by the Municipalities, such as:
 - a. The proposed "Industrial Area", which will be a joint venture (Municipality Private Enterprises), already has land available donated by the Azuero Industrial Group, a private investment consortium, and proposed for financing under the URBE/AID Project.
 - b. A bus terminal for passengers and light freight is also slated for financing under the URBE/AID Project. The Municipality has two options for purchasing private land (each with an area of 2 hectares). The selection of the most adequate will be based on feasibility studies. The general land use plan shows the location of the two alternative sites which is discussed in greater detail in the section on preliminary proposals.
 - c. The completion of two perimeter roads surrounding the more developed areas of the town, will not only facilitate traffic movement and the exchange of goods and services but will also promote the development of new activities and residential areas.

Work on these roads were initiated in recent years by the Municipality of Chitré in collaboration with the Ministry of

Public Works, and has been financed to a great extent with municipal resources. Currently, approximately 60% of the external and 65% of the internal perimeter roads have been completed. Although most Municipalities in Panama budget funds for public works, these do not include road construction or maintenance as such work is the responsibility of the Ministry of Public Works. The Municipal effort in this case is therefore highly significant.

- d. Another project of importance is a by-pass road which will skirt the commercial area of Chitré in route to the southeastern part of the Province of Los Santos.

This is another project initiated with municipal resources. It has progressed considerably, with the base course laid enabling use of the road by some heavy vehicles. The construction of these three roads (2 perimeter and by-pass) was recommended in a study undertaken by the Ministry of Housing in 1965.

13. Among private sector projects are the following:

- a. The recently opened "Pascual" biscuit and cookie factory which produces for export (investment: B/ 1,000.000), is located in the urbanized sector of Chitré and employs 80 permanent workers.
- b. The "Compañía Panameña de Alimentos, S. A." which currently is constructing a factory for the industrial processing of tomatoes and tropical fruits. The company has 27 hectares of land in the District of Los Santos, of which 6 hectares will be developed during the first stage and will provide 180 permanent jobs. This enterprise will stimulate the regions economy in terms of employment opportunities and increased agricultural production and incomes. Planned investments over the medium-term (45 years) is placed at \$10.0 million.
- c. The construction of the port of "El Rompío" in the District of Los Santos financed by the Azuero Industrial Group, is important for the import and export of agricultural inputs and produce. Over B/ 2,000.000 has been invested in the completion of the first stage.

Other important industries in the area are the CAMECO Company, S.A. which manufactures metal vans for transporting agricultural products and a roof industry for low income housing units which manufactures paperboard/asphalt surface treated roofs.

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- d. To develop the area's marine resources, storage and refrigeration facilities are being constructed in the Port of "Agallito" District of Chitré. The construction of a pier is also being added.

In addition to the specific identified ongoing and planned projects, the rural hinterland of the Chitré-Los Santos Center is used intensively for agriculture as well as cattle production, the primary activities on which its economy is based. Other GOP and private actions addressing improved production and productivities of these activities should generate additional activities which will certainly impact on the growth processes of the town.

The La Villa River supplies drinking and irrigation water. The completion of a new potable water plant in Chitré-Los Santos should satisfy the needs of the estimated population to the year 2000.

Diagnosis

14. Among the favorable and unfavorable factors and conditions which affects the physical development of the Chitré-Los Santos Center are the following:

a. Favorable Factors

- (1) Relatively flat topography with numerous possibilities for the physical expansion of the area in any direction. Favorable geological constitution with little erosion and appropriate stability for construction.
Pleasant climate (average temperature: 28° Centigrade) throughout the year and no history of natural disasters.
- (2) A sustained population growth.
- (3) Close proximity to the coast.
- (4) Significant commercial activities.
- (5) Growing industrial and agro-industrial activities.
- (6) Availability of a range of growth-inducing facilities and services (university, hospitals, insurance companies, banks, etc.).
- (7) The existence of relatively good road connections and adequate inter-urban public transportation.
- (8) Adequate rate of growth in agricultural productivity and cattle production.

- (9) Availability of adequate land reserves which facilitates the planning of these areas for the future expansion of the urban center.
 - (10) Ongoing and planned projects that further tends to promote and stimulate the town's growth and development.
 - (11) Adequate supply of drinking water and electricity, both of which have been integrated into the national system.
 - (12) Low juvenile delinquency rate and low incidence of other social problems.
 - (13) Location of regional offices of the principal governmental institutions within the center.
- b. Unfavorable Conditions
- (1) Limited use of modern techniques for rendering certain basic public services, such as garbage collection and disposal, and poor maintenance of streets and sidewalks.
 - (2) Scarcity of well defined and effective norms to stimulate adequate land use patterns among competing industrial, commercial and recreational requirements.
 - (3) Urban disorder in the configuration and size of lots, especially in Chitré.
 - (4) Unattractive central commercial area (Chitré), with few pedestrian facilities and a general lack of the physical and aesthetic elements of an "urban center"
 - (5) Low level or defficient municipal capabilities in urban planning and the need to create new Municipal administrative mechanisms to improve its financial and organizational structure for promoting development.
 - (6) High cost of supplying electricity which impact adversely on efforts to develop industrial and other types of activities.
 - (7) Limited skilled human resources at the administrative levels.
 - (8) Limited promotion of small businesses such as handi-crafts, and other specialized services.
 - (9) Low level of community awareness and participation, and inadequate mechanisms for involving the community in planning and implementing Municipal development activities.

The Future City

15. In terms of "developed or constructed areas", an area of 716.5 hectares has been estimated for the future city to accommodate the population of 52,000 projected for the year 2000.^{1/}

This area represents an increase of 286.43 hectares over the current developed area comprising 430.14 hectares.

The gross density in the current developed area is 48.30 inhabitants per hectare. The average gross density for the entire developed area by the year 2000 will be 72.57 inhabitants per hectare.

$$\frac{52000}{716.5} = 72.57 \text{ inhabitants/Hectare}$$

This represents a 66.5% increase over the present area to accommodate a population 2.3 times larger.

16. At present the population in the developed area is 20,775. However, outside the developed area the rest of the population (2,582) is dispersed in low density areas, comprising a total population of 23,357 (1970 Census). Consequently, the population increase estimated by the year 2000 is 26,643 (period 1970-2000).
17. Distribution of the usage of the total estimated area (716.5 hectares) required for the target year (2000) has been planned as follows: 82.2% has been allotted for residential areas; 3.21% for commercial and services activities in the Central Area; 1.73% neighborhood commercial and services activities; 7.7% for institutional use; 4.32% for recreation and green areas; and 0.83% for industrial activities.
18. For the remaining urban area (defined by the "ejidos"), consisting of vacant lots (uncultivated land and pasture lands) and farmlands, the Plan proposes the use of certain or, in some cases, alternative areas for non-residential purposes such as:
- Government Center (3.5 hectares)
 - Light Industries (non-polluting) and warehouse areas (2 alternatives: each consisting of 6.0 hectares)

^{1/} SOURCE: URBE (Growth and Service Centers Project), Preliminary Document, (2nd. Draft), March 1976, MPPE.

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- Bus Terminal (2 alternatives: each consisting of 2.0 hectares)
- The Chitré-Los Santos corridor (length: 2 kms.), as an area requiring priority attention.
- Civic Center (6.0 hectares)
- Sports-Cultural Complex (13.0 hectares)
- Regional University Center (10.0 hectares)

19. With regards to the road system, the Plan proposes as a first priority the completion of the external and internal perimeter roads presently of primary concern of Municipal authorities. Second, the upgrading of the present detour road, by paving approximately one kilometer. This section is located in the southeast area, between Chitré and Los Santos. The third proposal entails the construction of a road of approximately 3 kms. whose alignment would be almost parallel with and towards the northeastern corridor of Chitré-Los Santos. The idea is to provide an alternative for heavy vehicles transporting agricultural goods produced by the surrounding farmlands. This is a relatively costly proposal because it requires the construction of a bridge.

The summary plan, No. 13, clearly indicates these three proposals.

20. The Plan proposes the development of a small tourist facility on the banks of the La Villa River.

Space for commercial activities have been increased in this area, based on current ratios (m^2 of commercial activities/population) with an additional 15% for parking areas.

21. The growth rate of the student population was used to determine the areas needed for educational facilities and for additional health facilities, the plan proposes the use of reserve areas adjacent to the "Cecilio Castellero" hospital.

22. The industrial areas proposed include 20 hectares of the "industrial area" donated by the Azuero Industrial Group. In addition, an alternative area of 20 hectares has been proposed. These areas would accommodate industrial activities of a nuisance nature.

Other non-polluting light industries may be located in two alternative areas, each consisting of 6.0 hectares. Complementary activities could be developed in these zones, such as handicrafts, warehouses or distribution centers.

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23. With regards to housing, two "slum areas" have been identified. There are 112 housing units inhabited by 505 persons or 102 families. The future expansion areas indicated in the proposed land use plan would be alternative areas for solving the problem in spatial term.
24. The current and ongoing improvements in the infrastructural capacity for the supply of potable water and electricity is considered adequate to satisfy long-term future needs. The present sanitary sewer system serves 45% of the total population in the developed area which is located in the most densely populated areas. Provisions must be made to gradually extend this service, and to do so in a way that benefit the greatest number of inhabitants.
25. Among the other activities proposed is the upgrading of the Central Commercial Area (Urban Renewal Program), during the medium term; the creation of Municipal Advisory Committees ("Juntas Asesoras Municipales") in urban development; and the design of a training program for municipal and government officials to implement the Urban Development plan.

CHAPTER II

GENERAL FRAMEWORK

- Regional Focus
- The Study Area
- The Area of Influence
- The Road System
- Population
- General Conclusions

GENERAL FRAMEWORK- Regional FocusThe Study Area

26. The study area is defined as the "Chitré-Los Santos Growth Center", located east of the boundary which separates the Provinces of Herrera and Los Santos and southeast of the Central Region of the country. (See Map No. 1).

Part of the area is located in the District of Chitré, in the eastern region of the Province of Herrera; the other part is in the District bordering Los Santos, in the northern region of the Province of Los Santos. The area is located 8 kms. east of the Pacific Ocean and 5 kms. north of the Gulf of Parita.

27. Towards the south extend the predominantly agricultural rural areas of the Province of Los Santos, partly consisting of low lands with sedimentary soil and broken hilly type land with peaks ranging in altitudes of 200 to 800 meters above sea level. Towards the southwestern region of the Province there are small mountainous zones (Azucero Mt. Chain and the Canajagua Mts.) with peaks ranging in altitudes of 800 to 2000 meters above sea level.

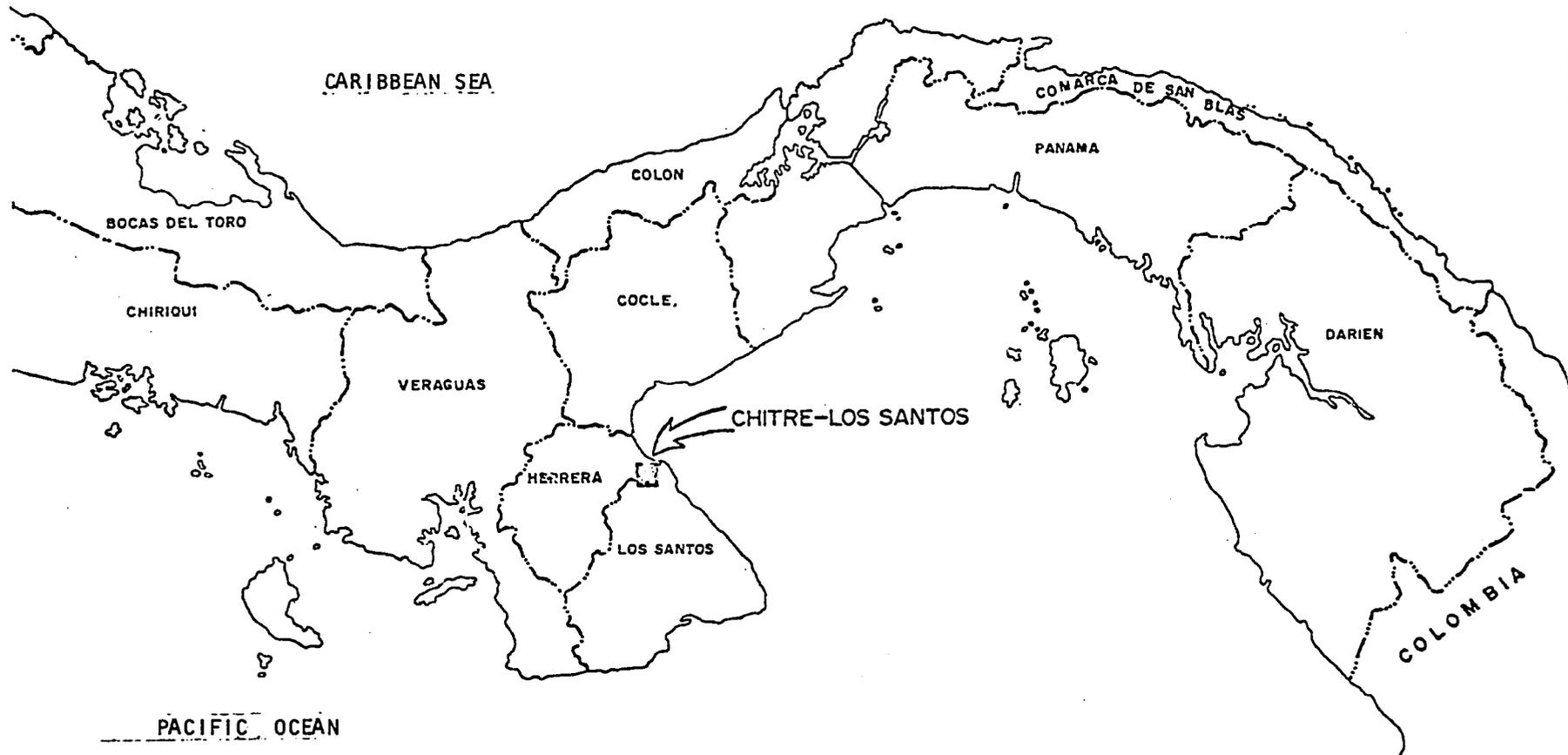
In the southern area is the Valley of Tonosí bordering the Pacific Ocean.

28. The rest of the Province of Herrera extends toward the west and is composed mostly of low lands and broken hilly type land with clay soils. To the south is a mountainous area which forms part of the western mountain chain of the Azucero Peninsula and covers most of the southern part of the Province of Veraguas whose eastern borders are the Provinces of Herrera and Los Santos. (See Map No. 2).
29. Spatially, the Province of Herrera extends over an area of 2,427.0 km² of which only 95.0 kms² correspond to the District of Chitré which is divided into three "Corregimientos".

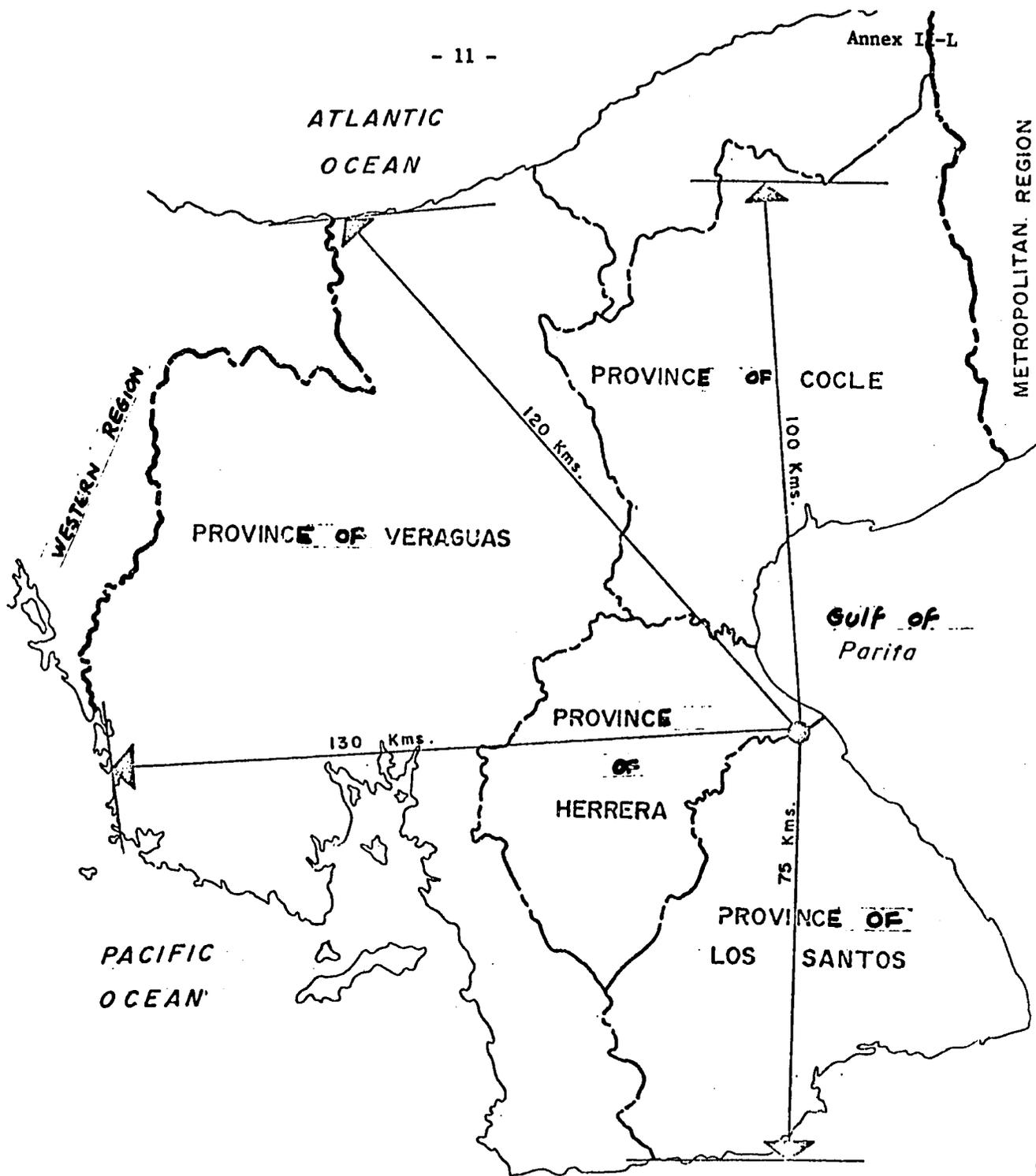
- Chitré	34.8	Kms ²
- La Arena	32.7	"
- Monagrillo	27.5	"

T O T A L: 95.0 "

The urban area of the District of Chitré that forms part of the twin-cities of Chitré-Los Santos is comprised of the urbanized



REPUBLIC OF PANAMA GEOGRAPHICAL LOCATION OF THE AREA		
	Scale: 1:2,500,000	MAP 101
	Date: March 1978	
	Source: MIPPE. URBES/AID PROJECT	



"CHITRE-LOS SANTOS GROWTH CENTER"

AREA OF INFLUENCE (1st LEVEL SERVICES)

Province	Population	Area (Km ²)	Density (Inhab/Km ²)	Scale 1:1,000,000
Herrera	72,549	2,427.00	29.9	MAP. No 2 Date: March 1978 Source: MIPPE, URBE/AID PROJECT
Los Santos	72,380	3,687.00	18.7	
Veraguas	151,840	11,085.00	13.7	
Cocle	118,004	5,035.00	23.4	
TOTAL	414,781	22,415.00	18.5	

areas of the three "Corregimientos" that make up the District. As previously mentioned, the total urbanized areas consists of 15.48 Kms² = 1,548 hectares, which represents 16.29% of the total area of the District.

30. The Province of Los Santos covers an area of 3,867.0 kms², of which 425.0 Kms² correspond to the District of Los Santos, politically divided into 12 "Corregimientos". The principal "Corregimiento" of the District, in terms of population concentration, is also called Los Santos, with an area of 54.9 Kms² of which only 2.89 Kms² is urbanized. This area represents only 0.68% of the total area of the District. This area in addition to the urbanized area of the District of Chitré forms the twin-city area of Chitré-Los Santos:

$$15.48 \text{ Kms.}^2 + 2.89 \text{ Kms.}^2 = 18.38 \text{ Kms}^2 = \underline{1,837 \text{ hectares}}$$

The political boundary between both Provinces and between the "Corregimientos" of Chitré and Los Santos is the La Villa River. The distance between the commercial center of Chitré and the urbanized center of Los Santos is approximately 3.0 Kms.

31. According to the 1970 Census, the District of Chitré had a total population of 20,109 with an average density of 211.7 inhabitants /Kms.². Most of the population is concentrated in the urbanized areas of Chitré, La Arena and Monagrillo, with a total population of 19,418 (1970 Census) or 95.56% of the total population of the District.
32. According to the 1970 Census, the total population of the District of Los Santos was 16,692 with an average density of 39.3 inhabitants /Kms.².
- In the principal "Corregimiento" of Los Santos there were 4,604 inhabitants (1970 Census) with an average density of 83.9 inhabitants/Kms.². The population of this "Corregimiento" is distributed among 14 populated places, the most important being the urbanized Center of Los Santos with 3,939 inhabitants, which at the "Corregimiento" level represents 85.5% of the urban population but only 23.6% at the District level.
33. In summary, the total urban population of the twin-cities Chitré-Los Santos is 23,357 extending over a total area ("ejidos") of 1,837.0 hectares.
34. Authorities of the two Municipios will be responsible for implementing the development efforts at the local level. This situation will require certain "ad hoc" administrative arrangements to insure the active participation of both Municipalities.

The Area of Influence

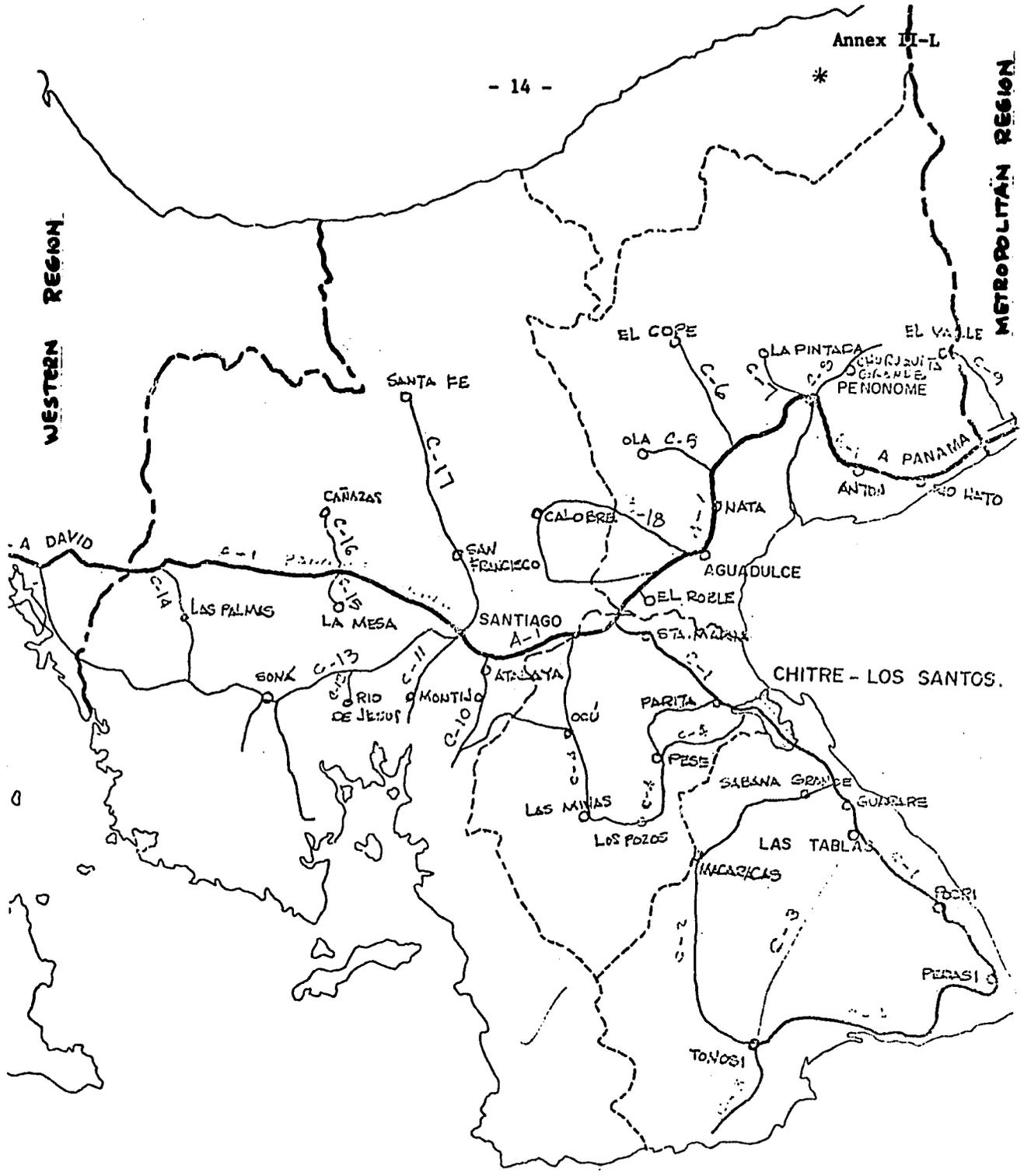
35. The area of influence corresponding to Chitré-Los Santos covers the entire Central Region of the country, with the exception of the District of Donoso, Province of Colón, which has been excluded because of the lack of adequate access routes.

In terms of spatial extension, the area covers a total of 22.415 Kms² with a population of 414.781. (See Map No. 2).

36. It should be noted that a companion analysis entitled "Analysis of the Spatial Structure of Panama" was parallelly prepared with this document. This study focussed on the urban-rural spatial relationships in the country, particularly, the existing urban-rural links. It provides basic and complementary information which, in part, justifies the regional-spatial approach in the development process considered in this document.
37. In summary this study analyzes the service functions of the relatively major population settlements within the Central Region, classifies them according to the level and variety of the services they perform, their spatial area of influence and the population served by each of these settlements, including their rural hinterland. Four categories of settlements were identified with Chitré-Los Santos providing the largest variety of services. (See Table 2). This study also revealed the fact that Chitré-Los Santos as a growth center commands an area of influence more extensive in area with greater population than that of David, the other growth center in the Western Region, although the population of the Chitré-Los Santos is smaller. Much of the service area of Chitré-Los Santos is in fact included in the area of influence of the Santiago service center. Government and private investments in Santiago, the density of its surrounding population and its position at some distance from Chitré and David provide indications that a future Census Commerce and industry will reveal Santiago to have achieved growth center status in its own right. That is, in the future, it will be shown to have an array of goods and services essentially equivalent to David and Chitré-Los Santos, and to be acting as a net destination of migrants.

The Road System (See Map No. 3)

38. The Chitré-Los Santos center is adequately linked with all of major population centers within the Central Region through a network of all-weather paved roads. Two main highways constitute the axis of the road system within the region: the Panamerican Highway (A-1)



"CHITRE-LOS SANTOS GROWTH CENTER"
REGIONAL FRAMEWORK

--- Regional Boundary	—— National Highway	Scale : 1:1,000,000	MAP #13
----- Provincial Boundary	—— Regional Highways	Date: March 1978	
----- Panamerican Highway	* Area not included in the study	Source: MIPPE. URBANIZATION PROJECT	

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and the National Highway (C-1) which intersects the former at Divisa and extends 97 Kms. Southeast to Pedaquí, passing through Chitré-Los Santos. Regional secondary roads in the Province of Los Santos (C-2) and (C-3) are connected to the National Highway (C-1) while (C-4) in the Province of Herrera is connected to the North with the Pan American Highway (A-1) and to the East with the National Highway (C-1). In the Province of Coclé, regional roads C-5, C-6, C-7, C-8 and C-9 are connected to the Pan-American Highway. In the Province of Veraguas, roads C-11, C-12, C-13 and C-17 connect directly with the Santiago service center while C-10, C-14, C-15, C-16 and C-18 connects with the Pan-American Highway (A-1).

Population

39. According to the 1970 Census, the population in the Central Region was 414,781, distributed over 22,415 Kms² with an average density of 18.5 inhabitants per Km². Table 1 shows the distribution of the population and density by sub-region. (Also see Annex 1).

General Conclusions

40. Based on the preceding brief descriptions of the road systems, the hierarchical distribution of the population settlements according to the level of services they provide and the distribution and density of the population, the following preliminary general conclusions are suggested.
- a. While previous studies have correctly identified the twin cities of Chitré-Los Santos as a potential regional growth center, it would appear that its influence will tend to be somewhat less than had been previously estimated. Three reasons are advanced in support of the above. First, its 1970 population of just under 24,000 represented only 5.6% of the total population in the region. While this population is expected to double by the year 2000 in absolute terms, its relative position is not expected to change substantially. Second, other service centers in the region, notably Santiago in the Province of Veraguas, Penonomé in the Province of Coclé, and Las Tablas in the Province of Los Santos, is potentially capable of substantially increasing their service capacity to their rural hinterland thus reducing dependancy on Chitré-Los Santos for the provision of many of the services it now provides. The result could be a spatial relationship based on three distinct sub-regions. Third, the existing road system seem to support and define these three sub-regions. This is not to imply that Chitré-Los Santos will not be the dominant center in the region, only that its influence will

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be somewhat reduced.

- b. Based on the apparently possible trend previously described it would appear that the greatest impact of Chitré-Los Santos as a growth center would be on a much smaller area than the entire Central Region, most likely the Provinces of Herrera and Los Santos. In addition, preliminary indications are that the service center of Penonomé, currently has a more pronounced functional-spatial relationship with the Metropolitan Area (City of Panama) than with the Central Region. Consequently, if we were to re-evaluate the situation in terms of the population distribution within three sub-regions deducting the population (81,293) and the area (3,514 kms²) of Penonome's area of influence, the results would be as shown in tables 3 and 4. While additional studies are required for a more precise assessment of the spatial relationship of Chitré-Los Santos with the other centers within the Central Region and the potential for further strengthening these linkages, the preliminary conclusions suggest that efforts to improve the service capacity of this potential growth center will have its major impact on a sub-region much smaller in area than the Central Region. Whether its influence can be expanded substantially beyond this area will depend, it appears, on the development that occurs in the other centers such as Santiago, Penonome, and Las Tablas.

TABLE No. 1

GEOGRAPHICAL DISTRIBUTION OF THE
POPULATION IN THE CENTRAL REGION

1970 Census

	Population		Area Kms ²	Density Inhabitants/Kms ²
	Number	%		
Chitré-Los Santos Urban Center	23,357	5.6	18.37	1,271.5
Northern Sub-region	157,501	38.0	8,791.52	17.9
Southern Sub-region	91,770	22.1	6,706.71	13.7
Western Sub-region	142,153	34.3	6,698.40	20.6
TOTAL	414,781	100.0	22,415.00	18.5

TABLE No. 2

HIERARCHICAL DISTRIBUTION OF POPULATION
SETTLEMENTS ACCORDING LEVEL OF SERVICES

	No. of Population Settlements According to Hierarchical Level			
	I	II	III	IV
	Chitré-Los Santos Growth Center	1	-	-
Northern Sub-region	-	2	5	10
Southern Sub-region	-	1	4	4
Western Sub-region	-	1	3	6
TOTAL	1	4	12	20

TABLE No. 3
GEOGRAPHICAL DISTRIBUTION OF THE POPULATION
IN THE CENTRAL REGION BY SUB-REGIONS

	Population 1970	Area Kms ²	Density Inhab./Kms ²
TOTAL	<u>333,488</u>	<u>18,901</u>	<u>17.64</u>
Sub-Region 1	<u>144,929</u>	<u>6,294</u>	<u>23.0</u>
Province of Herrera	72,549	2,427	
Province of Los Santos	72,380	3,867	
Sub Region 2			
Province of Veraguas	<u>151,849</u>	<u>11,086</u>	
Sub Region 3			
Province of Coclé (Partial)	<u>36,710</u>	<u>1,521</u>	24.1

TABLE No. 4

PERCENTAGE OF POPULATION IN GROWTH AND SERVICE
CENTERS IN RELATION TO ITS SUB-REGION

Spatial Sub-System 1	Pop. (1970) Chitré-Los Santos	Pop. (1970) Sub-System 1	Percentage %
	23,357	144,929	16.11
Spatial Sub-System 2	Pop. (1970) Santiago	Pop. (1970) Sub-System 2	Percentage
	15,108	151,849	9.9
Spatial Sub-System 3	Pop. (1970) Aguadulce	Pop. (1970) Sub-System 3	Percentage
	12,035	36,710	32.7

CHAPTER III

THE LOCAL FRAMEWORK

- Urban Aspects
- The Urban Area
- Basic Public Utility Services
- Present Land Use
- Other Facilities and Services
- Population
- Urban Layout
- Land Tenure Patterns and
Registered Value of Land
- Political-Administrative Organization

THE LOCAL FRAMEWORK

- Urban Aspects

The Urban Area (See Basic Plan and Plan No. 2)

41. The combined urbanized areas of La Arena, Chitré and Los Santos (pop. 1970: 19,525) result in an elongated area stretching approximately 12.8 Kms. West to Southeast with an average East-West width of 2 Kms. Towards the North the area extends to include Monagrillo (pop. 1970: 3,832), and thus forming a twin-city area of 23,357 inhabitants. The above mentioned area comprises a total area of approximately 1,837 hectares.
42. The topography of the area is generally flat and the urbanized center is located within a large farming and agricultural zone. Areas adjacent to the center are used for cattle production and most of the farmlands are located on the banks of the La Villa River.

The asphalt covered National Highway (c-1) crosses the urban center (12.8 Kms.) in a West-Southeast direction and constitutes the main highway in the area. Because it is a connecting road with the southern part of the Azuero Peninsula and to the North with the Panamerican Highway it has a considerable high level of vehicular traffic.

There are apparently no major problems regarding flood prone areas, soil depressions or unfavorable conditions for rain water drainage which may adversely affect future constructions activities to be realized in the area.

Basic Public Utilities Services (See Plans Nos. 3 and 4)43. a) Potable Water

Currently, 100% of the urban population is served by the potable water system installed by the IDAAN. The current water demand is 3.5 m.g.d.. Present plans to expand the urban center will require a supply of approximately 6.5 m.g.d., which will be guaranteed with the completion of a new potable water processing plant (3.0 m.g.d.) located East of La Arena. This

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plant will supply the needs of the urban center up to the year 2000.

b) Sewage Disposal System

Only about 25% of the four combined areas which comprise the urbanized center is served by the existing sanitary sewer system. (See Plan No. 3). The remaining areas are serviced with individual or communal septic tanks and latrines. At present, however, the expansion of the sewer system has a very low priority because of its costs.

c) Electricity

The urbanized center is currently served by four individual sub-stations installed by IRHE in each of the areas comprising the study area. In addition, these sub-systems are incorporated into the national electricity grid network providing the area with adequate facilities for future development.

Present Land Use (See Plan No. 5)

44. Present land use patterns in the developed area of Chitré-Los Santos clearly delineate broad sectors of specific predominant activities. In La Arena and Monagrillo land usage is predominantly for residential purposes. Although land use in Los Santos is predominantly residential, there are a number of small industries and services establishments.

Land use in the larger developed area of Chitré is predominantly residential, but parallelly reflects intensive usage in other activities. There is a dynamic and increasingly specialized commercial area in Chitré, for the most part located within definite boundaries. On the other hand, industrial activities which have been experiencing significant growth, is dispersed and often conflicting with other usages. Land use for institutional services is also expanding in a dispersed manner.

45. In summary, La Arena, Monagrillo and Los Santos are basically residential areas, whereas Chitré is a commercial center and the main source of employment. The residential, commercial and employment areas are linked by several bus and taxi routes which meet the current needs.

In the rest of the unurbanized areas within the town boundaries, land is used primarily for pasture with a low percentage in small dispersed farms representing 68.76% of the total land available for the future expansion and development of Chitré-Los Santos.

(See Table No. 5).

Education and Health

46. According to the 1970 Census the illiteracy rate in the study area was 10.8%, which represents 1,864 inhabitants of a total of 17,247 (pop. 10 years of age and over). (See Table No. 6). During the 1960-1970 decade this percentage decreased from 12.1% to 10.8% and is lower than that registered for the country as a whole for 1970 (20.7%).

The Chitré-Los Santos urbanized area has 12 elementary schools with a total of 157 classrooms. These educational facilities services approximately 4,714 students (1974), resulting in an average of 30.0 students per classroom. The student population at the primary school level represents 18.1% of the total student population in the Chitré-Los Santos urban center and in terms of a family ratio, an average of 1.8 school age persons per family. The population of the study area is young and the prevailing resulting in a high demand for basic primary education services.

47. At the secondary school level the area has 5 schools: the José D. Crespo High School (grades 7th-12th) in Chitré, a Professional and Technical Institute in Los Santos, with the remainder being of a Junior High School level (grades 7th, 8th and 9th). These Junior High Schools are located in Monagrillo, Chitré and Los Santos. In 1977 there were 5,574 secondary school students. There is a private school in Chitré, which also functions at night, with a total enrollment of 98 students. (See Table No. 7).

At the higher education level, the Regional University Center (which shares the facilities of the José D. Crespo High School, Chitré) has an enrollment of approximately 368 students. The University Center is comprised of Departments of Philosophy, Humanities and Education, which confer degrees, as well as Departments of Public Administration and Business, Engineering and Natural Science-Pharmacology. There is also a "Universidad Popular" (university) which share facilities with the Tomás Herrera Primary School, Chitré.

48. The Regional Nursing School in the District of Los Santos is part of the regional hospital complex and is located outside of the city limits.

According to 1975 data the Districts of Chitré and Los Santos have 5 hospitals with approximately 654 beds, 79 doctors and 25 nurses. There are also 3 health centers.

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The ratio of population to hospital beds is 56.3. There also exist health centers with child care facilities in the nearby Districts of Santa María, Ocú, Pesé and Los Posos, and health sub-centers in the populated areas of La Arena, Monagrillo.

Other Facilities and Services (See Plan No. 6)

49. Other important private and public services institutions are located in Chitré-Los Santos. The following private and public financial institutions maintains regional branches in the town: Chase Manhattan Bank, Bank of Colombia, Banco del Exterior, Banco Fiduciario, Savings and Loan Institution (Caja de Ahorros), Interiorana Savings and Loan Association, National Bank and the Agricultural Development Bank (BDA).

In addition, regional offices of the major government institutions are also located here. These include: The National Electric Power Institute (IRHE), the Agricultural Marketing Institution (Instituto de Mercadeo Agropecuario, IMA), Statistics and Census Bureau, Rural Land Assessment Office and the Ministries of Education, Housing, Commerce and Industry.

Population

50. According to the 1970 Census the population of the Chitré-Los Santos urban center was 23,357, living in 4,858 dwellings, which results in an average family size of 4.7 persons per dwelling. (See Table No. 8).

Of the total population located in the study area, 54.9% are in Chitré, 16.9% are in Los Santos, 16.4% in Monagrillo and the rest are located in La Arena. (See Table No. 9).

51. For analytical purposes, the populated areas were divided into 54 sectors with population densities of up to 157 inhabitants/hectare.

In addition, three density levels were established. The first includes low density areas of 5 to 30 inhabitants/hectare. In the second level the population density varies between 30 to 79 inhabitants/hectare, with a median of 53 inhabitants/hectare. The third level comprises more than 80 inhabitants/hectare, with a median of 103 inhabitants/hectare.

Urban Layout (See Plan No. 1)

52. As previously indicated, the urbanized area of the Chitré-Los Santos Growth Center comprises four populated areas: Chitré in the central part, La Arena to the West, Los Santos in the Southeast and Monagrillo to the North.

The first three are physically connected by the National Highway (c-1). Monagrillo, to the North, is integrated into the complex by another road link (Perez Avenue) which intersects with the National Highway (c-1) in the main commercial center of Chitré.

The relative distances from Chitré's commercial center to the other three areas are as follows: 3.6 Kms. to La Arena, 3.6 Kms. to Los Santos and 1.8 Kms. to Monagrillo.

53. The urban layout of the more developed areas in this twin-city center resembles the classic checkerboard pattern, although there is no uniformity in the geometrical shape of the city blocks. Equally, the demarcation of lots or individual plots follows the same chaotic pattern, resulting in a variety of shapes and sizes. The average lot size in the more urbanized areas is relatively small (300 m²).

The present building regulations for these areas do not include lateral construction specifications or limitations, but do require front construction alignments.

54. The regional highway (c-1) becomes the main or central avenue of Chitré, cutting across its central commercial area. Approximately 20 local secondary (city) streets cross this road forming the urban layout already described, in addition to the two perimeter roads: the exterior at a distance of 1 Km. from the commercial center and the internal loop at a 600 mts. radius from this central point. (See Plans Nos. 8 and 9).

These roads were suggested in previous studies and the Municipality has undertaken their construction. At present, 65% of the construction has been completed.

Land Tenure Patterns and Registered Value of Land (See Plan No. 7)

55. Studies conducted by the Land Assessment Office show that within the Chitré-Los Santos urbanized area, the land is extremely subdivided, and widely distributed which apparently has acted as a damper on price speculation. On the other hand, the fact that most of the available land is privately owned has to some extent

limited the planning possibilities of the area.

56. Registered values of the land (See Plan No. 7) in Chitré-Los Santos varies according to the degree of development, being higher in the central commercial area and gradually decreasing as they are located further away from this area. Within the Chitré-Los Santos town limits the highest values fluctuate between B/20.00 and B/35.00 per square meter and are located around the commercial center of Chitré. The lower values are found on the outskirts, with values approximating B/1.00 per square meter.

The registered values of land serve as the basis for property tax collections, a source of income for the central Government. The commercial values are subject to real estate market forces and trends and are generally always much higher than the registered values.

Political-Administrative Organization

57. At present the communities of Chitré and Los Santos participate as separate entities within the political structure of the country. At this level the political entities with the most influence on the development process are the Municipal Council and the Provincial Coordinating Council.

The Municipal Council is comprised of the elected representatives and the Mayor, who presides over it. One function of the Council is to plan the development of the District with the assistance of the Ministry of Planning and Economic Policy (MPPEE).

58. The Provincial Coordinating Council is an advisory body that promotes and coordinates official activities. The Council is responsible for preparing the Annual Provincial Development Program. It is composed of the "elected" representative within the respective Province, the Provincial Governor (who presides over the Council), the Chief of the Military Zone and the provincial chiefs of the Ministries and autonomous institutions. (See Organizational Chart).

TABLE No. 5
Present Land Use of the Chitré-Los Santos Area

Present Land Use	Area (Ha.)	%
Residential	361.0	19.65
Commercial	14.4	0.78
Institutional	34.00	1.85
Recreation and Green Areas	14.7	0.80
Industrial	6.00	0.32
Farmlands	25.00	1.36
Shanty Towns	7.3	0.39
Pasture	1,237.5	67.4
Uncultivated Areas	137.1	7.5
Total	1,837.00	100.0

SOURCE: Land Assessment Office. Ministry of Treasury.

TABLE No. 6
ILLITERACY RATE
1970

Populated Area	Total	Illiterate	
		No.	%
Chitré	9,648	913	9.5
La Arena	1,930	198	10.2
Monagrillo	2,742	404	14.7
Los Santos	2,927	349	11.9
TOTAL	17,247	1,864	10.8

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TABLE No. 7
SECONDARY SCHOOLS
1977

Area	Public Schools	No. of Students
CHITRE	<u>José D. Crespo</u> (Junior High School, High School and Business School)	1,942
	Night School (Secondary School) (Junior High School, Business School)	834
MONAGRILLO	<u>Junior High School</u>	721
LOS SANTOS	Teachers' College of Azuero "Col. Segundo Villarreal" (Junior High School, High School and Teachers' College)	1,182
	Professional and Technical Institute of Azuero	895
TOTAL.....		5,574
Private Schools		
CHITRE	"Fabio R. Broce" Vocational School	
	1. Day	14
	2. Night	84
	Total	98

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TABLE No. 8

OCCUPIED DWELLINGS

1970

Area	Total # of Dwellings	Occupied Dwellings		
		Total	N/P *	Private
Chitré	2,827	2,706	39	2,667
La Arena	613	565	5	560
Monagrillo	900	824	2	822
Los Santos	950	863	7	856
TOTAL	5,290	4,958	53	4,905

Source: Statistics and Census Bureau

* N/P = Not Private

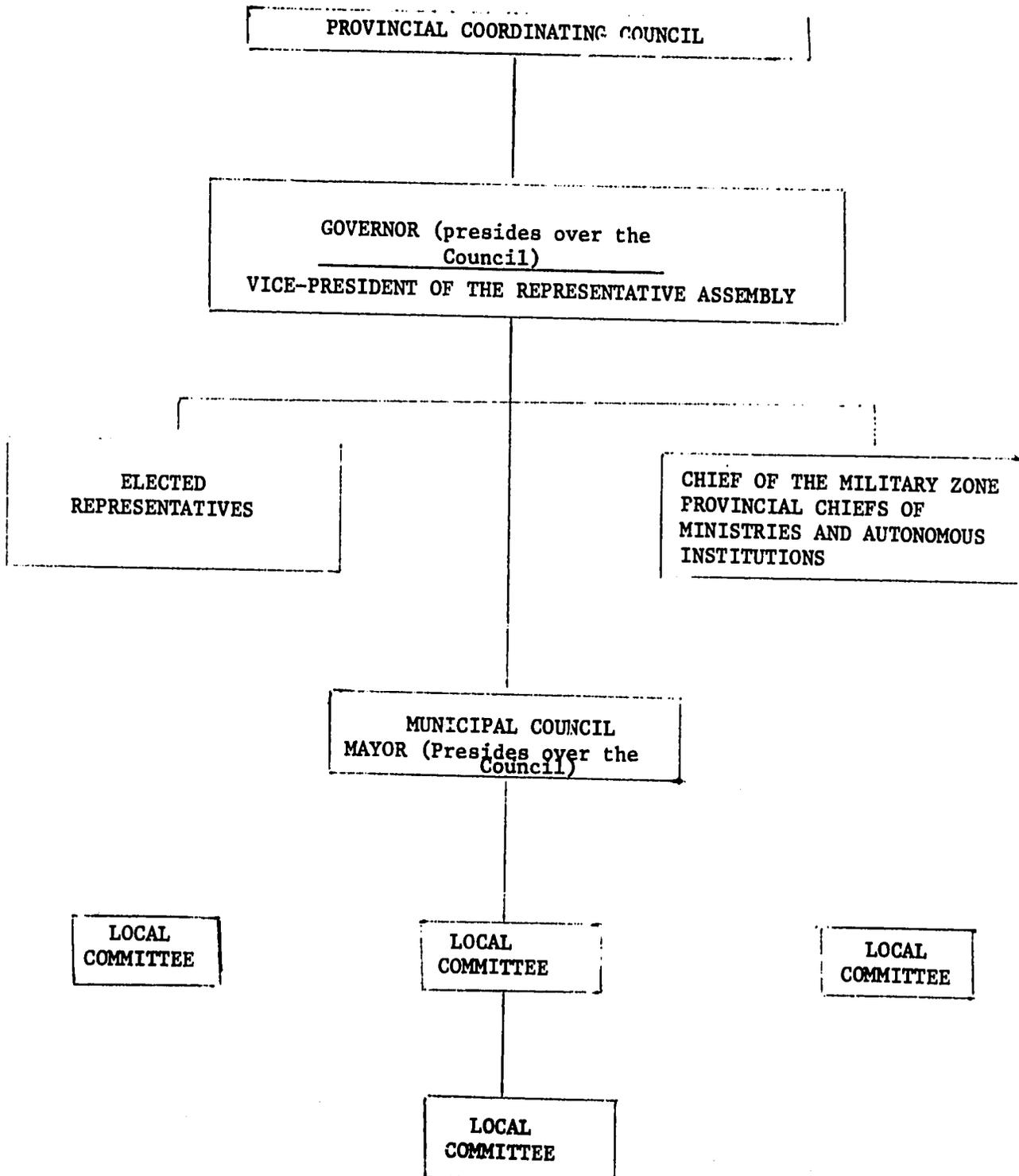
TABLE No. 9
POPULATION OF THE CHITRE-LOS SANTOS URBANIZED AREA
1970

Area	Population	%
Chitré	12,822	54.9
La Arena	2,764	11.8
Monagrillo	3,832	16.4
Los Santos	3,939	16.9
TOTAL	23,357	100.0

SOURCE: Statistics and Census Bureau

ORGANIZATIONAL CHART

POLITICAL - ADMINISTRATIVE ORGANIZATION



CHAPTER IV

PRELIMINARY PROPOSALS

- Specific Objectives
- Proposed Land Use
- Population and Housing
- Education and Health
- Industry and Employment
- Priority Areas for Development
 - a. Central Commercial Area
 - b. Government Center
 - c. Farmlands
 - d. Light Industry and Warehouses
 - e. Bus Terminal
 - f. Green Areas
 - g. Corridor Chitré-Los Santos
- Areas In Reserve
 - a. Civic Center
 - b. Sports-Cultural Complex
 - c. Regional University Center
- Technical Assistance for Municipal Officials and Personnel

PRELIMINARY PROPOSALS

59. The overall purpose of this study is to provide general guidelines for the spatial organization of the Chitré-Los Santos Growth Center on the basis of the resources and developmental potential of the area in order to accomplish the following specific objectives:

- a. Identification of urbanized areas and present land use.
- b. Define priority areas for future expansion on the basis of the population estimated (52,000) for the year 2000.^{1/}
 These areas or "pockets" so defined will constitute planning units which may be subsequently developed in detail.
- c. Estimate in quantitative terms the spatial needs for residential land use and complementary uses in terms of facilities and services required by the future population.
- d. Identify reserve areas to be developed on the basis of medium and long term plans of action in order to improve the physical aspect of the city.
- e. Identify in spatial terms alternative areas for the location of sub-projects proposed in the URBE/AID Project.
- f. Introduce functional improvements in the general road systems within the urbanized areas.
- g. Upgrade Municipio administrative efficiency by providing technical assistance in urban development aspects and by promoting activities that will benefit the lower income groups.

Proposed Land Use (Summary Plan)

60. The proposed land use plan incorporates all of the major physical-spatial proposals that have been suggested in previous analyses.

This plan ought to be studied in comparison with Plan No. 5, "Present Land Use", described in Chapter III (Urban Aspects), which identifies in detail, the urbanized areas.

The proposed area for development comprises 716.5 hectares to accommodate the total population estimated (52,000) by the year 2000.

^{1/} Population estimated in previous URBE Program studies.

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This area represents an increase of 286.43 hectares, or 66.5%, over the current urbanized area comprising 430.14 hectares (See Table No. 10) to accommodate a population 2.3 times larger with a gross density of 72.57 inhabitants per hectare:

$$\frac{52000}{716.5 \text{ hectares}} = 72.57 \text{ inhabitants/hectare}$$

61. The present gross density is 48.30 inhabitants per hectare.

The total area estimated (716.5 hectares) has been spatially planned as follows: 82.2% for residential use; 3.21% for the central commercial area; 1.73% for neighborhood commercial areas; 7.7% for institutional use; 4.32% for recreation and green areas; and 0.83% for industrial activities. (See Table No. 11).

It is important to note that the aforementioned areas refer specifically to the future developed areas (year 2000) which represent only 39% of the total available area of 1,837 hectares. (See Table No. 5). The area allotted for future expansion represents a 15.6% increase over the present developed area.

Within the present area the total unoccupied area is not significant as it consists of small lots scattered around the area. Consequently, the areas proposed for the future development of the city are the unoccupied areas located outside the present developed area.

Population and Housing

62. According to the 1970 Census the population in the Chitré-Los Santos center was 23,357, of which 20,775 (90%) lived in the more developed area. The rest of the population is dispersed in low density areas.

The total population (23,357) lived in 4,958 dwellings^{1/}, with an average family size of 4.7 persons.

Based on the 1970 Census figures, the gross density in the more developed area is 48.3 inhabitants per hectare:

$$\frac{20775 \text{ inhabitants}}{430.1 \text{ hectares}} = 48.30 \text{ inhabitants/hectare}$$

63. The following criteria were considered in estimating the area needed for the future growth of the population:

- a. It was decided to reject the idea proposed in previous studies (1965- Ministry of Housing) to increase the density

^{1/} 1970 Census

in the urbanized areas, especially the central area, by means of rigid zoning requirements and the construction of tall buildings.

In practice, this approach was never accepted by the community at large, and the control regulations have been very ineffective.

- b. Based on the fact that over 90% of the present dwellings are only one story high and that the majority of the population objects to tall apartment buildings it was decided to preserve the present developed or constructed areas without altering the population's life style and to avoid restrictive regulations concerning future development. In other words, in estimating the new areas for future expansion it has been assumed that the present developed area will generally maintain its average gross density of 48.30 inhabitants per hectare.
 - c. For the new areas, however, the criteria adopted has been to determine an overall gross density applicable to all the areas or zones proposed for future expansion. After analyzing several alternatives it was decided to establish the new gross density at 100 inhabitants per hectare, which is twice as large as the present density. This criteria is intended to discourage an excessive dispersion of the population. It assumes that in the areas proposed for future expansion (i.e. presently unoccupied areas) the guidelines will promote a more rational and intensive land use on the basis of public and private investments. It also assumes that this planning effort will facilitate the provision of more economical public utilities services given the greater demographic concentration in the area. Although the new gross density estimated for the area is double the present figure, it is still low enough so as not to alter the traditional life style of its inhabitants.
64. Plans No.'s 10 and 11 show the methodology applied to determine the distribution of the population in the present "developed area." The area was first divided into 54 "sectors" (Plan No. 10) and then into a group of sectors within each of the four populated areas comprising the urban complex (Plan No. 11).

The comparison of these plans with other plans providing basic information on public services (such as water, sewer systems, electricity, location of public institutions, etc.) indicate

the areas that will benefit in terms of the population served. This constitutes a basic source of information for future analysis.

65. Plan No. 12 shows the area proposed for expansion (286.4 hectares) divided into 12 areas or "pockets" comprising the future planning units. More detailed guidelines must be established to control the physical growth of these "pockets" which are considered priority areas for future expansion.
66. The slum area consists of 112 improvised dwellings inhabited by 505 persons or 102 families. The present land use plan shows the areas where the improvised dwellings are located.

Education and Health

67. The information provided on education and health (see Chapter III, page 34, paragraph 54) in the urban area indicates that the level of these services is adequate in relation to the present population.

Consequently, the indicators used for estimating future needs have been based on the present situation.^{1/} In terms of educational services for the future population (23,643) an area of 5.0 hectares has been estimated, of which 2.6 hectares will be for the construction of 6 primary schools and 2.4 hectares for two secondary schools. The spatial location of these schools should be planned according to future demographic growth tendencies. The areas proposed for future expansion should be considered as priority areas in terms of population growth (residential areas) and the location of services (educational facilities). At the university level, the Summary Plan shows the area where the National University intends to build the university extension center. This project is currently under study.

68. In terms of health needs, an area is required for the future expansion of the "Cecilio Castellero" hospital in order to insure an adequate level of services for future city.

Future plans of action should include other service levels (e.g. Health Centers) within the new areas proposed for future expansion.

In Annex No. 2, the ratios used to estimate the areas required for educational facilities and health services are indicated.

^{1/} See Annex No. 2 for the areas estimated.

Industry and Employment (See Table No. 12)

69. According to the 1970 Census, the economically active population in the Chitré-Los Santos urban center was, 8,748, of a total population of 17,247, 10 years of age and over, or 50.7%

Table No. 12 shows the occupational breakdown of the urban center population by agricultural and non-agricultural activities, as well as the unemployment rate.

Of the total economically active population, 11.6% is involved in agricultural activities and the remaining 79.5% comprises the secondary and tertiary sectors.

The unemployment rate is 8.9%, which is below the rate for the country (9.7%). At the provincial level, the unemployment rate in Herrera is 5% and 4% in Los Santos.

	<u>Population</u>	<u>%</u>
Agricultural Activities	1,012	11.6
Non-agricultural Activities	6,958	79.5
Unemployed	<u>778</u>	<u>8.9</u>
TOTAL	8,748	100.0

70. Previous studies suggested the creation of Municipal incentives and recommended areas for developing light industries, handicrafts, warehouses for storing agricultural goods, and wholesale commercial activities (Distribution Centers). Six (6) hectares have been proposed for these purposes in two separate areas. (See Summary Plan). These sites are conveniently located near the external perimeter road and National Highway (c-1). The "Industrial Area" comprising 20 hectares located between La Arena and Chitré, as shown in the Summary Plan, has been donated by the Azuero Industrial Group for future industrial development. In addition, another "industrial area" is suggested adjacent to the road leading towards the airport which, because of prevailing winds, would be a better alternative for nuisance industrial activities. It would be necessary, however, to study in detail the comparative advantages and disadvantages that might exist in relation to other important considerations such as traffic movement, disposal of industrial waste and, in general the ecological protection of the environment.

Priority Areas for Development (See Summary Plan)

71. The proposed plan has designated seven "areas for priority attention" as zones with special characteristics that justify priority attention or a particular Municipal plan of action. The following areas have been located in the present day unoccupied sites, that is, outside of the more developed area.

a. The Central Commercial Area

72. The Plan emphasizes the detrimental effects of the physical-functional aspects prevailing in the town's central commercial area. Significant deteriorated physical structures, for example, as well as inadequate spatial layout are incompatible with the role of a potential regional growth center. It is recommended, therefore, that within the short to medium term, an urban renewal program be initiated.

The Plan recommends the physical integration of an additional 14 hectares (includes parking area) to the present area of about 9 hectares. This would result in a total area of 23 hectares or 3.21% of the developed area by the year 2000. (See Summary Plan).

It is assumed that the progressive demographic growth will not only further the development of the central commercial area but also provide the opportunity to implement an urban renewal plan.

The Plan also proposes an additional 12.4 hectares (1.73% of the total future developed area) for neighborhood commercial and services activities which will be located in the new expanded areas projected for the year 2000. ^{1/}

The development of the future commercial areas requires detailed studies including market surveys establishing among other, the purchasing power of the population. As a preliminary proposal, the Plan's general estimates are based on current indicators and therefore, these are probably overvalued.

b. Government Center

73. A center for government institutions has been located on a site adjacent to the existing regional public offices which comprise an area of 3.0 hectares. An additional area of 3.5 hectares is proposed to group in one area all the public services institutions. It is assumed that other public offices will be eventually established in the city. This Governmental Center is located 600 mts. Southeast of the Commercial Center of Chitré.

c. Farmlands

74. Farmlands located on the banks of the La Villa River and in other areas (25 hectares) comprise 1.36% of the total area within the town limits. The new areas proposed for future urban expansion

^{1/} Annex No. 2 shows the projected commercial areas (urban and rural) based on current ratios.

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will absorb approximately 8.36 hectares of these farmlands. Consequently, the Plan for the future expansion of the new populated areas stresses the utilization of farmlands for other activities only during the final stages of the town's development process given the present productive uses currently being made of these areas.

Since these farmlands are private property, however, they could be developed into residential areas at any time if the owners so desire.

d. Light Industry and Storage Facilities (Warehouses)

75. The Plan proposes two areas for light industry activities and storage facilities. One is located between La Arena and Chitré, facing the National Highway (c-1), and the other is North of the Highway (c-1) towards the airport each with an area of about 6.0 hectares.

It is foreseen that with improved storage facilities (i.e. warehouses) for intermediate goods as well as finished products, Chitré-Los Santos will assume a significant role as a distribution center. It is suggested that a joint venture (Private-Public) or the Municipio develop this project. Consequently, the Plan indicates the most suitable areas in terms of the road structure and their relationship with the proposed areas for future growth.

e. Bus Terminal

76. Among the sub-projects proposed for financing under the URBE/AID Project is a transportation terminal for passengers as part of the national transportation system.

The Plan proposes two alternative areas, each comprising approximately 2.0 hectares. The first is located between La Arena and Monagrillo, 500 mts. North of the National Highway, and the other is 1.3 Kms. Northwest of the Central Commercial Center. The spatial location of the first, of the two areas is adequate considering the future lay out of the city and the demographic concentration estimated for the year 2000. The Municipality has first option for purchasing the land for this first alternative.

As a second alternative, the plan proposes for consideration an area of about 2.0 hectares located 1.3 Kms. Southwest of the Central Commercial Center and 200 mts. West of the National Highway between Chitré and Los Santos. This area faces the external perimeter road on one side and on the other, a road proposed in

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the Plan to better link La Arena and Los Santos. (See Summary Plan).

Unlike the first alternative, this particular location for the bus terminal would not be near a residential area.

f. Green Areas

77. The Plan proposes to allot 4.32% of the total developed area by the year 2000 for recreation and green areas. This represents 31.0 hectares or an increase of 16.3 hectares over the present green areas. (See Tables No.'s 10 and 11). The new areas proposed for residential use and complementary services makes it possible to adequately plan the green areas in order to enhance the functional and aesthetic aspects of the Chitré-Los Santos.

Ratios currently prevailing in the urbanized area were used to estimate the total new area required. (See Annex No. 2).

g. The Chitré-Los Santos Corridor

78. This area refers to the corridor formed along the National Highway which links the urbanized areas of Chitré-Los Santos towards the Southeastern section of the study area. The area comprises approximately 2 Kms., including a 600 mts. stretch in the District of Chitré which is outside of the present town limits.

This zone is considered as an area of priority attention because of its disorderly and indiscriminate array of activities and uses. Within this area are entertainment establishments, housing units, small industries, retail shops, health centers, public services offices, among others, and clearly illustrate the lack of planning and land use control which has prevailed in the past.

The Plan acknowledges this fact and consequently proposes to establish land use restrictions for the area so as not to further aggravate the present situation.

Additional research is proposed in order to more precisely determine the extent of land use incompatibility within the area and establish restrictions for further development of residential activities; also, to eventually relocate certain activities to other sites to the extent possible.

The object of this proposal is not to relocate activities for relocation sake, but to transform this zone into a tourist

attraction by the development of extensive green areas.

Areas In Reserve (See Summary Plan)

79. The proposed Plan has designated three "reserve areas" for medium and long term development in order to upgrade the physical aspect of the city and provide its future inhabitants with greater and better facilities. These facilities include public and communal services, educational and recreational centers as well as a sports and cultural complex. Given the nature of these services and facilities, they should be implemented by the Municipality.

These areas are located on currently unoccupied sites. that is, outside the urbanized area:

a. Civic Center

80. The Plan proposes an area comprising 6.0 hectares for the Civic Center. This area is located 600 mts. South of the Commercial Center and near the external and internal perimeter roads. It is suggested that this area be considered as a planning unit in order to develop spatially integrated solutions in accordance with the development program under study.

It is further suggested that facilities such as the Municipal and Governor's offices, the post office, central government regional offices (i.e. Ministries), the Public Library, among others, be eventually located within this area in addition to cultural-recreational activities and services (e.g., theaters, cinemas, art galleries and cafeterias).

These projects, which will require time to develop, must be allotted reserve areas. Such areas should be acquired by the Municipio and designated for the above mentioned uses.

b. Sports-Cultural Complex

81. The construction of a sports-cultural complex in one of the Republic's main provincial cities constitutes a project which the National Government is very interested in promoting, as in the case of the bus terminals. In Chitré-Los Santos this project is also desired by the community and favored by the Local Government.

The Plan proposes an area of 13.0 hectares located 600 mts. East of the Central Commercial Center and very near to the university extension area and the "José D. Crespo" secondary school.

This area is also close to the two perimeter roads (internal and external) of Chitré. A preliminary estimate of 6.0 hectares of

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presently utilized land has been considered for this purpose with possibilities for future expansion to the North.

Interest demonstrated by the National Government suggests that this project might be realized in the short-term.

c. Regional University Center

82. The Plan proposes an area comprising 10.0 hectares for the future construction of the University Center as a Regional Extension of the National University of Panamá. At present negotiations are underway to purchase this land.

The area is located on a presently unutilized site adjacent to the "José D. Crespo" secondary school, 900 mts. East of the Central Commercial Center of Chitré.

Technical Assistance for Municipal Officials and Personnel

83. In general, the Municipios in Panama lack the technical and administrative expertise needed to effectively and efficiently implement integrated urban development activities. As the local authority, however, the Municipios must assume an active role in this field. This applies also to the Municipios of the Districts of Chitré and Los Santos.

A technical assistance program including training of Municipal officials is essential in order to accomplish the objectives of the proposed development plan.

The Plan proposes as a preliminary measure for future technical assistance activities, the creation of an Urban Development Advisory Board or Committee at the Municipal level. This measure does not constitute an innovation as it has been previously applied in several Municipios such as David, Aguadulce and Chitré. In practice, however, more is required than a group of citizens willing to work for the good of their community. It is also necessary to implement activities promoting urban development. In other words, effective private and public investment programs are required which are in accord with previously established goals and objectives. The present document is intended as a general analysis which would provide the newly created Board or Committee with concrete ideas for discussion as well as guidelines for the activities they can implement.

On the other hand, this Board or Committee will require from the outset adequate technical assistance.

Finally, it is recommended that the Central Government establish a permanent Municipal subsidy to hire a full-time professional in

urban planning to fulfill the position of Municipal Engineer.

Annex No. 3 contains a proposed "Municipal Agreement" for the creation of the previously mentioned Advisory Board or Committee.

TABLE No. 10
LAND USE IN THE PRESENT URBANIZED AREA

Land Use	Area (Hectares)	%
Residential	361.0	83.93
Central Commercial	9.0	2.10
Neighborhood Commercial Areas	5.4	1.25
Institutional	34.0	7.90
Recreation	14.7	3.41
Industrial	6.0	1.40
Total	430.1	100

TABLE No. 11
FUTURE LAND USE YEAR 2000.

Land Use	Area (Hectares)	%
Residential	589.0	82.20
Central Commercial Areas	23.0	3.21
Neighborhood Commercial Areas	12.4	1.73
Institutional	55.1	7.70
Recreation	31.0	4.32
Industrial	6.0	0.83
Total	716.5	100

TABLE No. 12

ECONOMICALLY ACTIVE POPULATION OF THE CHITRE-LOS SANTOS
URBAN CENTER. POPULATION 10 YEARS OF AGE & OVER
1970 CENSUS

POPULATED AREA	TOTAL	ECONOMICALLY ACTIVE							NON- ECONOMICALLY ACTIVE	ACTIVITY RATE (per 100 persons)
		TOTAL	In Agricultural Activities		In Non-agricultural Activities		Unemployed			
			No.	%	No.	%	No.	%		
Chitré	9,648	5,112	374	7.3	4,310	84.3	428	8.4	4,536	53.0
La Arena	1,930	958	214	22.3	638	66.6	106	11.1	972	49.6
Monagrillo	2,742	1,313	288	21.9	923	70.3	102	7.8	1,429	47.9
Los Santos	2,927	1,365	136	10.0	1,087	79.6	142	10.4	1,562	46.6
T O T A L	17,247	8,748	1,012	11.6	6,958	79.5	778	8.9	8,499	50.7

Source: Statistics and Census Bureau.

GEOGRAPHICAL DISTRIBUTION OF THE POPULATION
OF THE CENTRAL REGION

1970

Sector	Population	Area Kms ²	Density Inhab./Kms ²
TOTAL	<u>414,781</u>	<u>22,415.00</u>	<u>18.5</u>
Chitré-Los Santos Growth Center	<u>23,357</u> (6%)	<u>18.37</u>	<u>1.271.5</u>
NORTH: TOTAL	<u>157,501</u> (38%)	<u>8,791.52</u>	<u>17.9</u>
Coclé (P)	118,003	5,035.00	23.4
Parita (D)	7,024	373.00	18.8
Santa María (D)	5,153	152.00	33.9
Rest of Chitré (D) ^{a/}	693	79.52	8.7
Calobre (D)	11,182	784.00	14.3
San Francisco (D)	7,792	441.00	17.7
Santa Fé (D)	7,654	6,706.71	
SOUTH: TOTAL	<u>91,770</u>	<u>6,706.71</u>	<u>13.7</u>
Las Minas (D)	6,988	512.00	13.6
Los Pozos (D)	8,296	377.00	22.0
Los Santos (P) ^{b/}	68,439	3,864.11	17.7
Montijo (D) ^{c/} Sur	8,047	1,953.60	4.1
WEST: TOTAL	<u>142,153</u>	<u>6,898.40</u>	<u>20.6</u>
Ocú (D)	14,974	636.00	23.5
Pesé (D)	10,005	282.00	35.5
Atalaya (D)	5,165	159.00	32.5
Cañazas (D)	13,961	1,178.00	11.9
La Mesa (D)	10,743	502.00	21.4
Las Palmas (D)	17,427	1,172.00	14.9
Montijo (D) ^{d/} Norte	4,546	137.40	33.1
Río de Jesús (D)	6,206	319.00	19.5
Santiago (D)	36,558	1,025.00	35.7
Soná (D)	22,568	1,488.00	15.2

^{a/} Excludes the area and population of the District of Chitré which comprises The Chitré-Los Santos Growth Center.

^{b/} Excludes the area and population of the populated area of Los Santos which comprises the Chitré-Los Santos Growth Center.

^{c/} Includes only the "Corregimientos" of Arenas, Gobernadora Leones,

(Continued)

Llano de Cativeal, Quebro and Tebario or Mariato

d/ Includes only the "Corregimientos" of Cabecera, La Larciana and Pilón.

D= District

P= Province

ESTIMATE OF THE FUTURE NEIGHBORHOOD COMMERCIAL AREA

Total Area of the present Neighborhood Commercial Area	=	54000 M ²
Population 1970	=	23357 inhabitants
Ratio (M ² /inhab) = $\frac{54000 \text{ M}^2}{23357 \text{ inhabitants}}$	=	<u>2.3M² inhabitant</u>
Future Population (Year: 2000)	=	52,000 inhabitants
Neighborhood Commercial Area (Year: 2000) 52000 X 2.3 M ²	=	119600 M ² 11.9 hectares
Future Parking Area, comprising 4% of the proposed Commercial Area: 11.9 ha. X .04	=	0.5 hectares
Neighborhood Commercial Area	=	11.9 hectares
Parking Area	=	0.5 hectares
Total Neighborhood Commercial Area (Year: 2000)	=	12.4 hectares

ESTIMATE OF THE FUTURE CENTRAL COMMERCIAL AREA

Total Area of the present Central Commercial Area	= 90000M ²
Population (1970)	= 23357 inhabitants
Ratio (M ² inhab) = $\frac{90000 \text{ M}^2}{23357 \text{ inhabitants}}$	= <u>3.85 M²/inhabitant</u>
Future Population (Year: 2000)	= 52000 inhabitants
Central Commercial Area (Year: 2000) 52000 X 3.85 M ²	= 200200 M ² <u>20.0 hectares</u>
Future Parking Area, comprising 15% of the proposed Commercial Area 20.0 ha. X .15	= 3.0 hectares
Central Commercial Business Area	= 20.0 hectares
Parking Area	= <u>3.0 hectares</u>
Central Commercial Business Area required by the year 2000	= 23.0 hectares

ESTIMATE OF THE FUTURE AREA INSTITUTIONAL USAGEEstimate of the Institutional Area: Education.

Present Population = 23357 inhabitants

Future Population (Year 2000) = 52000 inhabitants

Population Increase by year 2000 = 28643 inhabitants

Primary School Level

Primary School population = 17%

Student Population = 28643 inhab. X .17 = 4869 students

Students per Classroom = 30 students/classroom

Students per School = 811 students

Number of Schools Needed = $\frac{4869 \text{ student pop.}}{811 \text{ students/school}}$ = 6 schools

Number of Classrooms Needed = $\frac{4869 \text{ student pop.}}{30 \text{ students/classroom}}$ = 162 classrooms

Ratio (M²/student) = 5.3 M²/student

Area Needed = 5.3 M²/ x 4869 = 25805 M²

Area for Primary Schools = 2.6 hectares

ESTIMATE OF THE INSTITUTIONAL AREA: EDUCATION

Secondary School Level

Secondary School Population	=	12%
Student Population	= 28643 inhab. X .12	= 3437 students
Students per Classroom		= 34 students/classroom
Students per School		= 1718 students
Number of Schools Needed	= $\frac{3437 \text{ student pop.}}{1718 \text{ students/School}}$	= 2 schools
Number of Classrooms Needed	= $\frac{3437 \text{ student pop.}}{34 \text{ students/classroom}}$	= 101 classrooms
Ratio (M ² /student)	= 7.0 M ² x 3437	= 24059 M ²
Area for Secondary Schools		= 2.4 hectares

Summary:

Area for Primary Schools	= 2.6 hectares
Area for Secondary Schools	= 2.4 hectares
Area Needed for Education (Year: 2000)	= 5.0 hectares

ESTIMATE OF FUTURE GREEN AREAS

Estimate of future Green Areas = 23357 inhabitants
Present Population = 147000 M²
Present Green Areas = 14.7 hectares

Ratio (M²/inhabitant) = $\frac{147000 \text{ M}^2}{23357 \text{ inhabitants}}$ = 6.2 M²/inhabitants

Population by year 2000 52000 inhabitants
Area Needed by year 2000 = 52000 x 6.0 M² = 312000 M²
Area Needed = 31.2 hectares

ESTIMATE OF THE TOTAL INSTITUTIONAL AREA

Present Institutional Area	=	340000 M ²
Present Developed Area	=	4301000 M ²
Percentage	=	$\frac{340000 \text{ M}^2}{4301000 \text{ M}^2} = 7.9\%$
* Future Institutional Area	=	551.000 M ²
Future Developed Area	=	7165000 M ²
Future Percentage	=	$\frac{551000 \text{ M}^2}{7165000 \text{ M}^2} = 7.7\%$

* Includes the area needed for education facilities =50000 M² (5.0 ha.)

PROPOSED INTER-MUNICIPAL AGREEMENT

Inter-Municipal Agreement No. _____

(From _____, to _____, year ____)

Whereby the Inter-Municipal Advisory Committee for the Development of the Districts of Chitre-Los Santos is created and its functions are established.

The Municipal Councils of the Districts of Chitre and Los Santos, on the basis of their legal and constitutional rights,

W H E R E B Y:

Article 208 of the Political Constitution empowers the Municipalities to promote the development and social welfare of the community in collaboration with the National Government.

Law No. 106, dated October 8, 1973, pertaining to Municipal Government, establishes as one of the main functions of the Municipal Council the planning of development policies for the District and the preparation, evaluation and implementation of projects and programs for its development.

The Municipal Government may establish the advisory mechanisms it deems necessary to perform the aforementioned functions and upgrade the Municipal capabilities.

D E C R E E S:

ARTICLE ONE: The creation of a Inter-Municipal Advisory Committee for the Integrated Development of the Districts, of Chitré and Los Santos will be comprised of:

- The two Mayors, who will periodically alternate, presiding over the Committee.
- The Vice-President of the Assembly of Representatives for each Province.
- A representative from private enterprise (business) of each Municipality.
- The Municipal Treasurer of each Municipality.
- A representative of the civic or cultural organizations existing in each District.
- A representative of the Banco Nacional in both cities.
- A representative from the local educational institutions of each Municipality.

- PARAGRAFH:
- a. The Committee will be able to form sub-committees according to the different aspects involved in the Plan.
 - b. The members of the Committee will receive a fee per meeting, which will be established by the Municipalities.

- c. The members of the Committee will appoint a deputy from the staff of their respective institutions or organizations to act as substitutes during temporary absences.

ARTICLE TWO: The Committee will perform the following functions:

1. Identify, classify and quantify the Municipal problems affecting the development of the Districts:
 - a. Social and Cultural
 - b. Economic
 - c. Administrative
2. Assist the Municipal Governments in the preparation of medium and short term plans and programs for the integrated development of the Districts, in accordance with the national, regional and provincial development plans.
3. Assist the Mayors in the preparation of Income and Expenditure Budgets based on the plans and programs adopted for the development of the Municipios.
4. Receive, discuss and express opinions and recommendations regarding the studies for Municipal development presented by the Ministry of Planning and Economic Policy or other Government agencies.

ARTICLE THREE: In order to fulfill its obligations the Committee may:

- a. Prepare and adopt its own internal regulations in accordance with the corresponding Municipal agreements.
- b. Request and obtain technical advice and training from the Ministry of Planning and Economic Policy or other Government agencies.

- c. Maintain a reciprocal information system of their activities with the Ministry of planning through the respective Provincial Planner.
- d. Request and obtain from the Municipios the logistic support needed to perform its functions.

PARAGRAPH: It is hereby established that the jurisdiction of the Advisory Municipal Committee for Development does not cover the construction or re-construction of buildings, construction alignments and other similar functions which at present are the responsibility of the Municipal Engineering office.

ARTICLE FOUR: The present agreement will become effective as of its approval and annuls any other agreement pertaining to similar issues.

Issued in _____, on _____, year ____.
(city)

For The Municipio of Chitré:

For The Municipio of Los Santos

THE PRESIDENT _____

THE PRESIDENT _____

THE SECRETARY _____

THE SECRETARY _____

TERMINALES DE TRANSPORTE PARA LAS CIUDADES DE DAVID, CHITRE -
LOS SANTOS Y SANTIAGO.

La comunicación terrestre juega un papel primordial en el desarrollo de estas ciudades, tanto desde el punto de vista regional de cada una de ellas, como en el constecto nacional de interrelación con las demás ciudades del país.

Como paso necesario para lograr el desarrollo eficiente de el Transporte Terrestre, está la dotación de terminales que contribuyan a brindar un servicio más seguro y cómodo.

En la medida que fortalezcamos este servicio, estamos logrando como consecuencia, los objetivos principales del Proyecto URBE: El fortalecimiento de los Centros Urbanos del Interior.

Las ciudades de David y Chitré - Los Santos juegan el papel de ciudades terminales en cuanto al transporte se refiere, tanto para el movimiento de su área de influencia como para el resto del país; lo que nos indica la necesidad inobjetable de que esa situación sea aprovechada, proveyéndolas de un cómodo Terminal de Transporte.

La ciudad de Santiago juega ese mismo papel visto desde su área de influencia y representa además, un punto obligado de paso, para el movimiento del transporte entre las principales ciudades del Interior.

1- Terminal de Transporte de David

La ciudad de David, contaba para 1970 con 58,997 habitantes, según el último censo realizado. Esta población

representa a los usuarios principales del Terminal de Transporte, contando con la provincia de Chiriquí con 117,601 habitantes, lo que representa el área de influencia de la ciudad. (Excluyendo Barú, Boquete y Bugaba).

En cuanto a informaciones sobre el movimiento vehicular del Transporte Terrestre, para deducir las necesidades del Terminal de David, se tomaron las incluídas en el estudio del Fondo de Desarrollo Municipal, el cual, fue presentado en 1977.

Entre los datos considerados anotamos que la hora máxima de vehículos es de 94 y la hora máxima de pasajeros es de 1720.

Se señala además que la proporción de vehículos está dada por los siguientes porcentajes:

20% de Buses, 70% de Microbuses y 10% de Taxis y Otros.

El factor de crecimiento de vehículos y pasajeros se estableció en 3.7% de acuerdo con los datos de venta de boletos de la ruta David - Panamá. Nosotros lo consideramos bajo y tomando la experiencia de los terminales colombianos, lo hemos establecido en 5%.

El estudio considera que en la hora máxima el 50% de vehículos salen y el 50% entran al terminal y que el período de carga y descarga de un vehículo es de 15 minutos. El período de diseño de el terminal es de 15 años.

A- Areas del Terminal

A.1- Area de Operaciones no cubiertas.

A.1.1 - Estacionamientos.

Como los buses representan el 20%, en la hora máxima hay 19 vehículos.

En el período de diseño habrán 40 buses.

De las normas Colombianas hemos tomado que en 1,000 m² se estacionan 15 Buses.

$$\text{Area}_B = 2,700 \text{ m}^2$$

Como los microbuses, taxis y otros representan el 80%, en el período de diseño habrán 156 vehículos.

Para estos vehículos hemos estimado que por 1,000 m² se estacionan 25.

$$\text{Area}_{MB - T \text{ y } O} = 6,240 \text{ m}^2$$

A.1.2 - Area de Rampas.

Tomando en cuenta el período de carga y descarga y el movimiento en la hora máxima determinamos:

Se necesitan 50 espacios en 15 años,

$$A \text{ para Buses} = \frac{50 \times 0.20}{15} \times 1000 = 670 \text{ m}^2$$

$$A \text{ para MB-T y O} = \frac{50 \times 0.80}{25} \times 1000 = 1,600 \text{ m}^2$$

$$A \text{ de rampas} = 2270 \text{ m}^2$$

$$\text{Area de Operaciones no cubiertas} = 11,210 \text{ m}^2$$

A.2 - Areas de circulación cubierta para pasajeros.

A.2.1 - Area de Espera:

El volumen de pasajeros en la hora máxima es de 1720 y en 15 años, 3,576.

De acuerdo con las normas colombianas establecemos para espera un área de 1.8 m^2 por pasajero.

Tomando en consideración los 15 minutos de espera:

$$\begin{aligned} \text{Pas. en espera} &= 0.25 (3576) \\ &= 894 \text{ pas.} \end{aligned}$$

$$\begin{aligned} \text{Area de espera} &= 894 \text{ pas} \times 2 \text{ m}^2/\text{pas.} \\ &= 1788 \text{ m}^2 \end{aligned}$$

$$\text{A.2.2 - Area de circulación} = 202.50 \text{ m}^2$$

$$\text{A.2.3 - Pasillos} = 81.00 \text{ m}^2$$

Los datos de A.2.2 y A.2.3 fueron tomados del estudio mencionado.

$$\text{Area de circulación cubierta} = 2,071.50 \text{ m}^2$$

A.3 Areas cerradas (unidades de servicios complementarios)

A.3.1 - Taquillas

Las normas colombianas estiman que una taquilla absorbe 100 tiquetes por hora y que 2 m^2 por taquilla es adecuado.

$$\text{A de taquillas} = 72 \text{ m}^2$$

A.3.2	- Oficina de información	27 m ²
A.3.3	- Consignación de Equipaje	33.75 m ²
A.3.4	- Teléfonos	4.50 m ²
A.3.5	- Encomiendas	60.75 m ²
A.3.6	- Servicio Sanitario Público y Aseo	36.00 m ²
A.3.7	- Locales Comerciales	
A.3.8	- Administración General y Secretaría	90.00 m ²
A.3.9	- Mantenimiento y Depósitos	144.00 m ²
A.3.10	- Taller de Reparaciones	216.00 m ²
A.3.11	- Estación de gasolina	240.00 m ²

Las áreas exceptuando la A.3.1 fueron tomadas del estudio mencionado.

Areas cerradas = 1,410 m²

B- Cálculo de Inversiones Totales en la Terminal de Transporte.

A- Inversiones Fijas

1- Terrenos = 20,000 m² x B/.5.00 m² 100,000

2- Construcción

2-1-	Edificios Terminal	591,855
2-2-	Estacionamientos	15,000
2-3-	Vías Internas	20,000
2-4-	Zonas Verdes	1,000

3-	Otras Instalaciones	
3-1-	Energía de Emergencia	15,000
3-2-	Equipo de Sonido	5,000
3-3-	Teléfonos	3,000
4-	Proyecto Arquitectónico	40,000
5-	Muebles y Equipo	
5-1-	Administración	5,000
5-2-	General	5,000
6-	Equipo de oficina	5,000
7-	Montaje Equipos varios	7,000
8-	Puesta en marcha	6,000
9-	Gastos de Organización	21,000
10-	Intereses durante montaje puesta en marcha	30,000
11-	Imprevisto y Contingencia (10% del total)	<u>103,875.50</u>
	Total de Inversiones Fijas	1,142,630.50
B-	Capital de Trabajo	16,516.23
C-	Aumento debido a la duración del préstamo (10% del Total)	115,914.67
	Inversión Total	1,275,061.30

2- Terminal de Transporte de Chitré - Los Santos

La ciudad de Chitré cuenta con una población de 20,109 habitantes según el censo de 1970.

debido a características geográficas y comerciales, los distritos de Parita y Los Santos con una población de 7,024 hab. y 16,692 respectivamente, se han mantenido íntimamente ligados a la ciudad de Chitré, por lo que las hemos considerado como usuarios principales del Terminal de Chitré.

Bajo este punto de vista los usuarios principales suman 46,630, lo que representa el 79% de los usuarios del Terminal de David. El área de influencia de la Ciudad de Chitré - Los Santos cubre una población total de 69,114 habitantes.

Debido a la falta de información en cuanto al movimiento vehicular del transporte en Chitré - Los Santos, hemos optado por considerar que el 79% en relación con el Terminal de David se mantiene, tanto para el volumen de vehículos como de pasajeros.

A- Areas del Terminal

A.1- Area de Operaciones no cubiertas

A.1.1 - Estacionamientos 7,050 m²

A.1.2 - Rampas 1,797 m²

Area de Operaciones no cubiertas = 8,847 m²

A.2- Area de circulación cubierta para pasajeros

A.2.1 - Area de espera 1,412.00 m²

A.2.2 - Area de circulación 160.00 m²

A.2.3 - Pasillos 64.00 m²

Area de circulación cubierta = 1,636.00 m²

A.3- Areas cerradas (Unidades de Servicio Complementario)

A.3.1 -	Taquilla	57.00 m ²
A.3.2 -	Oficina de Información	22.00 m ²
A.3.3 -	Consignación de Equipaje	27.00 m ²
A.3.4 -	Teléfonos	4.50 m ²
A.3.5 -	Encomiendas	48.00 m ²
A.3.6 -	Ser. Sanitario Público y Aseo	30.00 m ²
A.3.7 -	Locales Comerciales	384.00 m ²
A.3.8 -	Administración General y Secretaría	71.1 m ²
A.3.9 -	Mantenimiento y Depósitos	113.76 m ²
A.3.10-	Taller de Reparaciones	170.64 m ²
A.3.11-	Estación de gasolina	189.60 m ²
Area cerrada	=	1,117.60 m ²

B- Cálculo de Inversiones Totales en la Terminal de Transporte (en Balboas)

A- Inversiones Fijas

1.Terrenos =	15,000 m ² x B/.5.00 =	75,000
2.Construcción		
2-1 Edificios Terminal		468,112
2-2 Estacionamientos		145,146
2-3 Vías Internas		15,800
2-4 Zonas Verdes		1,000
3.Otras Instalaciones		
3-1 Energía de Emergencia		12,000
3-2 Equipo de Sonido		5,000
3-3 Teléfonos		3,000

4. Proyecto Arquitectónico	31,000
5. Muebles y Equipo	
5-1 Administración	4,000
5-2 General	4,000
6. Equipo de Oficina	4,000
7. Montaje Equipo Varios	5,530
8. Puesta en Marcha	4,740
9. Gastos de Organización	17,000
10. Intereses durante montaje y puesta en marcha	24,000
11. Imprevisto y Contingencia (10% del total)	<u>81,932.80</u>
Total de las Inversiones Fijas	901,047.80
B- Capital de Trabajo =	13,047.82
Aumento debido a la duración del préstamo (10%)	91,430.86
Inversión Total	1,005,739.40

3- Terminal de Transporte de Santiago

La población del distrito de Santiago es de 36,558 habitantes según el censo de 1970. Esta población representa a los usuarios principales del Terminal y tiene bajo su área de influencia a una población de 176,398 habitantes.

Los usuarios principales representan el 60% con respecto a los del Terminal de David.

Debido a la falta de información en cuanto al movimiento vehicular del transporte en Santiago, hemos optado por mantener la relación mencionada para la determinación de las áreas y costos del Terminal.

A- Determinación de las áreas del Terminal

A.1 - Area de Operaciones no cubiertas

A.1.1 - Estacionamientos	5,364.00 m ²
A.1.2 - Rampas	1,362.00 m ²

A.2 - Areas de circulación cubierta para pasajeros

A.2.1 - Area de espera	1,072.80 m ²
A.2.2 - Area de circulación	121.5 m ²
A.2.3 - Pasillos	50.00 m ²

Area de circulación cubierta = 1,244.30 m²

A.3 - Area cerrada (unidades de servicios complementarios)

A.3.1 - Taquillas	43.20 m ²
A.3.2 - Oficina de información	16.20 m ²
A.3.3 - Consignación de Equipajes	20.25 m ²
A.3.4 - Teléfonos	4.50 m ²
A.3.5 - Encomiendas	36.45 m ²
A.3.6 - Servicio Sanitario Público y Aseo	21.60 m ²
A.3.7 - Locales Comerciales	291.60 m ²
A.3.8 - Administración General y Secretaría	54.0 m ²
A.3.9 - Mantenimiento y Depósitos	86.40 m ²
A.3.10- Talleres de Reparaciones	129.60 m ²
A.3.11- Estación de gasolina	144.00 m ²

Areas cerradas = 847.8 m²

B- Cálculo de las Inversiones Totales en la Terminal
de Santiago (en Balboas)

A- Inversiones Fijas

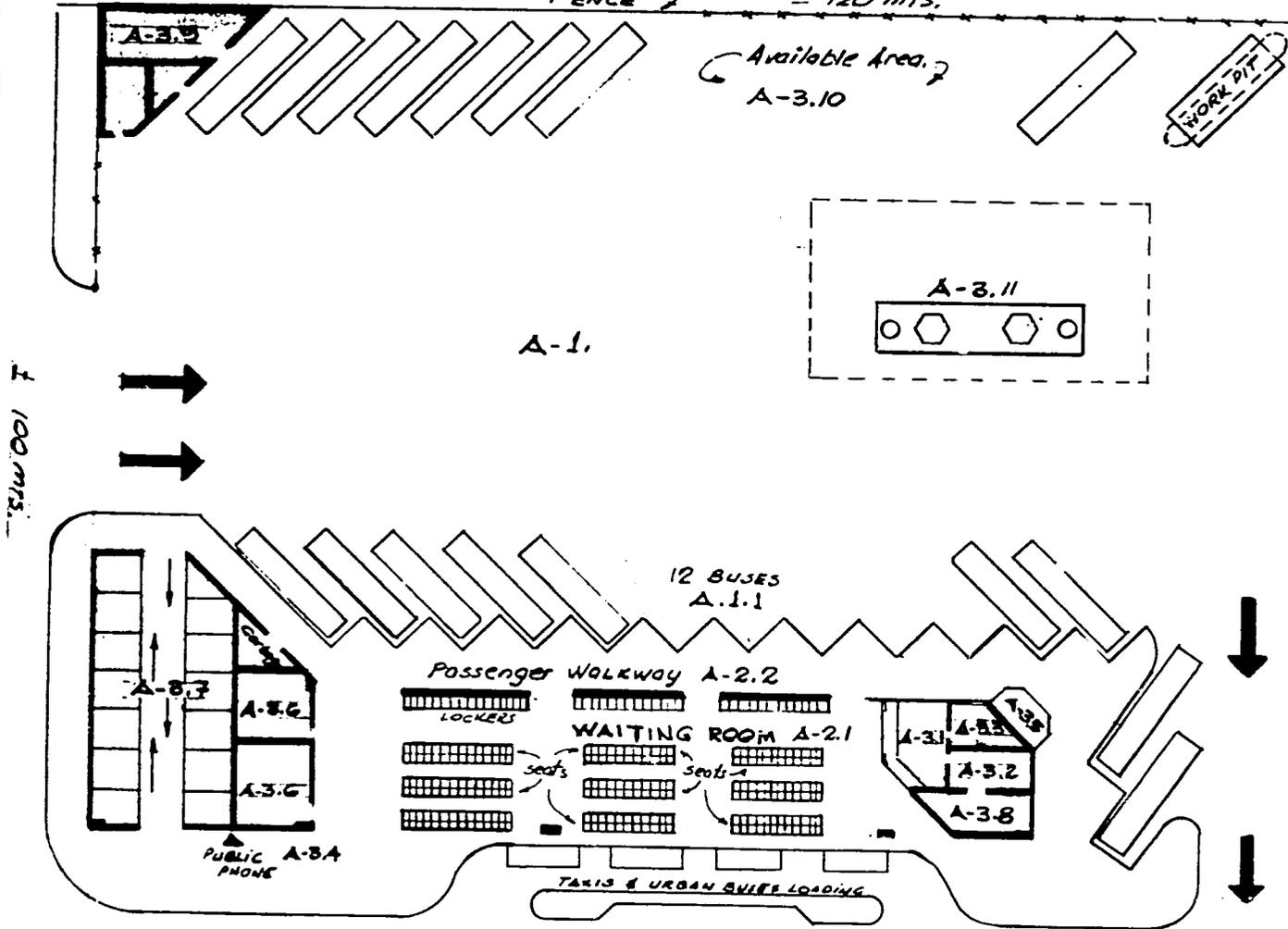
1. Terrenos = 12,000 m ² x B/.5.00 m ²	60,000
2. Construcción	
2-1 Edificios Terminal	355,657
2-2 Estacionamientos	110,340
2-3 Vías Internas	12,000
2-4 Zonas Verdes	1,000
3. Otras Instalaciones	
3-1 Energía de Emergencia	9,000
3-2 Equipo de Sonido	5,000
3-3 Teléfonos	3,000
4. Proyecto Arquitectónico	24,000
5. Muebles y Equipo	
5-1 Administración	3,000
5-2 General	3,000
6. Equipo de Oficina	3,000
7. Montaje Equipo Varios	4,200
8. Puesta en Marcha	3,600
9. Gastos de Organización	12,600
10. Intereses durante montaje y puesta en marcha	18,000
11. Imprevisto y Contingencia (10% del total)	<u>62,739.7</u>
Total de Inversiones Fijas	690,136.70
Capital de Trabajo	9,909.74
Aumento debido a la duración del préstamo(10%)	70,004.64
Inversión Total =	770,051.08

B. Investment Calculations		
a. Fixed Investment		
1. Land 12000 m ² X \$5.00 =		\$ 60,000.00
2. Construction		
2.1 Terminal Building		355,657.00
2.2 Parking (Bus)		110,340.00
2.3 Internal Passage Area		12,000.00
2.4 Green Areas		1,000.00
3. Other Installations		
3.1 Emergency Power		9,000.00
3.2 Intercom System		5,000.00
3.3 Telephones		3,000.00
4. Building Design		24,000.00
5. Furniture & Equipment		
5.1 Administration		3,000.00
5.2 General		3,000.00
6. Office Equipment		3,000.00
7. Equipment Installation		4,200.00
8. Startup Costs		3,600.00
9. Overhead		12,600.00
10. Interests during Equipment Installation & Startup		18,000.00
11. Contingencies 10%		62,739.70
Total of Fixed Investment		\$ 690,136.70
Working Capital		\$ 9,909.74
Inflation 10%		\$ 70,004.64
Total Investment		\$ 770,051.08

BUS TERMINAL
FENCE 2 ± 120 MTS.

BUS TERMINAL AREAS

A Terminal	
A-1 Operation Area Open	
A-1.1 Pa. king	5.364 M ²
A-1.2 Ramps	1.362 M ²
A-2 Passenger Area (Covered)	
A-2.1 Waiting Room	1.073 M ²
A-2.2 Walking Area	122 M ²
A-2.3 Aisles	50 M ²
A-3 Closed Areas (Complementary Services)	
A-3.1 Ticket Office	44 M ²
A-3.2 Information Office	17 M ²
A-3.3 Baggage	21 M ²
A-3.4 Telephones	5 M ²
A-3.5 Mail Room	37 M ²
A-3.6 Rest Rooms & Garbage	22 M ²
A-3.7 Commercial Area	292 M ²
A-3.8 Administ. Off.	54 M ²
A-3.9 Mainten. S. R.	87 M ²
A-3.10 Repair Shop	130 M ²
A-3.11 Sevice Station	144 M ²



SCALE 1:80

Building will be of Concrete
Block Construction over a
Concrete Slab and Roof will
be insulated galvanized
metal or Concrete.

Building will be of Concrete Block Construction over a Concrete Slab and Roof will be insulated galvanized metal or Concrete.