PROJECT PAPER

PHILIPPINES: BICOL

INTEGRATED RURAL DEVELOPMENT PROJECT

OCTOBER 1976

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PROJECT PAPER

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BICOL

INTEGRATED RURAL DEVELOPMENT PROJECT

1977 – 1981

FOOD AND NUTRITION CATEGORY

OFFICE OF REGIONAL DEVELOPMENT
USAID/PHILIPPINES
OCTOBER 1976

BICOL INTEGRATED RURAL DEVELOPMENT PROJECT

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AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

1. TRANSACTION CODE: A (A = ADD, C = CHANGE, D = DELETE)

PP

2. DOCUMENT CODE: 3

3. COUNTRY/ENTITY: Philippines

4. DOCUMENT REVISION NUMBER:

5. PROJECT NUMBER (7 digits): 492-0303

6. BUREAU/OFFICE: A. SYMBOL: ASIA; B. CODE: 04

7. PROJECT TITLE (Maximum 40 characters): Bicol Integrated Rural Development

8. ESTIMATED FY OF PROJECT COMPLETION: FY 81

9. ESTIMATED DATE OF OBLIGATION: A. INITIAL FY 78 a/ B. QUARTER 1; C. FINAL FY 81 (Enter 1, 2, 3, or 4)

10. ESTIMATED COSTS ($000 OR EQUIVALENT $1 –)

A. FUNDING SOURCE	FIRST FY B. FX	FIRST FY C. L/C	FIRST FY D. TOTAL	LIFE OF PROJECT E. FX	LIFE OF PROJECT F. L/C	LIFE OF PROJECT G. TOTAL
AID APPROPRIATED TOTAL	900		900	2890		2890
(GRANT)	(900)	( )	(900)	(2890)	( )	(2890)
(LOAN)	( )	( )	( )	( )	( )	( )
OTHER U.S. 1.						
OTHER U.S. 2.						
HOST COUNTRY		1925			7667	7667
OTHER DONOR(S)						
TOTALS	900	1925	900	2890	7667	10557

11. PROPOSED BUDGET APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. 1ST FY 78 F. GRANT	E. 1ST FY 78 G. LOAN	H. 2ND FY 79 I. GRANT	H. 2ND FY 79 J. LOAN	K. 3RD FY 80 L. GRANT	K. 3RD FY 80 M. LOAN
(1) FN	B291	210		900		870		720	
(2)									
(3)									
(4)									
TOTALS									

A. APPROPRIATION	N. 4TH FY 81 O. GRANT	N. 4TH FY 81 P. LOAN	Q. 5TH FY ___ R. GRANT	Q. 5TH FY ___ S. LOAN	LIFE OF PROJECT T. GRANT	LIFE OF PROJECT U. LOAN
(1) FN	400				2890a/	
(2)						
(3)						
(4)						
TOTALS						

12. IN-DEPTH EVALUATION SCHEDULED: MM 06 YY 77

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.

/ (1 = NO, 2 = YES)

14. ORIGINATING OFFICE CLEARANCE

SIGNATURE: Lawrence A. Marinelli / Don F. Wadley

TITLE / DATE SIGNED

Lawrence A. Marinelli	Don F. Wadley	MM 11 DD 02 YY 76
Asst.Dir. for Regional Dev.	Proj. Manager	

15. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

AID 1330-4 (3-76)

a/ FY 1977 funding ($868,000) provided under the Bicol River Basin Development Project (#492-55-199-260)

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: Philippines.

4. DOCUMENT REVISION NUMBER:

5. PROJECT NUMBER (7 DIGITS): 492-0303

6. BUREAU/OFFICE: A. SYMBOL: ASIA; B. CODE: 04

7. PROJECT TITLE (MAXIMUM 40 CHARACTERS): Bicol Integrated Rural Development

8. PROPOSED NEXT DOCUMENT: A. 3 (2 = PRP, 3 = PP); B. DATE: MM 10, YY 76

9. ESTIMATED FY OF AUTHORIZATION/OBLIGATION: 1/ a. INITIAL FY 78; b. FINAL FY 81

10. ESTIMATED COSTS ($000 OR EQUIVALENT, $1 = ₱ 7.50)

FUNDING SOURCE	LIFE OF PROJECT
A. AID APPROPRIATED	2,890
B. OTHER U.S. 1.	
B. OTHER U.S. 2.	
C. HOST COUNTRY (CY 1977-1981)	7,667 2/
D. OTHER DONOR(S)	
TOTAL	10,557

11. PROPOSED BUDGET AID APPROPRIATED FUNDS ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE C. GRANT	PRIMARY TECH. CODE D. LOAN	E. FIRST FY 78 F. GRANT	E. FIRST FY 78 G. LOAN	LIFE OF PROJECT H. GRANT	LIFE OF PROJECT I. LOAN
(1) FN	B-291	210		900		2,890	
(2)							
(3)							
(4)							
			TOTAL	900		2,890	

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

13. SPECIAL CONCERNS CODES (MAXIMUM SIX CODES OF FOUR POSITIONS EACH): BS; BR

14. SECONDARY PURPOSE CODE:

15. PROJECT GOAL (MAXIMUM 240 CHARACTERS)

To raise the socio-economic level of the poor majority in the Bicol River Basin and extended influence areas (Program Area) to the national average by 1990 and to sustain its growth rate at the national average after 1990.

16. PROJECT PURPOSE (MAXIMUM 480 CHARACTERS)

#1 Secure major financing from external donors and domestic sources and physically begin implementation of 8 or more socially and economically feasible, integrated development projects in the Bicol from 1977 to 1981.
#2 Increase private sector agribusiness and rural manufacturing investments in the Bicol.
#3 Manage AID support projects and coordinate all AID support in the Bicol.

17. PLANNING RESOURCE REQUIREMENTS (staff/funds)

18. ORIGINATING OFFICE CLEARANCE

Signature: Lawrence A. Marinelli / Don Wadley

Title: Asst. Director for Regional Development / Project Manager

Date Signed: MM 08, DD 27, YY 76

19. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM, DD, YY

AID 1330-2 (3-76)

1/ The PP will also justify FY77 funding under the old Program.

2/ Corrected from rounded number of 7,600.

B. Recommendations

The Mission recommends approval of the revised Bicol Integrated Rural Development Project programmed over the five-year period FY 1977 through FY 1981 at the following grant funding levels:

FY 1977	$ 868,000
1978	900,000
1979	870,000
1980	720,000
1981	400,000
Total New Obligations	$3,758,000

This Project Paper includes FY 1977 funding which has been included in the Congressional Presentation under the Bicol River Basin Development Project. A second revision of the PROP[1] would have been required for the last three years (FY 1977-79) of the original project because of major changes in the GOP Program. In response to these changes and because of the proposed two years extension, the Mission elected to prepare this Project Paper in lieu of a revised PROP.[2]

1/ Reference Manila 4800 and AID/W concurrence, State 086429

2/ Original PROP; "Bicol River Basin Development Project", Non-capital Project Paper (Project No. 492-55-199-260); May 1973, revised October 1974

As in the case of the above PROP, this Project Paper was developed in a collaborative manner with senior officers of the Bicol River Basin Development Program (BRBDP) Program Office.

C. Summary Description of the Project

The Revised Grant Bicol Project

The goal of the Bicol Integrated Rural Development Project which supports the Bicol River Basin Development Program is to raise the socio-economic level of the poor majority in the economically depressed, but well-endowed Bicol River Basin program area to the national average by 1990. This will be measured in terms of increased real income more equitably distributed (through increased production and productivity), increased employment, increased opportunities for the people to participate in the development process, and an improved overall quality of life.

The Bicol Program is designed to attack the classical development problems and constraints in the Bicol program area (with its population of 1.6 million) through an integrated area development strategy of interagency planning and implementation of multi-sectoral projects and programs.

The grant Bicol Project presented in this paper is designed to provide essential technical consultancy, participant training, and commodity inputs from AID in support of the Bicol Program. AID technical assistance ($3.7 million) is critical to sustain and accelerate the momentum of the expanding GOP Program. The Government of the Philippines (GOP) will provide national budget appropriations pursuant to Presidential Decree 926 for operations, project development and monitoring. The Bicol River Basin Development Program Office will manage the project with the assistance of a USAID core team.

The thrust and output of this technical support project is the identification, planning, design, assessment, and final packaging of (1) an integrated set of major development projects in the public sector and (2) high-potential investment projects in the private sector. Integrated area development (IAD) projects or integrated sectoral projects associated with this project include water control and transportation infrastructure, agricultural support activites (including marketing), institutional development and essential social services for human resource development.

The project purposes are (1) to secure financing from external and domestic sources and (2) to begin physical implementation of socially and economically feasible projects so as to reverse the current, downward economic trend. The project will provide for GOP and AID monitoring and evaluation of the major component development projects.

The complementarities of all public sector infrastructure projects and expanded social service programs in the Bicol program area, plus government incentives and promotional activities, are expected to encourage a higher level of private sector investment in agri-business and rural manufacturing. This in turn is expected to stimulate increased agricultural production, create more off-farm employment and strengthen the local tax base.

There is also a strong project component to do time-phased socio-economic surveys and innovative research and development to (a) provide essential inputs to planning and design that lead to project packaging, (b) strengthen implementation and effective management of current AID loan projects, and (c) establish baseline data and indicators to measure project progress and do impact evaluation. Surveys and analysis will also be designed to measure the synergistic effects of the various public and private investment projects.

The joint Bicol Integrated Rural Development Project (IRD) is a response to GOP initiatives and positive organizational changes in the Bicol River Basin Development Program (BRBDP). The revised project constitutes a change in thrust from primarily institution building to intensive project packaging, including feasibility studies[1/] of integrated development projects for external donor financing and to physically begin project implementation.

The GOP/BRBDP organizational and coordinating structure is now in place and operational. A developing institutional capability is also in place to coordinate integrated planning and to monitor interagency implementation of major component development projects. This was the primary purpose of the original grant project and has been accomplished. The institutional capability will be strengthened in the process of carrying out the intensified program over the next five years.

The institutional development process was initiated with the BRBDP framework plan in February 1973[2/] and the establishment of the Bicol River Basin Council in May 1973, under Executive Order 412. The original PROP,[3/] collaboratively developed in March 1973 and revised in 1974 outlined a six year project (FY 74-79) to develop the institutional capability and initiate implementation of capital development projects. The joint project evaluation in June 1975 indicated the institutional processwas well underway.[4/] The evaluation reinforced GOP and USAID views at that time regarding the need for (1) a more comprehensive framework plan and strategy and annual operational plans, (2) improvement in interagency coordination, and (3) inclusion of appropriate social services components into plans and projects. These and other evaluation recommendations have been successfully incorporated into the current GOP Program. Because of the rapidly expanding program, the evaluation also recommended increased personnel and financial resources from the GOP and USAID.

1/ AID resources for investment grade feasibility studies, if requested will likely come from consultative services loans, and would be an associated input of this project.

2/ Bicol River Basin Development Program, Framework Plan; (Bluebook) GOP Interagency Committee, Naga, Camarines Sur (February 1973)

3/ Op. cit.

4/ "An Evaluation of the Bicol River Development Project" USAID and GOP/BRBDP consultant team (June 1975) Manila

On April 28, 1976, President Marcos signed Presidential Decree (PD) 926 mandating the BRBDP to accelerate planning, facilitate interagency implementation, and to monitor an "integrated multi-project area development program" in the Bicol.[1/] At that time, the GOP also formally declared the Bicol River Basin Development Program to be a nationally supported project under the Cabinet Coordinating Committee for Integrated Rural Development Projects. The Secretary of Public Works was designated Cabinet Coordinator for BRBDP. PD 926 strengthened the decentralized BRBDP Program by providing increased authorities and well-defined policies including a clear coordinating and monitoring role, and very significantly, authorized annual budget appropriations. By mid-1976, the BRBDP Program Office had also completed a revised framework plan and operational plans.[2/] Combining the planning process and the implementing and coordinating guidelines under PD 926, the BRBDP development strategy became fully operational. With the strengthened structure in place, the challenge is to move rapidly into intensive packaging of feasible projects for GOP and other donor financing. The goal of the discrete component development projects continues to focus on the development problems and constraints of the Bicol.

A Review of the Development Problems

The core of the economically depressed Bicol Region is the two provinces of Camarines Sur and Albay and makes up the Bicol River Basin and its extended influence area. This core area or BRBDP Program Area recently enlarged by Presidential Decree 926, includes 706,000 hectares and has 1.6 million inhabitants. The area is characterized by:

-- a high rate of natural population growth (3.3%) coupled with a high rate of outmigration (1.0%)

-- the lowest per capita production and income compared with other regions (only 49% of the national average in 1974) and declining (1.5% real decline annually 1972-74)

-- serious maldistribution of income

-- low rate of savings and investments

-- a lower than average ratio of manufacturing activity

-- physical and economic isolation from Manila and other markets, high transportation costs due to bad roads, a dilapidated railroad, and inadequate port facilities and shipping [3/]

1/ See Annex B or TOAID A-109, May 12, 1976, for full text of PD 926

2/ BRBDP Comprehensive Development Plan 1975-2000, BRBDP Program Office Canaman, Camarines Sur August 1976 (Draft, revised framework plan); Also see Annex C(4) for listing of other BRBDP planning documents.

3/ Manila South Road to Bicol now fully paved as of late 1976, but access roads poor or non-existent.

-- lack of employment opportunities

-- hostile physical environment - periodic typhoons, flooding, poor drainage, salinity intrusion; the cumulative effects adversely affecting production

-- inefficient production, storage, and marketing technology

-- inequitable land tenure arrangements and small farm size (1.7 ha.)

-- poverty and technological ignorance in the home with a high level of malnutrition, disease, infant-child mortality, etc.

-- low revenue collection to support development efforts

-- capital scarcity

The classical development problems are all present. Addressing these problems falls clearly within the Congressional Mandate to AID.1/

The results of almost three years of initial studies and planning activity2/ indicate that the Bicol River Basin Area has immediate development potential, particularly for (1) irrigated riceland and upland areas that can be double cropped, (2) private sector investment especially agribusiness and rural manufacturing, and (3) basic infrastructure, highly complementary to the above. Analysis of increased health and social services suggest that in addition to improving the quality of life, work productivity can also be increased significantly. Improved village water systems, for example, are both socially and economically feasible.

In the recent past, there have been attempts to address the development problems in the Bicol, both on a sectoral basis and through coordinated efforts prior to the BRBDP.3/ Earlier coordinating organizations lacked adequate authorities, scope of coverage, and resources to do the job. Accelerated growth has not occurred and in real terms the downward transitional trend has continued.4/ Clearly, a new development strategy was required in the Bicol incorporating intensive

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1/ Foreign Assistance Act Sec. 102

2/ See BRBDP Framework Plans, USAID PROP and ProAg (1974-76). SSRU socio-economic survey reports, water resources studies listed in Annex C(4). Reports prior to July 1977 are on file in AID/W.

3/ Joint Project Evaluation, 1975

4/ See Economic Analysis Part III and Annex C

investment in productive capital stock and human skills, appropriate technological transfer and adaptability, an effective institutional planning framework, and an action program.

Integrated Development Approach

The Bicol River Basin Development Program represents an integrated area development (IAD) approach to attack the above problems and constraints simultaneously and in a coordinated, decentralized manner. It is based on the following precepts:

-- that development efforts targeted on the rural sector should focus on delimited geographic areas of high growth potential and recognized socio-economic need, where incremental investments in infrastructure, agriculture and social services will yield maximum social and economic benefits.

-- that development planning within the defined geographic areas of high growth potential should be integrated, cross-sectoral and interagency in nature.

-- that project planning and management should be decentralized to the greatest extent possible in order to maximize participation from all sectors, especially beneficiaries, in the development of the area.

The BRBDP development strategy is to build up the physical infrastructure, improve essential social services, improve land tenure arrangements, increase agricultural productivity, and encourage private investment in agribusiness and rural based industries. The strategy also takes into account urban -rural linkages, spatial integration and how urban functions support rural development. In operational terms, the strategy has been to undertake a comprehensive appraisal of Bicol River Basin resources and how these resources can be fully developed. Studies and planning to date have addressed the area's physiography, weather, land, water, human and institutional resources. Alternative solutions are being posed and the positive and negative effects calculated. Water resources and transportation have been analyzed the most rigorously to date. Private sector investment, social services and other sectors are in the process of being analyzed. From this analysis, projects are identified and subjected to feasibility tests to determine their technical, economic, financial and social viability. The next step, which is the focus of this assistance project, is to package the viable projects for external donors and GOP financing and move into physical implementation at an accelerated pace.

An essential component of the BRBDP strategy, working together with the Department of Local Government and Community Development and provincial governments, is to expand and develop the organizational and coordinating structure at the sub-basin level. Camarines Sur and Albay provinces have been divided into ten development areas for this purpose. The boundaries of multi-municipality areas are determined by homogenous geographic

features and rural-urban linkages. The purpose is to maximize local government and popular participation and also to relate the sub-basin project area to the province, region and national levels. Built on the foundation of existing government organizations, the strengthened structure includes Area Development Teams (ADTs) and Area Development Councils (ADCs). The ADTs are made up of the various line agency personnel operating at this level. They are or will be involved in the planning and implementation of coordinated line agency programs (e.g., integrated extension) and the major BRBDP Integrated Area Development (IAD) projects. 1/ Area Development Councils are made up of the local political, civic, church and other leaders; businessmen, and the supervisory level of line agencies. They are headed by elected local mayors. ADCs formulate policies, determine priorities and articulate the development needs within their communities and larger development areas. They also provide critical feedback to the ADTs, provincial government and to the BRBDP Program Office.

In the process of addressing the development needs in the Bicol, the Bicol River Basin Development Program strategy will be tested as an operational model of integrated rural development.

Project Design Summary

The grant project goal is a summary goal statement of the GOP Program. 2/ Stated in human terms, the goal is to help the poor majority particularly the subsistence level villagers, in a depressed region of the Philippines catch up economically and socially with the average Filipino by 1990. The GOP through Presidential Decree 926 and as an integral part of the regional and national development plans are publicly committed to this goal. 3/ The (draft) BRBDP Comprehensive Plan is the initial effort to spell out the magnitude of public and private investment required.

The key indicators of goal achievement are increased per capita (GNP) income and more equitable distribution (to increase by 6.2% annually from $237 in 1975 to $596 in 1990 with the lower 50% receiving at least 25% of total income, increased from 13% in 1974), and unemployment and underemployment significantly reduced (from 8% to 3% and 23% to 8%, respectively by 1990). The target is the poorest segment or 58% of the population who had average per capita incomes of less than $57 in 1971 and there is no evidence of improvement in real terms by 1974.

The Mission and GOP believe the goal is achievable with reasonable investment in feasible development projects, and other planned inputs, because the area clearly has, immediate high potential for growth.

1/ See Project Paper and loan agreement for Libmanan-Cabusao IAD I (Loan No. 492-T-037) now under implementation for an example of IAD structure and operations.

2/ See Logical Framework, Annex D and Part II B

3/ Regional Development Projects, Supplement to the Four-Year Development Plan FY 1974-77, NEDA, pp. 117-131.

Sub-goals, conceptually, represent an aggregation or net-sum of (1) output and purpose level achievements of BRBDP sponsored projects and other key GOP projects and programs also essential in this process, and (2) increased private sector investment. Only through the aggregated and complementary effects of a set of interlinked, integrated projects and programs, reflecting integrated sub-basin interests, can the goal be achieved by 1990.

The project purpose in support of the GOP Program is clearly action-oriented: to arrange major funding and move into physical implementation. One additional AID project is proposed in FY79 (there are two current AID development project loans and three are in the documentation process) with the balance of external capital requirements for the GOP Program to be provided from other external donors. Multi-donor financing is the preferred alternative beginning FY78. Officials of the World Bank and the Asian Development Bank, and bilateral donors, during recent visits to Bicol have indicated strong interest in the GOP Bicol Program and specific component projects. After 1981, the GOP Program is expected to be well into the implementation phase with a set of loan projects and the planning and packaging process self-sustaining. For the private sector, feasibility studies and promotion of small and medium-sized industries added to stimulated agribusiness is also expected to result in a high level of investment.

A critical assumption is that loans will be available from external donors (a share from AID) and that it will be matched by GOP resources for feasible projects in the Bicol Program Area. For the private sector it is assumed that the current favorable investment climate will be stimulated further by the GOP and that GOP infrastructure projects and other programs will provide the needed complementarities (roads, rail service, electrification, health services, etc.).

Key outputs are the packaging of a minimum of 12 major public sector development loan projects and 15 private sector pre-feasibility studies by 1981. Managed project outputs including studies are critical steps required to develop projects, attract external capital, justify scarce domestic resources, and for the private sector, encourage hard investment.

Proposed inputs for this supporting grant project include AID technical assistance consultancy (U.S. and regional sources), participant training (not available in country), and commodities to support GOP interagency and local government planning and implementation. AID feasibility study loan resources that may be requested by the GOP are associated AID inputs. AID/W centrally funded projects and interests will continue to be an integral part of the Bicol Program. Examples include an Agribusiness Resource Assessment (PPC) and the innovative Urban Functions in Rural Development Project (TAB). These and other efforts are expected to make a major contribution to the GOP Program and should generate follow-on activities leading to investment projects.

GOP inputs over the 1977 to 1981 period include support budget for personnel and operating expenses, and development budget for packaging of

projects. Additional budget will be required for feasibility studies of major component project. Estimates for project development costs will be refined by the GOP over the next year.

Conclusions

The GOP Bicol Program is going forward. It has a new mandate, increased authorities and national budget resources to develop and package feasible projects. The goal to catch up with the average of the Philippines economically and socially is valid and follows the U.S. Congressional mandate for AID almost to the letter. The classical development problems and constraints are present, but with a reasonable level of public and private sector investment for feasible projects and adequate management, the identified potential can be developed. Private sector investment will also capitalize on public sector improvements. AID has been associated with the Bicol Program from the beginning (1973) and has provided grant resources for three of the planned six years to help develop the organizational structure, institutional capability and initiate component projects. AID has also provided a share of the loan capital for the first component projects ($13.5 million). The Mission believes additional grant technical assistance over the next five years is fully justified and is essential to accelerate an expanded GOP Program, especially the intensive packaging of the major integrated development projects in the Bicol Program Area for other donor financing.

D. Summary of Findings

1. Economic Analysis

The Mission believes the development strategy adopted and represented by the BRBDP is an innovative approach in full support of the basic goals of national development plans announced by the GOP and described in the USAID/Philippines Development Assistance Program (DAP), and that it is also in line with the major recommendations of economic advisors from the World Bank and the United Nations.

The per capita income target and its implied productivity targets per worker may be somewhat overly optimistic within a 15-year period, but the Mission believes they are not outside the realm of possibility and are certainly worthy as targets.

This project supports a comprehensive and well-conceived development program in a depressed region where the incomes of 83% of the families are below the per capita poverty threshold of US$114 (1971 prices) adopted by the Mission in the DAP, below which the majority of families have insufficient income to provide for the minimum requirements of food, clothing and shelter. There is some evidence that between 1971 and 1974, due to a high (19%) annual rate of inflation, average family income in the region has suffered a real decline.

A major infusion of public and private sector investment and other government programs is clearly required to reverse this trend and achieve the catch-up goal by 1990. This process has started with the new national highway to Manila with its markets, proposed railroad rehabilitation, rural electrification, and the high potential component projects now being implemented and planned under the GOP Bicol River Basin Development Program.

2. Financial Analysis and Plan

Total project financial inputs during 1977-1981 are estimated at $11.4 million with 68% of the total to be provided by the GOP (see financial summary Table 1).

The Mission proposes project financial inputs of $3.7 million from FY1977 through FY1981 primarily for essential technical assistance and the USAID core team in the Bicol (79%), training (5%), and commodities (16%). The GOP/BRBDP estimates a requirement of $7.7 million for their operational budget (25%) and project development costs (75%) for the same period. Estimates are the best available at this stage in the BRBDP planning and project identification process. USAID obligations in joint Project Agreements will be conditional, based on the targeted performance of the GOP/BRBDP and on actual GOP financial commitments and releases.

The Mission considers the GOP project development projection ($5.5 million) to be high, but warranted for feasibility studies and engineering if most projects identified to date prove to be feasible.

Table 1

Financial Summary
Bicol Integrated Rural Development Project
FY 1974-1976[a] and FY 1977-1981

	FISCAL YEAR ($000)						
	74-76 TQ	77	78	79	80	81	77-81
AID							
- USAID Personnel	227	160	180	190	200	160	890
- Contract Services	775	500	490	460	390	240	2080
- Participant Training	107	42	50	60	40	-	192
- Commodities	195	166	180	160	90	-	596
AID TOTAL	1304	868	900	870	720	400	3758
GOP/BRBDP[b]							
- Personnel/Operating Budget and Trust Funds	753	307	333	373	400	400	1813
- Project Development and Monitoring Budget	3194	1618	1411	1136	854	835	5854
GOP/BRBDP TOTAL[c]	3947	1925	1744	1509	1254	1235	7667
TOTAL AID/GOP	5251	2793	2644	2379	1974	1635	11425

a/ Obligations under original grant project and GOP Program
b/ Dollar equivalent of pesos at $1.00 = ₱7.50
c/ GOP fiscal year same as calendar year beginning 1977

A portion could come through line agency budgets. The project development budget includes surveys, research, pilot projects, training, feasibility studies (partial funding), preliminary engineering and design, monitoring and evaluation.

USAID obligations from FY 1974 to FY 1976 (TQ) which were included in the original grant project totaled $1.3 million of which approximately $1.0 million is expended. The BRBDP has obligated $3.3 million through FY 76 and are in the process of obligating another $0.7 million for the GOP interim semester from July through December 1976.

Associated with this project, an estimated $2.0 million may be requested by the GOP from AID consultative service loan funds for major feasibility studies and agribusiness and rural manufacturing pre-feasibility studies. These loans could require up to $1.5 million in additional national peso support funds.

The order of magnitude of public sector capital investment obligations expected to be generated through the GOP Bicol Program is estimated at $150 million or more from 1977 through 1981 (expenditures would continue for another five years). A total of $31 million (AID obligations $13.5 million) has been or is expected to be obligated (GOP) in connection with the first two AID-GOP loan projects now under implementation.1/ The increased level of private sector investment to be generated directly or indirectly through BRBDP efforts should be substantial based on the potential, improving investment climate, and GOP complementary infrastructure projects and programs.

At this stage in BRBDP planning, the Mission believes the estimated AID financial inputs proposed in this grant are adequate to carry out pre-project and packaging activities leading up to a series of funded investment projects and to monitor all AID supported projects in the Bicol through 1981. The established national priority for the Bicol Program under Presidential Decree 926 and the approved BRBDP Comprehensive Development Plan strategy in the national development plan, plus the demonstrated willingness of the GOP/BRBDP to support more than 50% of project development costs and match other donor loans for major development projects constitute firm indicators of the viability of the GOP Bicol Program supported by this grant project.

3. Technical Analysis

This joint project in support of the GOP Program is primarily a technical assistance effort for pre-project activities and packaging of a shelf of bankable loan projects for other donor financing. The GOP recognizes the scope and complexity of the requirements to accomplish this work, and has recommended the continued technical assistance

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1/ Libmanan Integrated Area Development I (FY 75) and Bicol Secondary and Feeder Roads Project (FY 76)

of USAID through the intensive packaging period up to 1981.[1/]

Most of the project development resources will be provided by the GOP/BRBDP but they clearly require responsive external expertise in a timely manner. This assistance will both complement host country technical inputs and provide on-the-job training. It will also provide third party expertise to assess the technical soundness of contract feasibility studies and the packaged projects which must be of a high quality to present to international donors. Categories of AID technical assistance have been identified by year for general requirements, but specific consultancy will be based on GOP/BRBDP annual operational plans and the problems encountered in packaging the separate projects or sub-projects (e.g., ground water).

The hard technical analysis including initial environmental analysis will be addressed at the feasibility study and project appraisal stages of each major loan project (PRP and PP for AID). Some initial environmental studies and analyses have been carried out but must be continued, in-depth, for both component projects and the whole River Basin eco-system.

The GOP program, in essence, is the integrated technical efforts of all GOP line agencies operating in the Bicol Region. Each agency is introducing its most current and applicable technological recommendations. Intermediate technology is particularly applicable because of current cost/benefits and social acceptability. Feedback from the socio-economic survey will be essential in this regard.

The integrated development approach is sound technologically. The Mission considers the proposed AID technical assistance inputs to be essential in further developing, introducing and evaluating applicable technology through the public and private sector development projects in the Bicol.

4. Social Soundness

The majority of the people living in the Bicol are poor. The GOP has made a conscious decision to develop this region and has committed manpower and scarce resources. The nature of the planned changes, when considered one by one seem quite appropriate given the socio-cultural milieu of the area. Infrastructure projects such as roads, flood control, irrigation, and marketing and agro-industries facilities are necessary preconditions for the development of a rural area. Increasing farm productivity and processing capabilities in a regional setting has been shown to be fundamentally sound strategy. Nothing in the Bicol would indicate that this kind of project activity will not be successful. The expansion of and increase in human and social services is a needed complement to insure that the processes of modernization are translated into improved quality of life, especially for the poor segment of the population.

1/ Annex I, official request for project assistance

When the planned changes are programmed in a simultaneous, coordinated manner (Integrated Area Development projects coupled with other GOP national and line agency programs), the magnitude of the combined impacts is an educated projection at best. Clearly, there will be impact. Just as clearly, it will benefit the poor to a large extent. A significant research and evaluation component will closely monitor and assess the nature of the changes that are in process and the particular "mix" of projects and other governmental and private sector activities which will have contributed to producing these changes. The sequencing of projects, operating in a relatively monogeneous environment should result in increasingly greater impact at lower costs through time.

5. Conclusions

The Mission believes the integrated GOP Bicol River Basin Development Program is a sound approach to the development of this relatively depressed, yet high potential rural area of the Philippines. The goal to catch up to the Philippine average per capita income level, with more equitable distribution, is valid and attainable. The target date of 1990 is optimistic but a worthy, planning goal. The GOP has demonstrated their commitment and priority to attempt to achieve this goal. Project evaluations will continue to address the performance and commitments of all agencies involved. Based on the analysis of the GOP Program and plan, and essential AID inputs, the Mission recommends approval of this grant assistance project to support the intensive GOP Bicol Program over the next five years.

E. Issues

The issue raised in the PID regarding high per capita costs is summarized here for background.

The per capita cost of projected public investment in the Bicol is believed to be much lower than what will actually be necessary to raise per capita output and income up to the national average. The most recent World Bank report on the Philippines (May 5, 1976) indicated an incremental capital-output ratio of 3.4 is expected through 1980. This means it takes $3.40 of productive infrastructure and private investment to increase output and income by $1.00. If the Bicol Program Area Gross Regional Product is more than $100 per capita behind the rest of the nation today, it would take an initial investment outlay of over $340 per person, or more than $500 million total, just to catch up with the present average levels of productive physical and human capital stock already existing in the rest of the country. In order to catch up with the levels expected nationally by 1990, a much greater amount of total investment will be required, much of which can be generated within this region. 1/

Per capita requirements for productive capital stock and human skills in the Bicol area to accelerate the development process, if anything, are less than for many regions of the Philippines due to its high resource

1/ See Economic Analysis, Part III.A. and Annex C (1)

potential; but per capita requirements for sufficient investment to catch up with the rest of the country are higher due to the exceptionally low levels of investment in the recent past relative to the rest of the country.

The GOP has made a commitment to help the Bicol catch up. This project in support of the GOP Bicol Program is essentially a test case of a more efficient and effective approach to direct intensive investment into a high potential area. The issue for USAID is whether to continue to support the on-going effort and at what levels of grant and loan assistance. The Mission recommends the grant level proposed in this Project Paper. Additional AID loan packages are recommended but each must stand on its own feasibility analysis and justification.

PART II

PROJECT BACKGROUND AND DETAILED DESCRIPTION

A. Background

1. Program Area[1/]

The Bicol Region includes six provinces, four of which are located on the peninsula of southwestern Luzon -- Camarines Norte, Camarines Sur, Albay and Sorsogon -- and two island provinces of Catanduanes and Masbate. The Bicol Region land mass is six percent of that of the Philippines and supports 7.9 percent of the 1976 national population, or 3.5 million people.

Two-thirds of the Bicol River Basin watershed area is located in Camarines Sur, a small forested portion in Camarines Norte, and one-third in Albay province. (See Map #1 Annex C(5).) The Bicol River Basin covers an area of 312,000 hectares, 32 percent of which is prime, arable land. It has a population of about 1.2 million (1976). The Bicol River Basin Development Program (BRBDP) created by Executive Order 412 (May 1973) and the original USAID grant Bicol Project addressed the problems and potential of only the Bicol River Basin watershed area (31 rural municipalities and two cities). After three years of initial planning and implementation, it was recognized by program planners, and national and local government leaders that the program area had to be expanded inter-dependent outside the watershed, particularly in terms of social programs and agro-industrial development.

Presidential Decree 926 (April 1976) officially expanded the Program Area to cover 42 rural municipalities and three chartered cities which includes almost all Camarines Sur and most of Albay province (10 municipalities not yet covered). The 1976 population of the Program Area is about 1.6 million people. The land area was expanded from 312,000 hectares in the basin area to 706,000 in the extended Program Area. As the program progresses, the authority exists under PD 926 to extend the Program Area coverage still further within the Bicol Region.

2. Economic Symptoms

A 1968 United Nations study classified the Bicol Region as a "partly stable and partly downward transitional area,"[2/] based on the following observations:

1/ A detailed physical description of the Bicol River Basin and extended BRBDP Program Area can be found in the "BRBDP Comprehensive Plan 1975-2000," (August 1976); the BRBDP Framework Plan (February 1973); and the TAMS-TAE Bicol River Basin Comprehensive Water Resources Study (August 1976) and other related documents (see BRBDP Bibliography Annex C4).

2/ Frank Z. Martocci, Physical Regional Planning in the Philippines, United Nations Development Program, Manila, 1968, p. 60.

-- The annual rate of population growth for the region of 2.3% is less than the national average of 3.1%, indicating a sizeable ratio of population outflow through migration, a basic sign of economic stagnation and lack of opportunity. (If there were no outmigration, the Bicol population would be growing at an annual rate of 3.3%.)[1/]

-- The Bicol's share of current and projected Net Domestic Product (NDP) is less than half its share of total population and it is dropping. Its per capita NDP was the lowest among regions in the country in 1973 and 1974. It was only 49% of the national average in 1974 and had dropped an average of 1.5% per annum in real terms since 1972, while the national average grew by 3.9% per year.[2/]

-- In proportion to its population, the Bicol Region's share both of total value-added and of total employment in large (modern) manufacturing establishments in the Philippines was the lowest of all regions.[3/]

-- Due to inadequate transportation the region is virtually isolated from the rest of Luzon.

To this list of symptoms BRBDP analysis have added a few more:

-- The distribution of income is significantly unequal. The richest 10% of basin households received nearly 43% of total income, while the poorer half of the population shares only 13%.[4/]

1/ NEDA Statistical Yearbook of the Philippines 1975, NEDA, Manila, 1975, pp. 42 and 57.

2/ "The Regional Income Accounts of the Philippines, CY1971-1974," NEDA, mimeographed, preliminary estimates just available in Oct. 1976. See Table IIa & b of Annex C(2).

3/ Confirmed by calculations based on data in Ibid., pp. 1-8 and 1-9, with 1970 population percentage derived from NEDA Statistical Yearbook of the Philippines 1975, pp. 40-4.

4/ See page 1-2.4 and Tables 7.1-2 of the USAID Mission DAP, revised June 1975. The two possible explanations for the reportedly large rate of dissavings offered in the DAP must be discounted. Survey results in the Bicol indicate the non-cash income and expenditure estimates are almost equal and cannot explain the wide divergence between reported income and expenditures, all of which occurs in the cash portion of the ledgers. Heavy indebtedness cannot explain it either, since the savings of money to loan must also occur and the repayment of a debt is also saving. The only significant non-repayment of debts that occurs is in public-sponsored loan programs, and this cannot begin to account for the 32% negative savings rate for the whole society reported in the Bicol. The only plausible explanation is a serious underreporting of income and/or overstating of expenditures. We hope to see this problem resolved in the next household survey conducted for BRBDP.

-- An apparently low rate of savings. Recent national census, SSRU and BRBDP household income and expenditure surveys have all reported an inexplicably high negative rate of savings. This phenomenon was discussed in the USAID/Philippines DAP and has not yet been satisfactorily resolved.[1/] It can be taken as an indication, however, of a very low propensity to save. Certainly, a low rate of investment, both public and private, is obvious.

-- Lack of employment opportunities. The SSRU survey in 1974 reported a 7.7% rate of unemployment, compared with a nationwide rate of 4.0%, and a high rate of underemployment.[2/] These rates would be much higher were it not for the high rate of annual outmigration.

3. Development Constraints and Potential

Analysts studying the Bicol have identified nine major constraints to more rapid economic development, each of which are discussed briefly below. To the extent that these constraints can be relaxed through various investment projects and development programs, the potential for more rapid economic progress will be realized.

Physical Isolation - Although linked to the Manila market and, through its ports, to the world market by land, an advantage shared by only five of the country's eleven regions, the Bicol has been virtually isolated from Manila economically (and to some degree politically) due to the poor condition of the only road link, the deteriorated condition of the Philippine National Railway, and the inefficient transport service provided by the inter-island shipping fleet. Naga City is only about 280 miles (450 kms.) from Manila by road, but much of the only highway remained unpaved through the mountainous region between Naga City and Quezon province, making passage slow and expensive.[3/]

The railroad route is about 50 miles (80 kms.) shorter than the highway, but the deteriorated condition of its single track, equipment, rolling stocks and terminal facilities, coupled with antiquated cargo handling procedures, render its freight services grossly inefficient, unreliable, and insecure. Several recent major train wrecks attest to this fact.

1/ Jeanne F. I. Illo and Frank Lynch, S.J., "Patterns of Income Distribution and Household Spending in the Bicol River Basin," SSRU Research Report Series No. 13, Jan. 1975, p. 5. This study, based on a 1974 survey of households, found a skew of income distribution producing a Gini concentration index of .73, while the nationwide skew in 1971 was only .48. --Ibid., p. 23.

2/ SSRU reported that 20.6% of the labor force were employed, either part-time or full-time, already, but were seeking additional employment as well (they wanted to work more hours per week but jobs were not available).

3/ The Daet-Sipocot portion of this highway was just completed. As of mid-1976 the Naga-Manila trip took an average of 9 or 10 hours during dry weather. In 1974, it took 14 hours or more.

Although the Bicol has 43 sea ports in the Region, most of these are municipal ports (33) without facilities or with only rock causeways and timber landings. Of the other ten, only one serves Camarines Sur (Pasacao, with a rock causeway and timber landing) and two serve Albay Province (Legaspi and Tabaco). The inter-island shipping fleet is notoriously inefficient, with most of the larger carriers converted from World War II military service and more than 25 years old. The industry has been racked with problems of fleet obsolescence, inadequate berthing facilities, and unsafe harbors, fierce competition and lack of financing.

The result of inefficient and high-cost transportation services to Manila has been to drive up the cost of goods imported from there, to reduce the price Bicol producers can ask for their products and still match the competitive prices of goods from elsewhere, and to make travel and communication expensive, time-consuming, unreliable and especially costly in terms of managerial time. The Ranis report,[1/] for example, determined that the price per kilogram of fertilizer in the Bicol was among the highest in the country, 22% higher than in Central Luzon, and that the price of rough rice (palay) was the second lowest in the country, 17% lower than in Central Luzon. The fertilizer/palay price ratio (3.1 in 1971-2) was thus the second highest among regions and was 48% above the ratio for Central Luzon. It is no wonder then, why the Bicol reported the very lowest average of fertilizer used per crop-hectare of rice, even though it reported the very highest percentage of palay area under improved varieties.[1/]

The economic potential that could be generated simply by reducing the costs and risks of transportation between the Bicol and its primary market, in terms of economic activities in the Bicol presently unable to compete with producers from closer regions, is believed to be enormous.

Hostile physical environment - While the broad floodplain and rolling foothills of the Bicol River Basin contain productive soils and receive sufficient rainfall to support a highly productive agricultural sector, the area is subject to extensive flooding due to heavy rains and inadequate drainage. An estimated 40,000 hectares are inundated annually, and occasionally the total rises higher (56,000 has. in 1956). About 3,000 hectares of swampland could, with proper drainage, be made arable. Salinity intrusion from the San Miguel Bay extends about 20 kilometers up the mouth of the Bicol River and its tributaries during the drier part of the year, rendering lower-basin irrigation from natural flow of surface water questionable. Serious soil erosion occurs in some areas, particularly in the uppermost part of the basin near the coarse volcanic deposits of

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1/International Labor Office, Sharing in Development, ILO and the United Nations Development Programme, Geneva, 1974, pp. 80 and 106.

2/Ibid., pp. 80 and 106.

Mt. Mayon. Much of this erosion is natural, but increasing deforestation of the lower mountain slopes by squatters contributes to the problem. The silting is detrimental to flood channels, water storage and irrigation facilities, drainage channels, and navigation.

In addition, the area is subject to typhoons and periodically (averaging once every ten years) suffers extensive wind and flood damage.

While the weather is not yet subject to the control of man, its undesirable consequences can be considerably reduced with adequate planning and water control facilities. Improved drainage, better flood control and water storage facilities and salinity intrusion barriers (flap-gates and levees) could reduce the risk of damage and enlarge the potential crop-hectarage of the basin. In addition, sufficient water could be stored in the upper basin during the wetter parts of the year to support much more dry season irrigation than is presently practiced.

Inefficient production and marketing technology - In 1969-71 Bicol farmers produced 8% less rice per crop-hectare than the national average, 32% less than farmers in Central Luzon.[1/] Compared with other Asian countries, however, the productivity performance of the Bicol is even lower, since, during the four years 1970-73, the only Asian country averaging lower rice yields than the Philippines was Sarawak. The Philippine average was only 70% of the total average for all Asia, 39% of the average for neighboring Taiwan, and only 29% of the average yield in Japan.[2/] (See Table 2).

The low value-added per capita in the Bicol is evidence that, compared to other regions and the nation as a whole, productivity per worker in the region is also well below the national average and even farther below modern potentials.

Capital scarcity - Most of the above constraints to development could be significantly reduced if sufficient investment funds were available to build or upgrade the appropriate physical infrastructure, hire the appropriate technicians and effect the desired transfer of technology to Bicol producers. Thus the scarcity of such capital itself is a major constraint. More than just for major public infrastructure and technical assistance, though, capital has been exceedingly scarce in the Bicol for other productive investments, as well. Private investors, even Bicol residents and banks, have put their money elsewhere, closer to the big Manila markets, rather than risk it in a less profitable venture in the Bicol.

1/ Ibid., pp. 106 and 470. The Bicol yields were only 84% of the national average in corn, 40% in coconut, 32% in bananas, and 81% in abaca. The Bicol is the nation's leading abaca region, producing 42% of the total in 1969-71; but yields per hectare in Mindanao were 50 to 196% higher.

2/ USDA, Agricultural Statistics

Table 2 ROUGH RICE YIELD PER CROP PER HECTARE
(100 Kilograms)

Country	1970	1971	1972	1973	Average 1970-1973	Percentage of Average for all Asia 1970-73
Burma	16.3	17.2	15.5	17.1	16.5	72.8
Indonesia	22.1	22.8	23.8	24.0	23.2	102.1
Korea	44.5	46.3	48.0	51.7	47.6	209.8
Philippines	17.2	15.7	14.2	16.4	15.9	69.9
Thailand	15.9	17.2	17.1	18.0	17.1	75.1
Pakistan	17.5	23.3	22.7	24.0	21.9	96.4
India	16.9	17.1	16.1	17.2	16.8	74.1
Sri Lanka	24.1	23.6	18.7	16.4	20.7	91.2
Malaysia	28.6	29.9	27.4	27.9	28.5	125.3
Sabah	21.1	21.3	21.3	20.0	20.9	92.2
Sarawak	11.2	11.1	11.0	10.3	10.9	48.0
Nepal	20.8	18.1	14.6	20.0	18.4	81.0
Bangladesh	-	16.8	15.3	18.1	16.7*	73.6*
Taiwan	41.6	39.5	42.3	40.1	40.9	180.1
Japan	54.3	50.5	56.3	57.9	54.8	241.2
United States	51.7	52.9	52.6	47.9	51.3	225.9
Asia[1/]	22.6	22.6	22.2	23.4	22.7	100.0

1/ Including Japan

* 1971-3 only

Note: In calculating yields USDA/ERS adds the area which is double-cropped to total land area planted to rice.

Source: USDA, Agricultural Statistics

Sources of institutional credit for small-scale farmer investment are few, and the supply of funds made available at reasonable interest rates is too small. Provincial and local governments have been unable to obtain adequate revenues needed for local, mini-infrastructure projects, or even for the proper maintenance of existing facilities. Social services of all kinds have been seriously neglected. Although the basic literacy rate is high and schools are numerous, the quality of education in the Bicol is low especially in rural schools and many who can afford to do so send their children to Manila for training and (especially) for college. Health care, environmental sanitation and domestic water facilities are inadequate, resulting in high rates of disease and death and a weakened labor force. Basic utilities such as electricity, telephone and other communications media, local roads are either non-existent, or lack adequate maintenance.

A major productive opportunity in the Bicol lies in the development of water storage and irrigation works, so the excess water of the wet season can support a second crop during the dry season. Only 29% (48,800 ha.) of the potential rice growing area in the Bicol Region is presently irrigated, and a recent IBRD study estimated the irrigated area could be expanded by 138%, to a total of 115,920 ha., 69% of the potential rice growing area.[1/] Between 1965 and 1972, the Bicol Region received only 1.3% of total government expenditure on irrigation works, despite the fact that 5% of the nation's additional potential irrigated area are in the Bicol Region.[2/]

Another major productive opportunity, given sufficient capital, lies in the harnessing of the Tiwi geothermal fields for the generation of electric power, and the distribution of that power throughout the region and to Manila. This could provide a relatively inexpensive and flexible source of power for innumerable productive activities, both large and small, and would stimulate a much more rapid introduction of modern technology. Electric power is also used for a myriad of consumption activities and its availability can directly increase the real and psychic income of the population.

Rapid population growth - A high rate of population growth makes economic development more difficult through a variety of well known ways--increased dependency/worker ratio, reduced per capita income, more rapidly growing demand for all sorts of investment in social services and infrastructure, education, etc., all reducing the ability of a society to save and invest and upgrade its productive physical and human capital. In the Bicol, population growth would exceed the national average of 3.1% were it not for outmigration. Between 1960 and 1970 an estimated 1.0% of the total Bicol population migrated elsewhere and 1.8% migrated from Camarines Sur Province, annually.

1/ ILO, op. cit., p. 460.

2/ Ibid., pp. 196 and 73.

Since those who migrate tend to be the younger adults, unmarried or with small families, in search of jobs elsewhere, the dependency ratio is raised still further and the demand for more classrooms is little reduced. Some of the most able young workers contribute their productive talents and brawn elsewhere--the brain-drain on a regional level--after absorbing local resources during their childhood rearing, education and training.

A significant reduction in the birth rate would reduce the future cost of rearing and training the Bicol's young and give a significant boost to the per capita income and savings efforts of the region.

Poverty and technological ignorance in the home - The core health problems in the Bicol are (in order of incidence):[1]

- Enteric diseases resulting from poor sanitation and contaminated water supply, to include intestinal parasitism, bacterial and viral dysenteries, heptitis, and polio.

- Communicable diseases, including tuberculosis, diphtheria, measles, whooping cough, tetanus, leprosy, meningitis and influenza.

- Vector-borne diseases: malaria, schistosomiasis (in Sorsogon Province outside the Basin), filariasis and dengue/hemmorhagic fever.

All of the above are complicated by relatively high incidence of malnutrition, both primary and secondary[2] The common combination of primary and secondary malnutrition produces complex disease pathology and processes resulting in chronic disability and, in children, high rates of mortality and retardation, with obvious implications for economic development.

Over 30% of reported morbidity is due to enteric diseases associated with poor sanitation. A survey in Sorsogon which is representative of poor rural areas, reported intestinal parasitism infecting 96% of the population, with over 70% harboring two or more parasites. More than two thirds of the population in the provinces of Albay and Camarines Sur and the three cities of Naga, Iriga, and Legaspi are without satisfactory sanitary facilities (40% have no toilets at all).

Operation Timbang, which recently surveyed children from birth to 72 months, found over 5 percent of all pre-schoolers suffering from third degree (severe) malnutrition, 24% second degree (moderate)

1/ Dr. Patricia McCreedy, "Health Assessment, Bicol Region," a report submitted to USAID/Manila in Dec. 1975.

2/ Primary malnutrition results from the absence, imbalance or short supply of essential nutrients. Secondary malnutrition results from the caloric drain of disease processes. There is a high incidence of both types in the Bicol Region.

malnutrition, and 48% first degree. Only 22% were properly fed! The implication is that some 30% of this generation may not reach full growth and development, not counting those who have already died.

This sorry health and nutrition situation can be attributed (a) to household ignorance about disease and malnourishment and how to prevent them and (b) to the inability of many families to purchase minimum requirements of food throughout the year. Health and nutrition are themselves components of the end goal of development--a higher quality of life--and they also affect the stamina, intelligence and ability to learn of the labor force. In both respects, the poverty and ignorance that contribute to such poor health and nutrition are significant constraints to development.

Inequitable land tenure arrangements - A constraint to the developmental goal of a more equitable distribution of income has been identified as the relatively high rate of tenancy that existed among the small-scale farmer population. The institution of tenancy traditionally operated in such a way as to lock the tenant farmer into a life of low income and indebtedness to a wealthy and influential landlord. The income disparities were especially great in those cases where the landlords owned large landed estates.

In 1960, the rate of tenancy was higher than the national average in both Bicol River Basin provinces. Nationwide, the ratio of tenants to all farmers was 39%, while it was 44% in Camarines Sur and Albay. The ratio of tenanted rice and corn area to total rice and corn area cultivated was 40% nationwide, 45% in Camarines Sur and 55% in Albay. Considerable social unrest in the Bicol has in the past been attributable to landlord-tenant disputes, particularly with absentee landlords of large estates.

Land tenure reforms were planned to redress these inequities and improve the tenure security, social status and income level of tenants on rice and corn land. It is feared, however, that institutional reforms alone without a substantial effort to provide small-farmer support services, such as extension, credit and marketing, formerly provided by some landlords, might leave many worse off than before and trigger a decline in agricultural production.

Ineffective government institutions - Many of the above constraints should yield to effectively planned and coordinated development efforts. The fact that such efforts have not materialized is related in part, to the ability of government organizations and institutions to provide for the needs of the common man. The central government was earlier neutralized by conflicting political interests of the wealthy elite. Its regional line agencies often dissipated their efforts and scarce resources in uncoordinated, poorly planned and inadequately focused programs devised independently, primarily at the national level, with little regard for particular local needs and priorities. Provincial and local governments were hamstrung by low revenues and a traditional lack of local initiative in planning

and implementing development projects. The rural poor, even though a clear majority, had little voice in determining the location or priorities of infrastructure investment in governments controlled by an urbanized elite.

Clearly, if the recognized potential for a rural-based economic development program, aimed at relaxing the major constraints listed above, was to be effectively planned and successfully implemented in the Bicol Region, a new approach was essential.

4. Integrated Development Approach

The original development plan prepared by the GOP for the Bicol River Basin articulated a number of planning precepts which have come to form the foundation of the Bicol River Basin Program's planning and management philosophy. These precepts were originally articulated by GOP planners in the course of defining and subsequently justifying the approach to integrated area development in agriculturally based rural areas. Bicol River Basin planners have refined these precepts and extended their application to the planning of sub-regions of the Bicol River Basin and its influence areas.

These precepts are:

That development efforts targeted on the rural sector should focus on delimited geographic areas of high growth potential and recognized socio-economic need, where incremental investments in infrastructure, agricultural and social services will yield maximum social and economic benefits.

The Bicol River Basin was selected by the GOP as the initial area for execution of an integrated, agriculturally oriented, area development project because of the Basin's high growth prospects in a regional setting otherwise characterized by its acute poverty and generally depressed economy relative to other regions of the country.

By concentrating present development efforts and resources on discrete areas of high growth potential like the Bicol River Basin, it is expected that additional investment elsewhere will be easier to fund in the future, since the level of total national income will be higher than under alternative strategies.

That development planning within the defined geographic areas of high growth potential should be integrated, cross-sectoral and interagency in nature.

The BRBDP-Program Office, through its management arm, is attempting to rationalize and integrate the planning and program activities of the different sectoral agencies of government operating within the geographic boundaries of the Program Area. This integration of sectoral programs is essential, since rural and agricultural development is a complex process requiring major simultaneous inputs in several sectors before significant changes in productivity and income can be affected.

Furthermore, the meshing of these sectoral plans and activities must take place at all levels of government. The BRBDP has effectively brought the various agencies responsible for rural and agricultural development together at the sub-regional or basin level for planning purposes. The planned Integrated Area Development (IAD) Projects will bring these sectoral agencies together at the field level into a permanent working relationship. In the last analysis, this field level relationship is where integration is most essential if the GOP's objectives of increased agricultural productivity and increased income of the rural poor are to be achieved. The failure to achieve performance goals in the first phase of a major agricultural program in the Bicol--Masagana 99--can, in large part, be attributed to ineffective coordination at the field level and bears out the need to integrate government services in the field more effectively. This opinion is summarized by the BRBDP's Social Survey Research Unit (SSRU) which conducted an evaluation of on-going government sponsored programs in the River Basin Area. The SSRU concluded:

> "Beyond and above the production-technician question, there is what we consider an even more comprehensive problem. This is the way in which the government's rural programs are viewed relative to one another. With the one very significant, but vaguely conceived, exception of land reform, these programs (notably Masagana 99, compact farming and the Samahang Nayon) are perceived either as ends in themselves, on one hand, or as mere helping hands for other programs, on the other. The evidence we collected indicates that the government agents most closely involved in a program tend to exaggerate its importance, while those whose official commitment is elsewhere, are likely to play it down. The result is parallel, unfocused activity, and a defending of programs because they are <u>there</u> and they are <u>ours</u>."1/

The Bicol River Basin Coordinating Committee, composed of all major sectoral agencies and the Governors of Camarines Sur and Albay, was created in order to establish the development objectives for the Bicol River Basin, to mesh the various government agencies into the permanent working relationship necessary to achieve these common development objectives, and by so doing to avoid the problems reported by the SSRU. This working relationship is now operational at the basin-wide planning level and Area Development Teams are planned for each of the ten sub-Basin Integrated Area Development (IAD) Project Areas to carry this concept down to the field operational level.

1/ Lynch, Frank, S.J. and Barrameda, J.V.; "The Masagana 99 Delivery System; How well does it work in Camarines Sur;" SSRU Research Report Series, No. 3; Feb. 1974; pp. 38-39. (This program is now in its seventh phase, a re-survey of the reduced number of farmers in this program is proposed.)

That project planning and management should be decentralized to the greatest extent possible in order to maximize participation from all sectors in the development of the area.

This last premise--that of decentralized planning and management--is closely related to the second. Not only must the various governmental agency staff members learn to work together and reinforce one another's programs in the field, they must also actively solicit the involvement and participation of local leaders and residents in the development process. This requires a basic psychological shift away from the concept that the government implements projects for the people of a given area rather than with the people. The Area Development Councils already established or to be established in each of the ten IAD project areas is a BRBDP interagency effort to develop the organization and management structure and communication processes required to maximize public participation in the development process.

5. BRBDP Comprehensive Development Plan 1975-2000

The Bicol is an area suffering from serious past neglect in almost every aspect of social and physical infrastructure, and this neglect has resulted in a low level of private capital formation as well. Large inequalities in income and wealth distribution have arisen from historical land ownership patterns, breeding considerable social unrest as rapid population growth overloaded the limited productive resources avilable to the growing numbers of rural poor.

The Strategy

Regionally, the BRBDP strategy is to build up the physical infrastructure, to improve the delivery of essential social services, to reform the institutions of land tenure, to improve the productivity of the agricultural sector, and to encourage private investment in agribusiness, processing and rural manufacturing activities. The use of labor-intensive production techniques will be encouraged, wherever possible, in order to create more jobs. All this is to be accomplished in a concentrated, coordinated effort with the several line agencies involved, following a carefully selected set of priorities.

For purposes of both planning and implementation, the BRBDP Program Area has been sub-divided into ten development areas, each characterized by distinct and relatively homogeneous hydrology and physiography. They are delineated by the extent of major physical infrastructure undertakings, mostly involving some aspect of water control, critical to their development.

Horizontal integration in the initial planning and project preparation for each area is achieved by the task force teams pulled together by the BRBDP Office from the various participating line agencies and by the Area Development Teams, organized in each area and composed of participating line agency representatives. Vertical integration will

be institutionalized in the form of an Area Development Council for each area, a policy-making unit composed of local political, business, civic, government, occupational, religious, youth and professional representatives, in an effort to organize broad participation in the development process.

Income and Employment Targets

The primary goals of the BRBDP are to increase per capita income and to reduce the rate of unemployment in the Program Area. Its planners have picked the national per capita value-added, or GNP, as their principal target, and they aim to raise the real per capita value-added in the BRBDP Program Area, now estimated to be only two-thirds of the national average, to the national level by 1990. Since the national per capita GNP is expected to continue to grow, in real terms, by an average of 3.8% per year, the BRBDP target will require annual per capita growth in the Bicol of 6 and 7 percent and total economic growth rates of 7 to 9 percent. This would raise Bicol Gross Regional Product (GRP) per capita from an estimated $209 in 1970 to the projected national average of $612 in 1990 (in 1975 dollars). (See Tables 1 and 2, Annex C)

In the process it is anticipated that sufficiently labor-intensive techniques can be encouraged to increase productive employment opportunities more rapidly than the labor force is expected to grow, reducing the rate of unemployment from its present 7.7% to around 3.0% by 1990. (Tables 3 and 4, Annex C)

To achieve these overall targets the plan is to stimulate growth in agricultural production by 5 or 6% annually (including forestry, fishing and mining), to push manufacturing and industry to a 9 to 13% growth rate and to expect the rest of the economy to weigh in with between 8 and 11% growth per year. Total employment must increase by an average of 1.8% per year. (Table 5, Annex C)

Assuming certain ratios between new investment and incremental production (incremental capital-output ratios), BRBDP planners estimate that the total net investment required to achieve the desired rates of economic growth in the BRBDP Program Area will rise to 14.3% of total value-added (GRP) by 1986-90. If the allowance for capital consumption (depreciation) equals the recent national average of 10.7% of GNP, these projections imply an annual gross investment rate for the Bicol rising to 25% of Gross Regional (Program Area) Product by the 1986-90 period. It is projected that the private sector (farmers, housing, industry, etc.), can be induced to provide 74% of the 15-year investment requirement between 1976 and 1990, or about US $1.1 billion, and that the public sector will invest some $412 million in infrastructure and other productive assets during the same period. (See Table 6, Annex C)

B. Detailed Description

1. Logical Framework Design (See the Logical Framework Matrix, Annex D for an overview)

Project Goal

The grant project goal is a summary statement of the GOP Bicol River Basin Development Program:

> To raise the socio-economic level of the poor majority in the Bicol River Basin and extended influence areas (Program Area) to the national average by 1990 and to sustain its growth rate at the national average after 1990.

Stated in human terms, the goal is to help subsistence level villagers in a depressed region of the Philippines catch up economically and socially with the average Filipino by 1990. To sustain growth after 1990, the GOP goal builds in a requirement for long range planning which considers the limits of land resources (land use and spatial planning), second generation environmental questions, population growth and employment, etc. The BRBDP and regional NEDA Office[1/] have a mandate to do this. Most of the infrastructure projects have a twenty to thirty year life so the post 1990 period is a valid concern of current project planning and design.

The economic analysis (Part III A and Annex C) describes the validity of this catch-up target and its derivation and the magnitude of public and private investment required. The BRBDP strategy to achieve this goal is discussed in Part II.A.5. Analysis indicates the project (GOP Program) goal is achievable given reasonable capital inputs and effective management. The various studies and assessments of the Bicol Program Area, to date, clearly indicate the development potential is present. It is classified as an immediate, high potential area for agricultural and agro-industrial development. The challenge is to package feasible projects, secure external resources to match GOP resources, and harness the local capability and institutions to implement and operate the projects and programs.

The principal measures of goal achievement are increased real per capita income (6.3% annually from 1975 to 1990), but equally important, the equitable distribution of this increased income. The lower 50% of the population that received only 13% of the total income in 1974 is targeted to receive 25% or more by 1990. Productive employment is targeted to be increased, reducing unemployment from 7.7% in 1974 to 5% in 1981 and 3% in 1990; underemployment is to be reduced from 23% to 16% and 8% during these same time frames. Another measure and essential requirement is an increased level of popular participation in the development process itself. To achieve the goal, the people and institutions must be involved in the planning process and participate in the implementation, operations and maintenance of projects (see sub-goal).

1/ National Economic Development Authority responsible for national and regional planning

High GOP and USAID priority is placed on the means of verification of this goal in terms of progress indicators and the measurement of impact on intended beneficiaries -- the poor majority. An estimated 20% of the AID inputs is specifically targeted for applied research, socio-economic surveys with in-depth analysis, and post project evaluations. AID research and evaluation experience is particularly applicable to this project. It is proposed that the program socio-economic surveys be redesigned to link into a worldwide network (possibly through the Agricultural Development Council/New York, other institutions and AID/PPC). Because of the combined effects of the several multi-million peso public sector projects in the same area, plus the anticipated private sector investments, adequate baseline data and a well designed evaluation system is essential (see Part IV).

Sub-goal

The sub-goal narrative reads:

1. BRBDP component projects successfully completed (also see goal level assumptions for other key national and local GOP projects and programs) by 1990 or earlier.

2. Local government organizations (Area Development Councils and Area Development Teams or similar functional units) organized and operational.

3. Increased level of total net private sector investment in the Program Area.

The sub-goal, conceptually, represents an aggregation or net sum of the outputs and the purpose level achievement of not only the BRBDP-sponsored projects but other essential GOP projects/programs (several national programs supported by USAID) added to increase total private sector investment. Clearly, only through the aggregated and complementary effects of a set of interlinked, integrated projects can the GOP goal be achieved by 1990. It is particularly significant that planners have estimated that 74% of the total net investment must be met by the private sector (farming, housing, industry, etc.), thus the private sector thrust in outputs and purpose. Another essential sub-goal component is the participation in the planning and implementation process by the Bicolanos themselves, their local institutions and local government. Historically, the development process in LDCs has modified local institutions, but newly-introduced institutions and organizations have also been modified or co-opted by the prevailing power structure in the process as well. Recognizing this, the BRBDP, province and local governments are organizing this, the BRBDP, province and local governments are organizing multi-municipality, area development councils (elected) and area development teams (GOP technicians) to establish the foundation of a sub-basin institutional structure. Over time and after expected modifications, the integration and coordination linkages will be established and will function at the lowest level -- compact farm groups, coops, elected ADCs, etc. These are essential components of each integrated area development project (IAD).

Purpose

The purpose of the joint grant project in support of the GOP Program is clearly action oriented:

1. To secure major financing from external donors and domestic sources and physically begin implementation of eight or more socially and economically feasible integrated development projects in the Bicol from 1977 to 1981.

2. To increase private sector agribusiness and rural manufacturing investments in the Bicol.

3. To manage AID support projects and coordinate all AID support in the Bicol.

The first two are actions to commit targeted amounts of capital and manpower under a set of clear policy decisions to impact on the goal. The third is concerned with the integrated management and coordinating responsibilities of the USAID and relates to its technical assistance role (see Part IV.A and B for scope and nature of AID activities in the Bicol). For achievement of project purposes in 1981, there must be four or more new BRBDP sponsored Integrated Area Development Projects (area specific) and four or more major integrated sectoral projects (e.g., integrated health project, Bicol Roads II) financed and implementation underway. Three additional loan projects are proposed for GOP-AID financing (the last in FY1979) with the balance by other external donors and the GOP. Both international and regional financial institutions and bilateral donors have expressed firm interest in Bicol component projects beginning 1978-1979. Multi-donor financing is the preferred alternative beginning in 1978. After 1981, the GOP Bicol Program is expected to be well into the implementation phase with a set of interlinked loan projects and the planning and packaging process fully self-sustaining.

For the private sector, several BRBDP agribusiness and rural manufacturing pre-feasibility studies and joint or solely private sector feasibility studies are expected to result in several major investments in the Bicol by 1981. Targeted increases in the sales value from agricultural supply firms, increased gross value-added of rural manufacturing firms, and increased employment by business firms and investment loans will be hard indicators of real growth and achievement of this purpose level component.

The most critical assumption for the public and private investment purpose statement is that capital will be available from external donors (a share from AID) and that it will continue to be matched by GOP resources for sound projects in the Bicol Program Area. On the private sector side, the current potential favorable investment climate is expected to result in significant agribusiness and rural manufacturing activity, as planned GOP infrastructure, agricultural, and social service projects

and programs are implemented. The GOP is committed to stimulating the private sector and providing other needed complementarities in the Bicol.

Outputs

Narrative statements of project outputs are:

1. Studies and surveys conducted defining basic and second generation problems and providing detailed baseline and revised planning data leading to project packaging.

2. Identify, plan and package a minimum of 12 major development loan projects in the Bicol by 1981.

3. In-depth resource assessment conducted, agribusiness and rural manufacturing potential identified, pre-feasibility and feasibility studies completed, and provided to potential investors (studies conducted jointly with interested investors).

4. AID funded loan and grant projects monitored and evaluated as scheduled.

The magnitude of outputs for the above are:

1. Multi-purpose socio-economic surveys and analysis completed in 1977, 1979 and 1981 in Camarines Sur and Albay. Other studies as required(credit, environment, etc.)

2. Five or more major IAD projects and 7 integrated sectoral projects identified, feasibility studies and design completed (PIDs, PRPs & PPs for AID; project appraisals for other donors) from 1977 to 1981.

3. Fifteen or more pre-feasibility grade studies completed by the GOP (with AID technical consultancy as requested) by 1980.

4.1 Joint grant project evaluations conducted in mid-1977, 1979 and 1981 by NEDA and AID consultant team.

4.2 BRBDP management information system (including integrated networks) and reporting system fully operational by December 1976 with corrective management actions being taken. USAID Project Performance Tracking System (PPT/CPIs) operational and linked to the BRBDP for each AID supported project.

The first three managed outputs are the most critical in terms of things that must be done to attract external capital and justify scarce domestic resources, and in the case of the private sector,

encourage investment. The thrust of project outputs is packaging activities that lead to hard investments in the Bicol. The basis for the magnitude of outputs, is the BRBDP Comprehensive Development Plan and BRBDP planning projections. These will continue to be refined.

It is assumed that most basic or exploratory studies and research will be carried out by the GOP agencies most concerned (e.g., PCARR through the Ag Research Loan AID FY76).[1/] The BRBDP can and should make financial and technical inputs for innovative approaches not covered by a line department or to stimulate a particular agency, but this should not detract from achieving key outputs. This grant project proposes (a) action research that provides specific technical and policy feedback for planning and project implementation, and (b) multi-purpose and special surveys that provide the basis for measurement of phased progress and the impact of operational projects.

The fourth output describes a key USAID technical assistance function relating to current and proposed AID assisted projects and links the AID monitoring and evaluation requirement to the GOP management information system. If successfully carried out, this output will contribute to purpose level AID and BRBDP management and coordination.

The key assumption at the output level is a recognition that the BRBDP institutional framework and organization are now in place (original joint Bicol Project purpose) and that it will continue to function effectively under PD 926; furthermore, that both the GOP and AID will continue to place a high priority on the Bicol Program and provide adequate budget and technical resource inputs.

Inputs

Combined GOP-AID project development inputs amounting to $11.4 million are described in the financial plan and implementation plan so are not repeated here. It is important to note the magnitude of capital costs for the BRBDP component projects (GOP and other donor financing which is estimated in order of magnitude at $277 million in proposed projects and $150 million in obligations from 1975 to 1981) to be able to relate the ratio of project development costs (broadly defined) to estimated capital investments. Per capita investment costs are high, but the potential is present for even higher returns (See Economic and Financial Analysis Part III A and B and Annex C).

The outputs of public sector investment packages and private sector pre-feasibility study packages, in the opinion of the Mission, can be achieved with the proposed level of project inputs and associated inputs (AID feasibility loan resources where host country expertise is not available). Input figures are the best estimates available at this stage in the BRBDP planning and project identification process. GOP estimates will be revised by October 1977 in a revised framework

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1/ Loan 492-T-039 through the Philippines Council for Agricultural and Resources Research (PCARR)

plan and a five year plan. Where technical assistance resources are funded from other AID sources (Project Development Staff or AID/W) or on the GOP side from alternative sources (i.e., line agency budgets), the level of direct inputs through AID and the BRBDP will be reduced accordingly. One of the management tasks during 1977 will be to update the program so that activities will lead to hard investments, or will impact on improved project/program implementation and operation.

2. On-going and Proposed BRBDP Projects and Activities

Those component projects identified in the (draft) BRBDP Comprehensive Development Plan[1/] and the (pre-feasibility) Water Resources Development Study[2/] are outlined in the implementation plan (Part IV).[3/] Specific activities will be proposed in the BRBDP annual operational plans by October of each year and funded (pesos) by January, the beginning of the GOP fiscal year. Those selected activities to be supported by this project will be detailed in each ProAg. A listing of all completed and on-going BRBDP projects and activities (established as separate activities under the BRBDP Management Information System) are summarized in Annex C (3).

The BRBDP Comprehensive Plan classifies projects under four major development categories:

- physical (water resources and transport)
- agricultural
- agribusiness and rural manufacturing
- social

The IAD concept cuts across all categories. Within the systems context, each of these categories is functionally linked resulting in integrated planning and coordinated implementation.

The (pre-feasibility) Comprehensive Water Resources Development Study is the basis for the revised Bicol River Basin Water Resources Development Plan. It consolidated all prior studies,[4/] recommended major discrete projects for investment grade feasibility studies and required supporting studies (e.g., ground water and watershed management, etc.). The Libmanan IAD I Project (AID loan FY75) is the initial water based project (4000 ha.). In addition to the IAD Projects, domestic (and industrial) water studies and projects are proposed by the BRBDP

1/ See BRBDP Plan, pp. 81-149 for details.

2/ See Annex C (7) for summary of recommendations from the 5-volume contract study. Final report completed in August and released October 1976. Copies are on file at AID/W.

3/ See Tables 8 and 9 Part IV.B; the Annex C (6) Bar Chart of proposed major projects and Annex C (7) Recommendations of the Comprehensive Water Study by TAMS-TAE. (BRBDP project costs include other integrated components, TAMS only water structures and limited on-farm development.

4/ Annex C (3).

and classified under both the physical and social categories.

The Bicol Secondary and Feeder Roads Project (AID loan FY76) is the initial transport project (450 kms.).[1/] The BRBDP, interagency, Intermodal Transport Study is to be completed in November 1976. GOP road pre-feasibility and feasibility studies are planned to begin in late 1976 and 1977. Component projects will include a package of main trunklines off the Philippine-Japan Friendship Highway going through the Bicol River Basin, and two or more additional packages of secondary and feeder roads (up to 1,500 kms. to be upgraded or new feeder roads constructed).[2/]

Agriculture and fisheries development consist of the coordinated efforts by the concerned agencies and BRBDP to:

- identify adaptable production technology
- effectively link research and extension
- upgrade, intensify and integrated various GOP extension efforts
- facilitate critical agricultural production inputs
- facilitate development of farmers' organizations and expand marketing, storage, processing, etc.
- maintain ecological balance

The GOP thrust is a series of co-sponsored or BRBDP supported line agency research efforts, impact projects (pilot projects) and policy studies that lead to fundable projects or are critical inputs to improved implementation.

Land use maps in Annex C (5) show the existing distribution of crop production (1975) and the proposed land use (1985) with an expansion of irrigated rice land, sugar, coconut and other crops.

The BRBDP agribusiness and rural manufacturing activities will focus on pre-feasibility studies (joint GOP/private sector), feasibility studies, business information and promotion, marketing, support to the overall manpower development, and policy studies relating to private sector investment. The AID/W PPC Agribusiness Assessment Team quick look visit and report (July 1976) effectively initiated the revised BRBDP agribusiness program. The proposed follow-on team is requested. The BRBDP has already requested AID assistance (feasibility loan through NEDA) to carry out the geothermal salt plant and cold storage plant studies. Several more studies are proposed for 1977 (See Table 9, Part IV).

1/ See Annex C (5) Map #2 of Bicol Roads Project (1976-1980).

2/ See Annex C (6) Bar Chart of proposed major projects.

Key social development activities include the proposed Bicol Integrated Health Project, upgrading the agricultural colleges, and land tenure improvement, in both Camarines Sur and Albay provinces. The latter is linked as a condition to disbursement of current AID loans in the Bicol. Other social components include training of farmers plus skilled and semi-skilled manpower in the non-farm sector. All IAD site specific Integrated Area Development Projects include essential social and institutional components and place high priority on participation by the people in the development process.

PART III

PROJECT ANALYSIS

A. Economic Analysis

The Mission believes the development strategy adopted and represented by the Bicol River Basin Development Program (BRBDP) is an innovative approach in full support of the basic goals of national development plans announced by the GOP and described in the USAID Development Assistance Program for the Philippines (revised June 1975) and that it is also in line with the major recommendations of economic advisors from the World Bank and the United Nations.

The per capita income target and its implied productivity targets per worker appear overly optimistic within the 15-year time-frame projected in BRBDP plans, especially in view of the sizeable annual net investment initially projected as required plus the facts that the Incremental Capital/Output ratio (ICOR) may be understated and that actual investment requirements may therefore be even larger. In addition, there is some doubt the projected real growth in per capita income of 3.1% annually between 1970 and 1975 actually occurred (since inflation averaged 19.3% per year during 1971-4), and if it did not, then the targeted rates of growth from 1975 to 1990 would have to be even higher to catch up with the national average.[1/] On the other hand, the Mission does not believe these targets and requirements to be completely outside the realm of possibility, and they are certainly worthy targets.

In view of the focus AID assistance projects are to have on the rural and urban poor majority under the U.S. Congressional Mandate, the Mission believes the Bicol Integrated Rural Development Project in support of the BRBDP to be economically justified. It is in support of sound developmental strategy and a program with worthy income and employment goals. Furthermore, it focuses on a depressed region in which the vast majority of residents receive family income below minimum requirements of food, clothing and shelter.

The reader is referred to Annex C(1) for a detailed economic assessment of the BRBDP and its published income and employment targets.

1/ Preliminary regional income accounts just prepared (Oct. 1976) by NEDA do indicate Bicol per capita GDP fell in real terms between 1972 and 1974 by 1.5% annually and stood, in 1975 prices, at only US $182 in 1974 instead of the $236 projected by BRBDP, a 23% shortfall. The 1972 figure was higher than 1971 as the regional economy recovered from the damages wrought by the disastrous Typhoon Sening of Oct. 1970 and a few lesser typhoons in 1971 -- See Table 11a & b, Annex C(2).

B. Financial Analysis and Plan

This analysis and plan specifically address the proposed budget for the joint Bicol Integrated Rural Development Project from FY 1977 through FY 1981 (Tables 3, 4, & 5). The tables also provide information on the original project (FY 74-76) and Transition Quarter).1/ The proposed USAID and GOP inputs include those resources required to strengthen the technical capability and facilitate the operations of the BRBDP (AID technical assistance, training and commodities) and provide operational and development budget (GOP) to carry out planning, packaging, implementation monitoring, and evaluation functions. Justification for intensive development investment associated with this project is covered under economic analysis. It is important to note that each major loan project (whether AID or other donor funded) will have its own analysis and justification, drawn in part from major feasibility studies, and in terms of this grant project will be a packaging output. This section also discusses the cost-effectiveness of the grant project in generating a targeted level of investment packages.

For the revised grant Bicol Project, USAID proposes to provide $3.7 million from FY 1977 through FY 1981 (see Table 3). This breaks down into 24% for AID personnel, 55% for technical consultancy (contract and PASA), 5% for training and 16% for commodities. As discussed in more detail in the implementation plan (Part IV B), technical consultancy provided by AID (including a four-man direct hire team) is a critical input to the project development and packaging process (and monitoring of all AID projects through the implementation stage in the Bicol) and, in terms of cost, comprises 79% (77% of the original project) of the proposed AID grant inputs. This projected level could be reduced slightly if timely consultancy were funded and available from AID/W sources. The Mission is able to provide some consultancy for other USAID supported projects to integrate their implementation in the Bicol.

Based on the magnitude and complexity of major loan projects now being implemented and proposed in the Bicol (including requirements in training, planning, design, implementation, and research and evaluation activities), six general categories of USAID sponsored consultancy have been identified by fiscal year and cost (see Table 6). For programming purposes PASA was broken out separately but is primarily water and land resources consultancy. An estimated 70% of the consultancy would be U.S.(including institutional contracts, drawing heavily on U.S. universities associated with AID). The other 30% would be contracts for professional services at regional and local institutions: e.g., International Rice Research Institute (IRRI), Asian Institute of Technology/ Bangkok, Institute of Philippine Culture, Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), etc. Table 10 (Part IV B) and Annex G(1) give a detailed breakdown of FY 77 Consultancy and Annex G(2) provides a general break out for FY 78.

A moderate level of technical training (not available in the Philippines) is proposed, primarily at AIT Bangkok which is a suitable, cost effective alternative over similar training in the U.S. Essential commodities

1/ U.S. transition quarter (TQ) July-September 1976 and GOP transition semester (TS) July-December 1976

Table 3

Bicol Integrated Rural Development Project (Revised)
Proposed AID Financial Inputs FY 1977-1981

Assistance Category	Fiscal Year ($000) 1977	1978	1979	1980	1981	TOTAL
AID Personnel	160	180	190	200	160	890
Contract Services	500	490	460	390	240	2,080
Participant Training	42	50	60	40	-	192
Commodities	166	180	160	90	-	596
TOTALS	868	900	870	720	400	3,758

Table 4

Bicol River Basin Development Project (Original)
USAID Obligations FY 1974-1976[a]/

Assistance Category	Fiscal Year ($000) 1974	1975	1976	Transition Quarter	TOTAL
Personnel/Contract Services	283	471	176	62	1,002
Participant Training	36	53	18	-	107
Commodities	63	83	49	-	195
TOTALS	392	607	243	62	1,304

Total AID Obligations (FY 74-76) and Proposed (FY 1977-81) for Bicol Grant Project	5,062

a/ USAID Philippines Financial Management Report, June 1976

Table 5 BICOL RIVER BASIN DEVELOPMENT PROGRAM - OPERATIONS AND PROJECT DEVELOPMENT BUDGET
GOP Obligations[a] (FY 74-76) and Proposed Peso Inputs (FY 77-81)

Categories	FY74-76[a]	Transition Semester	GOP Fiscal Year (Jan-Dec) ₱000 77	78	79	80	81	1977-81
1. National Budget Appropriations	-	5,000[b]	13,900	12,500	10,800	9,000	9,000	₱55,200
a. Personnel/Operating Budget	-	(750)	(2,300)	(2,500)	(2,800)	(3,000)	(3,000)	(13,600)
b. Project Development/Monitoring Budget[c]	-	(4,250)	(11,600)	(10,000)	(8,000)	(6,000)	(6,000)	(41,600)[e]
2. Other GOP	24,600[c]		534	580	520	408	264	2,306
a. Counterpart & BRBDP Acct.	(9,400)[c]		-	-	-	-	-	-
-NEDA Counterpart	-	-	-	-	-	-	-	-
-Trust Fund A	-	-	(30)	(88)	(52)	(36)	-	(206)
-Trust Fund B	-	-	(504)	(492)	(468)	(372)	(264)	(2,100)
b. PL 480 Grant	(11,300)[c]		(Alternative source and/or supplemental 1.b, above)					
c. Line Agency (Thru BRBDP)	(3,900)[d]		(To be determined by GOP Memos of Agreement)					
TOTAL GOP Peso ₱	₱24,600	5,000	14,434	13,080	11,320	9,408	9,264	₱57,506
TOTAL $ Equivalent ₱7.5 $1.00	$ 3,280	667	1,925	1,744	1,509	1,254	1,235	$ 7,667

a/Source: BRBDP financial reports and ProAgs.
b/First authorization and release under Presidential Decree 926; GOP Transitional Semester July-Dec. 1976
c/Surveys, research, pilot projects, training, feasibility studies (partial), preliminary engineering and design, monitoring and evaluation.
d/Line agency budgets channeled through BRBDP Special Account Fund. Estimated 25% higher if all line agency activities generated through the BRBDP were included.
e/High GOP projection based on assumption that most identified projects are feasible.

Table 6 Bicol Integrated Rural Development Project
Proposed Categories and Types of Technical Assistance
($000) 1/

Contracts/PASA Services	FISCAL YEAR ($000) 77	78	79	80	81	77-81
(1) PASA -USDA, BUREC, SCS, Bureau Land Management, U.S. Forest Service, etc.	60	80	60	60	20	280
(2) Planning and Project Design -Regional Planner/Project Design -Regional Income Accts. -Environmental Engineering -Urban Functions in Rural Dev. -MIS, Project Design	80	90	80	60	20	330
(3) Research and Evaluation -Institutions; UP, IPC, EDF, ADC, Xavier U. DAP, IRRI, Others	130	80	110	80	100	500
(4) Water Resources/Fisheries/Ag. -CID, Water resources development -Groundwater specialist -U. of Hawaii, irrigation/agricultural planning -Fisheries assessment -Watershed management -Integrated extension	120	120	100	90	50	480
(5) Transportation -Economist/engineering/design -Roads maintenance management -Ports, railroad facilities, other	20	20	20	10	10	80
(6) Agribusiness/Rural Manufacturing -Credit/banking -technical consultancy (by commodity) -Marketing/pricing/export -Industrial promotion/incentives(economist) -Post harvest technology IRRI/UPLB	70	80	80	80	30	340
(7) Health/Nutrition/Social Services -Water supply system engineering -Sanitation/waste disposal -Water pollution, others	20	20	10	10	10	70
(8) TOTAL	500	490	460	390	240	2080

1/Actual TA will be based on appropriate requirements in BRBDP annual operational plans prepared each October, and from AID annual projections. See Implementation Plan, Table 10 (Part IV B) and Annex G for details of FY77 and FY78 programs. TA normally U.S. (est. $5,000/man-month) but source may be regional or local institutions: IRRI, UPLB, AIT/Bangkok, Institute for Philippine Culture and others. TA from U.S. and regional institutions estimated at 50% of total.

(primarily excess vehicles and office equipment and new communications and scientific equipment, etc.) would be provided to support the BRBDP Program Office, cooperating line agencies, and local government units involved in planning and implementation. A significantly increased level of activities and output has been demanded from the line agencies and local government organizations because of the Bicol Program. Increased commodities are required in this regard.

Overall, the Mission considers USAID input levels projected in Table 3 as justified for support of BRBDP project packaging efforts, monitoring and supporting implementation, and strengthening institutional development from 1977-1981.

The GOP/BRBDP estimates a minimal requirement of $7.7 million in peso budgets (which is 68% of the grand total of $11.4 million for the AID and GOP inputs - see Table 5).[1/] An estimated 25% of the GOP/BRBDP budget is for personnel, maintenance and operating expenses. The remaining 75% will be allocated for project development and monitoring categories to: (a) do the necessary training, surveys, research, pilot projects, feasibility studies (partial inputs), and preliminary engineering and design which are required to develop a shelf of bankable projects and (b) monitor and coordinate the implementation of current and proposed loan projects (see Table 5). An estimated 50 to 60% of the project development budget will be required for pre-feasibility type activities and support for feasibility studies. The heaviest peso requirement is currently projected during the last half of 1976 through 1979. Five million pesos ($667,000) were approved for the last six months of 1976 (under PD 926). If projects are developed as scheduled (and recent Asian Development Bank and World Bank expressions of interest have increased the momentum), the level of peso inputs required will be ₱10-11 million in 1977 as projected and then reduced each year to ₱5-6 million by 1981. The costs are hard but the rate at which feasibility studies can be completed and projects packaged is an educated target. The level can be better evaluated by late 1977.

While GOP/BRBDP projection may be on the high side if most of the projects identified to date prove feasible, extensive preliminary engineering and design will be required which could even increase the amount. A portion of the required GOP budget could also come through other agencies (e.g., National Irrigation Administration, Public Highways, Public Works) which would reduce BRBDP appropriations accordingly.

As part of the GOP Program, and a likely <u>associated</u> AID input to the grant project, the BRBDP is proposing to request AID consultative service loan funds. For planning purpose, Table 9 (Part IV B) lists proposed projects with an estimated order of magnitude of foreign exchange (U.S. contractors) and local support costs for major feasibility studies. An estimated $2.0 million or more will likely be requested through NEDA over the period 1977-1981. This projected level can be firmed up by late 1977. The GOP operational guidelines are to use host country contractors where expertise is available. It is likely that several of the studies identified will be conducted using host country contractors with limited external consultancy, particularly agribusiness

1/ Also see Table 7 Financial Summary, PART I B.

related studies in 1978-1979. Where pre-feasibility or feasibility studies are financed by AID under consultative services loans, an estimated 30% of the GOP counterpart budget will come directly through NEDA as part of the loan agreement with the balance from the BRBDP budget (Table 5, project development line item).

From 1974 through the FY 76 (TQ), USAID obligated $1.3 million under the original grant Bicol Project (see Table 4) and the GOP/BRBDP (formerly BRBC) obligated approximately $3.9 million (see Table 5). Approximately $1.5 million in GOP pesos came from PL 480 sources. USAID expenditures were approximately $1.0 million and BRBDP expenditures approximately $3.0 million as of September 1976. BRBDP peso expenditures included over one million dollars for pilot on-farm water and land consolidation sub-projects. Total GOP obligations would be higher (est. 25%) if all line agency activities generated directly or indirectly by the BRBDP were included.

For background on the capital loan side (financially not incorporated in this support project), USAID has obligated $14 million for two major loan projects[1/] and one feasibility loan study.[2/] The GOP/BRBDP has obligated or has committed (in implementation plans) $17.5 million to counterpart these loans which will be expended by 1980. Comparatively, the GOP is providing 56% of the financial resources for the initial two loan projects which is well above the 25% minimum prescribed by U.S. Foreign Assistance legislation. Because of the GOP Bicol priority, indications are that the GOP will continue to provide at least 50% of component project capital requirements. Any Asian Development Bank or World Bank loans, however, may be higher on the donor side.

Considering (a) the capital investment requirements that must be made by 1981 to achieve GOP/BRBDP economic targets by 1990 (see initial estimate in Annex C(1) Table 10) and (b) a rough order of magnitude of cost and number of feasible, high potential loan projects in the Bicol Project Area that can be packaged and funded by 1981, it is estimated that a total of $150 million or more in external loans and GOP resources can be obligated for the Bicol Program Area from 1977 to 1981 (see Table 7). Another $100 million in loan packages will have also been completed but not yet funded or will be in process by 1981. Therefore, from a hard, cost-effectiveness viewpoint, a minimum of $10 million in estimated project development costs (broadly defined)[3/] is required to generate $150-250 million in public sector investments for flood control, irrigation, agriculture, roads, domestic water, social services, projects, etc. in the Bicol (see Figure #1 Annex C(6)). Major feasibility studies and preliminary engineering and design are estimated at 3-4% of project capital costs. Other costs could be described as pre-project activities, plus project monitoring, overhead and a share for institution building. Training, applied research and improved

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1/ Libmanan Integrated Area Development Project ($3.5 million FY 75) and the Bicol Secondary and Feeder Roads Project ($10 million FY 76)

2/ Bicol River Basin Comprehensive Water Resources Study, funded from a FY 73 Feasibility Study Loan ($.6 million) and conducted by TAMS/TAE

3/ GOP and AID inputs for this joint project plus additional costs of the major feasibility studies

Table 7

ESTIMATED BRBDP COMPONENT DEVELOPMENT PROJECT COSTS BY YEAR
Current and Proposed Loan Projects and Major Feasibility Studies ($000)[a]
(Associated with but not costed in Bicol grant support project)[d]

	Obligations FY75-76	Earliest Date of Estimated Obligations [b] 77	78	79	80	81	77-81
A. AID-GOP Feasibility Studies							
1. AID Loan (FX) [c]	600	1,815	500	600	200	200	3,315[c]
2. GOP Budget (LC)	360	1,130	300	370	200	200	2,200[d]
Total	960	2,945	800	970	400	400	5,515
B. AID-GOP Loan Projects							
1. AID Loan (FX)	13,500[e]	8,000	21,000	10,000	( )	( )	39,000
2. GOP Budget (LC)	17,500	8,500	19,000	10,000	( )	( )	37,500
C. Other Donor - GOP Loan Projects							
1. Donor Loans	-	-	5,000	45,000	32,000	29,000+	111,000+
2. GOP Budget	-	-	5,000	24,500	31,000	29,000+	89,500+
TOTAL LOAN PROJECTS (B & C)	31,000	16,500	50,000	89,500	63,000	58,000	277,000+

a/ Order of magnitude estimates by year (See Tables 8 & 9, Part IV); $150 million in obligations is estimated between 1977 and 1981.

b/ FY for AID, CY for Other Donors-GOP

c/ Major feasibility studies projected by BRBDP which would be conducted by U.S. firms. As terms of reference developed and host country expertise identified, foreign exchange (FX) projections may be reduced and/or study dropped from feasibility loan listing and conducted by host country firm(s) from special NEDA/BRBDP budget. Present estimate AID feasibility loan inputs $2.0 million FY77-81.

d/ Exception: Estimated 70% of this total included in BRBDP project development budget line item within grant project. 30% to come from NEDA counterpart to loans (consultant support).

e/ Libmanan Loan Project (AID FY76) and Bicol Roads Loan Project (AID FY76)

technology and other spin-offs are complementary benefits from the process of planning and packaging projects under the Bicol integrated program.

Increased private sector investment is essential (74% of total requirements) to meet BRBDP income targets by 1990. In addition to the expected investment response from active promotion and GOP incentives, private sector investment will be encouraged as the infrastructure complementarities are put in place.

As discrete public and private projects are identified and total project development costs are better defined over the next year in the process of updating GOP plans, the ratio of project planning and packaging costs to total investment can be spelled out. By design, the bulk of the grant project resources should lead to packaged, bankable development projects.

Presidential Decree 926 has given high GOP priority to the BRBDP and assures adequate annual appropriations for operational budget which will counterpart USAID inputs. A moderate level of trust funds for participant training and U.S. technicians will also be provided by NEDA. NEDA counterpart and GOP PL 480 are also possible project development funding sources. Overall, estimated GOP inputs would be a minimum of 50% of total project costs over the five-year life of this grant support project.

Based on requirements identified at this stage of BRBDP planning and implementation (assuming the majority of AID technical resource inputs for assisting the BRBDP projects are channeled through this grant project through 1981), the proposed USAID field team, Mission technical staff, and the personal services/institutional contracts (plus some feasibility loan subprojects) are considered adequate to achieve project outputs. Major feasibility studies proposed by the BRBDP which would draw from the AID consultative service loan(s) will be scrutinized carefully by the NEDA prior to request to USAID, and also by the Mission to assure it is the most cost effective alternative for a quality study. The proposed BRBDP list (Table 9) can be firmed up by late 1977.

Based on the independent social and economic feasibility of the two component loan projects already funded by AID as of July 1976, plus the three AID loan assistance projects in the documentation process,[1/] and assuming that complementarities and increased levels of social and economic impact are achieved where an integrated set of projects are in place and operational (e.g., irrigation system supported by package of ag inputs and road access), the BRBDP IAD approach is considered efficient and cost effective. The stated policy (PD 926) to set economic targets and secure external financing and the demonstrated willingness of the GOP to support 50% or more of the project development costs and 50% or more of the major capital costs to date are indicators of the financial viability of the overall GOP Bicol Program and the component integrated development projects.

1/ Bula IAD II (PP), Rinconada IAD III (PRP) and Integrated Health (PRP) which appear to be feasible, see Table 8 Part IV.

C. Technical Analysis

1. General

The joint Bicol Integrated Rural Development (IRD) Project is designed to support the GOP Bicol River Basin Development Program (BRBDP). The grant project is primarily a technical assistance effort to: (a) package a shelf of bankable loan projects for external donors (including AID), (b) promote private sector agribusiness and rural manufacturing investment, (c) monitor and facilitate physical implementation and do impact evaluation of the component public sector and private sector projects, and (d) strengthen the BRBDP interagency institution of decentralized planning and coordination in the process. As such, the technical analysis of each component (loan) project will be addressed in the feasibility study and project appraisal stages (PRP and PP for AID). This section will include a short discussion of the technological implications and a review of environmental studies and planning associated with the GOP Program.

The BRBDP, in essence, is the integrated technical efforts of all the GOP line agencies operating in the Bicol Region. Data generation, pilot studies, feasibility studies, and the major development projects have drawn on the most advanced technology recommended by the GOP and applicable to the Program Area. As is clearly evident in the body of published reports and studies (see BRBDP Bibliography Annex C(4)), some of the most advanced management and technological packages are being used or are proposed in the BRBDP. There is a planning tendency to have a majority of farmers practicing improved technology faster than experience suggests they will accept change. The strong recommendation by the University of Hawaii (Irrigation/Agricultural Planning Contract) that irrigation and cropping systems be designed for double cropping and not two and one-half crops per year is a case in point. Because of the intensive labor question, storm patterns and level of management required, double cropping is the immediate objective and is a challenge to planners and extension services. The experiment stations and extension services, however, should be working with the more intensive cropping patterns, because it is the next step and some farmers are ready. Intermediate technology also has a place because of social acceptability and current cost/benefits of the more advanced technology (e.g., a less expensive village domestic water system).

Most of the development resources for component projects will be provided by the GOP/BRBDP but they clearly require responsive external expertise in a timely manner. This assistance will both complement host country technical inputs and provide on-the-job training. It will also allow USAID to assess the technical soundness of contract feasibility studies and the packaged projects which must be of a high quality to present to international donors. General categories of AID technical assistance have been identified by year but actual requirements will be based on GOP/BRBDP annual operational plans and the problems encountered in packaging the separate projects or sub-projects (e.g., ground water) as the program progresses. Since the AID direct hire and contract consultancy (technical assistance component) of this project is 79 percent of the projected total, it is covered in more detail in the implementation plan. Utilization of AID sponsored or assisted institutions will be tapped for an estimated 50 percent or more of this grant

assistance to link in the most appropriate technology and proven experience.

For the GOP Bicol Program, the Mission considers the integrated approach sound (also see economic analysis) and the level of technology being applied as appropriate in terms of cost and acceptability by beneficiaries.

2. Environmental Concerns

An initial environmental examination, if required, will be prepared in AID/W. (See Annex F).

Because this is a technical assistance project (grant money not contingent on the technical/environmental factors of any physical project) it has no environmental impact. Initial environmental examinations (IEE), and environmental assessments (EA), (and possibly environmental impact statements (EIS)) are required and will be prepared for each component loan project supported by AID as part of that loan project. Since this grant project will support some of the consultancy, environmental documentation can be considered as an associated output of this project. Appropriate environmental studies will be incorporated into all feasibility studies of both public sector infrastructure projects and private sector agro-industrial plant investments. Environmental assessments (prior terminology) were included in the Project Papers for the Libmanan IAD I Project and the Bicol Roads Project.[1/] In addition, several initial environmental studies have been completed and others are planned by the BRBDP as part of the rational, comprehensive development of the Bicol River Basin and the surrounding provinces and coastal areas. Key studies to date include:[2/]

- Ecological Inventory of the Bicol River Basin - with particular Reference to Water Resources Development, April 1976 (unpublished)

- Biological Impact of Projects Under Consideration, 1976 (TAMS/TAE Report XVIII, April 1976)

- Report on Schistosomiasis and the Development of the Bicol River Basin, May 1976 (USAID Consultant/GOP Report)

1/ Libmanan-Cabusao Loan No. 492-T-037 and Bicol Secondary and Feeder Roads Project Loan No. 492-T-041, on file at AID/W.

2/ See BRBDP Bibliography, Annex C.

The first study was undertaken by the Ecology Section of the Planning Project Development Office (PPDO), Department of Public Works (DPWTC) in the wetter season (October-November 1975) and the dryer season (March 1976). The study report provides essential baseline information to predict the nature of environmental impacts associated with the construction and operation of water resources development projects in the basin. Clearly, water quality is already deteriorating along sections of the Bicol River. Recommendations are made in the report for detailed investigations for proposed component projects. Prevalent plant pests and diseases, waterborne communicable human diseases, ecology of dominant/indigenous pestiferous organisms, and observations of past ecological damage are also discussed in the report. A summary and further analysis of this baseline ecological information together with inputs by other GOP bureaus and agencies, particularly the Bureau of Fisheries and Aquatic Resources, were the basis for the TAMS/TAE report above which, incidentally, is part of the Comprehensive Water Resources Development Study report. USAID consultancy is proposed in 1977 to do an in-depth assessment of the data generated thus far and assist in preparing appropriate terms of reference and scopes of work for required environmental studies some of which will be included in proposed feasibility studies.

A comprehensive Schistosomiasis survey was undertaken in early 1976 to determine (a) if the host snails were present in the basin, (b) if any residents were infected with the disease, (c) to arrive at the best professional opinion on the likelihood of the snail establishing itself in the basin, and (d) to recommend physical infrastructure design and construction measures to prevent the establishment of the snail. The survey findings indicated that the specific species of snail capable of transmitting the Schistosomiasis parasite was not present and was not likely to establish itself in the basin. In addition, the integrated water control projects proposed in the BRBDP plan further reduces the probability of their establishment.

The Mission and the GOP has carried out and will continue to support and carry out appropriate environmental studies and impact assessments of proposed projects and programs affecting the Bicol River Basin eco-system. U.S. and/or third country training is also proposed under this project to strengthen the in-house capability of the BRBDP to do pre-project studies and monitor the effects of changes in the environment.

D. Social Soundness Analysis

Most of the projected development efforts being planned and implemented in the Bicol are not new. Rather they represent the adaptation of proven prior work in the Bicol social context with the added dimension of attacking development programs in an integrated, concurrent fashion. Socially and culturally, there seems little in the make-up of the Bicolano population that would represent a significant obstacle to be overcome. Just the reverse, for the "market orientation" of the poor rural farmer (if in fact the incentive is present), and the provision for popular participation closely tied to the existing cultural form of social grouping appears to make the strategy even more feasible. Some provision has to be made for dealing with the concern for security and the potential to resist change found among the poorest rural segment.

The spread effects within the region are designed into the BRBDP and NEDA plans for developing the region. Reducing the isolation of the Bicol River Basin from other sections of Philippine society, integrating and coordinating GOP line agency effort as key components of IAD projects and the creation by the national government of three other Integrated Rural Development Programs/Projects in other regions of the Philippines should provide the major means for diffusion to occur outside the Program Area as well as within.

Although the cost in terms of scarce financial and technical resources is high, particularly at the beginning of the program, a realistic appraisal invariably leads to the conclusions that the benefits to the rural poor should result in their enjoyment of a significantly improved quality of life and that the Bicol Region can catch up socially and economically with the rest of the Philippines. During the process of this general improvement, it is expected that women will share the benefits and that their situation relative to males will be one of greater equality.

Land reform, labor-intensive development of agriculture, a more rapid rate of employment creation and other developments are expected to provide more productive employment and other incentives to remain in the Bicol resulting in a reduction of the rate of outmigration to the urban slums of Manila and other major cities.

For a detailed discussion of social soundness considerations of this project, see Annex C (2).

PART IV

IMPLEMENTATION ARRANGEMENTS

A. Recipient and AID Administrative Arrangements

1. BRBDP Organization and Management

Presidential Decree (PD) No. 926, promulgated in April 1976, established the Bicol River Basin Development Program to ensure full integration of development activities in the Bicol River Basin and its influence areas (Program Area).[1/] It superseded Executive Order No. 412 which established the Bicol River Basin Development Council (BRBC) in May 1973. PD 926 provided increased authorities and defined the policies, jurisdiction and organization necessary to carry out the program. It provided a well defined role for the BRBDP Program Office in the Bicol and; very significantly, authorized annual budget appropriations.[2/]

In July of 1977, Letter of Instruction No. 99 created the Cabinet Coordinating Committee on Integrated Rural Development Projects (CCC-IRDP). Presidential Decree 805 (October 1975) reconstituted the CCC-IRDP and embodies the national policy governing the operation of the BRBDP and the three other national integrated projects.[3/] The CCC-IRDP, under the National Economic and Development Authority, is composed of nine department secretaries and chaired by the Secretary of Agriculture. PD 926 reiterated the following national policies for effective implementation:

- to promote the integrated development of agriculture, natural resources, infrastructure and social services in under-developed areas

- that management and planning of the basin area will be comprehensive, decentralized, and framed within regional and national plans

- to integrate national and local government programs and projects within its (Program Area) jurisdiction and

- to decentralize the planning and implementation of rural development projects

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1/ See Annex B.

2/ Implementing Guidelines of Presidential Decree No. 926 for the Bicol River Basin Program, BRBDP (May 1976)

3/ Mindoro Integrated Rural (Area) Development Program (Oct. 1975), Cagayan Integrated Agriculture Development Project, Samar Integrated Area Development Project (Dec. 1975). The 1977 project evaluation will compare the Bicol Program with these three.

The Secretary of the DPWTC has been designated the Cabinet Coordinator for the BRBDP. In addition to policy and administrative concerns, the Cabinet Coordinator, subject to CCE approval, arranges for domestic and foreign funding for the overall Bicol Program and for component development projects. He also has the authority to call on any government agency or political subdivision for assistance in achieving BRBDP objectives.

The BRBDP Program Office decentralized in the Bicol River Basin in Camarines Sur, is both a planning and coordinating body (see BRBDP organizational and coordinating charts; figures 1 and 2). The organizational framework and coordinating structure are in place and operational. A developing institutional capability is also in place.

The Program Office is headed by a Program Director. It serves as a coordinating center for interagency planning and coordinated management and monitoring of component development projects. It administers national appropriations and prepares the documentation to generate capital funds for BRBDP component projects. The Program Office consists of two major operating departments, Program Planning and Program Management, and has several supporting staff divisions and sections.

The Program Planning Department (PPD) is directly responsible for formulating and updating the BRBDP Comprehensive Development Plan (strategy), mid-term plan (budget purposes) and annual operational plans in coordination with line agencies. Pre-project studies including socio-economic research, data generation, and feasibility studies are directed by this department either in-house or by contract including foreign firms. Agribusiness activities are included in the Program Planning Department.

The Program Management Department (PMD) is responsible for the programming, management and coordinated implementation of all BRBDP development programs and projects. The design and engineering services are under this department. Other key responsibilities are management information and evaluation systems including progress and financial reports.

A Program Office Management Committee made up of the program director and key staff is now functional. USAID AD/RD staff relate to the director and deputy directors and this committee in the execution of grant and loan projects. BRBDP-Program Office and USAID staff collaboratively plan and implement the joint grant project in support of the GOP Bicol Program.

There is a BRBDP Manila Liaison Office that facilitates communication and supportive actions from/to national agencies and the Program Office. It also provides a functional linkage to USAID at the Manila level.

A Program Coordination Committee composed of regional line agency directors and the provincial governors of Camarines Sur and Albay (19 members) provides the operating policies and guidelines for the day-to-day operations of the Program Office and facilitates interagency coordination. It is chaired by the BRBDP Program Director with the NEDA Regional Director as vice chairman.

Figure 1

ORGANIZATIONAL STRUCTURE
BICOL RIVER BASIN DEVELOPMENT PROGRAM

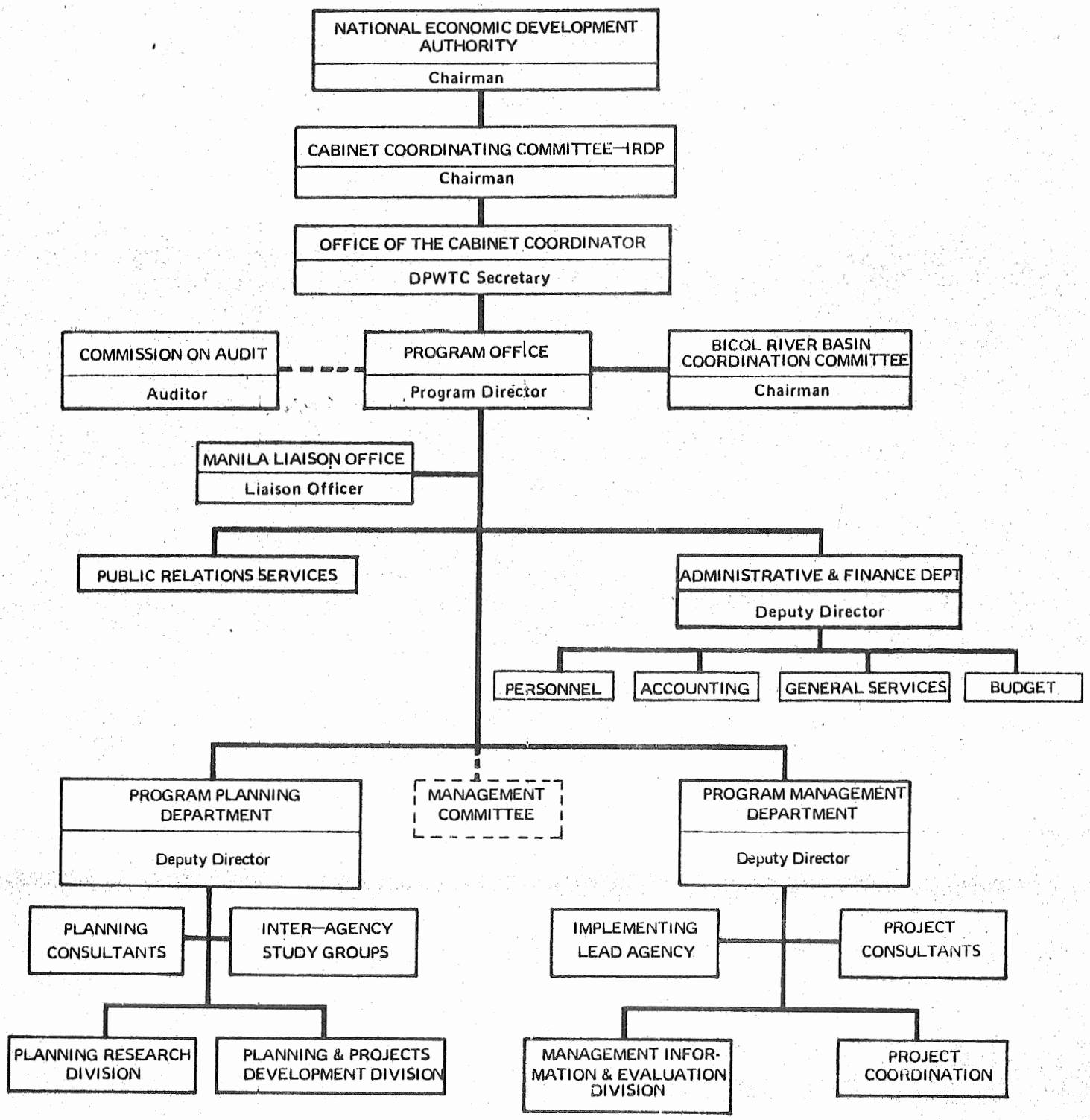
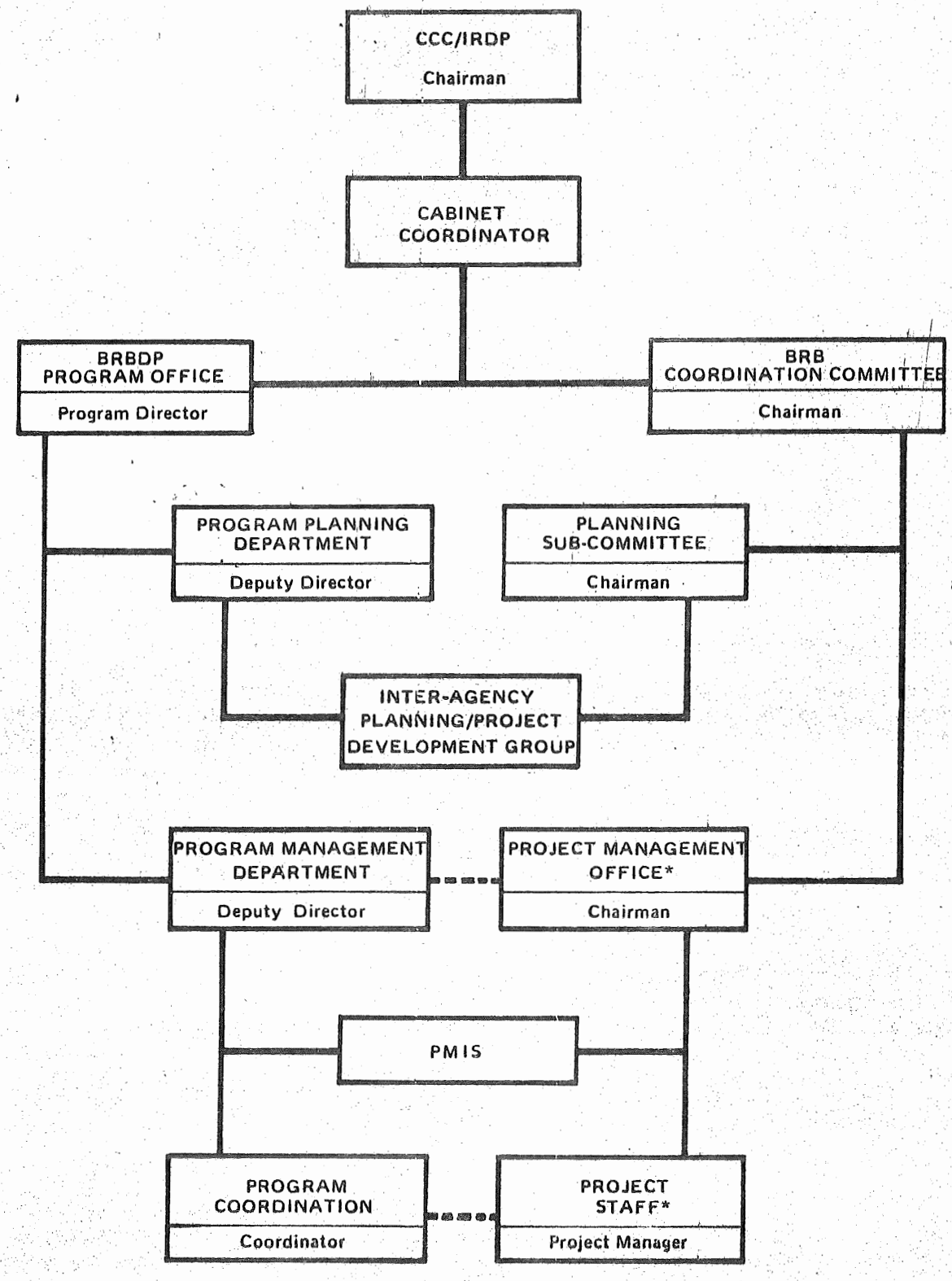


Figure 2

COORDINATION STRUCTURE
BICOL RIVER BASIN DEVELOPMENT PROGRAM



*Organized for each BRBDP component project –
See Annex C(6) Figure No. 2 for Bicol Roads Project*

The Program Office has a total manpower complement of 97 people (August 1976). Of this number, 60 percent are core BRBDP technical staff. An average of 350 technical personnel from various agencies are detailed to work in interagency teams in the planning process, prefeasibility and feasibility studies, and project implementation groups or offices. The unique professional challenge for the relatively young staff plus salaries and other benefits slightly above regular civil service levels contribute to the high esprit de corps among BRBDP core staff and interagency personnel. A majority of the staff are Bicolanos who relate well and feel they are helping their own people. These and other social factors are contributing to the positive impact on motivation and work accomplishment.

Adequate authorities, budget sources, organizational and coordinating structure and a developing institutional capability are in place and operational to successfully implement the GOP Program and this support project.

2. USAID Organization and Management

During the first three years of the USAID-assisted Bicol Program, a direct-hire officer (project representative) was assigned from the USAID Office of Agricultural Development. Prior to an approved PROP (FY 74), pre-project assistance was provided under the Agricultural Services Project. In September 1975, the Office of the Assistant Director for Regional Development (AD/RD) was established within the USAID Philippines Mission to focus increased policy level attention on integrated rural development and provide appropriate technical support and other resources to the expanding GOP Program.

With the concurrence of the NEDA and the BRBDP, a five-man USAID team, made up of four USAID direct-hire personnel[1/] and a USDA Participating Agency Consultant (PASA) was assigned to the AD/RD Office to assist in planning and packaging process, implementation (monitoring), and evaluation, particularly concerning AID inputs to the BRBDP. The AD/RD Office has a direct responsibility to the USAID Mission and AID Washington to coordinate and manage all USAID inputs provided through grant projects and multiple year loan projects in the Bicol. Staff members are USAID project managers (officers). The AD/RD Office was relocated from Manila to Naga City in December 1975. The five-man team is on the ground in the Bicol and collaborates closely with the BRBDP Program Office. Scheduled USAID AD/RD Office staffing includes:

	FY				
	77	78	79	80	81
1. Assistant Director/RD	x	x	x	x	x
2. Project Officer	x	x	x	x	-
3. Economist/Planner	x	x	x	x	-
4. Engineer/Planner	x	x	x	x	x
5. Water Management (Consultant)	x	(x)	(x)	(x)	-

1/ See Mission position descriptions: Nos. 557, 569, 592 and 602.

Some assistance is being drawn from USAID Mission technical divisions to assist the AD/RD Office carry out USAID planning and management responsibilities and to assist in a consultative capacity as requested by the BRBDP-Program Office. Since the overall Bicol Program includes the line agencies which other AID projects support, Mission consultants often work with BRBDP interagency groups in their technical capacities. The Bicol Program in fact integrates the implementation of many of the national level USAID projects. Other consultancy is described in section B below and Annex G (1).

For the associated component loan (or grant) projects assisted by USAID,[1/] specific staff members have been formally designated as USAID Project Managers (Officers). USAID project management responsibilities are defined by AID regulations (primarily handbooks 3 and 11) and in the case of loans also by GOP/AID loan agreements and letters of implementation.

In addition to on-site observation, USAID monitoring will be based on updated schedules using the Planned Performance Tracking System (PPT) with Critical Performance Indicators (CPI) and outputs indicators specified in annual ProAgs. Standard Mission reporting will be by exception. Progress reports will also be provided. Separate networks will be prepared for each BRBDP component project and program as an integral part of the BRBDP Project Management Information System (See Section B below). Effective implementation of the integrated system with appropriate management corrective action is a project output indicator. The USAID Support Office in the Bicol and the BRBDP-Program Office will basically use the same integrated monitoring and tracking system but the BRBDP will include additional detail at the project management and field implementation level.

Each USAID Project Officer will collaborate fully in the project planning, implementation monitoring and evaluation process with the designated BRBDP Project Manager, or in the case of component loan projects, with the line agency Project Manager and the BRBDP Project Coordinator (see Figure 2 above).

In addition to the responsibility of collaborating with and assisting the BRBDP, the AD/RD Office has the responsibility for monitoring and/or coordination with other USAID sectoral assistance programs and projects located not only within the BRBDP Program Area but also within the six provinces of Region V. The AD/RD Office will consult with and provide appropriate technical support to the NEDA Regional V Office to strengthen the regional and sub-regional data base and to strengthen their capability. The AD/RD Office may be requested on a special basis to assist in the identification and formulation of other IAD projects or programs within the Philippines.

1/ Two loans and one additional grant (TAB centrally funded) project currently underway.

B. Implementation Plan

1. Background

This implementation plan and schedule cover the jointly administered and managed grant Bicol Integrated Rural Development (IRD) Project (1977-1981) which is designed to support the implementation of the GOP managed Bicol River Basin Development Program (BRBDP).

The Bicol Project incorporates and further defines BRBDP projections and socio-economic development targets that are expected to be achieved in 1990 (see Part IIB). To achieve these targets to catch up with the Philippines average, the development process must move from the planning stage to packaging, funding and implementation--thus the focus of this assistance project.

This implementation plan provides a current listing of identified, component projects and proposed feasibility studies (by proposed earliest dates for packaging and financing). As investment grade studies are initiated and completed, projects can be firmed up and components of these projects may be redefined or separated for various donor financing.

The scheduling of BRBDP-Program Office activities will be spelled out in annual operating plans by each October for their fiscal year beginning January. The substance and scheduling of critical USAID technical assistance will be responsive to BRBDP requirements but must be projected as early as possible in the BRBDP planning process. AID centrally funded projects are also expected to contribute to Bicol Program objectives. Moderate commodity and training support are clear requirements and will be programmed as scheduled.

A key component of the implementation plan is the BRBDP integrated Project Management Information System with USAID monitoring linkages and the feedback to planning from intensive socio-economic surveys and analysis. The multi-purpose survey will also provide the indicators, data and analysis for impact evaluation. The biennial, grant project evaluation will focus on the organizational and management arrangements of the GOP Program and AID support.

2. Component Loan Projects

The key outputs of this grant project are feasible public and private sector investment packages of a high quality, ready for financing. Table 8 lists current projects and GOP and AID obligations to date ($31.0 million) plus projected projects with the estimated order of magnitude of proposed other donor loans ($150 M) and GOP budget ($127 M) for major projects through 1981. A proposed target is eight or more projects totalling $150 million in other donor loans and GOP financing.[1/] Annex C(6) Figure #1 presents a key bar chart schedule of 17 proposed projects divided into project development and implementation phases. The proposed schedule and approximation of investments (see Table 8 for earliest possible dates for obligation) are based on two years of preliminary interagency planning and most recently, the (prefeasibility)

1/ This does not include IAD VII, the focus of an industrial estate. A Dept. of Public Works feasibility study will be completed in late 1977.

Table 8 Bicol River Basin Development Program
Illustrative Project Listing by Other Donor Loans and GOP National Budget, 1977-1981[1/] by Earliest Dates of Estimated Obligation

	Total Est. Cost in $ Millions[5/]	
	Other Donors (FX)	GOP (LC)
1975-76 (Actual Obligations)		
Libmanan IAD I (AID FY75)	3.5	3.5
Bicol Roads (AID FY76)	10.0	14.0
	(13.5)	(17.5)
1977		
Integrated Health (AID FY77)	5.0	5.0
Bula IAD IIa (AID FY77)	3.0	3.5
	(8.0)	(8.5)
1978		
Rinconada IAD III (AID FY78) [2/]	21.0	19.0
Camarines Sur Ag College Expansion	5.0	5.0
	(26.0)	(24.0)
1979		
Quinali IAD VI (AID FY79)	10.0	10.0
City/Town Water Systems I	12.0	8.0
Naga-Calabanga IAD IV [3/]	9.0	5.0
Baliwag-San Vicente IAD V [4/]	12.0	8.0
Secondary Trunklines (300 kms including Quirino Highway)	12.0	3.5[6/]
	(55.0)	(34.5)
1980		
Pili-Bula IAD IIb	2.5	3.0
Sipocot-Del Gallego IAD VIII	5.0	5.0
Secondary-Feeder Roads II (1070 kms)	14.5	15.0
Port Expansion	10.0	8.0
	(32.0)	(31.0)
1981		
Partido IAD IX	5.0	5.0
City/Town Water Systems II	5.0	5.0
Bicol University plus three Ag Colleges	12.0	12.0
Secondary-Feeder Roads III 400 kms	7.0	7.0
Other projects to be identified (e.g. IAD VII)	-	-
	(29.0)	(29.0)
GRAND TOTAL CY1977-1981	150.0	127.0

1/ Source: Revised BRBDP-Program Office planning projections (September 1976). Order of magnitude of estimates; $150 million in obligations estimated between 1977-81. Amount for fully integrated projects and timing to be determined after full feasibility studies and preliminary engineering and design.

2/ Multiple donors proposed for all component projects beginning with FY78.

3/ The GOP proposes to begin flood control structures by 1978 ($1.3).

4/ Cut-off Channel #3 began mid 1976; the GOP proposes to begin flood control structures by 1978 (₱1.4).

5/ Projects through 1978 being packaged include inflation factors; others in current prices.

6/ To be corrected to $13.5 million

Bicol River Basin Comprehensive Water Resources Development Study, funded by the GOP and an AID loan.[1/] The outputs of this study are now being analyzed and will be incorporated into BRBDP operational plans. Transportation projects have been developed in part from the interagency Transportation Intermodal Study.[2/] The major transport and water resources based component projects will be modified and firmed up as feasibility grade studies and supporting activities are completed. Studies on groundwater, domestic water and watershed management are critical components of the site specific, integrated area development projects. GOP studies/investigations are included in the 1977 BRBDP operational plans and AID consultancy is programmed in FY 1977 to do assessments and assist the BRBDP in planning including terms of reference and scopes of work for GOP contractors, design and training.

The integrated health project (AID-GOP) is scheduled for possible funding in 1977 and the first of the college expansion projects (GOP-Other donor) in 1978, the latter, if the project appraisal by an external donor is positive. The major domestic water systems projects would be funded by donors other than AID and would normally be channeled through the National Water Utilities Administration, LWUA.

The final documentation (PRPs and PPs) required to secure AID concessional loans will be one of the critical activities of the USAID team/consultants, and key technical people from the BRBDP Program Office and concerned line agencies. Three loan proposals ($29 million AID) are now in different stages of project development.[3/] After several loan proposals have been packaged, the experience and data base (costs, engineering standards, environmental data, social soundness analysis, etc.) should be in place in order to begin a shift in management focus to implementation monitoring and evaluation. Major projects now being implemented will provide valuable feedback for improved design and management.

The USAID Office of Capital Development normally represents the Mission in loan negotiations and will consult on critical engineering and environmental questions. The NEDA will represent the GOP in loan negotiations and loan administration.

Normally, the line agency most concerned with a particular loan project will be the implementing agency under the NEDA after a loan agreement is signed. A GOP project manager will be designated from this line agency to head up an interagency implementation group.[4/]

1/ Bicol River Basin Comprehensive Water Resources Development Study: TAMS/TAE, New York/Honolulu and BRBDP, Camarines Sur: Vol. 1-V (August 1976) (See Annex C (7) for a summary of recommendations)

2/ "Bicol River Basin Intermodal Transport Study" Preliminary Report; BRBDP Interagency Team; Camarines Sur (August 1976)

3/ Bula IAD II ($3.0 million) PP; Integrated Health ($5.0 M) PRP, and Rinconada IAD III ($21.0 M) PRP

4/ Project Management Office (PMO), Annex C (6) Figure 1 for an operational example; Bicol Roads Loan Project PMO

The BRBDP will designate a Project Coordinator. USAID will have a monitoring role. If required, USAID can also provide technical consultancy in the implementation phase. This is being done now.

The World Bank, ADB and several bilateral donors have indicated definite interest in various projects to be packaged. They will increasingly be involved in an informal capacity during the feasibility study and final documentation period. The Mission and AID will continue to encourage other donor involvement.

3. Feasibility Studies

An essential element of the BRBDP component project packaging process is pre-feasibility and full feasibility studies to assess the technical, economic, and financial viability and social desirability of identified projects. The BRBDP Program Planning Department is responsible for identifying and ranking a set of projects to achieve the development goals and targets set forth in the comprehensive plan. A preliminary schedule of feasibility studies is included in the comprehensive plan and will be firmed up in 1977.[1/] Interagency teams and steering committees will be organized under the BRBDP to administer major feasibility study contracts. The major studies, especially feasibility grade studies will be contracted. Pre-feasibility studies will be conducted both by contract and in-house.

Associated with this grant project, AID feasibility loan resources may be requested by the GOP where local capability and expertise is not available at the required time. BRBDP and USAID management includes the planning and field monitoring of associated GOP-AID feasibility study loans for both public and major private sector investment projects targeted in the Program Area.

Table 9 lists completed and proposed pre-feasibility and feasibility study requirements by the BRBDP by project, (approximate cost by earliest dates) from FY 1977 to FY 1981. As terms of reference are developed and host country expertise identified, foreign exchange projections will be reduced and/or the study dropped from the proposed AID feasibility study loan listing and conducted by host country firms from BRBDP/NEDA budget. An AID level of $2.0 million is estimated for the 1977-1981 period. Based on the results of the basin-wide pre-feasibility, Comprehensive Water Resources Development Study (August 1976), the BRBDP has proposed loan assistance for full feasibility studies for one and possibly all three Integrated Area Development Project packages for 1978-1979 financing. The BRBDP has also requested (NEDA) for AID loan assistance for the first two private sector pre-feasibility studies (geothermal salt manufacturing and cold storage facilities for fish and other perishable foods).[2/] These pre-feasibility and feasibility studies are expected to be underway by mid-1977.

1/ Figure 5.23, p. 90a, BRBDP Comprehensive Plan

2/ A pulp and paper, and coconut processing pre-feasibility studies are expected to follow. The level of foreign exchange is expected to be reduced from the original BRBDP estimates, Table 9.

Table 9 Bicol River Basin Development Program
Possible Pre-Feasible and Feasibility Requirements
from AID Loan Sources[a]/
(Earliest Date by Fiscal Year in Current Prices)

	Total Est. Cost ($000) AID (FX)	GOP (LC)[b]/
FY 75-76 (Completed)		
Comprehensive Water Resources Development Study (pre-feasibility)	(598)	(360)
FY 77		
1. Integrated Area Development Projects (IAD's) -Rinconada IAD III -Naga-Calabanga IAD IV -Baliwag-San Vicente IAD V	700[c]/	700
2. City/Town Domestic Water Systems	350	200
3. Agribusiness/Rural Manufacturing[d]/		
a. Second Quarter FY 77 -Salt Manufacturing -Tiwi (138) -Cold Storage (134)	215[d]/	57
b. Follow-on FY 77 -Pulp and Paper; abaca and bagasse (279) -Coconut Processing (266) -Slaughterhouse Complex (146) -Fish Processing (133)	550	173
	(1,815)	(1,130)
FY 78		
1. Quinale IAD VI	300	200
2. Agribusiness/Rural Manufacturing (feed mill, rice straw/hull wallboard & bricks, molasses processing, fiber sacks (abaca & kenaf); plus others to be identified)	200	100
	(500)	(300)
FY 79		
1. Pili-Bula IAD II(B)	200	120
2. Sipocot-Del Gallego IAD VIII	220	130
3. Agribusiness/Rural Manufacturing (rice bran oil, cement plan, agricultural lime, citrus juice extraction; plus others to be identified)	180	120
	(600)	(370)
FY 80-81		
1. Partido IAD IX, plus other projects	(400)	(400)
2. (Agribusiness and Rural Manufacturing)	-	-

a/Source: BRBDP planning projections (September 1976). As terms of reference developed and host country expertise identified, foreign exchange (FX) projections may be reduced and/or study dropped from proposed feasibility loan listing and conducted by host country firm(s) from special NEDA or BRBDP budget. Estimated feasibility study loan subprojects from AID est. at $2.0 during FY 77-81.

b/Est. 70% included in BRBDP budget; 30% NEDA Loan Counterpart.

c/Three separate IAD studies to be submitted to NEDA by BRBDP early Nov. 1976.

d/Agribusiness pre-feasibility studies/feasibility studies must have contribution from interested investors.

The proposed BRBDP budget appropriations include an estimated 70% of the required GOP pre-feasibility and feasibility study funds.[1/] The BRBDP/interagency transportation studies are scheduled to begin in late 1976 and early 1977. Feasibility studies for roads to make up three major road packages are scheduled for 1977 and 1978. Where U.S. firms are contracted by the GOP under an AID feasibility loan, an estimated 30% of the funds will be provided by NEDA as special counterpart for contractor expenses. It is expected that there will be a diminishing requirement for foreign firms to do feasibility studies by 1981, however, joint ventures or short term external consultants funded through consultative services loans (or grant sources) will continue to be a critical input.

NEDA/BRBDP and the Mission will assess requirements for AID feasibility study consultancy on a project by project basis and if justified will finalize terms of reference and recommend loan funds be provided. After a (sub) loan agreement is signed, the BRBDP Program Office will administer feasibility study contracts and studies under NEDA through a special steering committee. USAID will monitor any loans and contracts associated with this grant project.

4. Planning and Programming

The development planning process which leads to packaged, integrated development projects is the foundation of the BRBDP. The BRBDP Program Office will continue to coordinate closely with line agencies to ensure effective integration and consolidation of existing and proposed programs into (a) a unified framework plan and (b) integrated area plans (area specific, i.e., IADs). The process began with the 1972 Lower Bicol River Basin Report (Greenbook)[2/] and the 1973 BRBDP framework plan (Bluebook).

The long range BRBDP Comprehensive Plan (August 1976) was approved as a working draft in October 1976. A revised version will be incorporated into the NEDA Regional Plan and National Plan (1975-2000) in 1977. A NEDA Ten-Year Regional Perspective Plan (1978-1987) is under preparation (October 1976) and incorporates the Bicol Program plan. A discrete, five-year BRBDP Plan (with budget projections) will be prepared as part of the Regional and National Plan (1978-82).[3/] Following the implementing guideline of PD 926, BRBDP Annual Operational Plans will be prepared by October each year and funded by national budget appropriations by January or earlier. Based on sound annual plans,

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1/ Estimated to be 50-60% of the project development budget line item Table 5 Part III financial analysis.

2/ "Report on the Province of Camarines Sur and the Lower Bicol River Basin", Camarines Sur Interagency Survey Team, September 1972.

3/ The AD/RD economist is assisting in upgrading these plans and the planning process.

GOP-USAID ProAgs will be jointly developed and signed by November each year spelling out joint activities and programs to be undertaken and how USAID technical assistance inputs will be used and the expected outputs.

Types and quantities of contractual services will be projected at least one year ahead of ProAg obligation dates. Nominations for participant training and specifications for commodities will also be completed well in advance of the ProAg. All AID cost projections will be within the budget levels established in the approved Project Paper.

5. Technical Assistance

The principal project input by USAID is technical assistance (contract consultancy including institutions) and a USAID direct-hire team. Associated with this grant project, the larger U.S. technical assistance packages may be provided under GOP-USAID feasibility loans (discussed above) or included as part of an approved development loan.1/ Host country teams will normally counterpart U.S. teams. On the GOP side, expertise will continue to be provided from line agencies, the BRBDP Program Office, host country consultants from local institutions, and increasingly from local firms.

All U.S. consultants provided through this project must receive the approval of NEDA which will normally request the endorsement of the BRBDP Program Office and the BRBDP Cabinet Coordinator.

USAID technical assistance requirements, by type, will be projected in AID annual budget presentations. A general breakout by type, year and cost was presented in Table 6 above in the financial plan (Part III B). Firm requirements will normally be identified in the preparation of BRBDP annual development plans by October of each year and funds obligated in joint GOP-USAID project agreements by November. See Table 10 for a listing and Annex 6(1) for a discussion of the proposed consultancy for FY 1977. In addition, because of the scope and technical complexity of the GOP program, there will be unforeseen requirements to provide short term assistance in the process of project development and implementation (e.g., environmental engineer for a technical problem or a geologist for a groundwater exploration problem). If these requirements cannot be filled within the Manila Mission or from AID resources at the time required, then PASA or contract services will be provided under the project. A contingency level of 5-10% of the projected technical assistance requirement for each year will be earmarked for this purpose (and obligated by ProAg amendments).

Because the comprehensive Bicol Program is an innovative approach which follows the U.S. congressional mandate in reaching the poor majority, and recognizing that several AID/W bureaus and offices have appropriate activities and expertise to offer (many through centrally funded projects), the policy of the Mission and AD/RD Office is to incorporate these AID/W interests as an integral part of the Bicol

1/ The Bicol Roads project includes $150,000 for maintenance consultancy.

Table 10 Bicol Integrated Rural Development Project
Proposed AID Consultancy and Institutional Contracts
FY 1977[a/]

	Est. Cost[b/]
Biennial project evaluation (org., mgt. & IAD strategy)	$ 30,000
Institutional contract for comprehensive socio-economic survey and impact analysis (IPC and UP system)	80,000
Project design and analysis consultancy	30,000
Rural credit research (Ohio U. through UPLB and Central Bank)	20,000
On-farm water assessment and training (CID/U. of Col. or Utah State Teams)	40,000
Watershed management (PASA)	15,000
Irrigation/agriculture planning (U. of Hawaii Team follow-on)	70,000
Irrigation management & pump design (PASA follow-on)	40,000
Water resources economist (U. of Col. or CID)	10,000
Transportation engineer/economist	10,000
Environmental planning/engineering	15,000
Groundwater specialist	10,000
Fisheries development assessment	10,000
Domestic water systems/sanitation engineering	20,000
Integrated Extension (Dev. Alternatives Inc.)	20,000
Agribusiness & rural manufacturing consultancy (Marketing, investment incentive, & pre-feasibility study consultancy)	50,000
Contingency	30,000
	$500,000

a/See Annex G(1) for details of FY77 TA by proposed PIO/T. TA based on AID projections for 1977, BRBDP 1977 operational plans, requirements identified through recent pre-feasibility studies (assessment of design or data generated or inputs to proposed full feasibility studies), etc.

b/Individual consultancy averages $5,000 per man month (including international travel). Institutional contract estimates based on similar scopes of work. The ProAg is re-scheduled for January 1976. The earliest consultancy begins February 1977. Trust Fund B peso support estimated at ₱6,000/man month for per diem and in-country transporation. Discounting the socio-economic survey, and overhead costs of institutional contracts, this amounts to an estimated ₱500,000 for Trust Fund B requirements during FY77.

Project.[1/] However, to be acceptable to the BRBDP, externally generated activities must fill a valid technical requirement, provide expert opinion on a requirement not yet articulated, and/or train BRBDP staff in skills applicable to the more immediate work requirements. Activities with heavy adminstration or management requirements cannot be undertaken.

Examples of on-going AID/W centrally funded activities (or interests) that are being incorporated in overall Bicol planning and are contributing to Program objectives include:

- AA/PPC — Agribusiness Resource Assessment and follow-on technical assistance programmed through the AID Special Assistant for the Private Sector.

- TAB/UD — "Urban Functions in Rural Development" an innovative, centrally funded R & D project jointly developed in the Bicol and now being implemented.

- PPC/PDA — An AID/W proposal to the Bicol Project to develop a second generation multi-purpose survey (from the Ag. Dev. Council (ADC) Laguna Study and the SSRU instrument). The PPC, ADC/New York (or Yale Growth Center or other institution) would then expand the use of the instrument in other regions of the Philippines and/or other countries (See Part III D., Evaluation).

- OLAB — There is an expression of interest in the centrally funded "Government Labor Services Project" under the AID Office of Labor Affairs. This would involve the regional offices of NEDA, Labor, BRBDP, and would address ways to increase productive employment opportunities.

- TAB/AG — The Kansas State University Agribusiness contract (FY 74-75) and the proposed new KSU national level Integrated Agricultural Production and Agricultural Marketing Project (USAID/AG) that will also serve the Bicol; another example is the centrally funded University of Hawaii Benchmark Soil Project on comparative soil capability in the Bicol and other countries; etc.

The results of pre-feasibility and feasibility studies to be conducted in 1977-1979 for Integrated Area Development Projects (IADs) and agro-industrial investment will determine in part, where critical AID

1/ Ref. Airgram AIDTO-A-20 6/10/76 as an example of TAB interest and capacity to reciprocally support and utilize the Bicol Project experience. Most of the referenced organizations will be tapped. The same is true for PPC, AID/W.

technical consultancy will be required. The BRBDP will be fully involved in establishing the priorities for the available level of technical assistance and developing scopes of work. The larger technical assistance packages for project implementation are expected to be included as part of AID or other donor development loans. The biennial project evaluation will address the appropriate level and sources of supporting technical assistance to the BRBDP. While a primary objective is to develop a shelf of bankable projects, an important consideration and particular interest of the BRBDP is the development of the skills of host country technicians and institutions in the process. In most cases, both objectives can be met.

The BRBDP Program Office is establishing a technical library,[1/] for use by local and foreign consultants, researchers and others. Individuals, institutions, and donor agencies are invited to contribute professional books, materials and bibliographies. The library will also serve the Camarines Sur Agricultural College.

6. Commodity Support

The intensive Bicol River Basin Development Program has put increased demands on and has elicited a higher level of performance from key line agencies at the regional, provincial and rural municipality levels. For most agencies, the Program is providing the means to carry out their recognized, priority programs. The increased demands require additional service vehicles, office equipment, laboratory, survey and testing equipment, and other essential commodities,[2/] that are very difficult to finance and procure through GOP channels. The BRBDP for example, does not have adequate office equipment, radios or the equipment to reproduce and bind the high volume of reports and studies it turns out. Table 11 lists six categories of commodities by fiscal year and the estimated cost. Commodities are proposed for only four years of the five year project. The U.S. inflationary factor of 7% has been taken into account.

Clearly, the BRBDP Program Office, interagency teams, and local government units involved in intensive planning and implementation activities require selected commodities to handle the increased workload. Major commodity requirements will be included in the loan projects. Excess property sources will be used where possible; other commodities will be procured in the U.S. through normal AID channels (average 12-month delivery). The BRBDP has a commodity management system to receive, inventory and monitor the use and maintenance of both AID and GOP provided commodities.

7. Staff Development and Public Information

Basin Level Training - The BRBDP has initiated and will continue to support a series of activities (a) to upgrade the BRBDP core staff,

1/ With limited USAID assistance (FY 75)

2/ The GOP has very stringent regulations on procurement of new equipment which presents a problem for new organizations like the BRBDP.

Table 11 Bicol Integrated Rural Development Project
Proposed AID Commodity Inputs
FY1977-1981

Commodity Type	Fiscal Year ($000) 77	78	79	80	77-80
Vehicles (excess & new)	45	55	55	40	195
Office equipment and furniture (excess & new)	45	40	40	30	155
Computer accessory equipment	5	10	10	-	25
Audio-Visual & briefing equipment (Program Office and training)	10	10	-	-	20
Communications equipment (SSB and VHF radios)	15	15	-	-	30
Laboratory, survey and testing equipment	46	50	55	20	171
TOTALS	166	180	160	90	596

(b) to orient and train Bicol based participating agency and local government personnel (including student on-job-training), and (c) to develop the institutional capability to provide training in integrated development for participants from other developing countries.

The first unit of a Soil and Water Management Research and Training Center complex (GOP financed under the BRBDP 1975 Bicol Project ProAg and constructed at the Camarines Sur Agricultural College) is currently used for a continuing series of interagency training sessions. The second unit will be completed in early 1977.[1/] Courses range from technical skills training for interagency personnel to planning and project design courses in integrated development (e.g., a one-day AID sponsored Syracuse University, project design training session for key technicians developing PRPs and PPs for loan projects). A proposed course for 1977 is feasibility study methodology. In-service training is designed to upgrade the quality of planning and implementation of BRBDP, local government and line agency programs. The BRBDP target is 1,200 personnel from 1977-81. This training could include personnel from other integrated projects in the Philippines to increase the spread effect. Funding will be provided by the sponsoring agency(s) so it is not a BRBDP program per se.

International Level - The BRBDP Program Office is proposing a program to provide observation training and on-job-training for foreign students and technicians by 1978. Informal linkages have already been developed with other LDC officials (e.g., Indonesian officials from LUWU Area Transmigration Development Project assisted by AID). This proposed international program will be spelled out in greater detail in revised AID documentation if AID assistance is requested. Other country contacts are expected to contribute to the spread effect of the GOP Integrated Area Development Program concepts.

AID Participant Training - Technical and administrative personnel employed by and detailed to the BRBDP are generally professionally competent but some of the younger technicians lack experience. The majority are from the Bicol Region and a conscious recruiting effort is made to hire and train personnel who will remain in the Bicol. Because of the higher level of expertise demanded by the BRBDP to do feasibility studies and carry out integrated development projects a moderate number (35) of both core staff and interagency staff will be selected for primarily third-country training over four years of the five year project (see Table 12). Most of the training will be at the Asian Institute of Technology (AIT) in Bangkok under the eight-month Diploma Program. One qualified candidate in a specialized field of water resources development is scheduled to continue in the Master's Program. Four participants are programmed for U.S. Master's level training in the key areas of development planning and agribusiness. Two months of non-academic study are proposed for a team of four senior BRBDP officials to travel to the U.S. in 1978. They would visit and brief international organizations, AID, and possibly others and would visit several integrated river basin projects in the U.S. (e.g. TVA).

1/ The AID Agricultural Research Loan Project (492-T-039) under the Philippines Council for Agricultural Resources Research (PCARR), will also provide for a research center in the same complex.

Table 12

BICOL INTEGRATED AREA DEVELOPMENT PROJECT
Participant Training (3rd Country and U.S.)

Proposed Training	FY77	FY78	FY79	FY80	FY81	Total
1. Water Resources Development (AIT Diploma Program)[1/]	4	4	4	4	-	16
2. Water Resources Development[2/] (AIT Masters Program)	1	1	1	1	-	4
3. Transport Planning (AIT)[1/] (AIT Diploma)	-	-	1	-	-	1
4. Environmental Engineering[1/] (AIT Diploma)	1	1	1	-	-	3
5. Systems Engineering and[1/] Management (AIT Diploma)	2	-	-	1	-	3
6. U.S. Non-Academic (2 mos.)[4/]	-	4	-	-	-	4
7. Agribusiness (M.S.)[3/]	-	-	2	-	-	2
8. Planning (M.S.)[3/] -Urban Planning -Regional Planning	-	1	-	1	-	2
TOTALS	8	11	9	7	-	35
(Est. Training Cost $000)	$(41.5)	(51.3)	(56.9)	(41.7)		$(191.4)
(Est. Transportation Trust Fund "A" ₱000)	₱(30.0)	(87.5)	(52.3)	(35.5)		₱(205.5)

Est. cost/participant ($000)
1/5.0 (Diploma Program AID 8 mo)
2/6.5 (M.S. Program, AIT 13 mo)
3/10.3 (M.S. Program, U.S. 12 mo)
4/2.4 Non-academic, 2 mo)
5/Round trip MNN/BKK ₱3,750
Round trip MNN/US ₱13,000

Public Information - The BRBDP is in the process of developing a professional, visitors' briefing using audio-visual aids to tell the story of the Bicol Program. This will be in operation by October 1976 but additional equipment is required. An average of eight or more official groups visit the BRBDP each month. A BRBDP public information section will design and maintain an effective information program to develop an awareness of and encourage active participation in BRBDP sponsored activities by Bicol residents, government and private agencies and institutions both within and outside the Bicol Program Area.

Several seminars and workshops are proposed as part of planned innovative activities and will serve to involve a wider Philippine and foreign professional community. The seminar series proposed in the AID/W TAB funded Urban Functions in Rural Development Project in the Bicol is a case in point. Another example is a proposed workshop in mid 1977 in coordination with the Agricultural Development Council and AID/PPC on the experience of the comprehensive, multi-purpose socio-economic survey instrument developed for the Bicol.

8. Monitoring and Reports (Also see Project Performance Tracking Network Annex E)

All BRBDP programs and component development projects will be monitored by the BRBDP Project Management Information System (PMIS) on a monthly basis.[1,2] Other national and local programs relating to the BRBDP will be monitored on a quarterly basis.

Monthly progress reports will continue to be prepared for BRBDP component projects and discrete activities. Monthly Consolidated Summary Reports will be provided to the BRBDP Cabinet Coordinator, USAID, and other key agencies (plus progress reports for each AID loan project). A Project Information Summary Report covering on-going and planned projects will be provided to all national, regional and local government agencies concerned, on a semi-annual basis. An Annual Report will be published covering all BRBDP activities for dissemination to all parties including the general public. Special BRBDP management reports will be prepared as required.

The PMIS is designed to provide accurate, timely, and relevant information to the various levels of decision makers in the BRBDP and associated agencies (including USAID) to assist in planning and programming, decision making, evaluations, etc. The BRBDP and implementing agencies will continue to prepare and update networks and charts as management tools to monitor progress. An integrated system of networks and charts will be developed by the BRBDP for the overall GOP Bicol Program. The USAID project performance tracking (PPT) network will be linked into the BRBDP Project Management Information System. The USAID monitoring role (see PPT) includes the coordination of all AID grant programs and AID-BRBDP component loan projects in the Bicol. The Mission will provide AID/W with routine and special reports on the progress of the Bicol Project.

1/ Kenneth Smith, "A Project Status Reporting System for BRBC", USAID/Manila (February 1975); pp.27.

2/ "Management Information System", Economic Development Foundation (January 1976); pp. 120.

C. Evaluation

1. Socio-economic Research and Impact Evaluation

Periodic surveys will be carried out within the Program Area (Camarines Sur and Albay Provinces) by contract and in-house (operational surveys by the BRBDP) (a) to provide feedback to planning, and (b) measure the progress and impact of BRBDP projects, other key GOP programs, and major private sector investment. Intensive analysis of data will be carried out on a continuous basis but will be concentrated during the year following the major multi-purpose surveys. Indicators of social and economic change include:

- per capita income and income distribution
- agricultural productivity per person and per hectare
- level of employment, underemployment and migration
- fertility and mortality rates
- nutritional and health status of the population and environmental conditions
- status of women in the development process
- land use and tenure status
- perceived and objective quality of life, etc.

Various kinds of baseline data, progress indicators and impact measures need to be established and analyzed if BRBDP development projects are to be properly designed, their implementation effectively monitored, and their impact evaluated. In addition to providing a basis for good management, this information is useful in establishing measurable linkages between purposes of component projects and overall BRBDP program goals. It is particularly important to have adequate baseline data to be able to understand the combined and synergestic effects of the various GOP projects and programs along with the other positive or negative processes of growth outside the control of regional development efforts (e.g. the oil crisis).

Background

From 1973 to 1976, the Institute of Philippine Culture (IPC) through its Social Survey Research Unit (SSRU) established in Naga City, carried out various surveys and research activities.[1/] The April 1974 SSRU panel survey, a random sample of 3,240 households in Camarines Sur

1/ See operational description in BRBDP Framework Plan (1973), USAID Bicol Project PROP (1974), and scopes of work in Bicol ProAgs and sub-agreements (1974-1975). Also see listing of published reports in BRBDP Bibliography, Annex C(4). Reports are on file in AID/W.

Province (only), is the primary data source for the BRBDP. Several other special studies were carried out and data analyzed to support BRBDP feasibility studies and the social soundness of development projects. A series of sixteen research reports have been published by the SSRU (See Annex C4) and other basic data is in tabular form. The SSRU is finalizing a socio-economic profile of the Bicol River Basin based on 1974 surveys. The social soundness analysis (See part III and Annex C2) of this Project Paper which covers the Program Area population and the targeted social impacts of the proposed long range BRBDP program draws from findings of previous SSRU research, unpublished sources and a special social soundness report by the IPC.1/

A follow-on IPC study on the role of women in development in the Bicol is being undertaken and the preliminary results will be available by March 1977. The study will pretest questions for the more extensive multi-purpose survey. The output of the IPC study will also contribute a national level study proposed by the Mission to establish a current data base on women in development. The latter will analyze impediments to women's participation in the economy and recommend development policy alternatives and program responses which will increase the role of women.

Proposed Multi-Purpose Survey (FY1977-1981)

To adequately design, monitor (progress indicators) and evaluate, over time, the impact of BRBDP projects on the population, particularly the poor majority, a comprehensive, well designed survey must be carried out in Camarines Sur and Albay provinces (est. 3,000 households). It should build on and be comparable with the existing 1974 baseline survey. The survey must be tailored to measure the contributions of integrated area projects, new agro-industries, and sectoral projects (Integrated Health, Bicol Roads, Rural Electrification, etc.) both individually and in combinations.

To accomplish this purpose, key components of the SSRU panel survey questionnaire are being combined with a modified Laguna multi-purpose survey questionnaire2/ to carry out periodic multi-purpose surveys to meet the evaluation requirements of agencies concerned. It has been designated the Bicol Survey (instrument). Complete surveys and analysis will be carried out by a qualified research institution (contracted by USAID) based on detailed scopes of work developed jointly by the BRBDP and USAID and approved by NEDA at intervals of two years: 1977, 1979, and 1981. Consultancy is being funded by AID/W3/ to assist in the design and pre-testing of the multi-purpose instrument. Additional U.S. consultancy is programmed for the analysis stages. AID/W (PPC/PDA) has given valuable suggestions and will be requested to assist in redesign and analysis.

1/ Let my People Lead : Rationale and Outline of a People-Centered Assistance Program for the Bicol River Basin, Institute of Philippine Culture, August 1976.

2/ Evenson, R.E. and B. Popkin, The Laguna Household Survey, Agricultural Development Council, 1975.

3/ Manila 13670, State 241333 September 1976.

AID/W (PPC/PDA) has proposed that a University of Michigan Survey Research Center (standard package) multi-purpose instrument be pre-tested in the Bicol to provide additional information and provide a means for external validation of the proposed Bicol survey instrument and data collection. This is proposed for early 1978.

The Laguna multi-purpose survey was developed by an associate of the Agriculture Development Council (ADC) and a member of the Rockefeller Foundation, together with University of the Philippines colleagues[1/] and others. It has been proposed by ADC, New York, and AID/W (PPC) that a modified second generation instrument be used in the Bicol (funded and managed under the Bicol Project), then possibly expanded to other regions within the Philippines (formalized as an ADC or possibly Yale University/Philippines Project) and to other developing countries under the auspices of AID/W by 1977 and 1978 respectively.[2/]

The Bicol Survey was initiated in October 1976 beginning with instrument modification. The initial design phase is involving Filipino researchers from several organizations who will conduct much of the analysis. The GOP Department of Health and the National Nutrition Council are also assisting in the development of the survey and will be involved in implementation. After pretesting of the instrument and training of staff, field work is scheduled to begin in February 1977 and analysis started by August 1977. A special workshop is scheduled in August 1977 to evaluate the experience of the Bicol Survey and begin design for expansion to other regions under the ADC or Yale/Philippines Project. Bicol planners and USAID consider it particularly advantageous to link into a multi-purpose survey network with comparable analysis possibilities.[3/]

The Bicol Survey and analysis will also link into an Economic and Social Impact Analysis Project proposed by the Mission (PRP under preparation) for FY1978-80. The project, under NEDA, would coordinate the collection and analysis of development data by government and private institutions nationwide.

Other BRBDP Operational Surveys and Research

The BRBDP will carry out operational surveys and research as required,

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1/ UPLB (Institute of Agriculture Development Administration), U.P. School of Economics, U.P. College of Home Economics, Population Center Foundation, etc. Several reports were published in 1976. These reports and a description of the Laguna project are available at AID/W (PPC/PDA).

2/ The scope and responsibility of this proposed project is under review by AID/W PPC/PDA with those involved in the Laguna Study Project. One alternative is the Yale University Growth Center (R.E. Evenson).

3/ This also will assist the NEDA regionalization effort. A NEDA/IBRD group is encouraging the development of high quality and comparable household data in each region in the Philippines.

by contract or using BRBDP and interagency staff and involving local university students (farm management students in the case below).

An initial activity for 1977 to be funded by the BRBDP is farm record-keeping. The general objective is to provide farm data for planning and evaluation, especially pilot efforts. Specifically, the activity seeks to:

- develop a socio-economic profile of farm families
- assess the impact of GOP programs on small scale farmers
- identify the level of farm management practices employed by farmers
- educate farmer cooperators in the use of farm records and accounts

The output is a continuous flow of field level information from a selected number of farmer beneficiaries. Respondents will be from current and proposed Integrated Area Development (IAD) projects and will link into the overall socio-economic survey (as sub-samples).

2. Biennial Evaluation of Grant Project

A joint biennial evaluation of the grant GOP-USAID support project, focusing on organization and management, and the IAD approach will be carried out between June and August in 1977, 1979, and 1981. USAID will fund a third party team of three consultants to join a GOP/NEDA third party team of three experts in development planning, management, integrated rural development or related disciplines. One member of the U.S. team and GOP team will have a social science background related to development. The evaluation will not be less than two months in duration and will cover the functional areas and activities of the Bicol River Basin Program related to the supporting grant project since the first project evaluation in July 1975. The evaluation will specifically cover:

- The effectiveness, appropriateness, and level of USAID and other donor assistance to the GOP program and its contribution toward output and purpose level achievement.
- The nature and level of GOP resources provided to the joint project and overall GOP Program.
- The conceptual framework of the BRBDP and the IAD approach, and an assessment of the effectiveness of the policy, planning, organization, programming and budgeting, interagency participation and coordination, and the BRBDP management systems including integrated information, networks, and corrective action taken.

- Recommendations to improve overall project and program performance particularly in terms of achieving output and purpose targets by 1981. Discuss alternative project design modifications.

- A comparative analysis of the Bicol Program with the other three national integrated projects in the Philippines.

The targeted indicators of specific loan projects will not be evaluated per se, since impacts of these projects are the subject of other project studies and evaluations. The interagency management and the BRBDP and USAID monitoring/coordination role will be evaluated as will the process of developing a shelf of bankable loan projects.

The Mission and the BRBDP will undertake an in-house project assessment (PAR) at the end of each fiscal year as required (see PPT Annex E).

D. Negotiating Status

This Project Paper is based in large part on the (draft) BRBDP Comprehensive Development Plan (August 1976), Presidential Decree 926 and related implementing guidelines, and other USAID and BRBDP planning documents and planning sessions. It was developed in a collaborative manner with members of the BRBDP Program Office Management Committee and there is substantive agreement on design, analysis, implementation plan, evaluation schedules and other proposals.

DEPARTMENT OF STATE

TELEGRAM

INCOMING
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ACTION:
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30 OCT 1976

UNCLASSIFIED
Classification

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Action Taken: _____
No action necessary: _____
Date: _____ Inits _____

DATE ANSWER DUE 11-4-76

SUBJECT: BICOL INTEGRATED RURAL DEVELOPMENT - RELOJYPZORCGKY

1. SUBJECT PID WAS REVIEWED BY PROJECT ADVISORY COMMITTEE OCTOBER 21, 1976.

2. AID/W APPRECIATES EFFORTS MADE BY MISSION IN PREPARING REVISED PID AND FEELS THAT IT REPRESENTS A CONSIDERABLE IMPROVEMENT OVER PREVIOUS PID. THE REVISED PID FOR THE BICOL INTEGRATED RURAL DEVELOPMENT PROJECT IS THEREFORE APPROVED. PLEASE NOTE, HOWEVER, THAT CONSENSUS OF OPINION IS THAT THE REVISED PID DOES NOT CONTAIN SUFFICIENT JUSTIFICATION FOR PRESENTATION OF A PROJECT PAPER WHICH WOULD INCORPORATE THE FINAL YEAR OF THE ORIGINAL GRANT PROJECT (FY 77 OF THE BICOL RIVER BASIN DEVELOPMENT PROJECT) IN THE FOLLOW-ON PROJECT, INTEGRATED RURAL DEVELOPMENT. ACCORDINGLY, AID/W REQUESTS MISSION TO PREPARE AMENDMENT TO THE REVISED PROP ON THE ORIGINAL GRANT WHICH WOULD JUSTIFY REQUESTED FUNDING FOR FY 77.

3. IN CONNECTION WITH BUDGET AMOUNTS FOR FY 77, WE NOTE CONTRACT AMOUNT SHOWN AS DOLS 500,000 (PAGE 2 OF REVISED IRD PID). IN PREPARING AMENDMENT TO THE PROP, PLEASE PREPARE A SUMMARY DETAILING NUMBER OF CONTRACTS AND TOTAL CONTRACT AMOUNTS TO BE FUNDED IN FY 77 IN FOLLOWING CATEGORIES: (1) ONGOING CONTRACTS SCHEDULED TO TERMINATE IN FY 77; (2) ONGOING CONTRACTS SCHEDULED TO TERMINATE AFTER FY 77; AND, (3) CONTRACTS PLANNED TO START IN FY 77.

4. REQUEST THAT THE MISSION NOT, REPEAT, NOT ENTER INTO ANY MORE NEW CONTRACTS RELATING TO THE BICOL RIVER BASIN DEVELOPMENT PROJECT UNTIL AMENDED PROP APPROVED.

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AG/PD		✓

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Classification

5. WE ARE AWARE OF TIME CONSTRAINTS INVOLVED IN PREPARING REQUIRED DOCUMENTATION ACCORDINGLY, AMENDED PROP DOES NOT HAVE TO BE SUBMITTED UNTIL NOVEMBER 30, 1976. MEANWHILE, ADVISE IF ANY FUNDING MANDATORY DURING PRESENT QUARTER OTHER THAN DIRECT-HIRE SALARIES.

6. INDICATIONS FROM REVISED PID ARE THAT ORIGINAL GRANT PROJECT IS ON SCHEDULE AND IS BEING IMPLEMENTED PROPERLY. AID/W WOULD THEREFORE LIKE TO BEGIN PLANNING A FORMAL EVALUATION IN ACCORDANCE WITH AID REGULATIONS OF PROJECT PROGRESS AND PERFORMANCE. EVALUATION PROGRAM WOULD BE DESIGNED IN SUCH A WAY AS TO PERMIT AN IN-DEPTH EVALUATION OF THE ORIGINAL GRANT PROJECT AND A BROADER REVIEW OF THE ENTIRE BICOL RIVER BASIN PROGRAM. SUCH AN EVALUATION AND REVIEW WOULD PROBABLY BEGIN JAN/FEB 1977. WOULD APPRECIATE YOUR SUGGESTIONS ON SCOPE AND TIMING OF SUCH AN EVALUATION

7. A SEPARATE CABLE CONTAINING SUGGESTIONS FOR PREPARATION OF NEXT DOCUMENT TO BE SUBMITTED ON INTEGRATED RURAL DEVELOPMENT WILL FOLLOW SHORTLY
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1. On-going contract services (FY75-76) scheduled to be completed in FY77:

   a. University of Hawaii (Irrigation/Ag Planning) August 1977 (pipeline as of 9/30/76 -$74,000). An extended or new contract requested by BRBDP.

   b. Thomas E. Lindsley (PSC Transport Economist/Planner) February 1977 (pipeline $20,000).

   c. John Roebig (MIS Specialist for land reform/jointly funded with Agrarian Reform Project) December 1976 (pipeline $8,000).

   d. Dr. William Pooler (Evaluation/Design) December 1976 (pipeline $6,000).

   e. SEATEC, Dr. Richard Frankel (Bangkok) (Water Supply/Sanitation) December 1976 (pipeline $4,000).

   f. Institute of Philippine Culture (Role of Women Analysis) December 1976 (pipeline $15,000).

   g. George Otey (USDA PASA Irrigation Specialist) June 1977 (on-going funding to be included in FY77 ProAg).

2. On-going contract services scheduled to terminate after FY77:

   Currently, none. (University of Hawaii proposed in FY77 estimated completion August 1978- $70,000, see Annex G)

3. Proposed Contracts Services scheduled to begin FY77:

   This category includes all proposed contract services listed in Table 10 and Annex G (1) (pending approved program for FY77 and joint BRBDP/USAID finalization of scopes of work.

MALACAÑANG
MANILA

PRESIDENTIAL DECREE NO. 926

MODIFYING THE ORGANIZATIONAL STRUCTURE FOR THE BICOL RIVER BASIN PROGRAM, PROVIDING FUNDS THEREFOR AND FOR OTHER PURPOSES

WHEREAS, it is a policy of the Government to promote the integrated development of agriculture, natural resources, infrastructure and social services in underdeveloped regions to solidify the economic and social structure of our society;

WHEREAS, Presidential Decree No. 805 reconstituted the Cabinet Coordinating Committee on Integrated Rural Development Projects constituted under Letter of Instructions No. 99;

WHEREAS, an integrated rural development program has been adopted for the Bicol River Basin;

WHEREAS, the success of the program requires that the management and planning of the basin area be comprehensive, decentralized, and framed within regional and national plans;

WHEREAS, there is an urgent need to enhance the organizational framework and systems capability for planning and monitoring of this integrated multi-project area development program;

NOW, THEREFORE, I, FERDINAND E. MARCOS, President of the Philippines, by virtue of the powers vested in me by the Constitution, in order to insure the success of this program, do hereby order and decree the following:

SECTION 1. Declaration of Policy. The Bicol River Basin Development Program, initiated pursuant to Executive Order No. 412 dated May 17, 1973, hereinafter referred to as the Program, is hereby declared an integrated area development program of the national government under the supervision and direction of the Cabinet Coordinating Committee on Integrated Rural Development Projects of the

National Economic and Development Authority, and the following policies are adopted for the effective implementation thereof: (a) to integrate national and local government programs and projects within its jurisdiction; and (b) to decentralize the planning and implementation of rural development projects.

SEC. 2. Cabinet Committee Coordinator for the Program. The Secretary of Public Works, Transportation and Communications shall be the Cabinet Committee Coordinator for the Program and shall act for the Chairman of the Cabinet Committee in all administrative matters, in accordance with the broad policies and guidelines established by the Cabinet Committee. As Cabinet Committee Coordinator, he shall have the following powers and functions:

a. Oversee the coordination of the planning and implementation of the Program;

b. Review the Program's consolidated plans, budgets and work programs and recommend approval by the Cabinet Committee;

c. Arrange and/or negotiate with local and foreign financial institutions, subject to approval by the Cabinet Committee for the funding of rural development projects in the Basin;

d. Approve requests of the implementing departments and agencies for budget releases for projects in accordance with the consolidated plans, budgets and work programs approved by the Cabinet Committee; Provided, That such approval, shall be subject to the availability of funds in accordance with the existing budgetary policy, laws, rules and regulations which shall be secured from the President.

e. Appoint the Program Director and heads of major organizational subdivisions of the Program Office;

f. Bring to the attention of the Cabinet Committee matters that require its urgent consideration;

g. Call upon any department, bureau, office, instrumentality or any political subdivision of the Government for such assistance that may be needed in achieving the objectives of the Program; and

h. Exercise such other related powers as may be delegated by the Cabinet Committee.

SEC. 3. Creation and Domicile of the Bicol River Basin Development Program Office. There is hereby created a Bicol River Basin Development Program Office, hereinafter referred to as the Program Office, which shall be under the supervision of the Cabinet Committee, through the Cabinet Committee Coordinator, for the purpose of coordinating the planning and implementation of the projects by the implementing departments and agencies at the national and provincial levels. The Program Office shall have its principal office in Camarines Sur. It shall also have a Manila Liaison Office for the purpose of facilitating supportive actions at the national level and such sub-offices as may be necessary in any municipality or city within the Program area.

Unless otherwise decreed, the jurisdiction of the Program Office shall encompass the Bicol River Basin area covering the municipalities of Del Gallego, Ragay, Lupi, Sipocot, Libmanan, Cabusao, Pasacao, Pamplona, San Fernando, Milaor, Minalabac, Gainza, Camaligan, Canaman, Magaro, Bombon, Calabanga, Tinambac, Goa, San Jose, Lagonoy, Sangay, Tigaon, Ocampo, Pili, Bula, Baao, Buhi, Nabua, Balatan, Bato, and the cities of Naga and Iriga in the province of Camarines Sur, and the municipalities of Libon, Polangui, Oas, Ligao, Pio Duran, Guinobatan, Tiwi, Malinao, Tabaco, Camalig, Daraga, and the City of Legaspi in the province of Albay, and such other areas as the Cabinet Committee may hereinafter decide to incorporate.

SEC. 4. Powers and Functions of the Program Office. The Program Office shall have the following powers, duties and functions:

a. Serve as a coordinating center for inter-agency planning and management of Bicol River Basin projects;

b. Identify rural development projects in the Bicol River Basin for inclusion in the integrated rural development program as authorized by the Cabinet Committee;

c. Prepare feasibility studies for identified projects for the Bicol River Basin as authorized by the Cabinet Committee;

d. Monitor and evaluate the progress and effects of project implementation in the Bicol River Basin;

e. Maintain a continuous feedback system with national agencies involved in Bicol River Basin projects;

f. Promote and encourage private enterprises and government agencies and instrumentalities to plan, develop and implement projects necessary or conducive to the accelerated development of the Bicol River Basin area;

g. Apply for, receive and accept grants and donations of funds, equipment, materials and services needed by the Program from sources within and outside the Philippines; Provided, That funds received herein shall be exempt from the provisions of Presidential Decree No. 711;

h. Call on the appropriate department, bureau, office, agency, or other government instrumentality for assistance in the discharge of its duties; and

i. Perform such other related functions as may be necessary to attain the objectives of this Decree.

SEC. 5. Appointment, Tenure Of Office, Qualifications and Compensation of the Program Director. The Program Office shall be headed by a Program Director who shall be appointed by the Cabinet Committee Coordinator.

The appointee to the position of Program Director shall possess the following qualifications: (a) a natural-born citizen of the Philippines; (b) at least thirty (30) years of age, and (c) of proven record of executive competence in the field of public administration and/or infrastructure projects and/or in the management of agricultural, industrial or commercial enterprises.

The Program Director shall receive an annual compensation to be fixed by the Cabinet Committee but not exceeding ₱48,000 per annum and such allowances received by other officials of comparable rank.

SEC. 6. Powers and Functions of the Program Director. The Program Director shall exercise the following powers and functions:

a. Execute and administer the policies and decisions of the Cabinet Committee;

b. Directly coordinate the activities of all implementing departments and agencies in the planning and implementation of the projects;

c. Submit periodic financial and work accomplishment reports relating to project implementation to the Cabinet Committee, the Budget Commission and other Agencies concerned through the Cabinet Committee Coordinator;

d. Consolidate, for the approval of the Cabinet Committee Coordinator, requests for budget relases of projects of the implementing departments and agencies in accordance with consolidated plans, budgets and work programs approved by the Cabinet Committee;

e. Collect and consolidate all project accounts under the Program maintained by the implementing departments and agencies;

f. Organize and manage the Program Office and adopt administrative rules and procedures for its internal management;

g. Call upon any department, bureau, office, agency, instrumentality or any political subdivision of the Government to assist in the planning and implementation of the Program;

h. Enter into contracts with private or public entities in connection with the functions of the Program Office, subject to the approval of the Cabinet Committee Coordinator; and

i. Perform such other functions as may be assigned by the Cabinet Committee Coordinator.

SEC. 7. Staff Appointments. In accordance with the staffing pattern to be approved by the President, the Program Director shall appoint the other personnel of the Program Office and define their duties and responsibilities: Provided, That all technical and professional positions shall be exempt from the rules and regulations

on wage and position classification and shall be provided with a salary rate to be determined in accordance with the possessed skills, experiences, educational attainment and the degree of specialization by the proper authorities concerned. In the case of personnel who are absorbed in the Bicol River Basin Development Program Office created by virtue of this Decree, they shall be provided a salary rate not lower than the salary including other emoluments they are actually receiving: Provided, further, That the Program Office may employ personnel on part-time basis, any provision of law to the contrary notwithstanding.

SEC. 8. Creation, Composition and Functions of the Program Coordination Committee. For the purpose of providing operating policies and guidelines, for the day-to-day operations of the Program Office, there is hereby created a Bicol River Basin Coordination Committee. It shall be composed of the Program Director as Chairman, the National Economic Development Authority Regional Executive Director for Region V as Vice-Chairman, with the Governors of Camarines Sur and Albay, and the designated representatives of the Department of Natural Resources and the Department of Public Works, Transportation and Communications, the Regional Directors for Region V of the Department of Local Government and Community Development, Agrarian Reform, Public Highways, Agriculture, Health, Education and Culture and the National Irrigation Administration, as members.

SEC. 9. Functions of the Program Coordination Committee. The Bicol River Basin Coordination Committee shall have the following functions:

a. Provide planning and management policies and guidelines for the day-to-day operations of the Program Officer;

b. Insure that plans and programs for the Bicol River Basin area conform with the overall development plan for Region V;

c. Serve as a forum to resolve problems of inter-agency coordination at the Bicol River Basin area level and propose and/or institute remedial measures; and

d. Perform such other duties as may be assigned to it by the Cabinet Committee.

SEC. 10. Role, Functions and Responsibilities of the Implementing Departments and Agencies. All implementing departments and agencies shall be responsible for the execution of the projects

assigned to them. They shall submit to the Cabinet Committee, through the Program Director, their respective annual project plans, budgets and the corresponding work programs for approval within three (3) months before the start of the ensuing calendar year. They shall also submit the financial and work plans for every request for budget release and periodic reports containing results of operations to the Cabinet Committee Coordinator.

SEC. 11. Expenditures and Disbursements. Projects of the Program funded by foreign or international institutions shall be exempt from any government ban and restriction against purchase of equipment and non-expendable and semi-expendable properties.

SEC. 12. Exemption from Taxes. Any provision of existing laws to the contrary notwithstanding, any donation, contribution, request, subsidy or financial aid which may be made to the Projects shall be exempt from taxes of any kind and shall constitute allowable deductions in full from the income of the donors and donees for income tax purposes.

The assets of the Program and its commodity requirements procured from local and foreign suppliers shall be exempt from all taxes, duties, fees, charges, imposts, licenses, and assessments, direct or indirect, imposed by the Republic of the Philippines or any of its political subdivision or authority.

SEC. 13. Auditing System. The Commission on Audit shall assign an auditor to the Program in accordance with existing laws, rules, and regulations. The auditor shall submit to the Cabinet Committee a consolidated project financial report within sixty days after the close of each calendar year.

SEC. 14. Appropriations. The amount of Five Million Pesos (P5,000,000) is hereby appropriated out of any available funds from the National Treasury not otherwise appropriated, as follows: Seven Hundred Fifty Thousand Pesos (P750,000) for the operating expenses of the Program Office and Four Million Two Hundred Fifty Thousand Pesos (P4,250,000) for the financing of the comprehensive operational plan for the Bicol River Basin. Thereafter, funds sufficient to fully carry out the objectives of the Program shall be appropriated every fiscal year in the General Appropriations Act.

SEC. 15. Separability Clause. If any provision, part or parts of this Decree is declared unconstitutional, such declaration shall not invalidate the other provisions hereof which shall continute to be operative.

SEC. 16. Repealing Clause. All laws, decrees, executive orders, administrative orders, letters of instructions, rules and regulations, or parts thereof, which are inconsistent with any provision of this Decree are hereby repealed or modified accordingly.

Executive Order No. 412, dated May 17, 1973, is hereby repealed and the properties, assets, records, unexpended funds and necessary personnel of the Program Office of the Bicol River Basin Council are hereby transferred to the Bicol River Basin Development Program Office created under this Decree.

SEC. 17. Effectivity. This Decree shall take effect immediately.

Done in the City of Manila, this 28th day of April in the year of Our Lord, nineteen hundred seventy-six.

By the President:

JUAN C. TUVERA
Presidential Assistant

CERTIFIED COPY

For: MELQUIADES T. DE LA CRUZ. CESO II
PRESIDENTIAL STAFF DIRECTOR
MALACAÑANG RECORDS OFFICE
4-29-76

PROJECT DETAILS

Economic Analysis

Economic Assessment of the GOP Bicol River Basin Development Program (BRBDP) 1/

While the project assistance proposed in this paper does not lend itself to traditional forms of cost-benefit or cost-effectiveness economic analysis, being primarily supportive in nature,2/ it is important to assess the major aspects of the development strategy represented by the BRBDP (reviewed in Part II. A., Sections 4 and 5) and to set forth the reasons for AID support.

In recent years, considerable high-powered analytical efforts have been expended on the state of the Philippine economy and on what direction its economic development program should take. References will be made below to some of the major conclusions and recommendations of those analyses to demonstrate the appropriateness of the BRBDP strategy as a response to them, but the reader is referred to the documents cited for the details and the rationale behind the recommendations.

The Mission believes the development strategy adopted and represented by the BRBDP is an innovative approach in full support of the basic goals of national development plans announced by the GOP and described in the USAID Development Assistance Program for the Philippines (USAID/DAP), revised June 1975. It is also in line with the major recommendations of economic advisors from the World Bank and the United Nations.

1/ "Comprehensive Development Plan 1975-2000", (operational draft) BRBDP, (August 1976)

2/ It should be noted that each component project packaged by BRBDP and proposed for AID or other donor funding will have its own economic analysis and justification.

Compatibility with National Development Plans and the USAID Development Assistance Program (DAP)

The BRBDP is not only compatible with national and USAID development plans, it has become a component part of them. A detailed description of the Bicol River Basin Development Program as a "pilot case of integrated planning on a basin-wide scale" is included in NEDA's Regional Development Projects, Supplement to the Four-Year Development Plan FY 1974-77,[1] along with a discussion of the reasons for its choice as "a priority area of development efforts". The BRBDP is identified as "the result of a multi-disciplinary planning exercise of an inter-agency committee composed of the Department of Agriculture and Natural Resources, the Department of Public Works, Transportation and Communications, the Provincial Government of Camarines Sur, the National Irrigation Administration, the University of the Philippines, and several other agencies".[2]

In April 1976, the President of the Philippines signed Presidential Decree No. 926, strengthening the organizational structure and legal status of the BRBDP Office and, in the process, reaffirming that:

> "... it is a policy of the Government to promote the integrated development of agriculture, natural resources, infrastructure and social services in underdeveloped regions to solidify the economic and social structure of our society;
>
> . . .
>
> "... an integrated rural development program has been adopted for the Bicol River Basin;
>
> . . .
>
> "... the success of the program requires that the management and planning of the basin area be comprehensive, decentralized, and framed within regional and national plans;
>
> . . .

1/ Ibid.,pp. 117-131

2/ Ibid., p. 117

> "... (and) there is an urgent need to enhance the organizational framework and systems capability for planning and monitoring of this integrated multi-project area development program;"

and stating that

> "... The Bicol River Basin Development Program... is hereby declared an integrated area development program of the national government..."

The USAID/DAP (p. I-3.18) reports a consensus among AID and other major donors that a development strategy concentrating on (1) mobilizing the rural sector and (2) stimulating industrial exports is appropriate for the Philippines. The BRBDP focuses on the former, but is also considering ideas for regionally-based export industries.

In a more detailed discussion of development strategy, the USAID/DAP (I-1.2-4) identifies six dominant lines of action as providing solutions to the key developmental problems of the Philippines:

- Reducing the rate of population growth
- Rural development
- Dispersal of cottage and light industry into rural areas
- Basic physical infrastructure development
- Expansion of basic industries, especially for export, and of consumer and service industries
- Increase participation in the development process through decentralized planning and implementation

The BRBDP development strategy is effectively addressing all six of these critical lines of action.

The GOP Program is properly focused on the rural and urban poor majority, a requirement for USAID projects under the U.S. Congressional Mandate to AID, since it concentrates on a depressed region in which the vast majority of all residents receive incomes below minimum requirements for food, clothing and shelter. Estimates of such requirements, or poverty thresholds, which vary according to family size, were developed by the Development Academy of the Philippines and are discussed in the Mission's DAP (pages I-2.2-3). Based on this study, the Mission adopted an average poverty threshold of ₱4000/year, below which the majority of rural families would have incomes less than their minimum requirements (in 1971 prices).

This was equated to $114 per capita, assuming an average family size of 5.4 members, as opposed to the $150 per capita standard suggested by AID/Washington. Based on the 1971 Household Income and Expenditures Survey by the National Census and Statistics Office, 79% of Bicol families reported annual income below this minimum, as opposed to 69% nationwide. Considering the fact that Bicol families average 6.1 members instead of 5.4, however, the same per capita threshold of $114 becomes ₱4,500 for the average Bicol family; and a total of 83% of families in the Bicol Region reported income below that level.

The Development Academy of the Philippines reported that nationwide 40% of the families had incomes less than ₱2000 (US $57 per capita). In the Bicol, 53% of the families were below the ₱2000 mark, and 58% were below $57 per capita.

The median and average family income levels in Bicol were only 76% and 75% of the national levels, respectively, in 1971, and these ratios had declined since the 1960's. Significantly, 77% of Bicol families received incomes below the national average in 1971, and that ratio had not improved since 1961. Nationwide, 66% were on the lower side of the national average, but at least the nationwide ratio had shown slow improvement by declining since 1961, indicating that a slow national trend toward a more equal distribution of income was apparently underway, although the skew was still pronounced. The Bicol has not yet benefited from this trend. (See Table 8, Annex C below).

The regional character of national maldistribution of income is also apparent in the estimate of how many Bicol families had income levels below the national median. This percentage rose from 57 and 58 in the 1960's to 61% in 1971, while nationwide the ratio stays at 50% by definition.

In real terms, after deflation with the appropriate price indices, average family income reported in the Bicol, which was only 83% of the national average in 1961, rose more slowly than the national average in the early 1960's and fell more rapidly between 1965 and 1971, winding up only 75% of the national average in 1971. (See Table 9, Annex C)

It is not certain how comparable the 1974 SSRU family income survey is with the National Census surveys, but the average family income in Camarines Sur Province reported by SSRU indicated a real decline of 5.9% annually between 1971 and 1974, a period when inflation in consumer prices was rising annually at an average rate of 19.3%. (See Tables 8 and 9, Annex C) There are as yet no comparable national figures more recent than 1971.

Compatibility with Recommendations of International Economic Advisors

The principal recommendations of the "Ranis Report," the report of an inter-agency team financed by the United Nations Development Programme, organized by the International Labor Office (ILO), and led by Professor Gustav Ranis, Director of the Yale University Economic Growth Center, were directed toward the mobilization of the rural sector.[1/] Their second major thrust was toward labor-intensive, decentralized, and export-oriented industry. Much of their report is concerned with unemployment and the maldistribution of wealth and income:

> "... income inequality in the Philippines is closely related to regional differences in the use of modern technology and inputs, in investments in feeder roads and irrigation works, and so on. The mission's strategy includes reducing those differences through rapid improvements in the low income regions... The Government should encourage irrigation vigorously in Bicol..."[2/]
>
> . . .
>
> "... Although the (Bicol) region has substantial water resources (seven major rivers pass through it), irrigation is, paradoxically, one of the main deficiencies; moreover, inadequate transport and communications have virtually isolated Bicol from the rest of Luzon. Irrigation and infrastructure could clearly provide a main impetus to development; land reform measures could further enhance its prospects. Much is expected from a multi-purpose project for the Bicol River basin which is supported by the United States Agency for International Development and focused on a concentrated rural development effort for the region."[3/]
>
> . . .
>
> "... In our assessment, the main difficulty in the way of generating an internally balanced rural growth pattern within and among the major islands results from organizational problems. The mini-infrastructure required (irrigation, market roads, storage, drainage, and so forth) can be planned only at the local level."[4/]

1/ International Labor Office, Sharing in Development, A Programme of Employment, Equity and Growth for the Philippines, ILO, United Nations, and National Economic and Development Authority, Philippines, Manila, 1974, p. 35
2/ Ibid., pp. 104-5
3/ Ibid., pp. 463-4
4/ Ibid., pp. 30

At the June 1976 Philippine Consultative Group Meeting held in Paris the donor group accepted the IBRD ten-year development strategy for the Philippines which emphasized 1) a rapid expansion of exports, 2) the creation of more employment opportunities, and 3) a wider distribution of development benefits, both geographically and to lower income levels. Increased agricultural production, both for domestic consumption and for export, is a big element of this strategy. The U.S. delegation stressed the importance of developing the productive potential of small farmers and developing small and medium-scale industry in rural areas.[1/]

The Mission believes the BRBDP is an effective operational response to these recommendations and that USAID's continued support for the next critical five-year period, as proposed in this Project Paper, is vital to the timely success of the Program, particularly the packaging of projects for other donor financing before 1981.

Assessment of Income and Employment Targets[2/]

BRBDP planners are under no illusions that the data base from which they are working is completely reliable; although it is, in the opinion of the Mission, remarkably rich and comprehensive compared with regional data in most developing countries. The weakest links are the regional and sub-regional estimates of gross value-added, or Gross Regional Product (GRP), upon which several of the targets are based. Attempts were made in 1967 and 1976 to derive regional accounts by sector contributions and to estimate the extent of the labor force in each sector by province. The 1976 estimates have only just been completed, however, and were not available when the BRBDP Comprehensive Development Plan 1975-2000 was prepared. No attempt has ever yet been made, to our knowledge, to estimate the expenditures on GRP by region.

Recognizing the need for such estimates the UNDP is presently working with NEDA in an attempt to upgrade the National Income Accounting system down to the regional level. The Mission and BRBDP are following this effort closely and stand ready to assist with survey work or technical assistance.

The BRBDP-Program Office will update plans and targets as it obtains more reliable information. For the present, however, available data are considered to be sufficiently close approximations to provide useful estimates of the general magnitudes and nature of the development efforts desired in Bicol, and this is the purpose for which they are being used.

1/ State-AID Cable OECD Paris 17786 dated June 76, "Philippine Consultative Group Meeting - June 15-16, 1976."

2/ See Part II, A, Section 5b, for a summary of these targets.

With respect to the key estimate of per capita GRP in the Bicol Program Area, estimated to be only 68% of national GNP per capita in 1970,[1] for example, this relationship seems to be roughly confirmed by family income and expenditure surveys conducted periodically by the National Census and Statistics Office, which placed the Bicol average family income at only 75% of the national average in 1971.[2]

The methodology by which the various interrelated targets and investment requirements have been derived is straight-forward and uncomplicated. Once the approximate rates of growth in per capita GRP required to catch-up with the projected national level are calculated, population growth estimates are cranked in to determine the total growth in production required. If it is assumed that the largest sectors of the economy (agriculture, forestry, fisheries and mining) can be pushed to an annual growth rate of no more than 5 or 6%, simple mathematical relationships dictate that the Bicol will have to rely on faster growth in the processing, manufacturing and industrial sector to achieve its goal, reaching 12-13% annually, with the rest of the economy (commerce, services, transportation, construction, utilities, etc.) growing by at least 10 or 11%. (See Table 5, Annex C)

Labor force projections were derived by multiplying total population projections by .35, the labor participation ratio observed by the SSRU survey of Camarines Sur Province in 1974. Actually, this ratio might be expected to rise if outmigration is reduced in the future due to more job opportunities in the Bicol, since those who outmigrate now tend to be young singles and young married couples with few dependents looking for jobs elsewhere. (See Table 3, Annex C)

With the expected and targeted numbers of unemployed deducted, BRBDP has allotted the available manpower to each sector roughly in proportion to its growth rate. The agricultural labor force is projected to grow at an average annual rate of only 0.5%, while the numbers employed by manufacturing and industry increase by 4.6% annually and those in the tertiary sector by 2.8%, for an average growth rate of total employment of 1.8% over the 20-year period from 1970 to 1990. (See Tables 4 and 5, Annex C)

The projections imply a healthy increase in worker productivity, with real value-added per worker rising 5-6% annually in the primary sector,

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1/ As this Project Paper was being readied for final typing in Oct. 1976, preliminary Regional Income Accounts estimates of value-added by productive sector for CY 1971-74 became available, indicating per capita Gross Domestic Product in the Bicol Region was only 49% of the national average in 1974, the very lowest among all regions, and it was declining in real terms. See Table 11a and b of Annex C(1).

2/ Discussed in Part III, A, Section 1a

5-9% in manufacturing, and 6-7% in the tertiary sector, or an average of 5 to 7% overall. (See Table 7, Annex C)

The actual proportions of workers and their respective growth rates in each sector are not as important (other analysts might assume a different scenario) as is the lesson that, no matter how the labor force is divided up, the name of the game is how to achieve, on a sustained basis, those rapid increases in productivity per worker while still maintaining a high rate of employment. This is the true challenge and ultimate goal of all developmental activity. The growth rates of worker productivity appear as simple assumptions in projecting employment targets, but in the implementation of their development program BRBDP planners are well aware that these productivity assumptions become the key objectives of the whole plan. It is the increase in value-added output per worker that creates the higher per capita income that is in turn the primary goal of this whole exercise. Much of the incremental productivity will be embodied in the physical capital and new technology brought in by the high rates of investment projected. Some of it will accrue from water control, modern inputs and high-yield technology introduced in agriculture. Some of it will result from more efficient transportation and marketing due to better transport facilities. Some will be due to better health and stamina on the part of the workers themselves and to various training programs; and some will be attributable to the inspired ability of the Bicolanos themselves to discover new and more efficient ways of doing things. From whatever source, the sustained increase in productivity per worker is crucial to the successful achievement of the BRBDP per capita income goals.

Multiplying the incremental annual production desired by the incremental capital/output ratio (ICOR) for each sector yields a very rough approximation of the total net investment required to achieve production targets. BRBDP assumed average ICOR's of 0.74 for the agricultural sector and 2.08 for the non-agricultural sector, the latter declining from 2.5 to 2.0 between 1971 and 1990, since it is believed private investment will be more productive as more of the planned (and high-cost) infrastructure investment and improvement is completed. The implicit ICOR for all sectors averaged 1.63 between 1971 and 1990, which is somewhat higher than the implicit ICOR derived from the NEDA Four-Year Development Plan FY1974-77 (projections on page 27) of 1.4, using a one-year lag and deducting, from the gross investment projections, 10.7% of projected GNP for the capital consumption allowance. A United Nations Centre for Regional Development study, "Regional Development of Bicol, Philippines," completed in 1974 cites an agricultural sector ICOR of 0.87 and a non-agricultural sector ICOR of 2.92 (Vol. II, p. 40). The BRBDP ICOR's are higher than those implied in the NEDA Plan and lower than those used by the U.N. study, but the Mission believes all of these estimates to be too low.

The most recent World Bank report on the Philippines (May 5, 1976) indicates "the incremental capital-output ratio (ICOR) is expected to

remain roughly at the current level of 3.4 ... through 1980 ..." nationwide. In view of the large amount of capital-intensive infrastructure and public utility investment required in the Bicol, to make up for years of neglect, it is anticipated the Bicol ICOR will be at least that high, since such investments typically have long lives but high ICOR's. This means that for every $100 increase in annual per capita value-added and gross income desired, $340 worth of new net investment must occur. In order to raise annual per capita income for the (1975) 1.5 million population by $100, total net investment of over $500 million would be required.

In terms of BRBDP targets, in order to increase annual per capita value-added from US$209 in 1970 to the projected national average of $612 in 1990 (1975 prices) with an ICOR of 3.4, net investment totalling around US$1,370 per capita would have to be undertaken to create the productive capital infrastructure, buildings, machinery and human skills required for the (1975) 1.5 million population. An additional $2,081 in net investment for each additional (.47 million) member of society expected by 1990 would be required to raise production another $612 for each of them. This would imply a total net investment requirement of over US$3 billion during the 20-year period instead of the projected $1.6 billion, or an average of $150 million per year ($76 per capita per year). The first 5 years have already fallen far short of that mark. The Bicol ICOR should probably be higher than that used in the Plan and the projected level of investment as required is probably understated.

The levels of net investment presently projected, rising to no more than 14.3% of GRP and implying gross investment of around 25% of Bicol GRP, are not unreasonable for a small, depressed region expecting relatively large sums of infrastructure assistance from outside the region--from the national government, from foreign donors, and from non-Bicol based private investors--as it strives to catch up with the rest of the country, rebuilding infrastructure suffering from many years of neglect and inviting outside capital to capitalize on new opportunities thereby created. Gross domestic capital formation (investment) was reported for the nation as a whole at 21% in 1973 and 24% in 1974. Preliminary figures for 1975 indicate 31.5% of GNP was spent on gross investment.

Of the total level of investment projected between 1970 and 1990 the private sector is counted on to provide 74%, public investment programs 26%, but with the public share rising to 30 and 40% of the annual requirement between 1976-1985, as the major public works programs currently being planned are implemented.

Table 1

Per Capita Value-Added Targets
Bicol River Basin Area

Year	1967 Pesos		1975 Pesos[1/]		1975 US Dollars[2/]		Percentage Rate of Growth	
	Philippines	Bicol Basin	Philippines	Bicol Basin	Philippines	Bicol Basin	Philippines	Bicol Basin
1970	878[a]	594[e]	2257	1527	309	209	-	-
1975	1015[a]	692[b]	2609	1779	357	244	2.9[a]	3.1[b]
1980	1197[t]	904[b]	3077	2324	422	318	3.4[t]	5.5[b]
1985	1442[t]	1220[b]	3707	3136	508	430	3.8[t]	6.2[b]
1990	1738[t]	1738[b]	4468	4468	612	612	3.8[t]	7.3[b]

1/Converted from constant 1967-price targets to constant 1975 prices by using the 1975 implicit GNP price deflator of 2.5705.

2/Converted from 1975 peso figures at the average 1975 exchange rate of ₱7.3 per dollar.

a actual estimates from national GNP accounts.

t Targeted per capita value-added based on average growth rate goals in the Four-Year Development Plan FY 1974-77, extended to 1990.

e Estimate for Bicol River Basin calculated by BRBD Program Office, based on NEDA national income account data for Region V (Bicol).

b BRBDP targets. (See project logical framework summary)

Table 2

Total Value-Added Target
Bicol River Basin Area

Year	Medium Estimate of Population[1/]	Annual Population Growth Rate (%)	Per Capita Value-Added Target (1975 Pesos)	Per Capita Value-Added Annual Growth Rate (%)	Total Value-Added Target (Million 1975 Pesos)	Annual Total Value-Added Growth Rate (%)
1970	1,446,170	-	1,527	-	2,208	-
1975	1,542,634	1.3	1,779	3.1	2,744	4.4
1980	1,642,956	1.3	2,324	5.5	3,818	6.8
1985	1,807,588	1.9	3,136	6.2	5,669	8.2
1990	1,971,353	1.8	4,468	7.3	8,808	9.2

1/The rate of population growth is expected to rise after 1980, despite family planning programs, due to a slower rate of net out-migration as Bicol development progresses and more people are able to find jobs within the River Basin Program area. The rate of net outmigration for the six-province Bicol Region averaged 1.1% from 1960-1970, but for Camarines Sur Province alone it was 1.8%. See NEDA Statistical Yearbook of the Philippines 1975, pp. 42, 57, and Comprehensive Development Plan for the Bicol Region 1975, NEDA Regional Development Council, Part III, p. III-54.

Table 3 Projected Population and Labor Force
Bicol River Program Area, 1975-2000
(Medium Variant)

Year	Population (Thousand)	Labor Force (Thousand)	Annual Growth Rate
1975	1,542.6	539.9	-
1980	1,643.0	575.0	1.3
1985	1,807.6	632.7	1.9
1990	1,971.4	690.0	1.8

Note: The labor participation rate of 35% used in making these labor force projections was calculated by the Social Survey Research Unit (SSRU) based on 1974 survey results in Camarines Sur Province.

Source: BRBDP Comprehensive Development Plan 1975-2000, p. 77.

Table 4 **Projected Employment Structure by Sector**

SECTOR	1970	1975	1980	1985	1990	1995	2000
			In Thousand				
Primary	300	308	317	323	331	353	362
Secondary	56	70	86	114	138	161	186
Tertiary	112	130	144	171	200	230	270
Sub-Total	467	508	547	608	669	744	818
Unemployed	41	32	29	25	21	23	25
TOTAL	508	540	576	633	690	767	843
			Percent Distribution				
Primary	59	57	55	51	48	46	43
Secondary	11	13	15	18	20	21	22
Tertiary	22	24	25	27	29	30	32
Sub-Total	92	94	95	96	97	97	97
Unemployed	8	6	5	4	3	3	3
TOTAL	100	100	100	100	100	100	100

Note: Primary sector includes Agriculture, Fishery, Forestry, Mining and Quarrying.
Secondary sector includes Manufacturing only.
Tertiary sector includes Construction, Transportation, Communication, Storage, Utilities, Commerce and Services.

Source: BKBDP Comprehensive Development Plan 1975-2000, p. 79

Table 5 Value-Added Target by Sector
Bicol River Basin Area

Year	Mining, Agriculture, Forestry and Fisheries	Manufacturing	All Other[1/]	Total
		Percentage Distribution		
1970	58	15	27	100
1975	55	17	28	100
1980	51	19	30	100
1985	46	22	32	100
1990	40	26	34	100
		In Million 1975 Pesos		
1970	1280.6	331.2	596.2	2208
1975	1509.2	466.5	768.3	2744
1980	1947.2	725.4	1145.4	3818
1985	2607.7	1247.2	1814.1	5669
1990	3523.2	2290.1	2994.7	8808
		Percent Annual Rate of Growth		
1970	-	-	-	-
1975	3.3	7.0	5.2	4.4
1980	5.2	9.3	8.3	6.8
1985	6.0	11.5	9.6	8.2
1990	6.2	12.9	10.5	9.2

1/Construction, transportation, communication, storage, utilities, commerce and services.

SOURCE: BRBDP Comprehensive Development Plan 1975-2000, p. 78. Constant 1967-price figures in source converted to 1975 prices by using implicit GNP deflator for 1975 of 2.5705.

Table 6

Bicol River Basin Development Program
Projected Net Investment Requirement

Sector	1971-5	1976-80	1981-5	1986-90	Total	Total In 1975 Dollars (₱7.3/$) (Millions)
Investment Requirement:			(In Million 1975 Pesos)			
Agriculture	198	362	522	697	1779	243
Non-Agriculture	892	1676	2784	4691	10043	1376
TOTAL	1090	2038	3306	5388	11822	1619
Total Net Investment as a % of Total Value-Added Target:	8.6%	12.0%	13.2%	14.3%	12.8%	
Incremental Capital/Output Ratios (ICOR's) Assumed:			(Ratios)			
Agriculture	0.75	0.77	0.74	0.73	0.74	
Non-Agriculture	2.51	2.31	2.06	1.95	2.08	
TOTAL	1.76	1.70	1.61	1.60	1.63	
Anticipated Sources of Investment:			(In Million 1975 Pesos)			
Public	108	612	1321	1077	3118	427
Private	982	1426	1985	4311	8704	1192
TOTAL	1090	2038	3306	5388	11822	1619
Public % of TOTAL	10%	30%	40%	20%	26%	

SOURCE: Calculated from BRBDP projections in Comprehensive Development Plan 1975-2000, p. 80, converting from constant 1967 prices with the 1975 implicit GNP deflator of 2.5705.

Table 7

Projected Productivity Per Worker, By Sector
Bicol River Basin Program Area
(1975 Prices)

	Mining, Agriculture Forestry & Fisheries		Manufacturing		All Other[1/]		Total Economy	
Year	Pesos	Annual % Change	Pesos	Annual % Change	Pesos	Annual % Change	Pesos	Annual % Change
1970	4269	-	5914	-	5323	-	4728	-
1975	4900	2.8	6664	2.4	5910	2.1	5402	2.7
1980	6143	4.6	8435	4.8	7954	6.1	6980	5.3
1985	8073	5.6	10940	5.3	10609	5.9	9324	6.0
1990	10644	5.7	16595	8.7	14974	7.1	13166	7.1

1/Construction, transportation, communication, storage, utilities, commerce and services.

SOURCE: Calculated from BRBDP Comprehensive Development Plan 1975-2000, pp. 78 and 79. Constant 1967-price figures in source converted to 1975 prices using implicit GNP deflator for 1975 of 2.5705.

Table 8

Median and Average Family Income Comparisons, Bicol Region with All-Philippine

Year	Median Income (Current Pesos) Phil.	Median Income (Current Pesos) Bicol	Bicol/Phil. Ratio	Average Income (Current Pesos) Phil.	Average Income (Current Pesos) Bicol	Bicol/Phil. Ratio	Estimated Percentage Families Below National: Median Phil.	Median Bicol	Average Phil.	Average Bicol
1956-7	924	730	.79	1471	1084	.74	50	62	70	83
1961	1105	936	.85	1804	1501	.83	50	58	71	77
1965	1648	1422	.86	2541	2024	.80	50	57	69	75
1971	2454	1875	.76	3736	2784	.75	50	61	66	50
1974					3770					

SOURCE: Calculated from family income distribution data in NEDA Statistical Yearbook of the Philippines 1975, pp. 410-25. The 1974 average family income figure is for Camarines Sur Province only, and is reported in Jeanne Francis I. Illo and Frank Lynch, S.J., "Patterns of Income Distribution and Household Spending in the Bicol River Basin," SSRU Research Report Series No. 13, Social Survey Research Unit, Ateneo de Naga, Naga City, (Jan. 1975).

Table 9

Real Growth in Median and Average Family Income, Bicol Region and All Philippine

Year	Median Family Income (Constant 1965 Pesos) Phil.	Bicol	Annual Growth Rate Phil.	Bicol	Average Family Income (Constant 1965 Pesos) Phil.	Bicol	Annual Growth Rate Phil.	Bicol
1956-7	1283	1018	-	-	2043	1511	-	-
1961	1384	1173	1.9	3.6	2261	1881	2.6	5.6
1965	1648	1422	4.5	4.9	2541	2024	3.0	1.8
1971	1532	1170	-1.2	-3.2	2332	1737	-1.5	-2.5
1974						1387		-5.9

SOURCE: Calculated from family income distribution data in NEDA Statistical Yearbook of the Philippines 1975, pp. 410-25. The 1974 SSRU figure for Camarines Sur Province (see Source note for Table 8, above) has been deflated to 1965 pesos with the Philippine Consumer Price Index. The average annual rate of decline between 1971 and 74 is based on 96% of the all-Bicol 1971 average family income, the ratio of the Camarines Sur Provincial average to the Bicol Regional average reported in 1965. (Consumer prices rose by 70% between 1971 and 1974, an average of 19.3% annually, which helps to explain this sharp decline in real income.)

Table 10 Comprehensive Development Plan
GOP Bicol River Basin Development Program
Summary of Estimated Expenditures through 1990[1]
$000 (₱000)[2]

	Programs	1976 to 1980	1981 to 1985	1986 to 1990	Total
I	Physical Infrastructure	$ 81,485 ₱(611,141)	105,121 (788,406)	86,536 (649,020)	273,142 (2,048,567
II	Agricultural Development	1,524 (11,427)	1,222 (9,162)	189 (1,417)	2,935 (22,006)
III	Rural Based Manufacturing (Promotion, etc.)	9,106 (68,298)	5,055 (37,915)	55 (415)	14,216 (106,628)
IV	Social Development	2,349 (17,616)	286 (2,145)	286 (2,145)	2,921 (21,906)
V	Administrative Overhead	18,893 (141,696)	22,337 (167,526)	17,413 (130,599)	58,643 (439,821)
	Total	$113,357 ₱(850,178)	134,021 (1,005,154)	104,479 (783,596)	351,857 (2,638,928)

1/Source: BRBDP Comprehensive Development Plan 1975-2000; 1975 prices. Includes BRBDP Component Projects and other GOP Programs in Bicol identified to date (to be revised by late 1977). Note figures are expenditure whereas the Project Paper estimates projected obligations by earliest dates which have 3-5 year draw-down.

2/U.S. $1.00 = (₱7.50)

Table 11a

PER CAPITA GROSS DOMESTIC PRODUCT BY REGION, CY 1971-1974
(Current Prices)

Region	In Pesos				Index: PHILIPPINES 100			
	1971	1972	1973	1974	1971	1972	1973	1974
PHILIPPINES	1324	1442	1797	2418	100	100	100	100
Ilocos	785	877	1210	1431	59	61	67	59
Cagayan Valley	757	938	1105	1325	57	65	61	55
Central Luzon	1096	1134	1401	1780	83	79	78	74
Southern Tagalog	2394	2521	3208	4421	181	175	179	183
Metro Manila	3442	3704	4645	6600	260	257	258	273
Rest of S. Tagalog	1370	1378	1840	2384	103	96	102	99
Bicol	650	817	905	1187	49	57	50	49
Western Visayas	1530	1604	2027	2677	116	111	113	111
Central Visayas	985	1148	1429	2016	74	80	80	83
Eastern Visayas	719	743	927	1304	54	52	52	54
Western Mindanao	806	901	941	1472	61	62	52	61
Northern Mindanao	1098	1267	1388	1775	83	88	77	73
Southern Mindanao	1490	1649	2100	2755	113	114	117	114
Central Mindanao	860	964	1108	1426	65	67	62	59

Source: "The Regional Income Accounts of the Philippines, CY 1971-1974", National Economic and Development Authority (NEDA), Philippines, mimeographed, undated (available Oct. 1976).

Table 11b

PER CAPITA GROSS DOMESTIC PRODUCT BY REGION, CY 1971-1974
(1972 Prices)

Region	In Pesos				Annual Growth (In Percent)		
	1971	1972	1973	1974	1971-1972	1972-1973	1973-1974
PHILIPPINES	1414	1442	1525	1556	2.0	5.8	2.0
Ilocos	880	877	956	929	-0.3	9.0	-2.8
Cagayan Valley	813	938	914	910	15.4	-2.6	-0.4
Central Luzon	1208	1134	1128	1173	-6.1	-0.5	4.0
Southern Tagalog	2598	2521	2734	2902	-3.0	8.4	6.1
Metro Manila	3760	3704	4129	4510	-1.5	11.5	9.2
Rest of S. Tagalog	1462	1378	1406	1398	-5.8	2.0	-0.6
Bicol	674	817	801	792	21.2	-2.0	-1.1
Western Visayas	1628	1604	1709	1685	-1.5	6.6	-1.4
Central Visayas	1013	1148	1229	1236	13.3	7.1	0.6
Eastern Visayas	735	743	829	816	1.1	11.6	-1.6
Western Mindanao	822	901	863	918	9.6	-4.2	6.4
Northern Mindanao	1132	1267	1264	1132	11.9	-0.2	-10.4
Southern Mindanao	1541	1649	1789	1683	7.0	8.5	-5.9
Central Mindanao	881	964	881	833	9.4	-8.6	5.4

Source: "The Regional Income Accounts of the Philippines, CY 1971-1974", National Economic and Development Authority (NEDA), Philippines, mimeographed, undated (available Oct. 1976).

Social Soundness Analysis

Social-Cultural Feasibility[1/]

The population residing in the Bicol River Basin is culturally homogeneous. They speak "Bikol", a particular dialect different than Tagalog yet related. The kinship system centers on the nuclear family, in a manner similar to the United States but with strong kin ties to the mother's and father's families of origin. The kinship group is not based on allegiance but is a primary group relationship where one can find needed support.

The nuclear family is the basic household unit. Social allies, family and others, form the next most significant group. Here individuals are related by ties of reciprocal responsibilities and obligations. The social alliance system of peers, family, patrons, and clients, provides the means through which and with which the individual is able to carry out the routines of everyday life. Depending upon circumstance, position, residence, etc., the social alliance network might change, nonetheless its form remains in place, helping to integrate the individual into the existing fabric of Bicol social organization.

The population of the Bicol River Basin can also be characterized as having a two class system, not unrelated to the social alliance system. There appears to be two kinds of people, the affluent or near affluent (about 20% of the population) and the poor (80%). The more wealthy with their command of resources, are in a position to help and do help the poor to satisfy their basic needs. In return, the affluent gain the mass support and manual help they desire and require. The two social classes have a symbiotic relationship pattern whereby both benefit.

It is important to note that both the social alliance and social class systems are based on pragmatic considerations. They are part of the accepted way and the cultural traditions of the area, yet the actual, substantive relationships change as circumstances and needs change.

"Big and little Bicolanos stay together because they need one another's help and because they have judged, consciously or unconsciously, that they can afford the going price. Let the need decline or the price exceed the current limit set on either side, and they will drift, more likely fly apart."[2/]

1/ The description of the culture is from: F. Lynch, S.J. et. al., "Let My People Lead; Rationale and Outline of a People-centered Assistance Program for the Bicol River Basin", Institute of Philippine Culture, Manila; August 1976.

SSRU footnotes refer to a numbered series of 16 reports with complete titles referenced in Annex C (4), BRBDP Bibliography.

2/ Ibid., p. 17.

The social allegiance and social class patterns are the means by which the Bicolanos actualize two central values: economic security and social acceptance. By performing their traditional roles, both the poor and the rich derive what they require, and gain increased social esteem and acceptance by doing what is socially expected. Yet as conditions change and old patterns of behavior do not lend themselves to security and/or acceptance, new patterns emerge. The nature of the changes are difficult to predict. But it appears that efforts to increase the productive capacities of the population through increasingly complex economic and social organizational patterns will not per se meet with resistance by the people.

GOP development objectives for the Bicol River Basin coincide with the concerns of the residents of the area. A sample of 1,021 basin farmers were asked in 1974[1/] what was the most significant problem with which they had to cope and the following list was mentioned in decreasing order of frequency: peace and order, irrigation and flood control, roads, employment, drinking water, community organizations, transportation facilities, electricity,[2/] dirty and unsanitary surroundings, and high prices. Of the ten problems reported, eight are directly addressed by either BRBDP Integrated Area Development Projects, BRBDP integrated sector projects, or GOP line agency programs specifically targeted for the Bicol. As well, the objectives of the BRBDP tend to match specific desires of the population that are related to the two central values of economic security and social acceptance. Responding to questions concerning aspects of their lives which are related to an improved quality of life, a sample of 3,240 household heads indicated that the following were important: to have a respectable job and an adequate income; to have a sturdy home, adequately furnished and with sufficient food and drink; to enjoy favorable esteem and status; and to participate in small group activities and community affairs.[3/]

In terms of the overall goals of the program, the problems that concern the population and their desires for change are directly addressed. In addition, there is empirical evidence that the development strategy adopted to achieve the goals is also socially feasible.

There are several major components in the initial infrastructure efforts. First, a 450 kilometer "Bicol Secondary and Feeder Roads Project" is funded and is being implemented. Social soundness analysis indicated that the project is feasible, would produce a significant spread effect, and provide the rural poor with a major share of the benefits.[4/]

Second, the Provincial Development Assistance Program (PDAP) in Albay and Camarines Sur is operational, and is beginning to rehabilitate and

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1/ Ibid., p. 33.

2/ Would be higher by 1976 with the rapidly expanding electric cooperatives raising expectations.

3/ Ibid., p. 24.

4/ Project Paper, USAID Philippines: Bicol Secondary and Feeder Roads Project Loan, November 1975, pp. 90-108.

maintain provincial roads, and is increasing general service capacities of the two provinces. This AID assisted project has proved to be both socially sound and effective in improving the responsiveness of provincial government to the people's needs.

Third, each of the planned BRBDP Integrated Area Development Projects (IADs) provides for irrigation, flood control, additional road access, plus agricultural support and institutional development components.[1/] The infrastructure components associated with the IADs are based on feasibility studies of the sub-areas of the Basin themselves as well as the relationship of the sub-area to the total basin. These infrastructure activities with agricultural inputs, land reform, etc., are socially feasible in that they have been planned to articulate with the existing social context, the overall program strategy, and involve putting in place some of the instrumentalities to facilitate social change.

Fourth, the BRBDP Coordinating Council and the Program Office have been working for the past three years to involve all line agencies and development organizations and coordinate their activities. Some evidence that this is a socially feasible procedure is evident by: (1) the authority vested in the BRBDP under Presidential Decree 926, (2) the fact that the population through its traditional pattern of social alliances to satisfy their requirements, has a history of forming small local groups such as irrigation associations and compact farm organizations, and articulating these organizations with governmental activities.[2/]

Fifth, there is an effort to orchestrate, primarily through changes in transportation and communication facilities, the mutual development of the region's urban and rural sector. This is an important component of development planning and its social feasibility is clear. A study of the travel patterns of the population in Camarines Sur demonstrates that there is an urban hierarchy of municipal centers, providing urban services, primarily economic, to the rural population. Naga City is the dominant provincial center, Iriga and Pili the major sub-provincial centers. A province wide sample of respondents indicated that 55% of all household heads visited Naga City at least four times in a 12 month period, and that the primary reason for the travel was economic (job related, marketing activities, financial or commercial activities, etc.).[3/] An inventory of 33 of the 37 municipalities of Camarines Sur demonstrates that the larger cities, Naga and Iriga, for example, can be characterized as urban centers capable of providing the numerous services necessary to sustain agricultural production and associated agribusiness activity.[4/]

1/ See, for example, Project Paper, USAID Philippines: Libmanan/Cabusao Integrated Area Development Project, May 1975.

2/ SSRU Report No. 2, see BRBDP Bibliography Annex C (4).

3/ SSRU Report No. 9.

4/ SSRU Report No. 15.

to sustain and improve future urban-rural integration in the Basin, an innovative Bicol Urban Functions in Rural Development Project (AID/TAB 1977-1978) is being implemented to provide direction to the overall planning process.

The social feasibility of the increased production and associated agri-business activity can be demonstrated by the market orientation of the population, somewhat tempered by the high value placed on security, especially by farmers. A sample of 600 rice farmers in Camarines Sur indicates that the largest majority, 73%, would like to own land.1/ The same respondents almost universally know about modern farm practices, what they require, and report actually using them.

A small sample of 90 poor farmers in three barrios of Camarines Sur indicates that they are willing to change their occupation in direct proportion to the similarity between their old and new employment. That is, of those who were fishermen, 68% indicated willingness to become fishpen operators. For those who listed fishing as a secondary occupation, 65% were willing and for those who are nipa farmers, only 39% were willing. The overriding concern of these small farmers seemed to be the trade-off involved in the relative security of the old occupation and the lessened security but added income of the new occupation.2/

Another sample of 475 poor farmers indicates that two-thirds to three-fourths use fertilizer, insecticides, and herbicides to increase rice production, 90% indicate that with sufficient water they would change to a more intensive cropping pattern, and 89% said they were willing to pay higher irrigation fees for a more adequate water supply.3/ For these farmers, resistance to change and adopting compact farming practices was related to security, with the poorest farmers being the most resistant.

As noted above, the population of Camarines Sur is quite mobile; 83% of a sample of 1,029 respondents had visited a place outside of their own municipality during a 12 month period, and 60% of all travel was for economic reasons (marketing 32%, business 20%, work related 9%).4/ Analysis of the employment patterns of the Camarines Sur labor force shows that 21% are underemployed and 7.7% are unemployed. (The underemployed are those working people who would like additional work because of the need for added income.) Further, the unemployment rate for the municipal centers (11%) is almost twice as high as the rate for the barangay population (6%). The largest number of unemployed are young single males, with some elementary or high school education, who reside

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1/ SSRU Report No. 1.

2/ SSRU Report No. 4.

3/ SSRU Report No. 6.

4/ SSRU Report No. 9.

in the urban areas.1/ The province of Camarines Sur has a high rate of outmigration (approximately 1.8%) and given that migrants tend to be young, relatively well-educated males, it is safe to assume that it is the young unemployed males residing in the urban segments of the province who are moving out of the area in an attempt to secure employment or further education. In absolute numbers, surveys show many young women also leave the Bicol.

Using two different measures of happiness (satisfaction with life), an objective cultural measure and a subjective social-psychological measure, it was found that socio-economic status was positively related to happiness, the more developed municipal population was happier than the barrio population, and income levels were positively related to happiness. Multi-variate analysis (multiple regression) showed that job level and income level taken together are the strongest predictors of life satisfaction accounting for 26.5% of the variations in the population.2/

The following conclusions have been drawn concerning the social cultural feasibility of the Bicol River Basin Development Program:

(1) Culturally, the population of the area displays no patterns which are antithetical to the development objectives or strategy. The social class and alliance system, while prescribing a traditional role network between rich and poor, and among peers, is also viewed as a means to achieving a comfortable life. Thus, the population appears to be culturally adaptable to change. The only exception to this conclusion would be the dominant value of security, especially among the poor. Changes that are planned must be implemented in such a manner that the population groups impacted have a sense of continuity between the old and the new assurances that their new life styles will at least not be worse than their old ones.

(2) The urban and rural residents have a market orientation and accept the idea that modern practices and increased production and income lead to a higher quality of life. Quality of life for the population tends first to revolve around the concept of job and income, second around the concept of adequate housing and food and third around the concept of formal and informal group affiliations.

(3) Both from the perspective of the people and the private sector investment community, the nature of the planned changes represent nothing new when each component part is analyzed separately. What is different is the large number of projects and programs that are to be instituted simultaneously. Taken one at a time, there is a strong case to be made

1/ SSRU Report No. 10; also Jeanne Francis I. Illo, The Unemployment Situation in the Bicol River Basin, M.A. Thesis, School of Economics, University of the Philippines, Diliman, Q.C.; December 1975.

2/ Robert C. Salazar and Frank Lynch, S.J., "Happiness Starts with a Good Job and a Good Home-- So Say the People of the Bicol River Basin", SSRU Research Report Series, No. 12, December 1974.

that each would have a positive impact if other related problems were neutralized. When the major problems are all considered as a package to be solved over the same time frame, the impact of any one planned change and the added (complementary) impact due to other planned changes are difficult to predict. Clearly, the total net result should be positive.

Rigorous and sophisticated research and evaluation studies have been, are currently, and will continue to be a strong component of the total Bicol Program (See Part IV C). The studies and analysis will enable the BRBDP-Program Office and USAID to understand and evaluate the impact of each particular integrated project, its articulation with various combinations of GOP line agency or national programs, the spread effects and potential future spread effects, and the impact on the total Bicol Program Area. The analysis should indicate the relative advantages and disadvantages of an integrated area development program and overall social-cultural feasibility.

Spread Effects

Each of the Integrated Area Development (IAD) projects is principally designed to impact on a high potential area of the Bicol Basin. They are site specific and in one sense can be viewed as demonstration projects that will eventually cover the Program Area. Concurrent with the IAD projects, are projects and programs of wider scope; the first secondary and feeder road project (450 kms), the Provincial Development Assistance Project (PDAP), rural electrification area coverage, and a planned integrated health project are examples. These latter efforts are designed to provide infrastructure and service networks so that the economic effects of the IAD projects can spread into adjoining areas.

The specific integrated projects have been planned so that, over time, as areas within the Basin are impacted, the experience of prior efforts can be built upon. Previous analysis indicates that the Bicol River Basin population is quite homogeneous in terms of its socio-cultural make-up. Further, travel and interaction patterns indicate that the people of the area use the total Bicol region. Thus, each subsequent project planned and implemented should prove to be more economical and demonstrate higher impact, partly because previous projects will have already brought about some changes and/or set in place the conditions necessary for anticipated social changes to occur.

The leadership structure in the Bicol is not that different from one area to the next. There is an effort to upgrade the province level capability to provide services on a sustained basis through updating local government adminstration and tax collection, etc., (the PDAP project). Local organizations, including Area Development Councils, irrigation associations and farmer cooperatives, have been formed or are in the process of being formed. The GOP line agency programs are organized on a regional and province basis and are increasingly reaching the level of rural municipalities, as well. The total governmental structure will be considered and programs issuing therefrom coordinated by the provincial government and the BRBDP. Thus, each segment of the Bicol Region will consist of essentially the same structural governmental organization. As experience with the various integrated projects is accumulated, the

various units of government and local level organizational relationships will be adjusted to accommodate planned changes.

Private sector involvement in the municipal centers will reflect the urban hierarchy that is emerging in the region. As the rural-urban linkages become more pronounced across sub-areas, the agribusiness network should serve as a conduit to help diffuse innovations and positive production and marketing practices throughout the region.

Improvements in transportation and communication infrastructure will better integrate sub-areas of the region and break down the current pattern of regional isolation from the rest of Philippine society. Increased travel and communication will further facilitate the diffusion of successfully coordinated government efforts.

The coordination of GOP line agency programs is an important consideration, not only in terms of spread within the Bicol, but in other regions as well. Several line agency programs, agriculture extension and family planning for example, are targeted throughout the total Program Area and its mix with IADs in terms of acceptance by and spread among segments of the population can be assessed. Second, this experience can be important in establishing policy and planning program efforts beyond the BRBDP Program Area.

While the major thrust of the Bicol supporting grant project is to expedite the packaging and to begin implementation of specific projects and to induce private sector investments, the institutional component will be strengthened in the process. If the BRBDP development strategy is successful, outside donor support will not be necessary after 1990. The economic and social organization of the region will by then be capable of sustaining and hopefully increasing the pace of development in the region. If a high degree of institutional development does occur, by definition the process of diffusion to other areas of the region will be fact and most probably its impact felt on institutions far beyond the Bicol.

The Bicol program is one of four nationally designated integrated rural development programs under the Cabinet Coordinating Committee for Integrated Rural Development. Because the BRBDP was the first such program, it is serving as a guide in the planning and design of the others. It is expected that the combined experiences of the integrated rural development programs will be assimilated into (NEDA) regional development councils, and temporary organizations such as the BRBDP will be phased out as the major infrastructure projects are completed. This will spread the institutional innovations directly to all regions in the Philippines.

Finally, if the Integrated Area Development approach is successful in the Philippines and if the conditions associated with its success are carefully analyzed, it can be modified for other LDCs. One of the many strengths of the current program is the development of a strong data base so that impacts can be measured and properly attributed to various components of the comprehensive program.

Social Consequences and Benefit Incidence

This section discusses the anticipated benefits for the Bicol River Basin population in terms of: income, employment, nutrition, health, and access to electrification (the latter a national program), all within the context of integrated development.

Income - About 80% of the Bicol Program Area population are considered poor. SSRU did the following analysis using (1) estimates of poverty thresholds derived from the Development Academy of the Philippines Social Indicator Project which is based on Manila and Philippine society and (2) Wage Commission cost of living deflators for the Bicol:[1/]

Table 12
Annex C (2)

Proportion of Households with Income or Expenditures Lower Than Food or Total Poverty Threshold, by Residence
Bicol River Basin - 1974[a/]

	Poblacion %[b/]	Barrio %[c/]
Households with income lower than		
Food Threshold	68.0	80.9
Total Poverty Threshold	82.4	91.0
Households with total expenditures lower than		
Food Threshold	48.4	62.5
Total Poverty Threshold	73.5	86.1
Households with food expenditures lower than		
Food Threshold	78.6	84.3

a/ SSRU Research Report No. 13.

b/ Central towns of rural municipalities.

c/ Rural villages.

It is clear that the region is composed primarily of the poor and that this is especially true of the rural areas. It is a specific goal of the comprehensive Bicol Program that by 1990 the average family income will

1/ SSRU Research Report No. 13.

match the national level and 25% or more of the income will go to the poor; the latter to compensate for the fact that currently 43% of the income in the River Basin goes to the richest 10% of the households in the area.

Employment - At present, it is estimated that 7.7% of the Camarines Sur labor force is unemployed, 33.1% partly employed and does not want more work, 38.7% fully employed and does not want more work, and 20.6% is already partly or fully employed but does want more work (the underemployed).[1/] It is the specific goal of the total program to reduce unemployment to 3%. Although there are no exact estimates, the numbers of unemployed and underemployed are to be significantly reduced through increased agricultural productivity and increased off-farm and non-farm employment opportunities in agribusiness and rural manufacturing activities. For example, current projections call for the secondary and tertiary sectors of the economy to employ 49% of the labor force compared to the 37% now employed by these sectors, by 1990.[2/]

Nutrition - Analyses prepared by SSRU estimated the diet deficiency of the Camarines Sur households based on a sample of 1,020:

Diet Deficiency	Household
No Deficiency	2.6%
Protein only	5.6%
Vegetables only	26.7%
Protein & vegetables	65.0%

Only 2.6% of the households have no diet deficiency while two-thirds have a combination of protein and vegetable deficiency in their diet.[3/] The Bicol appears to be very deficient in term of diet. An estimated 45% of the households of landless sugarcane workers in Negros have protein deficient diets, the comparable figure for the Bicol is 72% overall, and 77% for the poor.[4/] The objective of making the Bicol region self-sufficient in rice, coupled with significant increases in upland crops and livestock, and fish production certainly will help alleviate some of the nutrition problems. This is especially true for protein deficiency which is thought to be a direct result of poverty.

Health - Currently, physicians are in acute short supply in the Bicol region. With the exception of Naga City, patients loads for doctors are 4 to 12 times heavier than they should be, given the standard of 1 doctor per 250 to 300 households.[5/] The implementation of the proposed Integrated Health Project[6/] in the region, if successful, will result in an

1/ SSRU Research Report No. 10.

2/ BRBDP, Comprehensive Plan, 1975-2000, Table 4.6, p. 79.

3/ SSRU Research Report Series No. 11.

4/ SSRU Research Report Series No. 11.

5/ SSRU Research Report Series No. 11.

6/ PRP under preparation, September 1976.

improved health delivery system which extends down to the barrio or barangay level where primary medical care can be administered by trained para-professionals and a referral system used to transport people with serious illness or accident victims to emergency and provincial hospitals, for secondary and tertiary care. This kind of health delivery system appears to be appropriate in that a sample of 1,078 household heads indicated that 60% preferred using a doctor when confronted with medical problems, and 86% responded that they actually called for a doctor when serious illness occurred.[1/] The health system will be of particular help to the rural poor in that it is this group that is most removed from access to a doctor or alternative medical services.

The BRBDP Comprehensive Development Plan includes provision for rehabilitating the existing municipal water systems through local and national agencies. A Barangay Water Systems Program to bring safe drinking water to most of the rural population is planned through local government programs.

Electrification - The national rural electrification program underway in the Bicol should significantly improve the quality of life of the rural poor. The evaluation of the operation of the Misamis Oriental Rural Electric Service Cooperative (MORESCO) is illuminating in this regard. In a predominantly rural area of the Philippines not that unlike the Bicol region, it was found that:

- 62% of users of electricity are below subsistence level of income,
- electrification has encouraged the building of domestic water systems and brought about a decline in gastro-intestinal disease,
- electric illumination of the households was cheaper, safer and much more convenient than kerosene lamps (the traditional mode),
- the poor were able to buy consumer goods such as irons and small refrigerators,
- other household appliances were acquired contributing to a rise in the quality of life, e.g., electric radios (cheaper to operate than portable radios), motors for sewing machines, etc.,
- agribusiness and rural manufacturing increased, and
- employment and income increased because of increased job opportunities.

In short, the evaluation concludes that MORESCO has improved the quality of life of the rural poor.[2/] This suggests a similar impact is possible in the Bicol so electrification will be addressed in surveys and evaluations.

Integrated Development

The fact that the MORESCO Electric Cooperative had the impact it did gains in importance when it is realized that a similar program is already underway for most of the rural BRBDP Program Area in Albay and Camarines Sur

1/ SSRU Research Report Series No. 11.

2/ Research Institute of Mindanao Culture, An Evaluation Study of Misamis Oriental Rural Electric Service Cooperative, (May 1976).

not now served by electricity. At the same time, other programs to improve production, upgrade and rehabilitate infrastructure, create incentives for agribusiness and rural manufacturing, and provide for the delivery of social services are being planned and implemented. If only some of the rise in quality of life of the rural poor that occurred in MORESCO is realized, the additional impact of the other operating projects and programs should combine to produce a significantly improved quality of life among the rural poor.

Assurances that benefits will accrue to the rural poor are written into some of the AID loan agreements for the infrastructure portions of the IAD's and GOP line agency programs. For example, in the "Bicol Secondary and Feeder Roads" and the "Libmanan/Cabusao IAD" projects, conditions are included which call for speedy issuance of Land Transfer Certificates and lease-hold agreements to assure that the poor become land owners and actually realize gains that devolve from the development program.1/ Another safeguard involves decentralizing authority with the creation of area development councils, irrigation associations, and barangay organizations. Barangay committees are used to estimate production figures that set the value of the land for payment to owners, for example. The rural poor are thus not only targeted as recipients of many of the benefits of the Basin development effort, perhaps as important if not more important, they are made part of the planning process and given some measure of control over the decision making that affects their lives.

The Role of Women in Development

Not enough is known about sex role distinctions and their related differential consequences to properly analyze the benefits that will accrue to women as compared to men. Certainly, the expanded employment opportunities should work to the benefit of women, especially in the urban sector. Here, single females enter the work force in significant numbers and tend to gravitate to lower level white-collar occupations.2/ The expansion of employment in the urban sector should benefit women since it will both make the traditional pattern of employment more secure and perhaps offer opportunities for upward occupational mobility. The majority of urban women leave the work force after marriage or with the birth of their first child. With the anticipated changes in employment opportunities women would have more alternatives open to them, part-time employment for example.

For rural women, benefits would accrue because of job opportunities in urban and rural centers with improved accessibility to those jobs. When these rural women are involved in their role as homemaker, their lives would be more comfortable given the greater number of services and the increases in rural household income. As well, as with urban women, they would have a greater number of alternatives open to them.

1/ AID Loan 492-T-041, Section VIII and AID Loan 492-T-037, Article V, Section 5.01 on file at AID/W.

2/ Jeanne Frances I. Illo, "The Women in the Bicol River Basin: Selected Preliminary Findings", IPC Report submitted to USAID, August 1976. A field survey is proposed with a final report in December 1976.

Generally, as an area modernizes and the population adapts to the greater social complexities, there is a tendency for a levelling process, to some degree, to occur. This has implications for the gap between the poor and the wealthy as well as male and female role and status differentials. Undoubtedly, in the process of a general improvement in the quality of life of the Bicol population, women will benefit and probably their situation relative to males will be one of greater equality. In what ways and to what degree remains problematic for the present. In the process of evaluating Bicol development, the status of women and the changes that occur will be carefully documented. A three phase study using in-depth interviews, participant observation, and survey techniques is planned.[1/]

Rural Displacement, Migration and Urbanization

The land reform program, coupled with labor intensive agricultural practices and greater service accessibility should act to keep more of the rural population in place, provide them with the benefits of development, and keep them from moving to urban slums. Agribusiness and rural manufacturing should also slow the outmigration of management and technical people and may bring some Bicolanos back. The integrated area strategy is oriented toward maintaining a balance between urban and rural growth. Thus, while there is the expectation that the urban sector will increase in size and contribute a larger share of the economic productivity of the total Basin, the increases are planned to occur as an adaptation and response to the development of the rural sector.

The net outmigration rate for the Bicol Region has averaged about 1.1% over the past 10 to 15 years.[2/] This has resulted in a relatively low population growth rate in the area, for at least two reasons. The people leaving reduce the growth rate and, since they are primarily young and in the child bearing years their issue also reduce the growth rate. Negative consequences of the outmigration are that it is the better educated who tend to leave and thus their potential contribution to the region is lost. Also, given the fact that the migrants tend to be young, they reduce the proportion of population classified as productive and thereby increase the level of dependency in the population. It is expected that outmigration will slow as employment opportunities expand in the Basin. This probably will result in an increase in the population growth rate but some of this should be offset by the impact of the planned integrated health and family planning activities. The additional population should be able to be absorbed by the expanding economy. (See Table 2, Annex C)

1/ Ibid.

2/ See Table 2, Annex C. Camarines Sur is 1.8%.

List of Key On-going and Completed BRBDP/Interagency Projects and Activities 1974-76

Project or Activity	Nature of Activity	Status and/or Completion Date
Water and Land Resources Development		
1. Flood Control Simulation Study (Asian Institute of Technology, AIT/AID Contract)	Hydraulic simulation model of River Basin	Completed January 1975
2. Saline Intrusion Study (AIT) (Analysis)	Determine saline intrusion impact of various proposed flood control measures	Completed July 1975
3. Surface Water Supply (AIT) (Analysis)	Determine quality and quantity of surface water for irrigation, etc.	Completed October 1975
4. Water Balance Study (AIT) (Analysis)	Ground Water availability and recharge rate	Completed March 1976
5. Hydromet Data Collection including salinity	Water resources data generation	Continuous
6. Agrometeorological Data Collection	Meteorological station at Camarines Sur Agricultural College	Station completed June 1975 Collection-continuous
7. Topographic Mapping (166,000 ha.)	Contour maps of flood plains and irrigable areas	Field survey completed. Map compilation underway.
8. Land Classification (121,000 ha.)	Irrigability suitability	Field work completed. Reports under preparation.
9. Comprehensive Water Resource Development (AID feasibility study loan) (TAMS-TAE engineering contract)	Basinwide Water Resource Development plan with discrete project proposals	Completed August 1976. Five volume report received October 1976

10. On-Farm Water Management (7,000 ha. in 4 systems)	System Rehabilitation improved water management practices; form irrig. assoc.	Training and engineering design completed. Est. completion const.- June 1978
11. Libmanan/Cabusao (IAD I), Integrated Area Development Project (4,000 ha.)	Integrated irrigation, flood control and agricultural support systems	BRBDP feasibility study. AID loan $3.5 million FY75. Irrigation system construction underway. Completion of const. Dec. 1978 (Total cost $7.0 million)
12. Bula IAD II, Integrated Area Development Project (2,500 ha.)	Small farmer holdings. Irrigation, land consolidation, drainage, groundwater development, access roads and resettlement	Phase I pilot subproject (300 ha.) under const. PRP approved. Feasibility study and preparation USAID Loan PP targetted for April 1977
13. Pilot Rural Water Treatment Systems (3 barrios)	Intermediate Technology-Treated water systems	Completed-Water quality testing on-going
14. Schistosomiasis Survey	Baseline study on presence of snails and disease in Basin	Completed May 1976 (Results, no snails or disease present)
15. Irrigation/Agricultural planning (U. of Hawaii/ BRBDP)	Development of modular plans (irrigation and drainage design, cropping patterns, labor, socio-economic data)	Site 1 (Barit) to be completed Jan. 1977; Site 2 (Naga-Calabanga) August 1977. BRBDP requests a 16 month follow-on
16. Feasibility Studies a. Rinconada IAD b. Naga-Calabanga IAD c. Baliwag-San Vicente IAD	Investment grade studies; BRBDP/interagency and contractors	BRBDP data generation underway. AID PRP under preparation for Rinconada. BRBDP PID's being submitted to NEDA for Asian Dev. Bank and/or World Bank funding for b. & c.

Agricultural & Human Resource Development		
17. Pilot Livestock activity (Interagency)	Swine and cattle production and marketing	Continuous; Phase I completed; Phase II, 205 cooperating
18. Crop Demonstrations (Interagency)	Field crops, vegetable and fruit adaptability trials	Phase I-completed Sept.1976 (21 cropping models)
19. Farm Mechanization Demonstration and applied research (Interagency)	Rice production & post harvest small machinery demonstration; applied research of power tillers	On-going, 1st cycle completed. 2nd cycle to begin March 1977
20. Post Harvest Rice Technology (IRRI-UPLB)	Applied research of rice post harvest and milling.	Sept. 1976 to Aug. 1977. Sites selected.
21. Compact Farm Development (Target: 2,000 compact farm units with 20,000 farm families)	Training in farmers' organizations and management systems	1st phase-Completed: 148 technicians, 340 farmer leaders and 3,810 farmers trained. Compact farm units monitored by ADT's.
22. Fish Production, Interagency (Selected Sites)	Pilot demonstration and data generation in aquaculture	On-going Estimated completion-December 1976
23. Camarines Sur Agricultural College Feasibility Study	Improved Ag/vocational education and research for Bicol River Basin	Completed-January 1976. Under review by GOP.
24. Agribusiness Pre- and Feasibility Studies and Appraisals	Agribusiness and rural manufacturing development	AID/W-PPC team (July 1976) identified 6 high potential investment projects for proposed feasibility loan or grant assistance FY 77.
25. Area Development Teams (10 Teams to cover 10 geophysical sub-basin IAD's)	Interagency planning/ implementation effort	Continuous-Under reorganization and expansion from 6 to 10
26. Bicol Soil/Water/Training and Research Complex		Dormitory completed. Admin. and research buildings to begin Dec.1976. Interagency training continuous.

Transportation Development			
27.	Bicol River Basin Secondary and Feeder Roads Project	450 kms. of rural roads (14 systems)	Feasibility study completed; FY 1976 (AID loan ($10 million); Organizational A&E activities underway; completion FY 1980 (Total est. cost $24 million)
28.	Intermodal Transport Study	Roads, railroad, ports & airports. Basic transport data and project identification	On-going Estimated completion-November 1976
29.	Feasibility Studies; Trunk Roads and Rural Roads II	Secondary Trunklines 330 kms. Secondary Feeder roads 1,070 kms.	Prefeasibility studies November 1976-Dec. 1977
Management/Evaluation			
30.	BRBDP/USAID Biennial Project Evaluation	Evaluate supporting GOP/AID grant project as part of overall GOP Bicol Program	#1, Completed July 1975 #2, Mid 1977
31.	Socio-economic Surveys and Analysis (IPC/SSRU, in-house, and other analysis groups	Time-phased surveys; Analysis for planning process and evaluation of impact on beneficiaries	On-going Revised multi-purpose instrument being prepared for 1977 survey
32.	Systems Management (GOP Contract with Economic Development Foundation)	Develop overall system for BRBDP monitoring and management operations	Completed - December 1975. System being implemented
Urban/Rural Planning			
33.	Urban Functions in Rural Development Project (AID/W-TAB USAID/P and BRBDP)	Develop planning process and plan using critical linkages and spatial integration for urban dev. to support rural dev.	ProAg, Grant Agreement, & UPLB/CPDS institutional agreement signed. Study and training Nov. 77-Feb. 78

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Vol. III Preliminary Assessment of the Coastal Engineering Studies Required for the Prefeasibility Studies of the Bicol River Basin Study, Mike L. Scheffler (September 1975); 35 pp.

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Volume No. 2	Report
Volume No. 3	Appendices A to E
Volume No. 4	Appendices F to Q
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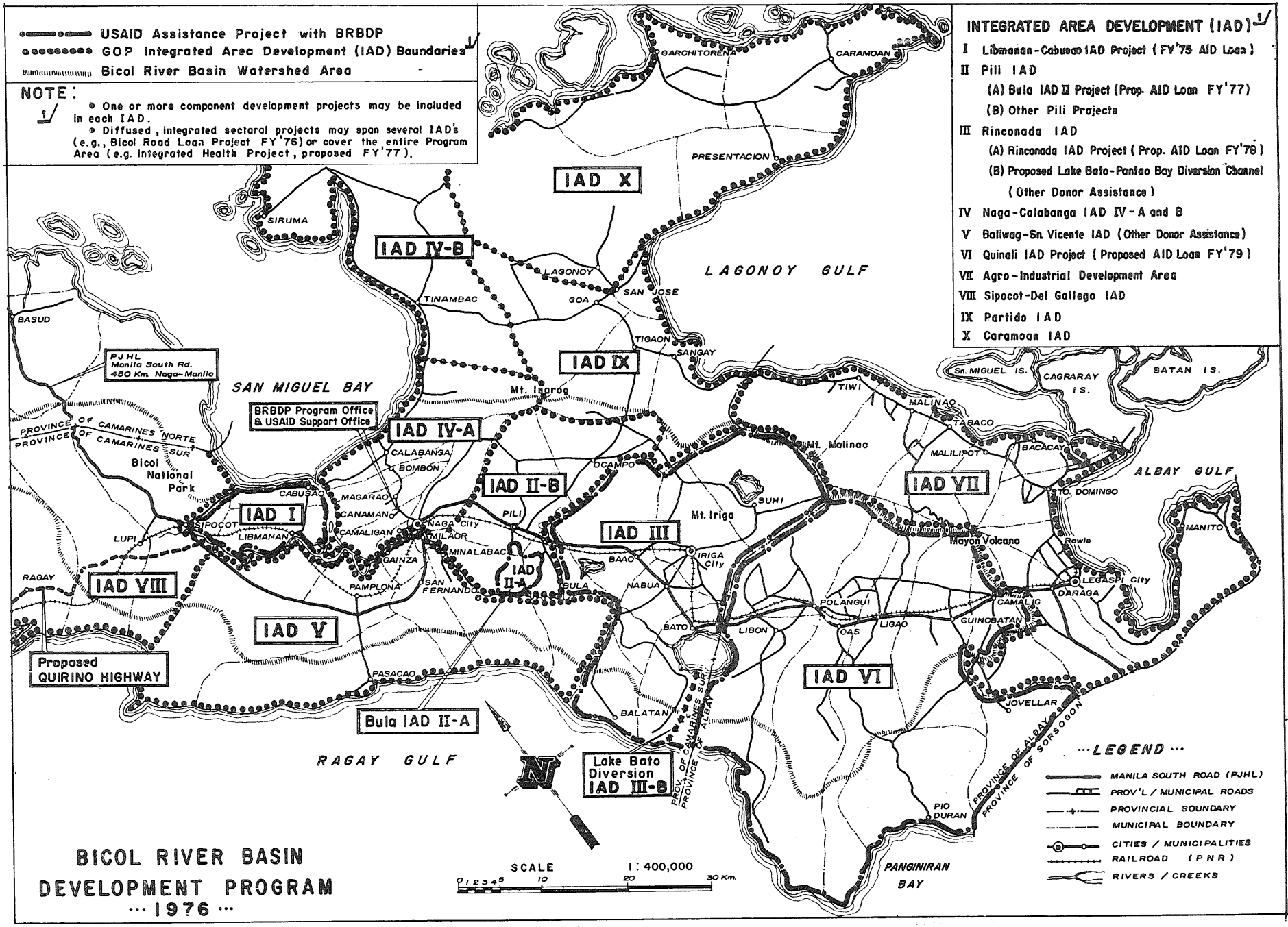
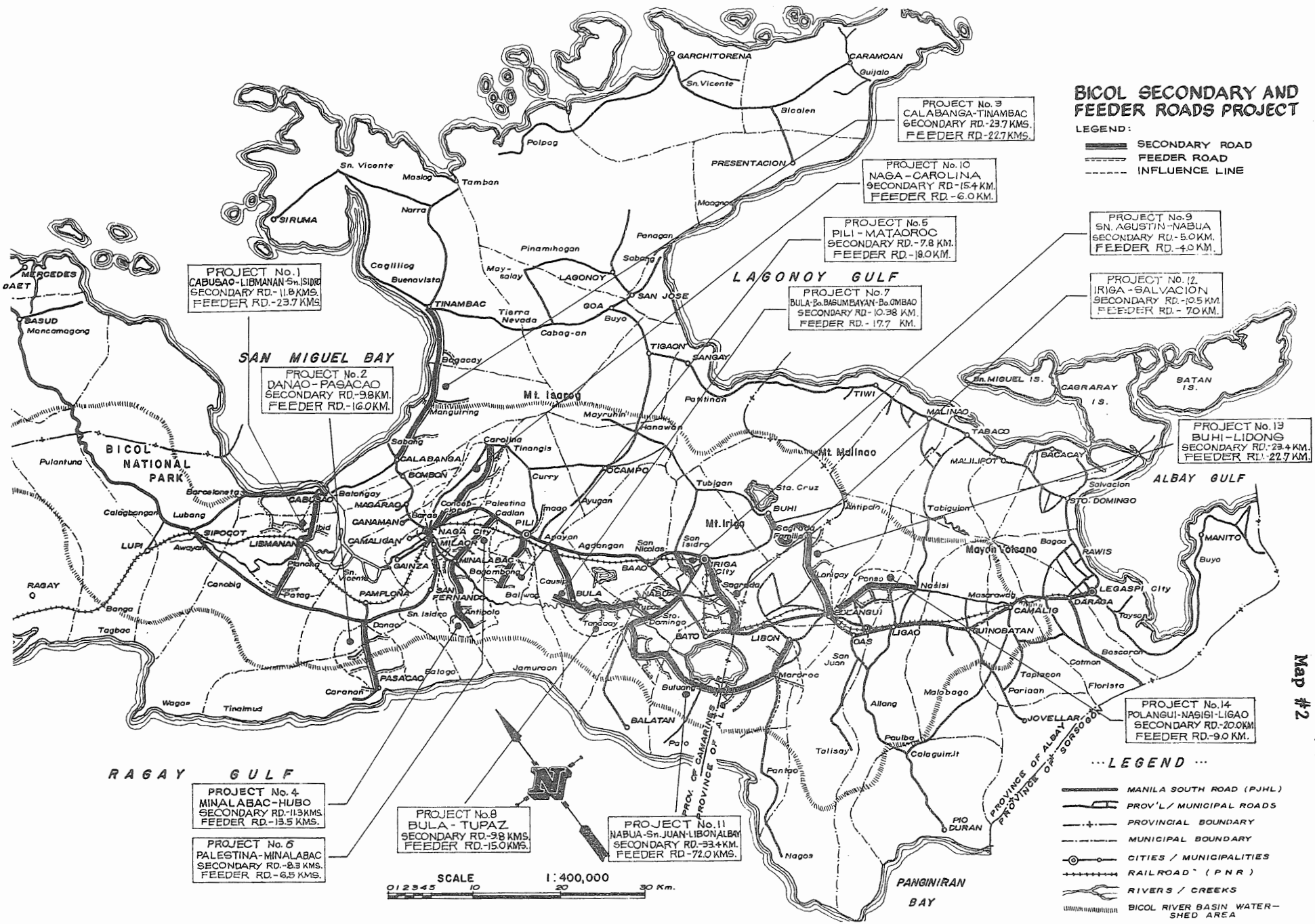
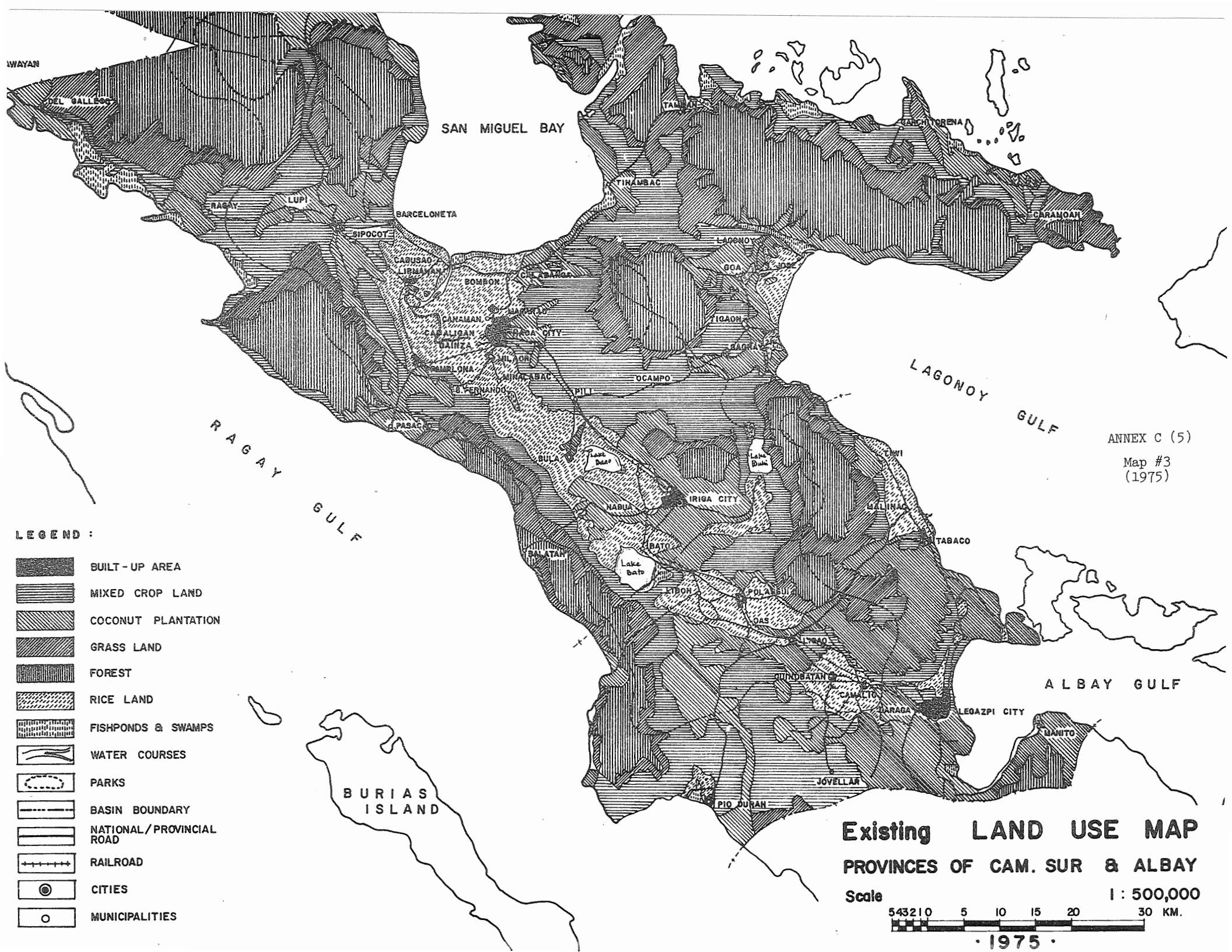
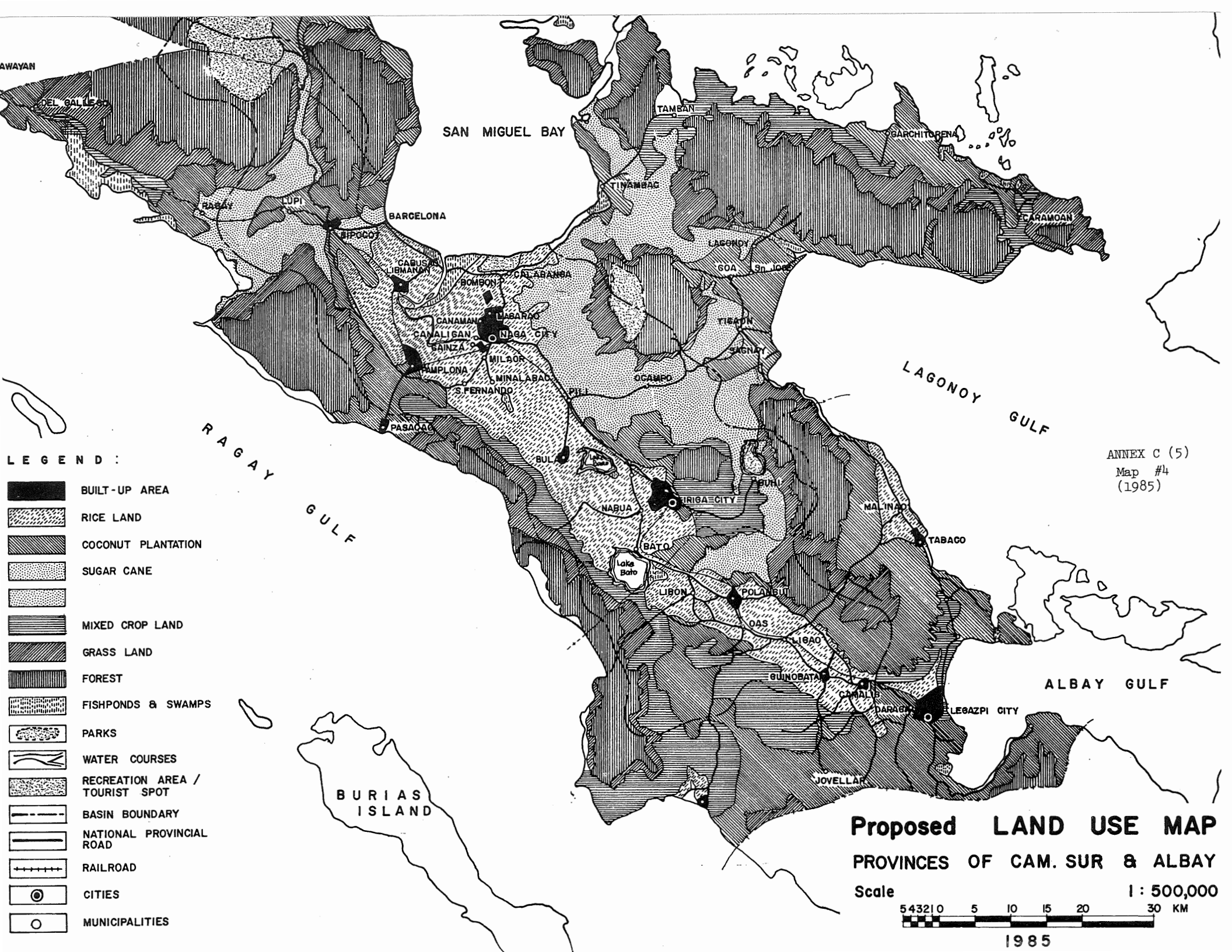


ANNEX C(5)
Map #1



ANNEX C(5)
Map #2


SAN MIGUEL BAY
RAGAY GULF
LAGONOY GULF
ALBAY GULF
BURIAS ISLAND
DEL GALLEGO
RAGAY
LUPI
BARCELONETA
SIPOCOT
CABUSAO
LIBMANAN
BOMBON
CAMALIGAN
CANAMAN
PASACAO
BULA
NABUA
IRIGA CITY
BATO
SAN ANTAN
Lake Buhi
Lake Bato
TINAMBAC
TALISAY
CARAMOAN
LAGONOY
GOA
TIGAON
RAGAY
OCAMPO
PILI
TABACO
LIBON
POLANGUI
OAS
LIGAO
CAMALIG
DARAGA
LEGAZPI CITY
MANITO
JOVELLAR
PIO DURAN
ANNEX C (5)
Map #3
(1975)
LEGEND :
BUILT-UP AREA
MIXED CROP LAND
COCONUT PLANTATION
GRASS LAND
FOREST
RICE LAND
FISHPONDS & SWAMPS
WATER COURSES
PARKS
BASIN BOUNDARY
NATIONAL/PROVINCIAL ROAD
RAILROAD
CITIES
MUNICIPALITIES
Existing LAND USE MAP
PROVINCES OF CAM. SUR & ALBAY
Scale 1 : 500,000
5 4 3 2 1 0 5 10 15 20 30 KM.
· 1975 ·


AWAYAN
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TAMBAN
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CARAMOAN
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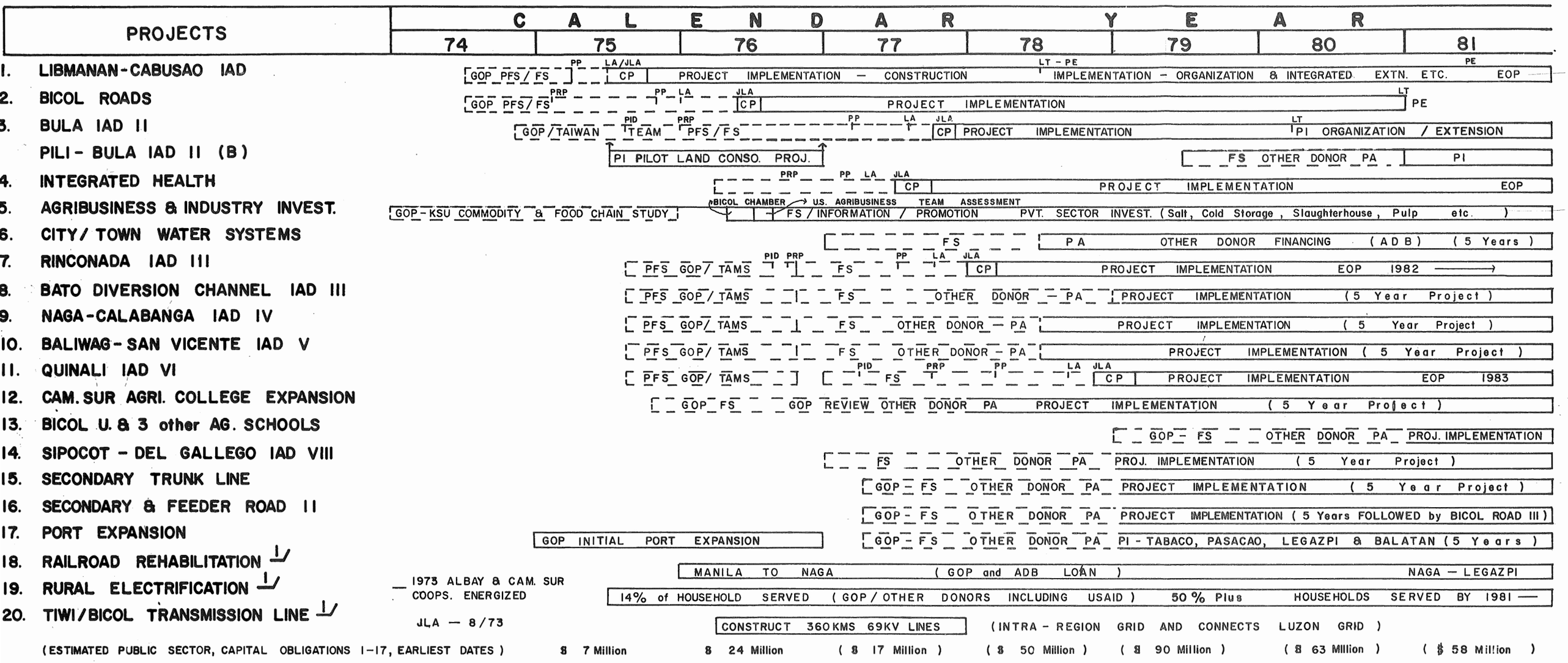
GOA
San JOSE
CABUSAO
LIBMANAN
CALABANGA
BOMBON
CANAMAN
MABARAO
NAGA CITY
CANALISAN
SAINZA
TIGAON
SAGNAY
MILAOR
PAMPLONA
MINALABAC
OCAMPO
S.FERNANDO
PILI
PASACAO
LAGONOY GULF
RAGAY GULF
BUL
BUHI
IRIGA CITY
NABUA
MALINAO
TABACO
BATO
Lake Buhi
LIBON
POLANGUI
OAS
LIBAO
GUINOBATAN
CAMALIG
DARAGA
LEGAZPI CITY
ALBAY GULF
BURIAS ISLAND
JOVELLAR
LEGEND :
BUILT-UP AREA
RICE LAND
COCONUT PLANTATION
SUGAR CANE
MIXED CROP LAND
GRASS LAND
FOREST
FISHPONDS & SWAMPS
PARKS
WATER COURSES
RECREATION AREA / TOURIST SPOT
BASIN BOUNDARY
NATIONAL PROVINCIAL ROAD
RAILROAD
CITIES
MUNICIPALITIES
ANNEX C (5)
Map #4
(1985)
Proposed LAND USE MAP
PROVINCES OF CAM. SUR & ALBAY
Scale 1 : 500,000
5 4 3 2 1 0 5 10 15 20 30 KM
1985

BICOL RIVER BASIN DEVELOPMENT PROGRAM
MAJOR COMPONENT DEVELOPMENT PROJECTS

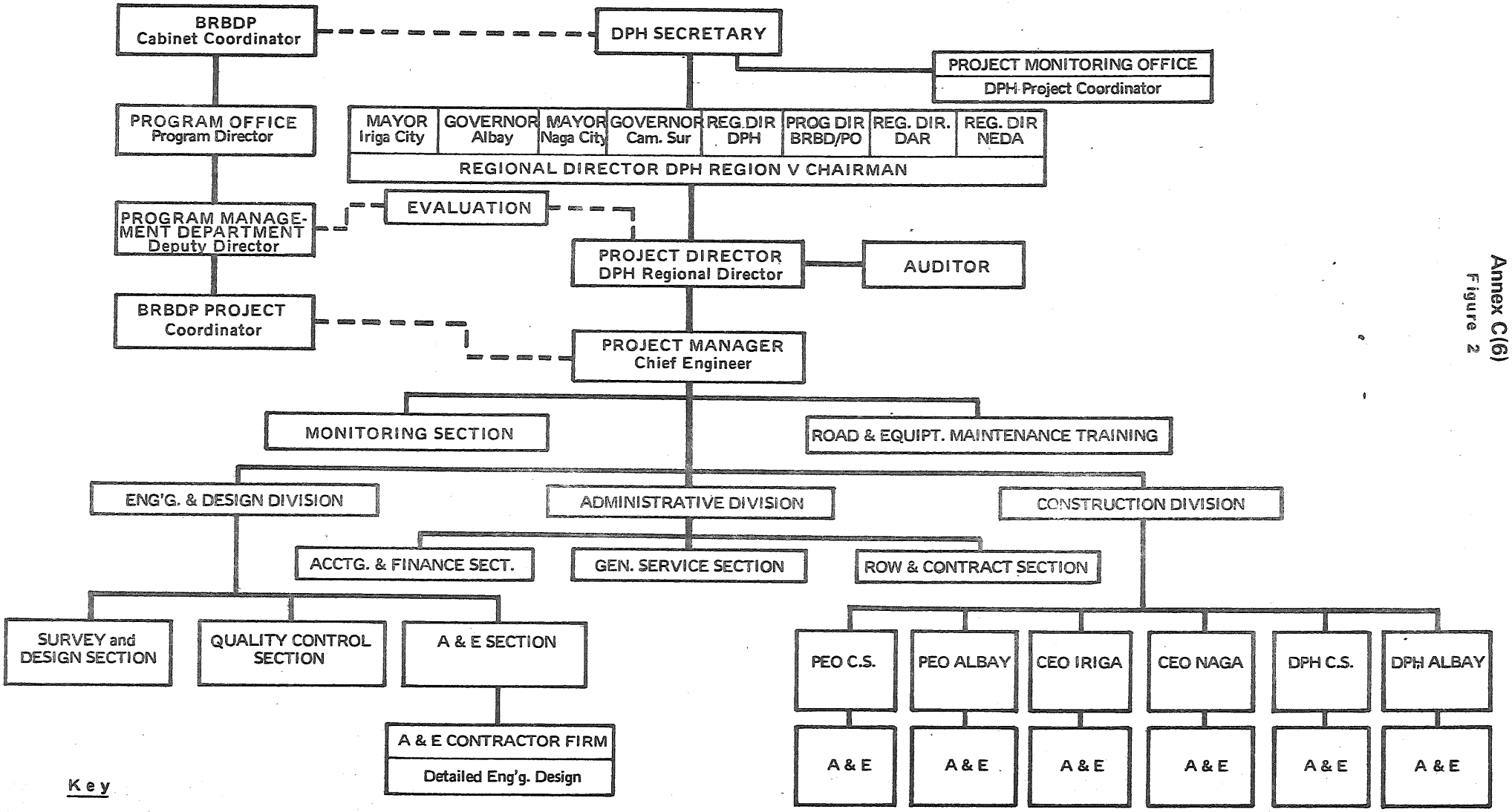
ANNEX C (6)
Figure No. 1



LEGEND:

PID - Project Identification Documentation (AID)
PFS - Pre-Feasibility Study
FS - Feasibility Study
PA - Project Appraisal (other donor)
PRP - Project Review Paper (AID)
PP - Project Paper (AID)
LA - Loan Authorization (AID)
JLA - Joint Loan Agreement (AID)
CP - Conditions Precedent (AID)
PI - Project Implementation
LT - Loan Termination Date
PE - Project Evaluation
EOP - End of Project
1/ - Complimentary National Projects

BICOL SECONDARY AND FEEDER ROADS PROJECT[1/]



Key

DPH — *Department of Public Works*
BRBDP — *Bicol River Basin Development Program*
DAR — *Department of Agrarian Reform*
NEDA — *National Economic Development Authority*
PEO — *Provincial Engineer's Office*
CEO — *City Engineer's Office*

[1/] AID Loan Project No. 492–T–041

Annex C(6)
Figure 2

Bicol River Basin Comprehensive Water Resources Development Study[1/] Prefeasibility Report Recommendations[2/]

WATER RESOURCE PROBLEMS

The principal water resource problems in the Bicol River Basin which can be ameliorated by physical works are those related to flood, drainage and salinity control and to the improvement of water supply for irrigation, domestic use and other purposes.

Flood Control

Of the 312,000 hectare basin drainage area, some 40,000 hectares are subject to annual flooding. During the major flood in 1956, an estimated 56,000 hectares were inundated. A flood damage survey undertaken during the pre-feasibility studies found that in excess of 40,000 hectares were flooded in December 1975. Estimates based on the damage survey which followed this flood indicated that it caused between 31 and 45 million pesos damage. The major portion of these damages were to the agricultural sector and, in particular, to the rice crop. These damages were due to the inundation caused by the flood waters and poor interior drainage. Erosion with subsequent deposition of sediment was also a source of damages in some areas. To a major degree, the extent of the damage to agriculture is minimized because the farmers generally wait to the end of the rainy season (November and December) to plant their rice. In the 1975 floods, only a portion of the value of the rice crops was lost. Farmers apparently utilize their experience very effectively to minimize the exposure of their crops to the hazard of flooding. This is a major factor in the prevention of flood losses throughout the basin.

Flooding in the Bicol Basin is the result of frequent typhoons with accompanying high intensity and long duration rainfall and monsoon rainfalls. About 65,000 hectares lie in the flood plain, at elevations ranging from near zero to several meters above sea level. Much of the most productive agricultural land is within this area. Severe floods and poor drainage cause extensive damage to crops. Additional damages

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1/ Bicol River Basin Comprehensive Water Resources Development Study, Tippetts-Abbett-McCarthy-Stratton and Trans-Asia Engineering Associates, Inc., Joint Venture (TAMS-TAE), Bicol River Basin Development Program, Volumes I-V, August 1976, Manila, Philippines (Contract Report from AID Feasibility Studies II Loan 492-H-030, sub-project 492-H-03005)

2/ Ibid, Volume I, pp. 5-36 (Reproduced with pesos also expressed in dollars)

are caused to buildings, commercial enterprises, the transportation and communications systems. Flood impacts on human health and on the basin ecology have not been measured, but they are said to be extensive.

A plan for flood protection and river control was formulated in 1957 consisting of 16 cutoff channels, levees and dredging. Since then, Cutoffs No. 1 and No. 2 and part of No. 3 have been completed and some dredging of the estuary has been carried out. Other proposals in recent years have been made including dikes, reservoir storage, diversion channels, and tidal barriers.

The water-oriented problems of the basin can be summarized as follows:

Drainage

About 16,800 hectares are poorly drained and/or waterlogged due to their location at low elevation, and a significant portion can be considered for potential development.

Salinity

Sea water intrusion has extended no further inland than Naga City during the low flow periods of record. However, the periods of salinity intrusion are short and are eliminated in the next tidal cycle. Under those conditions, the intrusion will not be a serious deterrent to agricultural use of water from the Bicol River except when water is taken from the Bicol Estuary proper.

Water Supply

The major need for water supply is for irrigation. A more certain supply of water to lands currently irrigated and the provision of water for land without supplemental water would be very effective in increasing crop yields and reducing the risks associated with agriculture. Such improvements would also have impacts on the crop processing and marketing functions and upon many other activities. Of the 312,000 hectares in the basin, arable lands in flood plain and upland areas which could be irrigated have been estimated at 86,000 hectares provided water supplies were available and drainage and other works were undertaken. At present, only about 44,000 hectares are irrigated in the wet season but only 37,000 can be irrigated in the dry season due to inadequate water supplies.

In addition to the large consumptive requirements for irrigation water, many of the population centers of the basin are known to have inadequate supplies of water for domestic use and for municipal and industrial needs. Surface waters are badly contaminated with organic

waste, fecal organisms, and pesticides. Although most domestic supplies are from upland springs and groundwater, it is suspected that these supplies are often also contaminated. The ingestion of polluted water has led to excessive incidence of enteric disease in the basin. Thus, the problems of water supply encompass both the quantity of water and the quality of water at its sources, at its points of distribution and at its points of discharge after use.

For the near future, irrigation water supplies will be dependent mainly on surface water facilities. Additional groundwater supplies are also being investigated which can serve municipal and irrigation needs.

Agricultural Practices

Increases in crop yields and more efficient use of water and production materials are possible with improved agricultural practices. The Bicol River Basin is similar to other regions undergoing agricultural development. Not only are new or additional physical facilities needed but such supporting services as land reform, research and extension services, agricultural credit, marketing, supply of farm production requisites, cooperatives and other farmers' organizations are an essential part of the overall development effort.

Other Problems

Some upland areas of the basin are steep and have erodible soils and inadequate vegetation. These conditions, together with high intensity rainfalls, lead to problems of soil erosion. These problems are evident particularly in the Mount Mayon area where the coarse volcanic deposits are particularly susceptible to erosion; and in the Pulantuna River watershed. As a result, sediments are deposited in Lake Bato, in the Bicol River, and in San Miguel Bay affecting flood channels, water storage, irrigation diversion channels, and navigation.

Commercial fishing is an important activity in the basin, in the lakes, rivers and estuary. Inadequate low flows and flooding in rivers and inadequate depths for fish trapping equipment in lakes impede the maintenance and growth of this industry.

At present, there are severe shortages in electric power and inadequate distribution facilities in the basin. National programs of improvements are underway. Opportunities for hydropower have been considered in this study.

Waterways in the basin are used for navigation by two types of vessels--inter-island vessels traversing the river between Naga City and San Miguel Bay and beyond, and smaller vessels operating only on the inland waters.

APPROACH TO COMPREHENSIVE PLANNING

The investigation of the Bicol River Basin was not solely a study of the needs, justification and desirability of building a system of facilities for the control and regulation of the water resources of the basin. Primarily, it was to improve the quality of life in the Basin and to permit the area to make its maximum contribution to national economic progress. In order to accomplish these broad objectives, a system or "package" approach was used, which included not only physical facilities but supporting services needed to implement the Comprehensive Water Resources Plan. Among the elements considered were:

- Land reform
- Compact farm development
- Agricultural credit and rural bank expansion
- Water resource development including flood control
- Drainage, salinity control and irrigation
- Road development
- Rural electrification
- Livestock development
- Fisheries development
- Other support services.

The impact of the recommended comprehensive plan on export and import substituting industries was given special consideration. The emphasis was to determine the extent those projects can enhance the nation's foreign exchange position.

The national, regional, and basin viewpoint have been carefully considered in the selection of component parts of the comprehensive plan and in the determination of their desirability. The Bicol River Basin has been selected by the nation in Presidential Decree No. 926 dated April 28, 1976 as a model for planning of water and land development and to meet the aspirations of the population for improvement of its well-being.

REVIEW OF FLOOD CONTROL PROJECTS

Initial consideration was given to flood control projects identified in previous investigations. The mathematical model LATIS was adopted to test the effectiveness of these flood control schemes. This computerized model has been shown through a long history of previous studies and initial review to be a reliable means of estimating the changes of water surface elevations resulting from flood control measures. It was calibrated with available field data for the October 1970 flood due to Typhoon Sening. This flood has been estimated to have a recurrence interval of about 13 years. The result of this evaluation can be summarized as follows:

Bicol Cutoffs and Dikes

The estimated cost of Cutoff No. 3 (40 meters bottom width channel) with replacement of PNR and Manila South Highway Bridges is ₱32 million ($5.0 million).[1/] Flood control benefits will not justify, and the cutoff channel was reduced in bottom width to 10 meters to serve as an interior drainage and irrigation canal. The dikes were also retained as local protection works.

Bicol-Ragay Diversion Channel

Estimated cost of a canal capable of discharging 200 cms is about ₱110 million ($4.7 million), without right-of-way, relocation and irrigation costs. However, flood control effects are localized and are not sufficient to economically justify the project costs.

Sipocot-San Miguel Bay Diversion Channel

Estimated investment cost for canal (capacity 1150 cms) is about ₱100 million ($13.3 million). An alternate alignment through Manga River would cost about ₱60 million ($8.0 million). Flood control effects are limited to Sipocot River near the point of diversion with maximum effect at Sipocot. Flood damages prevented would not economically justify construction.

Reservoirs

The Bicol watershed was examined for potential reservoirs. Upstream of Ombao, the Bicol Basin has considerable surface storage in Lakes Bato, Buhi and Baao. For example, during the 1970 flood the peak inflow to Lake Bato was estimated at 1060 cms while maximum outflow was about 340 cms. Lakes Buhi and Baao have similar flood moderating effects. The studies indicated that other flood control reservoirs including one on the Talisay River would not significantly reduce the flood peaks in lower valley. Within the Sipocot-Libmanan River portion of the Bicol Basin, flood storage would not be effective as Pulantuna and/or Culacling Reservoirs control only small portions of the watershed. However, it appears that flood benefits could arise if the natural storage of Lake Bato, Lake Buhi and Lake Baao was enhanced by regulation of outflow.

1/ $1.00 = ₱7.5 at current prices

The feasibility studies should consider the most desirable utilization of the available storage capacity in the natural reservoirs, - Lake Bato, Lake Buhi and Lake Baao. The alternatives investigated should include the raising of the lake levels to increase flood storage capacity. If major reduction in flood damage within the basin appears likely, or if the increased water storage produces benefits to agriculture through irrigation or to fisheries, the possibilities of the construction of the levees to protect the urban and developed portions of the municipalities of Bato and Buhi and the adjacent agricultural area should be explored. In addition, the costs involved in the relocation of the urban areas should be determined.

Tide Barrier at Balongay, San Nicolas, Tributary Outlets and other Locations

Tide barriers at Balongay would cost about ₱220 million ($29.3 million) and have little effect on flood elevation with serious adverse effects through elimination of tidal flushing and modification of existing marine environment. The San Nicolas damsite would create similar problems. Flap-gate structures on the interior drainage canals would control the intrusion of salt water at less cost.

Lake Bato-Pantao Bay Diversion

In addition to the projects developed in previous studies, a diversion channel from Lake Bato to Pantao Bay was considered. The investment cost of a channel capable of discharging 450 cms would be about ₱105 million ($14.0 million).

ALTERNATIVES CONSIDERED

Flood Control

The above analysis indicated that the following principal alternative systems of flood control works for the Bicol Basin be considered:

Alternative 1 - One or more diversion channels.
Alternative 2 - One or more diversion channels and local protection works.
Alternative 3 - Local protection works.
Alternative 4 - Local protection works with a control structure on the Bicol River downstream of its confluence with the Pawili River.

Alternative 1 is not considered a reasonable alternative as it would not provide protection for the substantial area of agricultural lands that lie in the downstream portion of the basin. Alternatives 2,3 and 4 would include levees for local protection in the lower estuary

to above Naga City. These levees would generally not exceed two meters in height above ground level and would where possible incorporate natural levees and existing roads. The most reasonable arrangement for Alternative 2 would consist of the Lake Bato-Pantao Bay Diversion to provide flood protection for upstream areas below Lake Bato and sedimentation control for Lake Bato with levees to protect the downstream lands.

Alternative 4 would increase the regulation of flood water by a control structure at or near Ombao. This would supplement the protection afforded by the downstream levee system and could reduce flood damage in unprotected areas such as Naga City.

Economic studies indicate that Alternative 3 local protection levees for the downstream areas can be economically justified by the flood damages prevented. Alternatives 2 and 4 would reduce the flood hazard below Lake Bato and within areas unprotected by the local protection levees provided under Alternative 3. The economic feasibility of the alternatives will depend upon more detailed studies.

Irrigation, Drainage and Salinity Control

The alternatives available in meeting the irrigation, drainage, and salinity requirements of the agricultural lands within the basin are somewhat limited. Hydrologic studies indicate that there is an ample supply of water to meet the estimated agricultural requirements for irrigation provided additional storage within the basin is provided to increase the available supply during the dry season - February through May. In addition, a number of irrigation systems must be enlarged and extended to distribute water to the irrigable areas. The feasibility study should consider alternative methods of supplying the required water in order to determine the most economical and desirable sources of irrigation water and canal network to the remote areas.

The improvement of drainage in general would be accomplished by the enlargement and extension of the existing drainage system with a range of capacities investigated to insure that the most efficient and economic system is provided. The reduction and/or elimination of the intrusion of salt water would be accomplished by flap gate controls on each of the canal and stream draining the leveed area. Stop-logs would be provided for interior water control.

Power

The possibilities of the development of hydro-electric power in the basin was investigated. Pulantuna High Dam was found to be the most desirable and economical site, but even at this site the costs of

construction indicate that it is not cost-effective at this time. However, the site should be reserved so that development within the reservoir area would not prevent its future utilization.

COMPREHENSIVE WATER RESOURCE DEVELOPMENT PLAN

The Comprehensive Water Resource Development Plan was formulated from consideration of the water-oriented requirements for flood and salinity control, drainage, water supply for agricultural and urban populations, and other water uses such as fishing. In general, the plan consists of:

- levees to protect the alluvial plain from overflow along San Miguel Bay and the Bicol and Libmanan Rivers:
- flap-gate control structures at all drainage outlets in the leveed areas, to prevent the inflow of water during floods and salt water at other times. Stop logs would be provided for control of interior water levels;
- extension and improvement of the drainage systems within the projected areas to provide a minimum 5-year capacity;
- extension and improvement of irrigation system and/or systems with sufficient storage to furnish an adequate water supply to practically all lands which would benefit from irrigation; and
- provision of additional measures, programs and infrastructure required to ensure that the water-oriented construction program would be effectively utilized. Those programs include:

    -- agricultural and fishery practices,
    -- infrastructure,
    -- flood proofing,
    -- flood plain zoning,
    -- interior drainage
    -- public water supplies,
    -- water pollution control, and
    -- financial, educational and health.

The Bicol River Basin Development Program (BRBDP) has subdivided the area under its administration into ten (10) project areas, seven of which include areas within the Bicol Basin. For efficient construction management, project administration and operation, the Comprehensive Water Resource Development Plan has been sub-divided into separate area projects, which relate to the BRBDP project areas, as follows:

Naga-Calabanga IAD

Naga-Calabanga IAD would comprise integrated development for irrigation, drainage, salinity and flood control. The irrigated area in the project would be approximately 11,200 hectares. Flood levees would be constructed

along San Miguel Bay from Calabanga to the Estuary, and parallel to the Bicol River upstream to Camaligan. The existing major waterways would be dredged as required, to serve as the main drain. A supplemental network of lateral and farm drains would also be constructed. An outlet structure would be placed at the outlet of each of the main drains. Irrigation water supplies, depending on the areas served, would be from the groundwater, local streams originating on the western slope of Mt. Isarog, out-of-basin diversion from the Tigman and the Hinagyanan Rivers on the northern slope of Mt. Isarog, and the Bicol River and tidal tributaries as augmented by controlled releases from Lake Bato. Irrigated areas would be provided with distribution systems up to the compact farm level.

The estimated costs of the overall system is:

Item	Total Cost
Flood Levees (about 25.5 kilometers)	₱ 1,326,000
Drainage system with outlet structures	9,644,000
Irrigation facilities including the allocation of the upstream costs for the control structure	21,762,000
On-Farm Development	5,016,000
Right-of-Way Relocations	1,500,000
Engineering	6,125,000
T O T A L	₱45,373,000 1/ ($ 6,050,000)

It is estimated that the annual benefits of the program at full development would be ₱43,135,000.

Computation indicates that the merit of the program is as follows:

Internal Rate of Return (IRR)	22.1%
Net Present Value (PV)	₱ 29.9 million ($ 4.0 million)
Benefit/Cost Ratio	1.65 to 1

The sensitivy analysis indicates that the project is viable over a wide range of assumptions; only the reduction of the benefits to 50 percent would reduce the Benefit-Cost ratio below unity.

It is estimated that the foreign exchange requirement in dollars would be about $2,405,000 or about 40 percent of the estimated costs.

A feasibility study of the Naga- Calabanga IAD project is estimated to take about 14 months and cost about $422,600. Local costs are estimated at about ₱1,000,000 ($130,000). The study would identify the charac-

1/ $1.00 = ₱7.5 rounded up

teristics of the flood control, irrigation and drainage, land development, inland fishery, and public water supply facilities that will meet the need of the area at least cost. Available alternatives will be examined. The determination of the most economic and desirable irrigation water supply should consider the use of the Bicol River, the runoff from Mt. Isarog directly into the area and from the Tigman River, and groundwater development. Several of these sources would require pumping.

Design criteria will be determined and preliminary plans and outline specifications developed for the facilities which are found to have technical, economical and social merit. Based upon these designs, cost estimated will be made and preliminary construction schedules developed.

Baliwag-SanVicente IAD

Baliwag-San Vicente IAD would provide for drainage, salinity control, flood control and irrigation. Some 16,250 hectares have been classified as irrigable, of which only about 5,660 hectares are currently irrigated. Cut-off No. 3 would serve as the main drainage outlet through the low-lying portion of the area which would have first priority for development. In this area, the use of dredged natural channels, outlet works, interior drainage works, and irrigation facilities would serve for the irrigation of about 12,000 hectares, including 1,400 hectares which are currently waterlogged. Irrigable areas at higher elevation would be served by local streams from the Ragay Hills groundwater or by extending the irrigation facilities of the lower developed areas. An alternative water supply would be a canal at higher elevation at the base of the Ragay Hills. Flood protection would be provided by levees. Water supply would be from the Bicol River, augmented by upstream storage releases from Lake Bato which would also assist in salinity control.

The estimated costs would be:

Item	Total Cost
Flood Levees (about 27 kilometers)	₱ 1,940,000
Drainage including outlet structures	11,085,000
Irrigation facilities including the allocation of the upstream costs of the control structure	21,733,000 1/
On-Farm Development	5,056,000
Right-of-Way Relocation	2,500,000
Engineering	6,900,000
T O T A L	₱51,154,000 ($ 6,821,000)

1/ Increased ₱1,940,000 from TAMS-TAE Report for consistency.

It is estimated that the annual benefit of the overall project at full development would be about ₱ 45,080,000 ($6.0 million).

Economic analysis shows the following:

Internal Rate of Return (%)	21.3
Net Present Value	₱ 27.8 million ($ 3.7 million)
Benefit/Cost Ratio	1.56 to 1

The sensitivity analysis indicates that the project is economically viable over a wide range of assumptions: only with a reduction of benefits by about 50 percent would the Benefit-Cost Ratio be reduced below unity.

It is estimated that the foreign exchange requirement in dollars would be about $2,712,000 or about 40 percent of the estimated costs.

A feasibility study of the Baliwag-San Vicente IAD would take about 14 months and require about $495,000. The local costs of the study are estimated at about ₱ 1,400,000 ($187,000). The studies would identify the magnitude of flood control, drainage, irrigation, public water supply, land development and institutional components of the project that will produce the needed improvements at least cost.

Preliminary designs would be developed and costs estimated for the facilities found economical.

During this study, alternative sources of water should be considered for irrigation water supply. Among these sources are groundwater, streams in the Ragay Hills, and the Bicol River. This water can be transmitted by gravity and pumping, utilizing lateral canals along the foothills and by the Libmanan River. The evaluation of the groundwater potential will require a major geologic effort. However, due to the costs of furnishing irrigation water supply to remote portions of the area it may be economical.

Rinconada IAD

The Rinconada IAD would focus on the development of Lakes Bato,Baao and Buhi. Regulatory structures at the mouths of the lakes would maintain water levels for fishery development, store water to augment irrigation water requirements, and minimize flood risk within the area. Discharge during the low flow season would benefit lands within other IAD's by providing irrigation water and controlling salinity. Other works in addition to the regulatory structure would include dredging of the river channels below Lake Bato and Lake Buhi, a major drainage channel between Lakes Baao and Bato,levees to define the Lake Baao boundaries, and

irrigation facilities. The merit of constructing the Lake Bato-Pantao Bay Diversion would be explored further in the feasibility study. The Rinconada IAD contains several separated irrigable areas totalling approximately 14,000 hectares, which would be benefited by facilities ranging from better water supplies to complete development. In addition, the merit of reclaiming 4,000 hectares of poorly drained and/or water-logged lands would be determined.

The estimated costs of the project works are as follows:

Item	Total Cost	
Lake Baao		
Levee	₱ 1,673,000	
Drainage and Irrigation Facilities	9,840,000	
On-Farm	2,400,000	
Sub-total	13,913,000	($1,855,000)
Lake Buhi		
Control structure and Low Flows Channel	6,746,000	($899,000)
Lake Bato		
Control Structure and Low Flows		
Channel	7,083,000	
Right-of-Way Relocation	2,500,000	
Engineering	8,125,000	
Sub-total with control structure	38,367,000	($5,116,000)
Sub-total without control structure	31,284,000	($4,171,000)
Lake Bato-Pantao Diversion Channel		
Construction	98,000,000	
Right-of-Way Relocation	5,000,000	
Engineering and Design	2,625,000	
Sub-total	105,625,000	($14,083,000)
TOTAL Construction cost with Control Structure	₱143,992,000	($19,199,000)
TOTAL Construction cost without Control Structure	136,909,000	($18,255,000)

It is estimated that the annual benefits of the Lakes Baao and Buhi at full project development would be ₱22,879,000 ($3.1 million). All the benefits of the Lake Bato-Pantao Bay Diversion Channel have not been quantified at this time due to lack of data on sedimentation in this lake.

The flood benefits for this project are estimated to be in order of magnitude of 7.5 million pesos ($1.0-million) per year in 1976.

The economic merits of the Lake Baao and Lake Buhi portion of the Rinconada (The cost of the control structure and low water channel at Lake Bato has been allocated for purposes of economic analysis to Naga-Calabanga IAD and Baliwag-San Vicente IAD) and the Lake Bato-Pantao Diversion Channel are shown separately:

	Lake Buhi and Lake Baao Diversion	Lake Bato Diversion
Internal Rate of Return %	20.9	5.4
Net Present Value	₱17,625	₱35.9 million ($ 4.8 million)
Benefit/Cost Ratio	1.50 to 1	0.43 to 1

These indices indicate that Lake Baao and Lake Buhi portions of the project are feasible. The Lake Bato-Pantao Bay Diversion Channel clearly is not feasible at this time. However, all the benefits of the diversion project were not quantified and a more detailed economic analysis should me made in the feasibility studies.

A sensitivity analysis was made of these projects, increasing investment costs 50 percent, reducing benefits 25 percent and 50 percent, placing a constraint on yields and reducing project life to 1990. Under all conditions except when the estimated benefits were reduced by 50 percent, the Lake Buhi and Lake Baao projects were viable. Similar sensitivity checks were made for the Lake Bato-Pantao Diversion Channel. They indicate that it would be viable when benefits were increased by 300 percent. The foreign exchange requirements in dollars for the Rinconada Project (Lake Baao, Lake Buhi and Lake Bato) is estimated to be about $6,850,000 or about 40 percent of its total cost. If the Lake Bato-Pantao Bay Diversion channel is included, the foreign exchange requirement in dollars increases to about $17,632,000.

A feasibility study of the Rinconada IAD project including the Lake Bato-Pantao Bay Diversion Channel would take about 10 months and cost about 48,400 dollars and about 1,500,000 pesos ($200,000). The study would identify the flood control, irrigation and drainage, land development, inland fishery development, and water supply projects which would maximize benefits at least economic costs. Preliminary designs would be prepared, and the construction, and operation and maintenance costs estimated. Ecological studies would be made to determine impact of the projects on the environment. In addition, the study would determine the institutional mechanisms that will insure the transfer of technology to project beneficiaries, and the support services, i.e. land reform, credit, agricultural development, and post-production and intensive education program, required to develop the full potential of the project.

The Rinconada IAD area includes three lakes - Lake Bato, Lake Buhi and Lake Baao. The investigations should determine the optimum utilization

of their sites. If an increase in their flood levels appears to the economic and to the social advantage to the overall basin, the costs of protection by levees, and/or relocation of the developed urban portions of the municipalities of Bato and Buhi should be investigated. The local costs are estimated at about ₱3,000,000 ($400,000).

Libmanan-Cabusao IAD

Libmanan-Cabusao IAD is currently under construction. The feasibility studies for this project were completed and construction of the main canal was initiated in May 1976. Levees, irrigation and drainage works are included in the project.

Pili-Bula IAD

Pili-Bula IAD has about 19,000 gross irrigable hectares. Only about half of this area has adequate water supplies for dry season irrigation although over 13,800 hectares are potentially served by existing irrigation systems. The principal sources of water are currently streams originating on the slopes of Mt. Isarog whose supplies are insufficient in the dry season. Some areas are served by groundwater. It is believed that the irrigated areas can be substantially increased if groundwater development, whose exploration appears promising is confirmed, or by pumping from the Bicol River. Until overall estimates of groundwater are determined, feasibility studies of extending the irrigation area can not be made.

Quinale IAD

Quinale IAD has problems that are somewhat different from the other developed portions of the Basin. In this area, due to the proximity to Mt. Mayon, material from recent eruptions is transported into the natural streams and canals resulting in a partial choking. Cultivated areas, with the exceptions of rice fields, have drainage problems and are subject, during periods of heavy rainfall, to severe flooding due to the inadequate capacity of drainage channels. The floods also cover significant area with sand and silt which permanently reduce their productivity and under severe conditions must be removed for continued agricultural use. The problems of the IAD can be ameliorated only by a program of watershed management. This may include control of vegetation, protection of slopes by structural means, sedimentation basins to intercept larger and heavier portions of suspended and bed load, and improvement of the hydraulic performance of streams and canals. Adequate water is generally available for irrigation but drainage and irrigation supply works cannot be justified until volume of sediment is reduced.

Sipocot-Del Gallego IAD

Sipocot-Del Gallego IAD would provide for watershed treatment of the steeply sloping lands to reduce erosion, increase filtration of the existing rainfall, and reduce the silt load carried by flood waters. As previously discussed, while Pulantuna Dam Can not be justified by current needs, the plan would provide for protection of the damsite

and potential reservoir area by restricting development, particularly urban settlements, as it appears possible that construction of the Pulantuna Dam may be found feasible when the lower basin is more intensely developed. In addition, the plan provides for the construction of low dams for supplemental water supply when required to augment the supply of water available for irrigation or salinity control. There are a number of potential sites for such dams in the watershed. The actual selection of the number and location of the supplemental storage dams would be made after a water balance study of the basin based on results of the feasibility studies of other portions of the basin.

Combination of Projects

The combined total cost of the Naga-Calabanga IAD, Caliwag-San Vicente IAD, and the Rinconada IAD projects would be about ₱ 128 million ($17.1 million) without Lake Bato Diversion Channel. If the diversion channel is included, the total cost would be ₱233 million ($31.1 million).

The economic feasibility of the three IAD's were determined using three indices as shown below:

	IAD's Without Lake Bato Diversion	IAD's With Lake Bato Diversion
Internal Rate of Return	21.1	17.3
Net Present Value	71,992	₱36.1 million ($ 4.8 million)
Benefit/Cost Ratio	1.55 to 1	1.19 to 1

The indices show clearly that the three IAD's are economically feasible with or without the Lake Bato Diversion Channel. The latter project can only be considered feasible if it is included as a portion of the overall project.

The sensitivity analysis indicates that the entire group of projects are feasible under most circumstances except when costs are increased by 50 percent or benefits are reduced by 50 percent. The positive flood control provided by the Bato Diversion Channel gives greater certainty that the benefits developed for the other projects will be achieved.

General Conclusions

Recent studies involving mathematical modeling have indicated that the damages from salinity intrusion are not as serious as believed earlier. With the expected increased use of the Bicol River and tributaries, however, the problems may worsen unless the low-flow augmentation is accomplished from supplemental surface water reservoirs. The feasibility studies of Lakes Bato, Baao and Buhi will indicate what can be expected by regulation of these lakes. If other storage is required, additional low head reservoirs can be developed in the basin.

Watershed management has been discussed above for the Quinale IAD and the Sipocot-Del Gallego IAD. Watershed protection could also have valuable benefits for other portions of the Bicol Basin. Some 185,000 hectares or 59 percent of the basin area consist of steeply sloping lands which under adverse conditions of susceptible soils and heavy rainfall, are subject to excessive erosion. The management program would include both structural and vegetative methods and may be different for each project area.

The pre-feasibility field studies of the geologic characteristics of the Bicol Basin indicated the possibility of good groundwater potentials in a number of areas. The existing exploration program should be continued, in order to determine potential groundwater and costs. This would permit a balanced utilization of both groundwater and surface water supplies in various IAD's.

There is also the necessity to continue the existing hydromet program which consists of the periodic observations of rainfall, stream stages and discharges.

Finally, cloud seeding has been a controversial issue in many locations but its effectiveness and economic value in increasing water supplies when needed has been demonstrated in a number of areas. An exploratory program to determine its appropriateness for the Bicol Basin should be undertaken, including additional rainfall gages, and tests of ground-based burners and aircraft seeding over at least three dry seasons.

The above described physcial works and program do not include a number of additional measures that should be provided in each of the areas designated for integrated area development. These are not detailed nor are cost estimates presented in the pre-feasibility report but some are outlined below.

Farming practices and infrastructure to supply agricultural materials and process and market crops should be improved. As applicable, commercial fisheries should be subject to similar programs. Organization of farm management and farm ownership is being addressed by existing programs which should be extended.

Flood proofing to protect existing buildings and zoning to control types and methods of construction of buildings and other physical works should be undertaken for the floodplain. This would reduce the flood damage and inconvenience from heavy rains due to improper building and road construction or inadequate interior drainage works.

Public water supplies should be installed, expanded, or modified to serve a greater portion of the population and business enterprises with water of adequate quantity and quality. In this connection, water pollution control programs are are also needed. Roads, telephone service, and public transportation services to serve urban and rural population and agricultural activities should be expanded.

Financial, educational and health and other economic and social services should be instituted or supported to a greater extent than at current levels.

The physical works, related programs and the other activities described above to improve the economic and social climate of the Bicol region are a necessary pre-requisite to the infusion of capital for agro-business. Plans to support off-farm employment, and the supporting commercial and personal service industries are also needed to increase employment opportunities and raise the overall economic health of the region.

THE SOCIO-ECONOMIC IMPACT OF THE PLAN

The construction and implementation of the recommended package program in the Comprehensive Water Resources Plan will improve the utilization of the human and natural resources in the Bicol River Basin. The overall impact of this program will be the improvement in the quality of life for the inhabitants of the Basin.

The plan when implemted will reduce the flood damages on agricultural and urban lands, provide sufficient water to irrigate a total of about 16 thousand additional hectares, reclaim and irrigate about 2,500 hectares of poorly drained and waterlogged lands and reduce or eliminate the intrusion of saltwater on about 9 hundred hectares of land. Agricultural economic studies indicate that with the project completed, the rice farmer on poor quality lands will be able to increase his yields in a normal wet season from 1.1 to 1.8 tons per hectare, and his cropping intensity from 1.8 to 2.5. Similarly on the most productive lands, wet season yields are expected to increase from 1.4 to 4.8 tons per hectare and the cropping intensity from 2.1 to 2.75. With the provision of ample water, dry season yields and cropping intensity will be similarly improved. It is estimated that net farm income which is presently negative on the more marginal lands will increase to about ₱1,650 per year, the more productive land will also see net farm income increase from near subsistence to over ₱11,000. In addition, the fishery projects at Lakes Baao and Bato are expected to increase employment opportunities by well over a thousand persons where they are completed. The reduction of flooding is expected to reduce the incidence of disease in the wet season and improve the capital formation of the poorer subsistence farmer which now farm the marginal lands susceptible to flooding and drainage problems.

RECOMMENDATIONS

On the basis of the Comprehensive Water Resources Development Study, it is recommended that:

1. Prepare a design memorandum outlining the project performance requirements, basic designs, and cost estimates. This should be initiated immediately because the facilities required in the Naga-Calabanga IAD and Baliwag-San Vicente IAD are justified beyond a reasonable doubt.
2. Prepare a feasibility study of the facilities required for the Rinconada IAD. Although the Lake Bato-Pantao Bay Diversion Channel seems to be economically marginal, it should be included as part of feasibility studies for the Rinconada IAD since not all the benefits have been quantified in this pre-feasibility study.

3. Continue the program for supplemental surface water resources, watershed management, groundwater exploration and cloud seeding for the Pili-Bula IAD, Quinale IAD, and Sipocot-Del Gallego IAD. The hydromet program for collection of rainfall and streamflow and salinity data should be continued.
4. Develop supporting programs which will complement the construction program and improve its effectiveness. These programs should insure adequate farm credit, extension services, feeder roads, and improved educational and health facilities be made available to the farmer. The combined effects of the improved physical and social infrastructure should insure an improvement in the quality of life for all the basin's inhabitants.

From FY 1977 To FY 1981

Total U.S. Funding: $3,758

Date Prepared: August 1976

Project title & Number: BICOL INTEGRATED RURAL DEVELOPMENT 492-0303

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: (A-1) **The broader objective to which this project contributes:** To raise the socio-economic level of the poor majority in the Bicol River Basin and extended influence areas (Program Area) to the national average by 1990 and to sustain its growth rate at the national average after 1990. Sub-goal 1. BRBDP component projects successfully completed (also see goal level assumptions for other key national and local GOP projects and programs) by 1990 or earlier. 2. Local government organizations (Area Development Councils and Area Development Teams or similar functional units) organized and operational. 3. Increased level of total net private sector investment in the Program Area.	**Measures of Goal Achievement: (A-2)** 1. Real per capita annual income (1967 prices) increased by 6.3% annually; from ₱592 in 1975 to ₱1,738 in 1990 (₱594 in 1970); more equitably distributed with the lower 50% of population receiving 25% of total income by 1990, increased from 13% in 1974. 2. Per capita value added annual growth rate accelerated from (1975 prices ₱7.5 = $1.00): 3.1% for 1970-75 to ₱1,779 US$ 237 5.5% for 1975-80 2,324 310 6.2% for 1980-85, and 3,136 418 7.3% for 1985-90 4,468 596 3. Productive employment increased, reducing: -unemployment from 7.7% in 1974 to 5% in 1981 and 3% in 1990 -under employment from 22.8% in 1974 to 16% in 1981 and 8% in 1990 4. Increase in local participation index by 1981 5. Improved objective/perceived quality of life among Program Area population using the multipurpose Survey index. Sub-goal 1. (See output and purpose level OVI's for each BRBDP component project) 2. ADCs and ADTs expanded from 6 to 10, equipped, staffed and trained, backed by PDS and fully operational by 1977. 3.1 Total annual net investment in Program Area 13-14% of gross value added between 1980 and 1990. 3.2 From 1971 to 1990 74% of total net investment requirements will be met by private sector (farmers, housing, industry, etc.)	- Multipurpose socio-economic surveys by contract institution: (1974), 1977, 1979, 1981, 1990 - Applicable GOP regional and national accounts - Measures developed in (TAB) Urban Functions in Rural Development Project by 1978 - Surveys of barrio, municipal and area development councils: 1977, 1981, 1990 - Local participation index to be developed as part of socio-economic survey instrument Sub-goal - (See output and purpose level means of verification for each BRBDP component project) - NEDA/UNDP regional accounts	**Assumptions for achieving Goal Targets: (A-4)** - The GOP continues to be stable and external condition do not adversely affect national and regional development. - The Bicol Region and the BRBDP continue to have a high GOP political and development priority. - Targets and projections in the BRBDP comprehensive plan are based on valid assumptions, methodology and base-period estimates. - Major weather patterns will continue as in the recent past. - No major disasters will occur in the area. - Key complementary projects and programs financed and successfully implemented as planned before 1990: -- National Railway rehabilitation - Manila to Legaspi -- Rural electrification coverage in Program Area -- Agrarian Reform Program completed by 1978 -- National Grains Authority Marketing expanded -- DLGCD/Province Development planning, tax collection, infrastructure development -- Line agency health, population, nutrition, and sanitation -- Agriculture, fishery, and livestock extension: credit and production inputs; and farmers organizations Sub-goal - (See assumptions for each BRBDP component project) - Reliable data to measure private and public investment levels will be developed by NEDA/UNDP - Income Accounts Project. - Domestic and world prices will remain favorable for productive investment.
Project Purpose: (B-1) 1. Secure major financing from external donors and domestic sources and physically begin implementation of eight or more socially and economically feasible integrated development projects in the Bicol from 1977 to 1981. 2. Increase private sector agribusiness and rural manufacturing investments in the Bicol. 3. Manage AID support projects and coordinate all AID support in the Bicol.	**Conditions that will indicate purpose has been achieved. End-of-Project Status. (B-2)** 1.1 Four or more BRBDP packaged, IAD projects and four or more integrated sectoral projects financed and implementation underway from 1977 and 1981. 2.1 Sales value of agricultural supply firms increased from $22.8 million (1975 prices) in 1975 to $36.8 million (1975 prices) in 1980. 2.2 Rural Manufacturing Firms' gross value added increased from $24.1 (1967 prices) in 1975 to $37.6 in 1980. 2.3 Rural Manufacturing Firms' employment absorption increased from 70,000 in 1975 to 86,000 in 1980. 2.4 Six direct and 9 indirect major ($1 0 million plus) new investment projects attributed to BRBDP. 3.1 (See listing of U.S. support activities in Bicol (II-3.65) in USAID/Philippines DAP.	- Joint loan agreements signed and expenditure records - GOP and donor reports - GOP Regional and National Statistical sources - BOI, Provincial and Tax records - BRBDP surveys	**Assumptions for achieving Purpose: (B-4)** - Bilateral donors and international lending institutions financially able and willing to continue high level funding of development project in the Philippines. - World inflation rate does not limit availability or source of external capital for the Philippines. - Capital will be available for sound investments project in Bicol. - GOP continues policy of industrial dispersion to the regions. - GOP creates favorable financial climate through investment incentives in Bicol. - Private sector investment potential increases commensurate with public sector investment in infrastructure and service complementarities. - Domestic and world prices and markets remain favorable for business investment in Bicol - Agro-commodities produced as required; weather and pests not a serious problem.
Project Outputs: 1. Studies and surveys conducted defining basic and second generation problems and providing detailed baseline and revised planning data leading to project packaging. 2. Identify, plan and package a minimum of 12 major development loan projects in Bicol by 1981. 3. In-depth resource assessment conducted, agribusiness and rural manufacturing potential identified, pre-feasibility and and feasibility studies completed, and provided to potential investors (studies conducted jointly with interested investors). 4. AID funded loan and grant projects monitored and evaluated as scheduled.	**Magnitude of Outputs: (C-2a)** 1. Multipurpose socio-economic surveys and analysis completed in 1977, 1979 and 1981 in Camarines Sur and Albay. Other studies as required. 2. Five or more major IAD projects and 7 integrated sectoral projects identified, feasibility studies and design completed (PIDs, PRPs, & PPs for AID; project appraisals for other donors) from 1977 to 1981. 3. Fifteen or more feasibility grade studies completed by the GOP (with AID technical consultancy as requested by 1980. 4.1 Joint grant project evaluation mid-1977, 1979 and 1981 by NEDA and AID consultant team. 4.2 BRBDP management information system (including integrated networks) and reporting system fully operational by December 1976 with corrective management actions being taken. USAID Project Performance Tracking System (PPT/CPIs) operational and linked to the BRBDP for each AID supported project.	**(C-3a)** - Survey reports - Terms of reference - Final feasibility studies - Donor assessment reports - Evaluation reports - MIS reports - Gannt charts, integrated network system - AID exception and progress reports based on PPT	**Assumptions for achieving Outputs: (C-4a)** - BRBDP has GOP priority sufficient to receive adequate operational budget - AID continues to give high priority to Bicol Program in terms of budget and technical inputs - AID and BRBDP technical consultants and contractors available when required - BRBDP-Program Office given adequate authorities and operational resources to perform functions prescribed in PD 926 - BRBDP, NEDA line agencies and provinces continue beneficial coordinating relationships under BRBDP Coordinating Council. - Local government and institutions continue to provide planning inputs to BRBDP (including ADCs).

Project Inputs: (D-1) **Implementation Target: (Type and Quantity) (D-2)**

		Fiscal Year $000/₱000						
		74-76 TQ	77	78	79	80	81	77-81
1. USAID $000 (See Implementation Plan)								
a. Personnel and Contract Services		1002	660	670	650	590	400	2970
b. Training (35 participants)		107	42	50	60	40	-	192
c. Commodities		195	166	180	160	90	-	596
USAID TOTAL		1304	868	900	870	720	400	3758
2. GOP/BRBDP $000 (₱000) $1.00 = ₱7.5								
a. National Budget Appropriations								
- Personnel/Operating Budget	₱	(750)[b]	(2300)	(2500)	(2800)	(3000)	(3000)	(13600)
- Project Development/Monitoring Budget[a]	₱	(4250)[b]	(11600)	(10000)	(8000)	(6000)	(6000)	(41600)[c]
b. Other GOP (See Table 5 Part IIIB)								
- NEDA Counterpart & Trust Funds		(9400)[d]	(534)	(580)	(520)	(408)	(264)	(2306)
- GOP PL 480 Grant		(11300)	-	-	-	-	-	- [e]
- Line Agencies (thru BRBDP)		(3900)	-	-	-	-	-	- [f]
GOP TOTAL PESOS	₱	(29600)	(14434)	(13080)	(11320)	(9408)	(9264)	(₱57506)
TOTAL $ Equivalent	$	3947	1925	1744	1509	1254	1235	$ 7667
TOTAL AID/GOP	$	5251	2793	2644	2379	1974	1635	$11425

a/ Surveys, research, pilot projects, training feasibility studies (partial), preliminary engineering & design, monitoring & evaluation.
b/ First PD 926 obligation July-Dec. 1976.
c/ High BRBDP projection assumes most projects feasible
d/ Includes operating costs FY74-76
e/ (Alternate source and/or supplement to 1.b.)
f/ (To be determined by GOP Memos of Agreement)

ESTIMATED BRBDP COMPONENT PROJECT COSTS
Current and Proposed Loan Projects and Major Feasibility Studies ($ Million) 1/ 4/
(Associated with but not costed in Bicol grant support project except A.2)

	Obligations FY75-76	Earliest Date of Estimated Obligations 2/ 77	78	79	80	81	77-81
A. AID-GOP Feasibility Studies							
1. AID Loan (FX)	.6	1.8	.5	.6	.2	.2	3.3 3/
2. GOP Budget (LC)	.4	1.1	.3	.4	.2	.2	2.2 4/
Total	1.0	2.9	.8	1.0	.4	.4	5.5
B. AID-GOP Loan Projects							
1. AID Loan (FX)	13.5	8.0	21.0	10.0	( )	( )	39.0
2. GOP Budget (LC)	17.5	8.5	19.0	10.0	( )	( )	37.5
C. Other Donor - GOP Loan Projects							
1. Donor Loans	-	-	5.0	45.0	32.0	29.0	111.0
2. GOP Budget	-	-	5.0	24.5	31.0	29.0	89.5
TOTAL Loan Projects (B & C)	31.0	16.5	50.0	89.5	63.0	58.0	277.0

1/ Order of magnitude estimates by year (see Tables 8 & 9, Part IV); New obligations estimated at $150 million between 1977-81.
2/ FY for AID, CY for Other Donors-GOP.
3/ If host country expertise identified, foreign exchange to be reduced or study dropped from feasibility loan listing (Est. $2.0 plus in loans from AID FY77-81).
4/ Est. 70% included in BRBDP budget; 30% NEDA loan counterpart.

country:	project no:	project title:	date:	/X / original / / revision #	apprvd:
Philippines	492-0303	Bicol Integrated Rural Development	9/76		WD

CPI NARRATIVE

1. 10-76 BRBDP 1977 Operational Plan completed
2. 11-76 PP approved
3. 12-76 Joint Project Agreement signed for FY 77
4. 12-76 USAID Monitoring begins (includes management and coordination of all Bicol grant and loan projects).
5. 1-77 BRBDP Management Information System begins
6. 1-77 BRBDP Budget Appropriation (for on-going and new activities). Begin GOP operational year.
7. 2-77 Begin socio-economic research and analysis.
8. 6-77 Biennial Joint Project Evaluation (2 mos.).
9. 9-77 End of Fiscal Year 77 Project Indicators
   a. BRBDP Public Sector Component Projects
      (1) Actual number packaged
      (2) Actual number funded and on implementation.
   b. BRBDP-promoted Private Sector Component Projects
      (1) Actual number of pre-feasibility studies
      (2) Actual number of new investment projects (direct and indirect)
   c. PAR included
10. 10-77 BRBDP 1978 Operational Plan completed
11. 11-77 Joint ProAg signed for FY 78
12. 1-78 BRBDP Budget Appropriation
13. 9-78 End of FY 78 Project Indicators (refer to #9).
14. 10-78 BRBDP 1979 Operational Plan completed
15. 11-78 Joint ProAg signed for FY 79
16. 1-79 BRBDP Budget Appropriation
17. 6-79 Biennial Joint Project Evaluation (2 mos.)
18. 9-79 End of FY 79 Project Indicators (refer to #9).
19. 10-79 BRBDP 1980 Operational Plan completed
20. 11-79 Joint ProAg signed for FY 80
21. 1-80 BRBDP Budget Appropriation
22. 9-80 End of FY 80 Project Indicators (refer to #9)
23. 10-80 BRBDP 1981 Operational Plan completed

ANNEX E

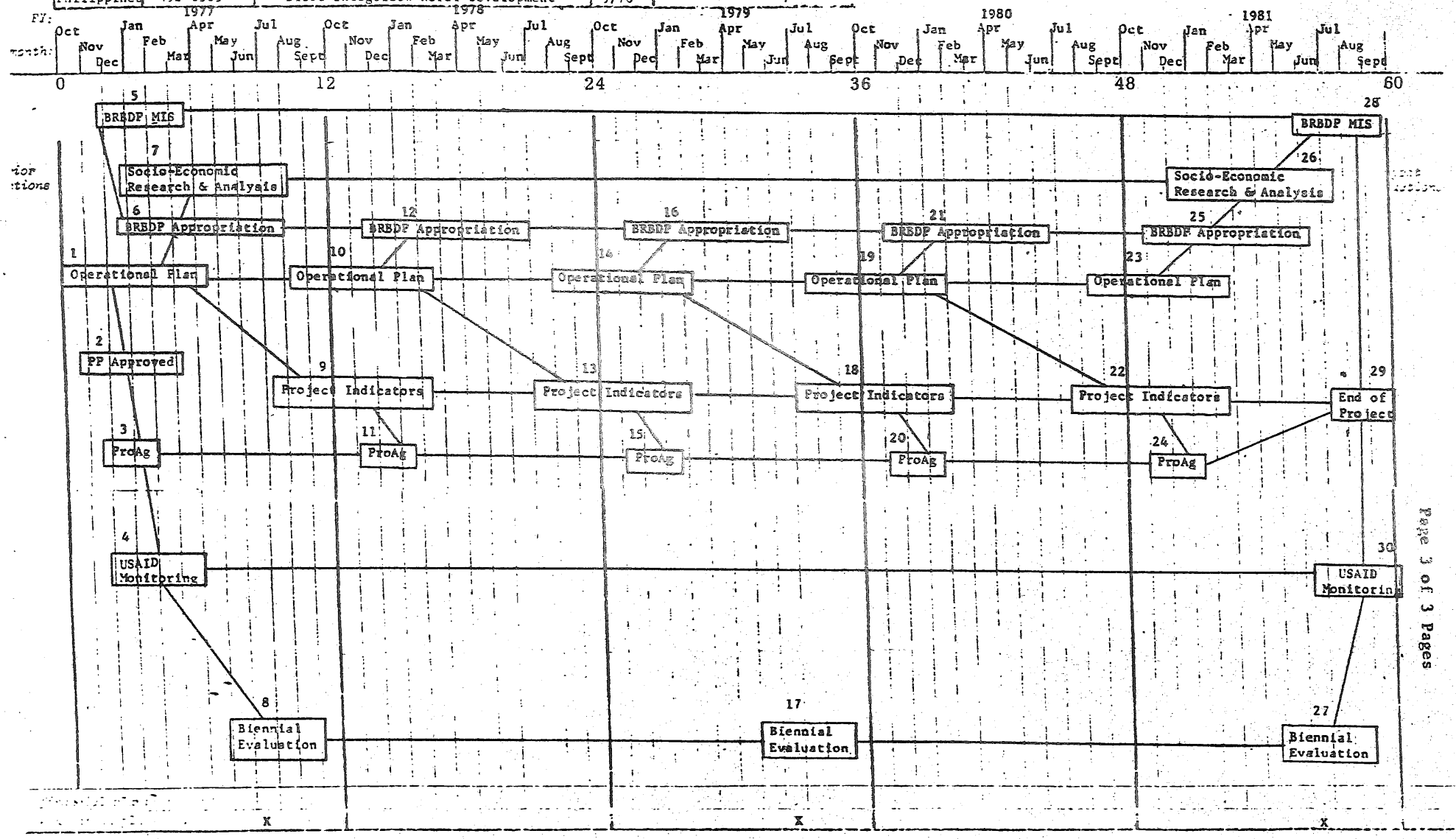
country:	project no:	project title:	date:	original / revision #	apprvd:
Philippines	492-0303	Bicol Integrated Rural Development	9/76	/X/ original / / revision #	WD

CPI NARRATIVE

24.	11-80	Joint ProAg signed for FY 81
25.	1-81	BRBDP Budget Appropriation
26.	6-81	Complete socio-economic research and analysis
27.	6-81	Joint Biennial Evaluation
28.	9-81	End BRBDP Management Information System
29.	9-81	End of Project Status Begin final PAR
30.	9-81	End USAID monitoring.

PROJECT PERFORMANCE NETWORK

country	project no.	project title	date	X original / revision	no.
Philippines	492-0303	Bicol Integrated Rural Development	9/76		



ANNEX F

Initial Environmental Examination

(For determination and preparation by AID/W if required)

(See Environmental Concerns for background Part III C)

Bicol Integrated Rural Development Project

Description of Proposed AID (Contract) Consultancy-FY1977 ProAg

1. Biennial (In-depth) Project Evaluation ($30,000)

As a follow-on to the FY1975 grant project evaluation, the FY76 evaluation will be conducted by a joint U.S./GOP professional team (3 U.S. contract members) for two months and will address the organization, management, integrated area development strategy, and the overall grant project in support of the BRBDP Program (See discussion in Part IV C). The scope will also include a comparative analysis of the Bicol Program with the three other integrated projects in the Philippines.

2. Comprehensive Socio-economic Survey and Analysis ($80,000)

A multi-purpose instrument (modified from Institute of Philippine Culture/Social Survey Research Unit, and Agricultural Development Council/Laguna studies), is being developed to conduct a comprehensive survey (3,000 sample households) in the two provinces of the Bicol River Basin (1.8 million pop.). Two man months (2MM) of consultancy were funded by AID/W to develop and pretest the instrument (over period Oct 76-Jan 77). The survey will provide updated baseline data, progress indicators, and initial impact analysis for the projected 150-200 million in public and private investment projects and programs to be undertaken in the Bicol (See discussion in Part IV C). Computerized analysis will be carried out by selected private research groups/institutions and will include expertise from the University of the Philippines system.

3. Project Design and Analysis ($30,000)

This category includes U.S. consultants (two identified from prior work with the Bicol Project and others to provide (a) project design/evaluation consultancy including training of BRBDP/interagency training staff using actual projects for case studies, and training in feasibility study methodology (including World Bank system) (2MM), (b) consultancy for BRBDP management/analytical skills, management information systems and the AID PIT System linkages (1MM), and (c) technical assistance for assessment and modification of engineering and design of two FY77 Loan Projects (3MM). The preference is AID/W Engineering. Other specialized consultancy (project development staff-PDS) required for final loan PP's (Bula IAD II, Integrated Rural Health, and Rinconada IAD III-FY78) will be identified in PRP's. Where possible, PDS requirements for PP and PRP development will be covered from other consultancy funded under this project, especially water resources.

4. Rural Credit Research ($20,000)

This proposed study, by Ohio State University (Dr. Dale Adams) and

the BRBDP-PO agribusiness section, is follow-on research (consultancy) to that financed under USAID Agriculture (FY75) with the Central Bank, agricultural credit research division. It will focus on the problems and status of group lending practices initiated in the Bicol (the Bicol compact farm group credit experience contributed to the design of the national credit program). It will also address the status of informal credit since land reform measures have changed local relationships. The study (including a Filipino graduate student from Ohio U.) involves the Central Bank, rural banks, the UPLB rural credit institute, the BRBDP and focuses on compact farms and other loan groups. Detailed farm record data will be cross-tabulated for wider analysis. It is proposed that the study be an intensive sub-sample of the socio-economic study (2) discussed above. Dr. Adams would also assist in the design and analysis of a wider scope BRBDP study covering agricultural credit and agribusiness credit systems in the Bicol (current and projected).

5. On-farm Water Assessment Team and Training ($40,000)

Ref. Manila AIDTO-A34, this is follow-on to prior CUSUSWASH consultancy in FY1974 establishing a sub-project to rehabilitate four basin irrigation systems (7,000 ha.). A team of four from the Consortium for International Development (CID--Col. State or Utah State U.) would assess: (a) work underway including problems of design, management, organization, water law, etc., and (b) assist in preparation of scopes of work and operational plans for on-farm water management components of major loan projects underway or being packaged (40,000 ha.). A series of water resources training courses (irrigation design, drainage, etc.) have been conducted for the past three years at the national level, using Bicol Project consultants as resource people. The Regional Office of the National Irrigation Administration and the National Water Resource Council propose to conduct 1977 training in the Bicol. The on-farm water management training would be scheduled during the CID team consultancy period for additional output. This will be coordinated with other USAID irrigation support projects including the national Small Scale Irrigation Project (Loan).

6. Watershed Management ($15,000)

A consultant (3MM) is proposed to assist an interagency/BRBDP group to assess the status of the Bicol River Basin watershed area, prepare detailed terms of reference for proposed feasibility studies to be conducted in each IAD and terms for a basin-wide feasibility study including recommendations for reforestation and structures to control heavy silting from the volcanoes. This team will coordinate with the USAID national level Agro-forestry Project (PP now in preparation).

7. Irrigation/Agriculture Planning ($70,000)

A follow-on contract has been requested by the BRBDP for the University of Hawaii Irrigation/Agricultural Research Project (Dr.

Jaw-Kai Wang - Principal Investigator). The first phase to be completed in mid 1976 includes the modular irrigation/drainage design for two systems (12,000 ha.) to be included in 1977 feasibility studies. The follow-on study will further analyze the socio-economic factors (including income distrution patterns), institutions (land reform and farmer's organizations) cropping patterns, labor availability, etc. and recommend the optimum operational design for actual implementation. The output will be included in loan packages for other donors. The scope would also include analysis of the overall water resources allocative policy using earlier AIT water balance data,the Basin comprehensive water study, (August 1976), domestic/industrial water requirements and proposed irrigation system expansion.

8. Irrigation Management/Pump Design ($40,000)

(a) Continued funding for the USDA PASA incumbent (irrigation specialist) through June 1977, as the AID Project Manager for the Libmanan IAD Loan Project (AID FY75) and for pump design and irrigation water measurement. He would also coordinate other water resources consultancy to June 1977.

(b) Specialized consultancy to write specifications for large pumps for three proposed irrigation loan projects (BUREC).

9. Water Resources Economist ($10,000)

The proposed source is CID (U. of Colorado or Utah State U. - 2MM). This consultancy is requested by the BRBDP to assess the methodology of the recently completed TAMS-TAE pre-feasibility study, and assist in preparation of terms of reference/scopes for proposed IAD full feasibility studies. He would also assist the proposed GOP Bicol interagency Water Resources Team develop methodologies (linked to BRBDP training session on conducting feasibility studies), operational plans and schedules to counterpart foreign and domestic water resource contractors.

10. Transportation Engineer/Economist ($10,000)

This consultancy is proposed to assist BRBDP interagency team (2MM in two visits) during the pre-feasibility and feasibility studies for trunk roads (330 kms) and upgraded secondary and feeder roads (1070 kms), to be packaged for other donor financing. The first visit would focus on the Quirino Highway feasibility package being updated/proposed for World Bank financing. He would also assist in an objective assessment of progress of the Bicol Roads Project Loan (FY76 funding).

11. Environmental Planning/Engineering ($15,000)

Consultancy is proposed to assess the initial environmental studies already undertaken in the Bicol River Basin eco-system,recommend additional required studies and analysis, and assist in preparation of the detailed terms of reference/scopes for the environmental

impact assessment components of IAD contract feasibility studies. He would prepare a status report for the perusal of AID, World Bank and Asian Development Bank and other donors from which environmental impact statements could be prepared as part of loan funding documentation. He would also assist in the organization of an interagency environmental committee for the Bicol River Basin. (U. of North Carolina has been suggested).

12. Ground Water Specialist ($10,000)

This provides technical consultancy (2MM) for the BRBDP ground water sub-project for test drilling of the Bula IAD Project Area (for FY77 loan) and to assist the BRBDP/public works representatives to assess the drilling, core samples, testing for aquifer characteristics and draw-down in the Bula area for placement of pumps. He would develop and recommend a detailed ground water investigation program for Naga-Calabanga IAD IV and Rinconada IAD III. (Depending on the driller contracted by the BRBDP, this (2MM) consultancy may be extended for 10 months (from project contingency funds) per recommendation by the TDY ground water specialist from AID/Pakistan (Sept. 1976) or included in ground water investigation package under a consultative services loan sub-project.

13. Fisheries Consultant (2MM) ($10,000)

He would assess the recent fisheries development proposals (economic, environmental, biological, and technical), for the Bicol River Basin with specific focus on the Rinconada IAD (three lakes fisheries development). He would assist in the development of detailed scopes of work on fisheries to be covered in the GOP contract, full feasibility studies.

14. Domestic Water System/Sanitation Engineering ($20,000)

This is a follow-on contract (SEATEC/BKK - 4MM) for consultancy to assist the interagency BRBDP team in the design, survey and analysis of existing and proposed barrio water supply systems and sanitation conditions of all barrios in the Bicol Program Area. (This data is required for the PP for the final design of the Integrated Health Project proposed FY77). This will be coordinated with the USAID Human Resources Development Division health projects and Provincial Development Division Barangay Water Supply Project (PRP stage).

15. Agribusiness and Rural Manufacturing Consultancy ($50,000)

Based on the visit of the AID/W PPC sponsored Agribusiness Assessment Team (July 1976), the BRBDP is restructuring their agribusiness program. The timing of the proposed follow-on AID/W agribusiness investment assessment team has not been determined. (a) Based on the initial 3-week assessment and a probable follow-on PPC team visit, it is proposed that a broadly based agricultural marketing consultant (6MM) be provided to assist a BRBDP/NEDA regional team carry out a detailed marketing study and develop an operational

marketing strategy/plan for the region and the Bicol River Basin (market demand, agricultural supply, warehousing, processing, etc.); (b) Consultancy is also required in the area of investment incentives through government policies, taxation and promotion activities (2MM); (c) Grant technical consultancy (by specific commodities) is being requested by the BRBDP for the six investment areas identified by the AID/W PPC team. If feasibility loan studies are not likely to be initiated by June 1977, the Mission recommends limited grant funding for the first of the six proposed pre-feasibility studies (coconut processing, feed mixing, bagasse pulp, salt manufacturing, abaca, or food processing); (d) Per an AID/W TAB recommendation, the BRBDP is assessing a possible study by SEARCA for agricultural supply systems in the Bicol Region. Depending on FY77 fund availability, this could be deferred to FY78. (e) All agribusiness activities in the Bicol will be coordinated with the proposed national level "Integrated Ag Production and Marketing Project" (FY77) and "Agribusiness Development Project" (FY78).

16. Integrated Extension ($20,000)

Per AIDTO A-34 and A-20 (AID/W TAB), a proposal to utilize Development Alternatives, Inc. to provide resource people for a workshop/seminar on integrated extension is being developed by the BRBDP. The concept of an integrated extension system has been endorsed by national department secretaries. The innovative Bicol Program appears to be the best suited to design and test such a system for the Philippines in connection with the integrated area development projects and interagency area development teams.

Country: Philippines — GRANT ACTIVITY DATA

Title	Funds	Proposed Obligation ($000)	
Bicol Integrated Rural Development	Food and Nutrition	FY78 900	
Number	**Prior Reference**	**Initial Oblig.**	**Scheduled Final Obligation**
492-0303	FY77 Congressional Presentation	FY: 77	FY: 81

Project Target and Course of Action: The thrust is to assist the Bicol River Basin Development Program (BRBDP) (a) to plan and package an interlinked set of major, integrated development projects, secure capital financing from external donors and domestic sources, and begin actual implementation, and (b) to increase private sector agribusiness and rural manufacturing investments in the Bicol. The target is the poor majority, principally small scale farmer, in the program area of 1.6 million people. The clear goal is to raise their socio-economic level to the national average by 1990.

Progress to date: This project is a follow-on to the (grant) Bicol River Basin Development Project (492-55-199-260). The organization/coordinating structure of the GOP Bicol Program is in place and fully operational. There is a developing institutional capability to plan and package integrated projects, and monitor interagency implementation. Presidential Decree 926 (April 1976) elevated the Bicol Program to the Cabinet Coordinating Committee for Integrated Rural Development, provided increased authorities and authorized national appropriations ($.7 million Jul-Dec 76). A revised Bicol Comprehensive Development Plan (strategy) was developed and operation plans are being prepared. The comprehensive water resources pre-feasibility study was completed and an intermodal transport study will be completed in late 1976. Feasibility studies are under preparation for 4 major integrated area development (IAD) projects and there are informal expressions of interest from international lending institutions and bilateral donors. The Libmanan IAD Project(4,000 irrigated ha.) and Bicol Roads Project (454 kms.) associated with this grant project are under implementation ($13.5 million in AID Loans, and $17.5 GOP). This grant project provides USAID management/coordination for all AID assistance project in the Bicol. Socio-economic surveys and analysis are being conducted to facilitate the planning process, measure progress, and evaluate impact on the poor. The synergistic effects of integrated rural development will also be measured.

FY78 Program: A total of $900,000 is proposed for: (1) USAID core planning/management team (4DH-$180,000), (2) PASA/Contract services ($490,000); technical consultancy includes water resources (irrigation planning/design, ground water, on-farm and watershed management); regional planning, environmental engineering, agribusiness and socio-economic survey, and evaluation; (3) training-6 U.S. and 5 third country in water resources and planning; (4) commodities ($50,000) primarily vehicles, communications, survey and office equipment.

U.S. DOLLAR COST (In Thousands)

(Original project)	Oblig.	Expend.	Unliquid
Thru 6/30/76 a/	(1,228)	(884)	(344)
Int. Quarter	(62)	(152)	(254)
Est. FY 77 b/	868	650	
Est. Thru 9/30/77	868	620	248
		Future Yr. Oblg	Est Total Cost
Proposed FY 78	900	1990	3,758

Cost Components	OBLIGATIONS Est. FY 1977 D.H.	Est. FY 1977 Cont/ PASA	Est. FY 1977 Total	Proposed FY 1978 D.H.	Proposed FY 1978 Cont/ PASA	Proposed FY 1978 Total
U.S. Tech...	160	500	660	180	490	670
Participants.	42	-	42	50	-	50
Commodities	166	-	166	180	-	180
Other Costs	-	-	-	-	-	-
Total Obligations	368	500	868	410	490	900

Principal Contractors/ Agencies

PASA: BUREC, USDA
Other: U. of Hawaii, U. of Ohio, Consortium for International Dev. (CID)(Col.State and Utah State U.), Asian Institute of Tech., & Institute of Philippine Culture

a/ USAID/P Financial Report as of 9/30/76

b/ Assumes FY77 will be included in new project

SHADOW SHEET

Country: Philippines Project: Bicol Integrated Rural Development 492-0303

1. Explanation of Difference from Last Year's CP

Last Year's CP Showed for FY 1977

	Direct	Con/PASA	Total
US Tech.	160	500	660
Part.	42	-	42
Commod.	166	-	166
Other	-	-	-
Total	368	500	868

This Year's CP Shows for FY 1977

	Direct	Con/PASA	Total
US Tech.	160	500	660
Part.	42	-	42
Commod.	166	-	166
Other	-	-	-
Total	386	500	868

Explanation of Difference

FY 1977 included in CP for Bicol River Basin Development Project (492-55-199-260). Revised project (492-0303) presented in new project paper (10/76).

Original Estimate
Total Cost 981
Final Date 1978

Last Year's CP Showed
Total Cost 2,700
Final Date 1979

This Year's CP Shows
Total Cost 3,758 (FY77-81)
Final Date 1981

Actual Obligations for FY 1976 and TQ a/

	Direct	Con/PASA	Total
US Tech.	159	71	230
Part.	18	-	18
Commod.	49	-	49
Other	1	-	1
Total	227	71	298

a/ USAID/P Financial Report as of 9/30/76

2. U.S. Technicians by Major Category	FY 76 $	FY 76 #	TQ $	TQ #	FY 77 $	FY 77 #	FY 78 $	FY 78 #
a. Direct Hire		110		49		160		180
TOTALS								
b. Contract/PASA								
(1) PASA		12		13		60		80
(2) CONTRACTS		-		-		-		-
Institutions		-				240		220
Technicians		46				200		190
TOTALS				13		500		490
GRAND TOTALS		168		62		660		670

3. Participants by Major Category	FY 76 $	FY 76 #	TQ $	TQ #	FY 77 $	FY 77 #	FY 78 $	FY 78 #
a. Direct AID								
Academic				-		-		10 (1)
Non-Academic				-		-		10 (4)
3rd Country		18(add)		-		42 (8)		30 (6)
TOTALS		18		-		42 (8)		50(11)
b. Contract/PASA								
TOTALS								
GRAND TOTALS								

	U.S.	Third
c. Unit Costs	$5,000	$6,000

d. No. completed Prior FY77: 20

4. Commodities by Major Category	FY 76 $	TQ $	FY 77 $	FY 78 $
a. Direct AID				
Vehicles; office, Communications, Survey, Lab, and Testing equipment	49	-	166	180
TOTALS				

5. Other Costs by Major Specific Item	FY 76 $	TQ $	FY 77 $	FY 78 $
a. Direct AID				
TOTALS				
b. Contractor/PASA				
TOTALS				
GRAND TOTALS				

6. Pipeline Explanation by Major Element

	6/30/76	9/30/76	9/30/77	9/30/78	Justification
U.S. Personnel Costs	208	154	180	160	Forward funding of contracts and
Participants	41	40	20	30	training participants, and lead
Commodities	59	35	48	60	time for commodity procurement.
Other Costs	50	25	-	-	
TOTALS	358	354	248	250	

7. Local Costs in Support of Project

($000) ₱7.5=$1.00	FY 1976	TQ	FY 1977	FY 1978
U.S. Generated	-	-	-	-
U.S. Purchased	-	-	-	-
Government Budget	335	667	1,925	1,744
TOTALS				

8. Relevance of Project Under Congressional Mandate: (As specific as possible)

This project, in direct support of the Government of the Philippines (GOP) Bicol River Basin Development Program (BRBDP), is clearly targetted to raise the socio-economic level of the poor majority in the economically depressed Bicol area to the national average by 1990 in terms of increased real income more equitably distributed (through increased production and productivity), increased employment, increased opportunities for the people to participate in the development process, and an improved overall quality of life.

The majority of the 1.6 million population of the expanded program area are poor farm families tilling less than five acres (many under the land reform program). The thrust of the project is to assist the GOP plan and package viable integrated development projects for external donor and GOP funding. Complementary to this is the encouragement of increased private sector investment in agribusiness, to support agricultural development and agro-based rural manufacturing to increase value-added and off-farm employment.

ANNEX H

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
OFFICE OF THE ASSISTANT DIRECTOR FOR REGIONAL DEVELOPMENT

Ramon Magsaysay Center
1680 Roxas Boulevard
Manila
Tel.: 59-80-11, Ext. 408/497

No. 27 Bagumbayan Street
City of Naga
Camarines Sur
Tel.: 436/308/550

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

I, CHARLES C. CHRISTIAN, the principal officer of the Agency for International Development in the Philippines, having taken into account, among other things, the maintenance and utilization of projects in the Philippines previously financed or assisted by the United States, do hereby certify that, in my judgment, the Philippines has both the financial and human resource capability to implement the planning and development of integrated development projects for the Bicol Region; further that the Government of the Philippines will support development costs and maintain and utilize these projects after implementation.

This judgment is based on the analysis of the capital projects already being implemented in the Bicol and the project analysis as detailed in the grant Bicol Integrated Rural Development Project Paper imposed therein.

Mr. Charles C. Christian
Acting Mission Director
USAID Philippines

11/2/76
Date

ANNEX I

Republic of the Philippines

BICOL RIVER BASIN DEVELOPMENT PROGRAM

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USAID/C&R

11 October 1976

Mr. Charles C. Christian
Acting Mission Director
Agency for International Development
Manila, Philippines

Dear Mr. Christian:

The Bicol River Basin Development Program is moving forward and promises to achieve the goal of assisting the poor majority in the Bicol. As you know the Government of the Philippines has given the Bicol Area and the Bicol River Basin Development Program high priority. Presidential Decree 926 recently promulgated and the decision to provide national budget appropriations are clear manifestation of this priority.

USAID has been a partner in the development and support of the Program to date both through grant and the initial capital loans. I would like to take this opportunity to thank you for USAID assistance to formally request continued grant support over the next five years. This is the most critical period for the development of major projects for the Bicol Program Area and USAID assistance will continue to be needed. It is our hope that the project packaging effort will lead to major direct investment from multilateral and bilateral donors in addition to planned USAID inputs.

Thank you again for the support you have been providing to the program. We look forward to our continued good working relationsips in the future.

Very truly yours,

ALFREDO L. JUINIO
(Secretary)
Cabinet Coordinator, BRBDP

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A.I.D. Project No. 492-0303

Bicol Integrated Rural Development Project

Section 2.1: Draft Grant Project Description

The goal of the Bicol Integrated Rural Development Project which supports the Bicol River Basin Development Program is to raise the socio-economic level of the poor majority in the economically depressed, but well-endowed Bicol River Basin program area to the national average by 1990, in terms of increased real income equitably distributed (increased production and productivity), increased employment, increased opportunities for the people to participate in the development process, and an improved overall quality of life. The Bicol Program, with its integrated area development strategy is designed to attack the classical development problems and constraints in the Bicol program area, which has a population of 1.6 million, through decentralized, integrated, interagency planning and implementation of multisectoral projects and programs.

The grant Bicol Integrated Area Development Project is designed to provide essential technical consultancy, participant training not available in the Philippines, and commodity inputs from AID, in support of the Bicol Program. The Government of the Philippines shall provide national budget appropriations pursuant to Presidential Decree 926 for operations and project development, and monitoring. The Bicol River Basin Development Program Office shall manage the project with the assistance of a USAID core team. The thrust of the support project is the identification, planning, design, assessment, and packaging of (1) an integrated set of major development projects in the public sector and (2) high-potential investment projects in the private sector. The project purposes are (1) to secure financing from external and domestic sources and (2) to begin physical implementation of socially and economically feasible projects so as to reverse the current downward economic trend. The project will provide for Government of the Philippines and A.I.D. monitoring and evaluation of the separate component projects implemented by interagency management offices. Integrated area development projects (IADs) and/or integrated sectoral projects include water control and transportation infrastructure, agricultural support activities (including marketing), institutional development and essential social services for human resource development.

The complementarities of all public sector infrastructure projects and expanded social service programs in the Bicol program area, plus government incentives and promotional activities, are expected to encourage a higher level of private sector investment in agri-business and rural manufacturing. This in turn is expected to stimulate increased agricultural production, create more off-farm employment and strengthen the local tax base. Comprehensive, socio-economic surveys and analyses will be undertaken over time to facilitate the development planning process, to measure progress and to evaluate the impacts and synergistic effects of the various public and private sector investment projects.

In the process of addressing development needs in the Bicol program area, the interagency organizational structure and institutional capability of the Bicol River Basin Development Program will be strengthened and the strategy tested as an operational model of integrated rural development.