

July 1981

Overview of AID Assistance
BICOL RIVER BASIN DEVELOPMENT PROGRAM

AID ASSISTANCE - GENERAL

The Bicol River Basin Development Program (BRBDP) being undertaken by the Government of the Philippines (GOP) is a test case in its integrated rural development strategy. The innovative, sub-regional integrated area development (IAD) approach includes decentralized planning and implementation of multi-sectoral projects in a defined geographical area of critical need and high growth potential. Equally important has been the development of an organizational structure and institutional capability in the concerned agencies and local governments to achieve an increasing degree of regional and local level coordination of development activities (see attachment 1 for summary background).

AID played a key supporting role in helping to initiate the Bicol Program in 1974-75 and in sustaining the expanded Program to date. ADB became a major donor in 1979. AID assistance includes one completed and one follow-on grant technical assistance project, two sub-loan feasibility studies (a basin-wide comprehensive water resources development study and the Rinconada IAD III feasibility study), and five on-going Bicol loan assistance projects (see Table 1). As of July 1981, AID loan obligations totalled \$25.1 million for the Bicol Program. GOP commitments against AID loans are estimated at \$59.4 million which is an indicator of the national priority attributed to the Bicol Program as a test case. Total AID grant and loan commitments to the Bicol Program through 1981 is \$30.6 million; the estimated GOP commitment is \$75.5 million (in local currency). The combined GOP and AID total is over \$100 million, approximately one-third from AID and two-thirds from the GOP.

AID grant expenditures are scheduled through 1983 (recently extended 1 year) and loan draw-down to 1985.

USAID Philippines does not propose financing additional major projects through the BRBDP at this time. USAID, however, is encouraging other donor assistance, particularly for the major infrastructure components such as that proposed for the Baliwag-San Vicente, Quinali and Irosin-Jubon areas (see Table 1). USAID, together with the Bicol Program Office and lead technical agencies, is now focusing on the implementation of existing AID-supported projects and the evaluation of both the process and the impact of component projects and the overall Bicol Program.

OTHER DONOR SUPPORT

One of the stated purposes of the Bicol grant technical assistance project is to prepare project packages and secure major financing from external donors for the Bicol Program. Sub-loan project feasibility studies, institutional and other technical assistance have been provided to facilitate the entry of other donors. The first major project with another donor was signed in October 1979. It amounted to a \$46.8 million package which includes a \$41 million Asian Development Bank loan and a grant of \$5.8 million

Table 1. On-going and Proposed Projects Assisted by External Donors
Bicol River Basin Development Program

I. AID ASSISTANCE	Duration CYs	Obligations FYs	\$ Million		
			Donor	GOP (est)	
<u>Grant Technical Assistance Projects</u>					
- Bicol River Basin Development	74-78	74-77	2.2	4.3	
- Bicol Integrated Rural Development	78-83 ^{1/}	78-80	2.2	8.8	
- Ag Research 1 (Bicol Research Complex) ^{2/}	75-80	75	0.7	1.5	
- Ag Outreach (Camarines Sur Ag College) ^{2/}	79-82	79-81	0.4	1.5	
<u>Consulting Services (Sub-Loans)</u>					
- Bicol River Basin Comprehensive Water Resources Development Prefeasibility Study	77-76	-	0.6	0.4	
- Rinconada IAD III Feasibility Study	77-78	-	0.5	0.5	
<u>Development Loan Projects</u>					
	No.				
- Libmanan IAD I	0275	76-82 ^{1/}	75	3.5	6.4 ^{3/}
- Bicol Secondary & Feeder Roads	0281	77-82 ^{1/}	76	10.0	35.7 ^{3/}
- Bula IAD II	0310	78-82 ^{1/}	78	3.0	6.8 ^{3/}
- Rinconada IAD III (Buhi-Lalo)	0289	79-85	79-80	5.0	4.3
- Bicol Integrated Health, Nutrition & Population	0319	79-84	79	2.5	5.3 ^{3/}
			Sub-Total	30.6	75.5
II. ADB-ASSISTED BICOL RIVER BASIN DEVELOPMENT PROJECT	79-85	79	46.8 ^{4/}	35.9	
- Rinconada Component (Bato-Baao IAD III)					
- Naga-Calabanga Component (IAD IVa)					
			Sub-Total	77.4	111.4
			TOTAL	188.8	
III. OTHER PROPOSED PROJECTS (est.) ^{5/}					
- Baliwag-San Vicente IAD V (Feasibility Study Complete)				53.5	
- Quinali IAD VII (Feasibility Study Complete)				115.8	
- Irosin-Juban Valley IAD (Feasibility Study Underway)				29.0	
- Bicol Roads II (Feasibility Study Underway)				70.0	
			GRAND TOTAL	457.1	

^{1/} Project period extended.

^{2/} Non-BRBDP, but functionally related.

^{3/} Revised GOP lead agency request.

^{4/} Includes \$5.8 million from European Economic Community.

^{5/} Costs and proportions by GOP and donor subject to change with study results and negotiations.

from the Europe Economic Community. The project combines (a) major irrigation and related components in the Naga-Calabanga IAD IV area and (b) major components in the Rinconada IAD III area where AID is assisting with the Buhi-Lalo irrigation and upland components. The ADB-supported project will provide resources for irrigation, drainage, access roads, agricultural support services, and the development of community water systems.

The BRBDP has submitted the Baliwag-San Vicente IAD V and Quinali IAD VII feasibility studies to ADB for informal review and comment. Another GOP funded feasibility study of an integrated project for Sorsogon's Irosin-Juban Valley is in the final stage of preparation. While UNDP has been actively assisting in planning activities surrounding the region's port facilities and mineral resources, other possible donors (IBRD, Japan and Germany) have informally expressed interest in supporting the Bicol Program. Some BRBDP related Japanese assistance has been provided in flood control in IAD V.

SUMMARY OF AID-SUPPORTED PROJECTS (See attached Bicol Program area map)

The following briefly describes the background and status of completed and on-going Bicol projects supported by AID.

Grant Bicol River Basin Development Project (1974-1978) - The joint objective was the establishment and institutional development of the broader GOP Bicol River Basin Development Program. AID inputs included technical assistance in planning, preliminary technical and socio-economic studies, initial loan project development, third-country training and commodity procurement. In addition to the first two Bicol development loan projects, the early Bicol Program helped to induce or facilitate additional GOP and other investments in the Bicol (e.g., rural electrification, roads, agricultural research, drainage, national railroad improvement, etc.). A joint, in-depth Bicol evaluation in June 1977 (Arthur Mosher, U.S. team leader) critically examined and described the status of the Bicol Program at that time; the findings were that the joint GOP-U.S. objectives of the early Bicol Program and AID support were achieved.

Grant Bicol Integrated Rural Development (Support) Project (1978-83) - The joint objective is to support the expanded and accelerated GOP Bicol Development Program. AID inputs are primarily in the form of technical assistance: (1) to support GOP line agency implementation and BRBDPO/USAID monitoring of on-going Bicol projects assisted by AID loans, and to coordinate other AID-supported (Mission and AID/W funded) projects or activities in the Bicol, (2) to support adequate impact evaluation of component projects and the overall GOP Bicol Program, (3) to identify, design, support feasibility analysis and package additional component projects primarily for external donor financing, (4) to promote accelerated private sector investment in agribusiness and small-scale rural industry, and (5) to facilitate institutional spin-off and spread effects from the Bicol Program. The USAID/Philippines FY 83 Country Development Strategy Statement (CDSS) identifies Bicol as one of the three core regions wherein future AID resources will be focused. Within the scope and objectives of the Bicol Program, Bicol IRD grant supported research and technical assistance can further facilitate the start-up of new or expanded CDSS related activities in the Bicol Region.

A joint evaluation of the broader Bicol Program and this support project was conducted in July-August 1979. An AID Washington sponsored Program Impact Evaluation is scheduled for July 1981. A summary report will be published as part of the worldwide Impact Evaluation Series by AID Washington.

Libmanan IAD I Project (loan assistance 1976-82) - This project provides for the construction of a 4,000-hectare irrigation and drainage system plus flood control, salt water intrusion protection facilities, and farm access roads in an economically depressed, but high growth potential area in the lower Bicol River Basin. Institutional and agricultural support components are built into project implementation and post-project system operations. The lead implementing agency is the National Irrigation Administration (NIA). As in all Bicol component projects, the Bicol Program Office has a coordinating and monitoring responsibility. Direct beneficiaries include 2,500 small-scale farm households. Another 10,000 households in the two major towns will be indirect beneficiaries of flood protection, access roads and secondary economic activity. Although some minor construction remains to be completed, pump operation and debugging of the system began in April 1981. Irrigation service is presently being provided in portions of the irrigable area. A three-year water management applied research and training program has been initiated under the auspices of NIA and the International Rice Research Institute (IRRI). This is being funded in part under the Bicol IRD grant project. There will be a continuing effort to organize an irrigators' association to assist in system operation and ensure quality water management. Improved extension, provision of adequate credit, post-harvest handling, marketing and related agricultural support activities are targeted to receive increased attention from Ministry of Agriculture (MA) technicians and farmers' cooperatives. Targeted land reform activities are virtually completed but need to be reassessed.

Experience from the design and implementation of the Libmanan IAD I Project has been important in the design of the Bula IAD II and the Rinconada/Buhi-Lalo IAD III Projects. Many of the trained personnel are transferring to Buhi-Lalo or the ADB-assisted project as work is completed at Libmanan. The most recent joint assessment of the project was conducted in April-June 1981. An impact evaluation is scheduled in 1982 after the irrigation system is fully operational.

Bicol IAD II (Bula-Minalabac - 1978-82) - This project is basically a combination land consolidation and irrigation project covering 2,300 hectares in the middle Bicol Basin. The project also includes construction of community buildings, improved water supply facilities, organization of farmer associations and cooperatives, and training of project area residents in agriculture and health. It is the most functionally integrated of the Bicol component projects to date. Irrigation water for most of the project area will be pumped from the Bicol River and the remainder from ground water sources. The Ministry of Agrarian Reform (MAR) is the lead implementing agency. The Bicol Program Office is the coordinating agency. Six other line agencies are actively involved in the institutional, agricultural and community support activities. There are an estimated 1,230 small-scale farm family beneficiaries.

As of July 1981, approximately 24% of the total project was completed. Insufficient and delayed budget initially handicapped the project, but this now appears to be resolved. While A&E design work is substantially complete, the lengthy GOP contracting process, particularly an unexpected audit interpretation of the regulations, has resulted in further delay of national level contract approval (all contracts over ₱2 million) and delay of construction activities. Related contracting problems resulted in one element of the project reverting to GOP force account for construction by NIA. With the initiation of irrigation service in Phase I scheduled for early next year, irrigators' association development and water management concerns require increased attention. Significant increases in irrigation system construction and operation costs merit review by GOP and U.S. planners. The most recent evaluation was conducted in June 1981. Justification for an extension of the project assistance completion date (PACD) for AID support to December 1984 will be addressed in the scheduled 1982 progress evaluation.

Rinconada IAD III (Buhi-Lalo - 1979-85) - Under the project, Lake Buhi will be developed into a source of gravity irrigation water for an additional 8,000 hectares by constructing a control structure and regulation facilities and by excavating the outlet channel. The project will rehabilitate irrigation facilities in the existing 1,100-hectare Lalo system and construct new facilities to expand the system to 3,000 hectares using water from Lake Buhi. Irrigation service roads built along irrigation canals will provide improved access and will tie in with two additional links being constructed under the Bicol Secondary and Feeder Roads Project. Irrigation system maintenance equipment is being procured. Additional irrigation water from Lake Buhi will be diverted to the existing Barit Irrigation System and to the service area of the ADB-assisted project which will rehabilitate and construct irrigation facilities in the Baao and Bula areas. NIA is the lead line implementing agency for this irrigation component.

Improved water management, farmer organizations and farm family training in the Lalo service area are also supported under the project. NIA recently adopted the Lalo system as a pilot test area for its participatory approach to irrigation development on a national irrigation system.

Another component of the project is a pilot upland development program in selected areas of the 10,000-hectare Lake Buhi watershed. This component is under the auspices of the Bureau of Forest Development (BFD), Region V Office. The objective is to assist poor upland farmers increase their productivity and to protect the watershed and irrigation water source. The pilot program will develop and maintain 5 nursery sites, reforest 150 hectares of denuded public forested lands, and provide for the development of mixed agro-forestry orchards, firewood lots, contours/terraces and vegetative terraces for annual crops on the farms of 95 cooperators.

A basin level prefeasibility study and the Rinconada IAD III feasibility study, both partially funded by AID sub-loans, confirmed the viability of developing lake water supplies and expanding/rehabilitating gravity irrigation systems. The Rinconada study provided preliminary engineering and cost data. The Rinconada/Buhi-Lalo loan was signed in August 1979. Engineering design and construction work is underway and overall project completion stands at 20% as of July 1981. Associated ADB-supported Rinconada activities are in the preliminary design stages.

Bicol Secondary and Feeder Roads Project (loan assistance 1977-82) - This project provides for the rehabilitation and improvement of 191 kms. of secondary roads and 241 kms. of feeder roads within the Bicol River Basin. Fourteen separate road and bridge sub-project systems are being constructed by the GOP through 25 separate construction contracts over a five-year period (1978-82). AID inputs include \$3 million in maintenance equipment and \$0.2 million for U.S. road maintenance consultancy. Effective maintenance of all project and existing roads in the provinces of Camarines Sur and Albay is considered as important as new construction. The remaining \$6.8 million from AID provides for part of the local currency costs for engineering design, and construction using fixed amount reimbursement procedures. The Ministry of Public Highways (MPH) is the lead implementing agency. The Bicol Program Office has a coordination and monitoring role.

This project increases the road density in the Bicol River Basin area by approximately 50% (from 0.29 to 0.59 km. per square kilometer of arable land). It is projected that average transport costs will be reduced by 42% for cargo and 40% for passengers, and travel time will be reduced by 55% because of improved roads. The roads generally traverse intensively cultivated lands, serve small-scale farmers and connect relatively isolated communities with existing highways and market centers. The road project is integrated into the larger Bicol Program and specifically provides secondary and feeder road access to and within the Libmanan IAD I Project, Bula IAD II Project and the Rinconada IAD III (Buhi-LaLo) Project. These connect with farm access roads on main canals and laterals being constructed in the IAD projects. The project also provides access in the ADB project supported areas, but additional roads are also funded by ADB. The Bicol Roads project map shows the location of the 14 sub-project systems. (See attachment 2.)

As of July 1981, the Bicol Roads Project is approximately 75% completed. Construction is finished on five of the sub-project road systems and work is underway on the remaining roads. The contract approval and review process, limited POL availability, and government attempts to deal with increasing costs were the primary factors delaying scheduled construction. The basic U.S. contract for road maintenance management was completed in December 1979. Short-term, follow-on assistance of a monitoring and technical assistance nature is being provided over 1981-1982 from the Bicol IRD grant. Three million dollars in U.S. equipment has begun arriving in country. Major portions of the AID loan will be drawn down in 1981 and 1982 as usable sub-projects are completed and reimbursement is requested. The project assistance completion date (PACD) was recently extended through October 1982 by AID/W. The most recent progress evaluation was conducted in September 1980. A follow-on evaluation (joint monitoring event) is scheduled in late 1981.

Bicol Integrated Health, Nutrition and Population Project (1979-84) - This loan project was signed in August 1979. Designed primarily by the GOP, the project constitutes a high priority social services component which balances the broader GOP Bicol Program with its heavy orientation towards physical infrastructure. The project will deploy approximately 400 Barangay Health Aides (BHAs), fund environmental sanitation improvements (household water, waste disposal and drainage), and strengthen Ministry of Health (MOH) management and interagency coordination. There will be an estimated 400,000

targeted beneficiaries in 400 barangays (barrios) which make up about one-third of the rural barangays of Albay and Camarines Sur provinces. The MOH is the lead implementing agency. Other involved regional line agencies and local governments have placed a high priority on implementation of this project. The design specifically addresses the replicability question and embodies a significant attempt to mobilize local resources and maximize local government and beneficiary participation. The start of project activities was delayed due to changes in key Ministry of Health personnel. Progress has been slow because of staffing and budgeting problems. The Project Management Office has moved ahead on several components. At present, some 65 Health Aides have been trained and fielded. Project manuals are being finalized; commodity procurement and modest project related construction are underway.

OTHER AID-SUPPORTED PROJECTS

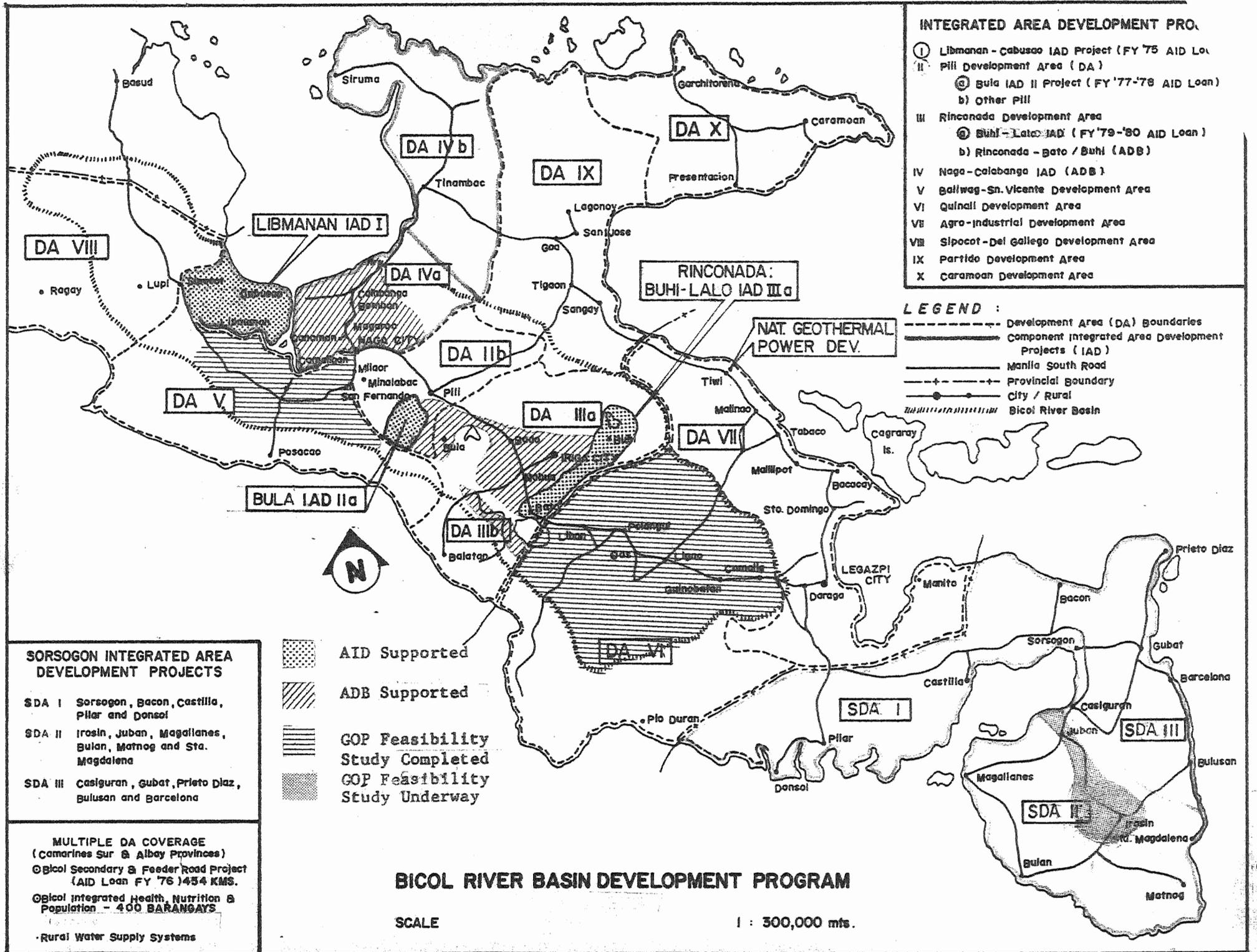
Where national programs are in place, the Bicol Program functions to support and coordinate with them. This is true for AID-assisted projects such as Rural Electrification, Provincial Development and PDAP Rural Roads, Rural Service Center (3 cities in Bicol), Agrarian Reform, Cooperative Marketing, Integrated Agricultural Production and Marketing, Small Farmer Systems (Irrigation), Real Property Tax Administration, plus Population, Health and Nutrition project activities. The selection of the Bicol location as one of the four original sites for the Agricultural Research Loan Project, for example, was planned as part of the Bicol Program. The Agricultural Education Outreach Project also provides support to the Camarines Sur Agricultural College (1 of 7), which is closely associated with the agricultural research complex and the Bicol Program. Bicol Program surveys and evaluations will also attempt to measure or take into account the impact of other AID-supported projects as they relate to sub-regional development.

Bicol Program experience provided valuable lessons and direction in the preparation of the USAID/Philippines FY-82 and FY-83 Country Development Strategy Statement (CDSS). These documents, reviewed and supported by the National Economic and Development Authority (NEDA), will serve as the basis for planning future AID assistance projects in the Philippines. As part of the CDSS process, joint GOP-U.S. discussions in early 1980 led to the identification of Bicol as one of the three core regions in which AID resources will be focused beginning in FY-82 and FY-83. As a result of these joint strategy discussions and agreements, USAID Philippines does not propose additional major projects through the BRBDP at this time. However, BRBDP supported research and informal regional planning mechanisms will facilitate the start-up of new CDSS related projects in Bicol several of which were recommended in the 1979 joint Bicol Biennial Evaluation. Tentatively, these new projects will include agro-forestry improvement, coastal wetland management, farming systems research, and rural enterprise development activities.

INTEGRATED AREA DEVELOPMENT PRO.

- I Libmanan - Cabusao IAD Project (FY '75 AID Loan)
- II Pili Development Area (DA)
 - a) Bula IAD II Project (FY '77-'78 AID Loan)
 - b) Other Pili
- III Rinconada Development Area
 - a) Buhi - Lalo IAD (FY '79-'80 AID Loan)
 - b) Rinconada - Gato / Buhi (ADB)
- IV Naga - Calabanga IAD (ADB)
- V Galiwag - Sn. Vicente Development Area
- VI Quinal Development Area
- VII Agro-industrial Development Area
- VIII Sipocot - Del Gallego Development Area
- IX Partido Development Area
- X Caramoan Development Area

- LEGEND :**
- - - - - Development Area (DA) boundaries
 - — — — — Component Integrated Area Development Projects (IAD)
 - — — — — Manila South Road
 - + — + — Provincial boundary
 - — — — City / Rural
 - ||||| Bicol River Basin



SORSOGON INTEGRATED AREA DEVELOPMENT PROJECTS

- SDA I Sorsogon, Bacon, Castilla, Pilar and Donsol
- SDA II Irosin, Juban, Magallanes, Buluan, Matnog and Sta. Magdalena
- SDA III Casiguran, Gubat, Prieto Diaz, Gulusan and Barcelona

- AID Supported
- ADB Supported
- GOP Feasibility Study Completed
- GOP Feasibility Study Underway

MULTIPLE DA COVERAGE
(Camarines Sur & Albay Provinces)

- OBical Secondary & Feeder Road Project (AID Loan FY '76) 454 KMS.
- OBical Integrated Health, Nutrition & Population - 400 BARANGAYS
- Rural Water Supply Systems

BICOL RIVER BASIN DEVELOPMENT PROGRAM

SCALE

1 : 300,000 mts.

Bicol River Basin Development Program (BRBDP)

The Bicol Region

The Bicol Region consists of 6 provinces (2 of them separate islands) at the southeastern tip of Luzon. It comprises 8% (3.5 million) of the total Philippine population and 6% of its total land mass. It is characterized by:

- a declining per capita income, already at \$172 (in 1974) one of the lowest among the 12 Philippine regions and only 49% of the national average
- a serious maldistribution of income, with the poorer half of the people surviving on \$45 per capita in 1974
- the lowest share among regions of employment and production in large, modern manufacturing establishments, in proportion to population
- a lack of employment opportunities, resulting in high rates of under-employment and outmigration to Manila (1.1%)
- high rates of malnutrition, morbidity and mortality (78% of preschoolers malnourished, of which 5.5% are serious 3rd degree cases)

Development Constraints

The chief obstacles to more rapid development have been:

- physical isolation due to neglected transportation infrastructure
- poor communication facilities
- hostile physical environment (particularly typhoon and flooding)
- inefficient production, storage and marketing technology
- capital scarcity
- inequitable land tenure arrangements
- rapid rate of crude population growth (3.3% annually before migration)
- poverty and technological ignorance about health and nutrition
- ineffective government institutions and low revenue collection

GOP Development Strategy

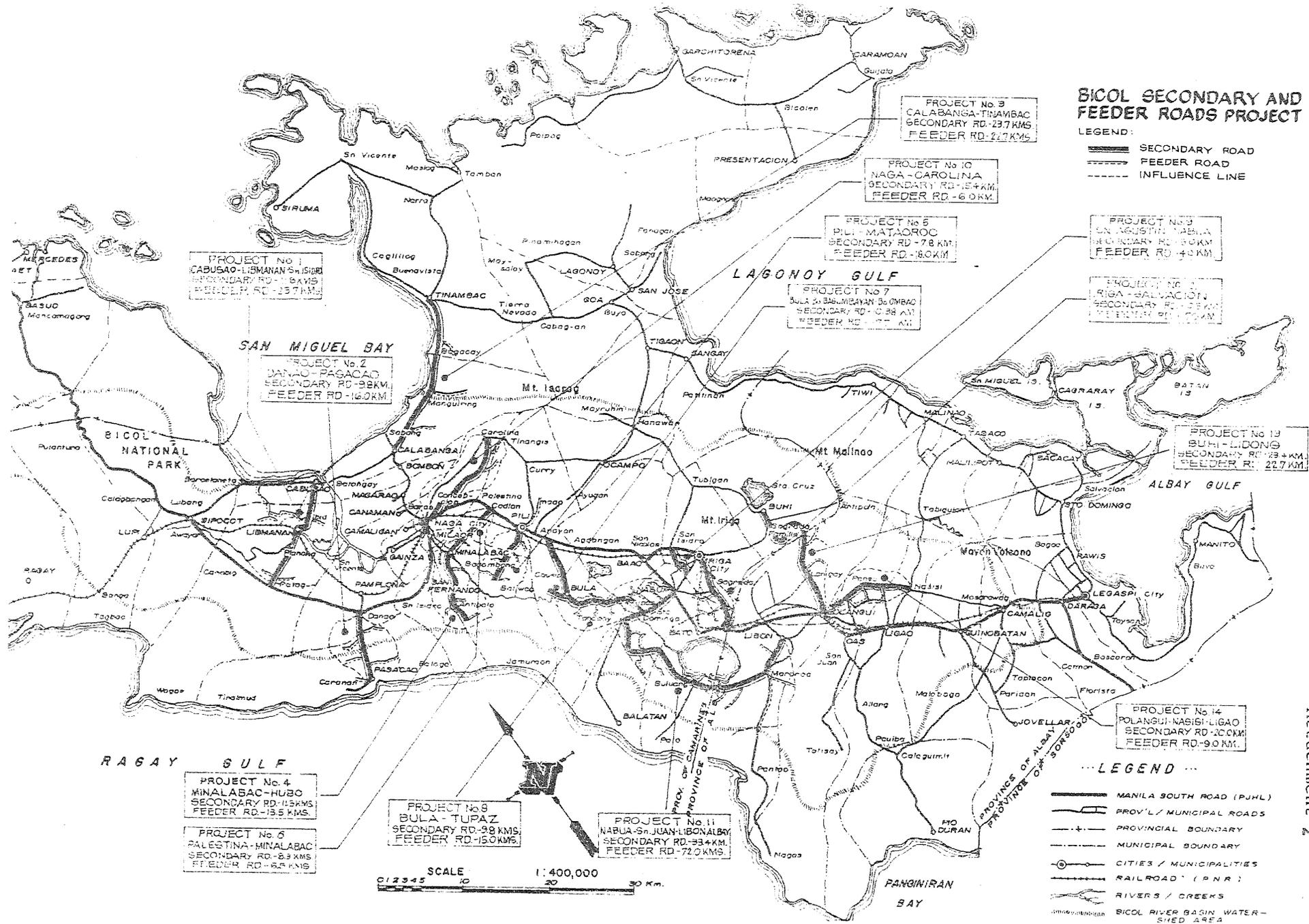
Pursuant to a national strategy of rural mobilization and development, the Bicol Program is an innovative effort to prioritize and reduce these constraints in a phased, coordinated, decentralized manner:

- The BRBDP institution is itself designed to improve the effectiveness of government entities to plan and implement development programs and projects. Its Integrated Area Development approach focuses on a delineated area of recognized socio-economic need with high growth potential to maximize benefits. It directs an integrated, cross-sectoral, interagency planning process to ensure coordination. It decentralizes project planning and management to maximize local government and popular participation.
- Basic infrastructure development demands high priority to reduce costs of other activities and to best utilize natural resources: drainage and flood control, irrigation facilities, watershed protection, roads, bridges, port facilities, the railroad, geothermal power and rural electrification, intra-regional telecommunications.
- Land reform is designed to reduce income inequality.
- Agricultural development - IAD component projects focus on full development of water resources and provide supporting programs to increase productivity of small-scale farmers; upland watershed development expands the focus to include conservation of natural resources.
- Integrated health, nutrition and population. This project will train and help rural residents to improve environmental sanitation, reduce morbidity, malnutrition and population growth.
- The promotion of private sector investment is designed to expand productive and employment-generating capital assets and to stimulate technological improvements.

BICOL SECONDARY AND FEEDER ROADS PROJECT

LEGEND:

- SECONDARY ROAD
- FEEDER ROAD
- INFLUENCE LINE



PROJECT No. 1
CABUSAO-LISMANAN-SHISHIB
SECONDARY RD-18.5KMS
FEEDER RD-13.7KMS

PROJECT No. 2
DANAO-PAGACAO
SECONDARY RD-9.8KM
FEEDER RD-16.0KM

PROJECT No. 3
CALABANGA-TINAMBAC
SECONDARY RD-23.7KMS
FEEDER RD-21.7KMS

PROJECT No. 10
NAGA-CAROLINA
SECONDARY RD-15.4KM
FEEDER RD-6.0KM

PROJECT No. 6
PILI-MATAOROC
SECONDARY RD-7.8 KM
FEEDER RD-18.0KM

PROJECT No. 9
SAN AGUSTIN-NABUA
SECONDARY RD-18.0KM
FEEDER RD-4.0KM

PROJECT No. 7
BULA-SAN BAMBAYAN-SAN OMBAC
SECONDARY RD-0.28 KM
FEEDER RD-1.07 KM

PROJECT No. 11
RIGA-SALVACION
SECONDARY RD-2.5KM
FEEDER RD-1.05KM

PROJECT No. 13
BUNI-LIDONG
SECONDARY RD-18.4KM
FEEDER RD-22.7KM

PROJECT No. 4
MINALABAC-HUBC
SECONDARY RD-15.5KMS
FEEDER RD-13.5 KMS

PROJECT No. 5
PALESTINA-MINALABAC
SECONDARY RD-8.3 KMS
FEEDER RD-6.5 KMS

PROJECT No. 8
BULA-TUPAZ
SECONDARY RD-9.8 KMS
FEEDER RD-15.0KMS

PROJECT No. 11
NABUA-SAN JUAN-LIBONALBY
SECONDARY RD-33.4KMS
FEEDER RD-72.0KMS

PROJECT No. 14
POLANGUI-NABISI-LIGAO
SECONDARY RD-20.0KM
FEEDER RD-9.0KM

LEGEND

- MANILA SOUTH ROAD (P.N.H.L)
- PROV'L / MUNICIPAL ROADS
- PROVINCIAL BOUNDARY
- MUNICIPAL BOUNDARY
- CITIES / MUNICIPALITIES
- RAILROAD (P.N.R)
- RIVERS / CREEKS
- BICOL RIVER BASIN WATER-SHED AREA

SCALE 1:400,000
0 20 30 Km.