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BICOL INTEGRATED AREA DEVELOPMENT III  
(Rinconada/Buhi-Lalo)

AID LOAN NO. 492-T-056 A&B

SUMMARY ASSESSMENT REPORT

by

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(1)

PREFACE

The summary assessment reported in these pages was conducted by Jerry Silverman (Team Leader) and Keith Ogden. Jerry Silverman was responsible for structuring the investigation and editing the Report.

The Assessment Team had only 8 days<sup>1/</sup> to visit the Project site, conduct interviews, review available documents, write, type, and reproduce a first draft, and present it for review to the BIAD III Project Manager and seven senior members<sup>2/</sup> of his staff. Given limited time, the Team consciously chose to use a Rapid Reconnaissance Approach<sup>3/</sup> in order to identify the areas of primary concern and pride to Project Managers, assist them in thinking about approaches which they might use to solve problems, and--only secondarily--to provide a written report which might be of use to AID/W's Bicol River Basin Impact Evaluation Team due to arrive in Manila in July, 1981.

Although with the assistance of Project Management Staff and farmer-beneficiaries the team was able to identify several project implementation problems and the Report tends to concentrate on them, readers should be aware that the overall view of the Team Leader is that BIAD III is currently the best example of any participatory development project he has seen in his fifteen years of overseas development experience.

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1/ Wednesday, June 17 through Wednesday, June 25, 1981.

2/ Feliciano Berdin (Project Manager), Virgilio Brusas (Assistant Project Manager), Felix Pena (Chief, Farmer Assistance Division), Arturo Gonzales (Chief, Construction Division), Manuel Silerio (Chief, Design Section), Catalino Tria, Jr. (Chief, Plans and Programming Section), Ted Ehera (Community Organizers Supervisor), and Raul Ursua (Chief, Administrative Division).

3/ George Honadle, Rapid Reconnaissance Approaches to Organizational Analysis for Development Administration (Wash., D.C.: Development Alternatives, Inc., 1979), 56 pages.

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- C. ANTHONY BOTTRALL, PLANS FOR THE FARMERS' PARTICIPATION IN THE MANAGEMENT OF THE BUHI-LALO IRRIGATION SYSTEM (LONDON: OVERSEAS DEVELOPMENT INSTITUTE, 1981), 10 PAGES (MIMEO)
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LIST OF ABBREVIATIONS

AID	Agency for International Development
ADB	Asian Development Bank
BIAD I	Bicol Integrated Area Development Project I (Libmanan-Cabusao)
BIAD II	Bicol Integrated Area Development Project II (Bula-Minalabac)
BIAD III	Bicol Integrated Area Development Project III (Rinconada/Buhi-Lalo)
BRBCC	Bicol River Basin Coordinating Council (GOP)
BRBDP	Bicol River Basin Development Project
BRBDPO	Bicol River Basin Development Project Office (GOP)
CCD	Chief of Construction Division (PMO/BIAD III)
CO	Community Organizer (PM)/BIAD III)
COA	Commission on Audit (GOP)
DS	Development Support Bureau (AID/Washington D. C.)
FARA	Fixed Amount Reimbursement Agreement
FS	Field Supervisor (GOP Agencies other than NIA)
FT	Field Technician (GOP Agencies other than NIA)
GOP	Government of the Philippines
IA	Irrigator's Association
IAD	Integrated Area Development
MA	Ministry of Agriculture (GOP)
MAR	Ministry of Agrarian Reform (GOP)
NACIAD	National Council for Integrated Area Development (GOP)
NIA	National Irrigation Administration (GOP)
NPC	National Power Corporation (GOP)

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O&M	Operation and Maintenance
PMG	Project Management Group
PMO	Project Management Office
PMD	Program Management Department
ORDDA	Office of Rural Development and Development Administration, AID/Washington D. C.
RAGL	Rotational Area Group Leader
RAMC	Rotational Area of the Main Canal
RIDA	Rinconada Integrated Development Area
ROW	Right of Way
RSC	Research and Service Center, Ateneo de Naga
SFDL	Supplementary Farm Ditch Leader
USAID	United States Agency for International Development
ZE	Zone Engineer

## I. INTRODUCTION: PROJECT DESCRIPTION

### Overview

Between 1951 and 1979, the U.S. Government, through AID, has obligated approximately \$132.7 million towards helping the Government of the Philippines increase agricultural production and the income of the rural poor through a wide variety of programs (e.g., Rural Electrification, Provincial Development Assistance and Rural Roads). A major emphasis among these Programs has been, since 1974, support of a GOP integrated area development (IAD) program in the Bicol River Basin in Southern Luzon, an area characterized on the one hand by abundant natural resources and on the other hand by extreme rural poverty. To date, USAID has obligated \$28.4 million for five separate loan projects and two grant technical assistance projects in the Bicol River Basin. Obligations totalling \$46.8 million have followed from the Asian Development Bank and European Economic Community. The subject of this Assessment Report, the Rinconada/Buhi-Lalo Integrated Area Development (BIAD III) Project, is but one component of this overall effort.

The Loan Agreement provides for (1) construction of major water regulation facilities in the Lake Buhi vicinity; (2) rehabilitation and construction of irrigation facilities in the Lalo area and procurement of equipment for adequate system operation and maintenance; (3) supporting organizational, training, extension and applied research activities; and (4) continuation of pilot-level upland development activities in the Lake Buhi watershed.<sup>1/</sup> Major AID funding is provided for Lake Buhi Water Source Development, Lalo Irrigation Construction and Agro-forestation/Watershed Development. Supplementary AID funding is also provided to the PMO for the Irrigation and Agricultural Support component. This supplementary funding helps cover the cost of the construction of physical infrastructure, line agency field technician allowances, and farmer training. AID will also finance all O&M equipment and the cost of Impact Evaluation. The GOP will provide the major funding for the Project Office facilities, the activities of the Farmer Assistance Division and other PMO costs. The GOP will also provide partial funding for the other project components.

### Costs

The total budget for BIAD III is currently estimated to be \$9.3 million, of which \$5 million or 54% is provided by the AID loan.<sup>2/</sup>

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<sup>1/</sup> Project Loan Agreement between the Republic of the Philippines and the United States of America for Bicol Integrated Area Development III (Rinconada/Buhi-Lalo) Project (August 1, 1979). Annex I, p. 1. Amendment No. 1 to the Project Loan Agreement between the Republic of the Philippines and the United States of America for Bicol Integrated Area Development III (Rinconada/Buhi-Lalo) Project (August 29, 1980). Annex I.

<sup>2/</sup> The Project Paper estimated total costs at \$8.6 million; of which \$5 million would have accounted for 59% of total costs.

An Introduction to BIAD III

Activities in the Rinconada/Buhi-Lalo Project can be divided into two hydrologically distinct areas: the Upper Lalo and the Lower Lalo. In the Upper Lalo Area, the existing gravity irrigation system (built by NIA in 1974-75) is being rehabilitated.<sup>3/</sup> In the Lower Lalo Area, Lake Buhi will be developed to supply water control and distribution structures.

A major design change that has occurred since the Project Paper was written has been a dramatic increase in the participation of farmers in the design and implementation of the project. As a result of the addition of the Participatory Approach, the primary emphasis of BIAD III is not to just build an irrigation system, but rather, to experiment with an approach to developing management structure for long term O & M. This Project is a national pilot for this type of approach.

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<sup>3/</sup> Also underway in the Buhi Area is the Agro-forestation/Watershed Development component of the Project. However, that component is not assessed in this Report.

## II. MANAGEMENT STRUCTURE

The management system is, in most respects, similar to those in use in BIAD I and BIAD II. In the formal sense, a lead agency (NIA) is designated for overall project level management; the Project Management Office (PMO) is responsible to the Regional Director of the Lead Agency (NIA); the Regional Director (NIA) is responsible for broad policy questions and horizontal coordination between government agencies at the Regional level to the BRBDP and its subordinate Project Management Group and for operational implementation to the National Office of the NIA.

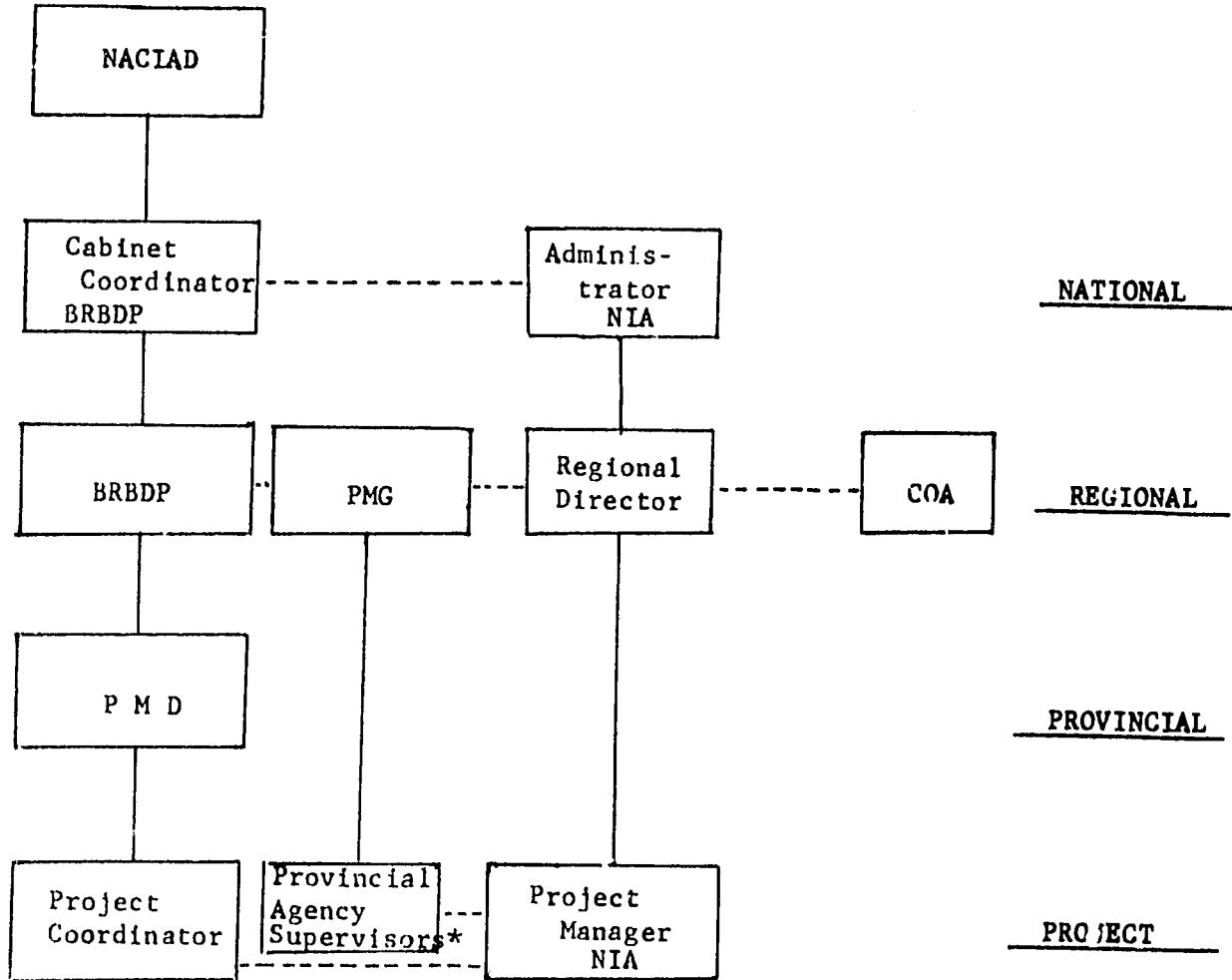
However, the structure of the management system for BIAD III varies slightly, but significantly, from the systems in use in BIAD I and BIAD II.

The Organizational Chart (Figure 1) on the next page illustrates the structure of the BIAD III management system from National to Project level.

The most significant difference between the BIAD III structure and those of BIAD I and II is that the Field Supervisors and Field Technicians assigned by GOP agencies other than the NIA are outside the PMO. Thus, the PMO coordinates with them at the project level, but they are responsible to their agency's Provincial Supervisors. Given the structure of authority illustrated in Figure 1, conflicts between other agencies, Field Supervisors and the PMO must be resolved at the PMG level, to which the PMO has direct access but Field Supervisors do not. Being able to reach directly to the Regional level does not provide any particular benefit to the PMO, since it has no direct access to those directly responsible at the provincial level for those Field Supervisors.

Figure 2 illustrates the management structure from the project to farmer level.

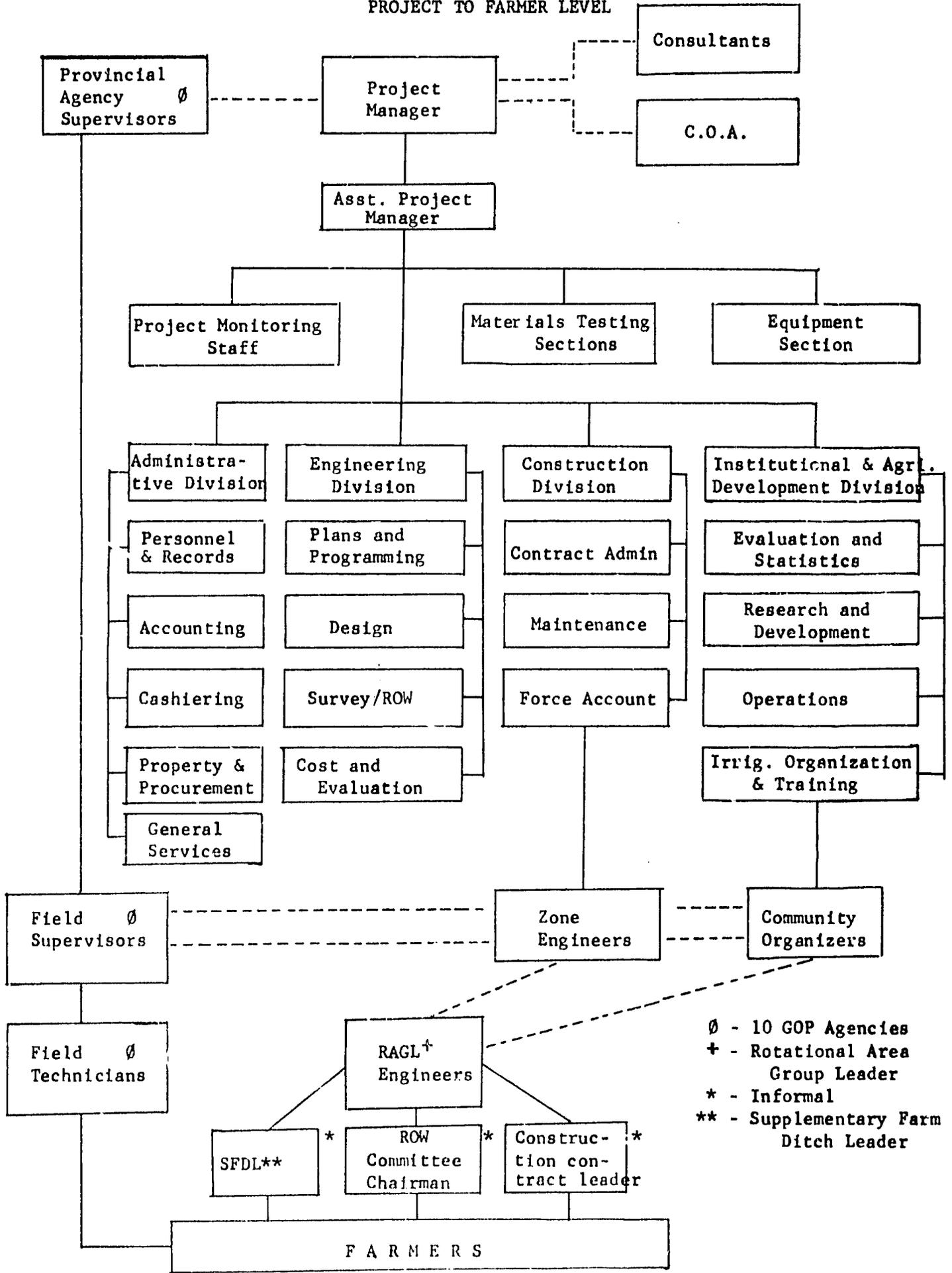
FIGURE 1  
MANAGEMENT STRUCTURE  
NATIONAL TO PROJECT LEVEL



\* 10 GOP Agencies.

SOURCE: Based on Discussions with PMO/BIAD III Staff

FIGURE 2  
MANAGEMENT STRUCTURE  
PROJECT TO FARMER LEVEL



- Ø - 10 GOP Agencies
- † - Rotational Area Group Leader
- \* - Informal
- \*\* - Supplementary Farm Ditch Leader

SOURCE: Based on Discussions with PMO/BIAD III Staff.

Figure 2 clearly illustrates the potential for cross-pressures on farmers could result if specific boundaries between government agencies are not drawn and/or if field technicians do not respect those boundaries once they are drawn.

### III. APPROACH TO DEVELOPMENT

#### A. Learning from Experience

##### 1. BIAD I and BIAD II

The PMO staff responsible for the implementation of the Rinconada-Buhi/Lalo project have benefited substantially from prior experience in the IAD projects at Libmanan-Cabusao (BIAD I) and Bula-Minalabac (BIAD II). Fully five of the six senior PMO staff have had prior implementation experience in one or both of those projects.<sup>4/</sup> In addition, several of the zone engineers have also had prior experience at Libmanan.

The result of that experience has been a substantially different approach to both the design and construction of physical infrastructure and the approach to farmer participation in BIAD III. The willingness to learn lessons and the ability to creatively apply learning from those lessons is illustrated in Figure 3 below.

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<sup>4/</sup> Feliciano Berdin (Project Manager) was an Area Engineer at Upper Pampangu Irrigation System and was Chief of the Construction Division at Libmanan; Arturo Gonzales (Chief, Construction Division) was Deputy Project Manager for Physical Infrastructure Development at Bula; Felix Peña (Chief, Farmer Assistance Division) was Chief of the Evaluation and Statistics Section of the Institutional Development Division at Libmanan; Manuel Silerio (Chief, Design Section) was an Area Engineer at Libmanan; and Catalino Tria, Jr. (Chief, Plans and Programming Section) was employed in the Contract Administration Division at Libmanan.

Figure 3  
 SAMPLE OF LESSONS LEARNED FROM OTHER BIAD PROJECTS

LIBMANAN AND/OR BULA

RINCONADA (BIAD III)

PRACTICE	PROBLEM	RESPONSE	RESULT
<b>A. Physical Infrastructure Development</b>			
1. <u>Libmanan</u> (BIAD I) Construction of main structures by private contractor.	1a. Unreliability of contractor re: provision of adequate inputs resulting in delays. b. Substandard quality of work.	1a. Limit contracting to only major structures. b. Increase PMO supervision of contractor performance.	1a. Rehabilitation construction by PMO/NIA in Upper Lalo ahead of schedule. Costs of construction to date lower than estimates. b. Construction of main infrastructure in Lower Lalo not yet begun. Therefore, cannot assess contractor performance.
2. <u>Bula</u> (BIAD II) <u>All</u> construction of physical infrastructure by private contractors.	2a. Delays due to 3 step contracting approval process. b. Substandard quality of work. c. Unreliability of contractors re: provision of adequate inputs resulting in delays.	2. PMO has primary responsibility for construction by Force Account. Only one contract for major work. One step approval process (NIA/Manila) for contracts up to ₱15 million (\$2 million).	2. As above (1a).
<b>B. Beneficiary Participation</b>			
1. <u>Libmanan</u> (BIAD II) Contracted community organization responsibility to private consulting firm (EDP). Used conventional approach:	1a. Farmer Organizations existed only on "paper"; not functional groups.	1a. PMO/FAD assumes direct responsibility for mobilization of farmers and organization & training.	1a. PMO has direct information on farmer attitudes and level of participation which can be shared among all PMO divisions.

Figure 3 (continued)

PRACTICE	PROBLEM	RESPONSE	RESULT
<p>(i) Formal Organization; determination of structure, assignment of members, and election of officers first.</p> <p>(ii) Farmer role seen as passive; mobilization for purpose of being "sold" on project and receiving instructions.</p>	<p>b. Construction work proceeded without farmer input.</p> <p>(i) serious right of way disputes.</p> <p>(ii) Extent to which farmers could or would be willing to take over responsibility for O&amp;M of completed system; farmers refused to take responsibility for O&amp;M.</p> <p>(iii) Technical construction plans based on maps, not actual farmplot contours.</p>	<p>b. Uses participatory/evolutionary approach stressing consultation with farmers from initial design through implementation phases. Location of structures and ROW questions include input by farmers and redesign based on farmer participation. Farmer participation proceeds through informal groups; formal organization grows eventually out of function.</p> <p>c. Assigns Zone Engineers and Community Organizers for liaison with, not leadership of, farmers.</p> <p>d. Informal farmer groups contracted for construction work of laterals.</p>	<p>b. Structure and leadership follows function. Energy not devoted to premature organizing activity. Farmers participate in determining operational aspects of project, resolve ROW problems, negotiate solutions to conflict. Farmer participation in decisions on actual location of canals and laterals results in conformity between design and actual farmplot contours.</p> <p>c. Zone Engineers and Community Organizers do actually serve as links between farmers and Project Management. Organizational leadership does emerge among farmers as functions must be performed and Zone Engineers and Community Organizers properly refuse to perform them.</p> <p>d. Farmer concern with leakage from improperly constructed canals motivates them to build high-quality lateral and farm ditches. Also serves as specific function from which organization and leadership emerges.</p>

Figure 3 (continued)

PRACTICE	PROBLEM	RESPONSE	RESULT
2. <u>Bula</u> (BIAD II)	a. As above.	2. As above.	2. As above.
a. Community Organization responsibility of PMO. Combination of MLGCD and MA personnel assigned to PMO used conventional methods for farmer mobilization similar to those used by EDF at Litmanan.			
b. Inadequate consultation between PMO division responsible for Community Organization and Division responsible for Physical Infrastructure Development.			

Source: Based on discussions with PMO/BIAD III staff.

## 2. BIAD III

Unfortunately, the lessons learned about beneficiary participation from BIAD I and BIAD II were not immediately available nor applied to the initial design of BIAD III. The primary reason for that was that the results of de-emphasizing farmer participation in the design and location of physical infrastructure in Libmanan and Bula was not yet sufficiently understood by the end of 1978 and the early months of 1979. Farmers in Libmanan had not yet attempted, in some cases, to prohibit the contractor from entering their land because of right-of-way disputes nor had they yet refused to assume responsibility for the operation and maintenance of completed segments of the irrigation system. Project staff and external evaluators of the project in Bula-Minalabac were not yet aware that the complexity of the system and the escalating costs would raise serious doubts about both the ability of farmers to manage and pay for it or their willingness to assume the responsibility for O&M even if they had the required capacity.

Thus, the Project Paper was again written without significant levels of farmer participation, and tentative plans for the rehabilitation of the pre-existing upper Lalo irrigation system and the construction of a new lower Lalo system were prepared.

However, by the time the Farmer Assistance Division (designated, at that time, the Institutional and Agricultural Development Division) was established in February 1980, project staff were aware that they had a problem. Non-cooperation by the farmers at Libmanan had become evident and farmer hostility towards new NIA initiatives in Upper Lalo--based on prior experience--had also surfaced.

In April 1980, the PMO responded to those new concerns by requesting NIA/Manila to provide funds for the training of community organizers who could be used to mobilize the farmers. When that request reached NIA/Manila, the PMO was informed that training could not be approved unless a detailed implementation plan for the use of community organizers was developed. The implementation plan<sup>5/</sup> drafted by the PMO contained many elements similar to those involved in NIA experiments with farmer participation in small-scale communal irrigation systems since 1975; <sup>6/</sup> although the BIAD III project staff was not fully aware of those NIA/Manila experiments at that time. However, those similarities were apparent to NIA/Manila and a one week training program for BIAD III Community Organizers was provided in November 1980.

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<sup>5/</sup> That Implementation Plan is attached to this Report as an annex.

<sup>6/</sup> For a description of NIA experience with communal irrigation systems, refer to Benjamin Bagadion, "People's Participation: A Learning Process", \_\_\_\_\_ ( ), p. 2-4, 14; attached to this Report as an annex.

That training offered much of value, but because it was based on experience with small-scale communal irrigation efforts rather than an area development effort based on a large complex National irrigation system, the PMO followed that training with its own two day workshop for PMO staff in December 1980. The result of that workshop was an integrated plan for physical infrastructure and community organization using the Critical Path Method. An additional three day training session for all community organizers (COs) and zone engineers (ZEs) was held in January 1981. Since then, coordination meetings are held every four to six weeks between PMO headquarters staff and all COs and ZEs. The information exchanged at those meetings include farmers' concerns as experienced by the COs and ZEs themselves and/or as reflected in the process documentation efforts of the Research and Service Center, Ateneo de Naga.<sup>7/</sup>

As expressed by a Senior member of the PMO staff: "Actually, we are still in training; on-the-job training". That is a succinct way of expressing the idea that project implementation is evolutionary and flexible in operation and corresponds to the definition of the "process approach" to project implementation.<sup>8/</sup>

One clear result of the PMO's current approach to project implementation is their explicit recognition that the two primary components of the project--physical infrastructure development and farmer organizational development--must be interdependent; successful implementation of either component rests on successful completion of the other. Implicit in that view is the principle that each phase of development within each component must be timed according to progress within the other. Hence, simply meeting construction schedules is appropriately viewed by PMO staff as being potentially counterproductive if farmer-beneficiary organizations are not yet in place and capable of performing those O&M functions required of them. The reverse is also true; "Organizing" farmer-beneficiaries too soon in advance of infrastructure development can have a depressive effect on participation by resulting in paper organizations without real functions to perform.

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<sup>7/</sup> To date, eight of those monthly reports have been published, four each on Upper and Lower Lalo for the four month period January through April 1981.

<sup>8/</sup> Process approach -- A managerial orientation to project implementation which assumes considerable uncertainty and is characterized by flexibility and continual openness to redesign and adaptation to changing circumstances. On-the-spot study and solution of problems are relied upon, rather than remote expertise. George Honadle, et. al., Integrated Rural Development: Making It work? (Wash., D.C.: Development Alternatives, Inc., 1980), p. 212.

## B. PHYSICAL INFRASTRUCTURE

As described elsewhere<sup>9/</sup> and illustrated in Figure 3 above, previous experience with private contractors in both BIAD I and BIAD II has been fraught with problems. Those problems include inadequate performance in terms of substandard technical work and the fact that construction performed by private companies does not allow for farmer participation in any activities other than as daily laborers. In Bula, NIA itself was asked by MAR (the lead agency) to take over the construction work in Phase I-A because of inadequate performance by a private contractor.

Thus, the NIA as the lead agency for BIAD II has decided to reduce the participation of private construction companies to a minimum. Contracting outside of NIA for construction of physical infrastructure is limited to requirements at the two ends of the simple/difficult continuum.

At the most difficult end, a single construction company will be hired to build only the major structures required: Buhí Lake Control Structure; Channelization of the Barit River; and the bridge and flume at the Daraga River. At the least difficult end, construction of terminal facilities and lateral supplementary farm ditches, and farmlot ditches will be constructed by the farmers themselves under individual group contracts with the PMO. All other Project specific construction work is performed by the PMO based on consultations with affected farmer-beneficiaries.

## C. BENEFICIARY PARTICIPATION

As the project has evolved, its most significant aspect has become the role of farmer-beneficiaries in its design, implementation, and eventual sustainability. That has been officially recognized by NIA through the designation of BIAD III as a Pilot Project for the extension of the participatory approach from communal irrigation systems to the more complex requirements of a large-scale national irrigation system. However, it should be noted that the NIA does not view beneficiary participation as an end in itself. Rather, beneficiary participation is viewed as an effective means to the end of appropriate design, O&M, and sustainability of the irrigation system.

Three elements of NIA's approach to BIAD III in that regard are noteworthy: The comprehensiveness of farmer inclusion, the functions performed by farmer-beneficiaries, and the mechanisms used to link that participation to project management.

### 1. Membership

No distinctions whatsoever are made by Project staff between owner-cultivators and tenants that in any way precludes the latter from full participation in project activities. Thus, tenants are allowed

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<sup>9/</sup> For experience in BIAD II, refer to Gregorio Beluang et al, Bicol Integrated Area Development II (Bula-Minalabac Land Consolidation): Project Evaluation Report (June 18, 1981); Section: II/V, Subsections 4.

to serve as Rotational Area farmer leaders, Supplemental Farm Ditch leaders, and on Right of Way committees.

The participation of tenants and women was exemplified in a public meeting of a rotational area group which was observed by the assessment team. Twenty-three of the total 35 members of the group were in attendance.<sup>10/</sup> The purpose of the meeting was to review the new plans for construction and location of supplementary farm ditches which had been prepared by the PMO following an earlier meeting in which farmers requested revisions of approximately 60% in the original design.

The meeting was conducted throughout by one of the Supplementary Farm Ditch Leaders (SFDL); not by the CO or ZE. When the map was unfolded on the floor, eight of the farmers took positions on the floor and began a spirited conversation with the Zone Engineer. That discussion lasted for about one hour. If the participation of those eight farmers can be viewed as an indicator of the functional leadership of that rotational area group, then its non-formal leadership consists of three of the lease tenants, one share tenant, and four owner-cultivators. Two of the lease tenants hold both of the formal leadership positions: Rotational Area Group Leader (RAGL) and Supplementary Farm Ditch Leader (SFDL). The amount of land farmed by each of those eight farmers ranged in size from .15 hectare (share tenant) to 1.1 hectare (owner cultivator). The lease tenant who serves as RAGL farms 3 parcels totaling one hectare; the lease tenant who serves as SFDL farms .34 hectares.

Another interesting point is that the group elected five persons to a Right of Way Committee and two of them were women. Among the three men, the lease tenant serving as SFDL was elected chairman of the ROW Committee and the lease tenant who serves as RAGL was elected as a member.

2. Functions: System Design, Right of Way and O&M

In addition to contracts with farmers for construction work, three other sets of functions are performed by them.

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<sup>10/</sup> The meeting was scheduled for 1:00 P.M. but could not begin until a quorum (18 persons = majority) was present. It was not until 3:20 P.M. that a sufficient number of persons arrived. The CO and ZE waited patiently during those 2 hours 20 minutes.

a. System Design

The first of those is the design of the irrigation system. Participation of farmers in that regard is not comprehensive; they do not and will not participate in decisions concerning the specifications or location of the major infrastructure components (i.e., the Buhi Lake Control Structure, structures for the channelization of the Tabao River, the bridge and flume at the Daraga River, nor main irrigation canals). In addition, the farmers in the Upper Lalo area--having inherited a pre-existing system--have little opportunity to affect the design or location of major channels.

However, a major effort is underway to include farmer level desires and expertise in all decisions about the location and specifications of other than pre-existing terminals and all lateral irrigation and drainage ditches. That effort includes farmer reviews of all initial plans drawn-up by the PMO and often substantial revisions based on farmer responses.<sup>11/</sup>

b. Right of Way

Farmer groups at the Rotational Area level are expected to form Right of Way committees. These Committees have two functions: to involve farmers in Right of Way considerations through participation in decisions affecting location of lateral irrigation and drainage ditches and to assist in negotiations concerning Right of Way agreements with individual farmers once location decisions are made.

c. O & M

Eventually, when the physical infrastructure is in place and operating, farmers are expected to take over the "Operation and Maintenance" of the system. That is both a noble goal and one difficult to achieve. The specific functions comprising O&M and the responsibilities for each have not yet been specified. Conflict can result between government agencies and farmers because of different perceptions about the proper definition of O&M in terms of specific functions to be performed. In addition, specific decisions about what internal structures farmer organizations should have, to what degree and in what manner they should be aggregated within the total system, and which level should be responsible for what functions will also substantively affect the quality of farmer participation and proper performance of the O&M function.

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<sup>11/</sup> One such review meeting observed by the assessment team and attended by 23 members (of 35 total members) in RAMC-7 (Upper Lalo) resulted in two hours of detailed discussion and confirmation of revisions to approximately 60% of the original design. Overall, the PMO reports that farmer initiated changes have been submitted from thirteen of all 29 zones to date and all 29 zones have not yet been surveyed.

Although an approach to farmer participation in O&M has been established, it is currently only broadly defined: farmers should be responsible for O&M and should be organized in order to fulfill those responsibilities. Additional thinking is required to provide substance to that broad outline.

3. Linkage: Zone Engineers and Community Organizers

Project management in BIAD III and the farmer-beneficiaries are linked through a comprehensive extension system staffed by Zone Engineers (ZEs) and Community Organizers (COs). That system has been adapted from the NIA's experimental program directed toward establishing farmer-beneficiary controlled irrigation system. The key features of the BIAD III approach are:

- ZEs and COs are expected to perform a liaison rather than leadership function between farmers and Project Management. Their job is to facilitate two way communication;
- ZEs monitor the performance of farmers on construction contracts, but do not provide leadership for that purpose;
- COs attempt to mobilize farmers by bringing all farmers within a rotational area together to perform specified decision-making, review, and/or construction functions;
- Such meetings within Rotational Areas define pre-organized groups from which leadership and formal structures are expected to eventually emerge;
- COs and ZEs serve among the farmers as technical resource persons;
- Each CO and ZE serve together within a zone disaggregated into Rotational Area Groups, providing for reasonably intense coverage; and
- The CO and ZE assigned to each Zone are expected to live together in the Zone.

#### IV. CURRENT PROJECT STATUS

This section summarizes the current status (as of June 23, 1981) of project implementation in terms of the approach described above.

##### A. PHYSICAL INFRASTRUCTURE

Construction of physical infrastructure in BIAD III is still in the early stages (18.46% complete as of May 5, 1981). In the Upper Lalo Area, activities include rehabilitation and construction of both the main canal and supplementary farm ditches. Upper Lalo Rehabilitation is over 25% complete and terminal facilities are over 23% complete. In addition, Project facilities are approximately 58% complete. In the Lower Lalo Area, the development of Lake Buhi as a water source is awaiting the selection of a bid for construction of the major physical infrastructure. Selection of the contractor for the Lake Buhi Control Structure, the Barit River Channel Improvement and the Daraga River Flume and Bridge<sup>12/</sup> is scheduled for June 30, 1981. The only construction that has occurred to date in Lower Lalo is along the Left Connector Canal (approximately 9% complete); this includes some construction of the NPC Intake Structure, the national road crossing, Headgate Lateral A and the Barangay Road Crossing. Work is scheduled to begin on the Lake Buhi Control Structure and the Barit River Channel Improvement in the 1st quarter of 1982 and construction of the Daraga River Flume and Bridge is scheduled to begin in mid-1982.

Construction in the Lower Lalo area is approximately one year behind schedule due to delays caused by changes in the design of the Lake Buhi Control Structure recommended by USAID consultants.<sup>13/</sup> However, given the PMO's current approach, which requires the integrated timing of progress by phase in both the construction and beneficiary organizational aspects of the project, and the current status of that latter effort, the construction delay should not cause any significant problems.

##### B. BENEFICIARY PARTICIPATION

###### 1. Structure

It is the intention of project management that eventually a comprehensive Irrigators' Association (IA) will be created for each of the two irrigation systems being constructed by BIAD III. Irrigators' Associations of that scope will be required if farmers are to effectively perform all four functions expected of them.<sup>14/</sup>

<sup>12/</sup> The Daraga River Bridge and Flume is located in Upper Lalo.

<sup>13/</sup> Engineering Consultants, Inc. (ECI), 1979/80.

<sup>14/</sup> Distribution of water and maintenance (O & M), collection of fees, and resolution of conflicts.

However, the PMO does not expect that level of organization to be reached until mid-1982, at the earliest, in Upper Lalo and has no fixed date by which it expects to accomplish it in Lower Lalo.

With that approach in mind, the PMO is currently engaged in the second step of the following nine step process in Lower Lalo and, depending on the group, somewhere between the second and fourth step of the process in Upper Lalo:

- Identifying all farmers in the project area and collecting all relevant statistics about them;
- Assisting farmers to organize in small informal groups at the farm ditch, supplementary farm ditch, and rotational area level in order to participate in decisions concerning design and location of turnouts, lateral and farm level canals/ditches, and right of way questions;
- Assisting farmer leaders at the rotational area level to organize informally at the lateral headgate or main canal level in order to participate in decisions concerning O&M functions;
- Assisting farmer leaders at the rotational area and main turnout or main canal level to organize informally at the zone level in order to participate in aggregated decisions concerning O&M functions;
- Assisting farmer leaders in the establishment of formal organizations at the Zone level for actual O&M as--through performance of specific aggregated functions--that higher level leadership and structure emerges;<sup>15/</sup>

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<sup>15/</sup> Anthony Bottrall, Plans for the Farmers' Participation in the Management of the Buhi-Lalo Irrigation System, (London: Overseas Development Institute, 1981), criticizes the PMO's current efforts because, he contends, they concentrate on the Zone level and below rather than on systems level Irrigators' Associations. Although he states that "the main strategy at this early stage of the project's development is quite rightly /emphasis added/ to concentrate on organizing small groups at the farm-ditch or turnout levels...", he also asks "Why associate at the Zone level?" He goes on to claim that "zones do not appear to have any particular hydrological significance and they certainly do not have any social or local administrative significance." He then advocates moving directly from organization of Rotational Area Management Groups to organization of system-wide IADs but laments that "some officials see the formation of a water users' Association at the system level as a 'long-term goal,' but ideas about its possible functions are hazy." This evaluation team does not share Bottrall's conclusion nor lament. The "building-block" approach which the PMO is using is appropriately cautious in its attempt to aggregate in manageable steps. A Rotational Area will involve approximately 35 farmers with a limited set of functional

- Assisting farmer leaders in the establishment of formal organizations at the lateral headgate or main canal level for actual O&M as--through performance of specific functions--that higher level leadership and structure emerges;
- Assisting farmers in the establishment of formal organizations at the rotational area level as--through the performance of specific functions--the leadership and structure of the group emerges;
- Assisting farmer leaders at the Zone level to organize informally at the comprehensive systems level in order to participate in decisions concerning the terms under which and the methods by which the comprehensive set of four functions will be performed by farmer beneficiaries; and
- Finally, assisting farmer leaders in the establishment of a formal, comprehensive Irrigators' Association for each of the two irrigation systems as that highest level local leadership and structure emerges.

The Organizational Structure for the Upper Lalo System, when fully created, is expected to be as illustrated in Figure 4 on the next page. The structure for Lower Lalo will be similar, except that the Lower Lalo system will have nine rather than three Zone level organizations.

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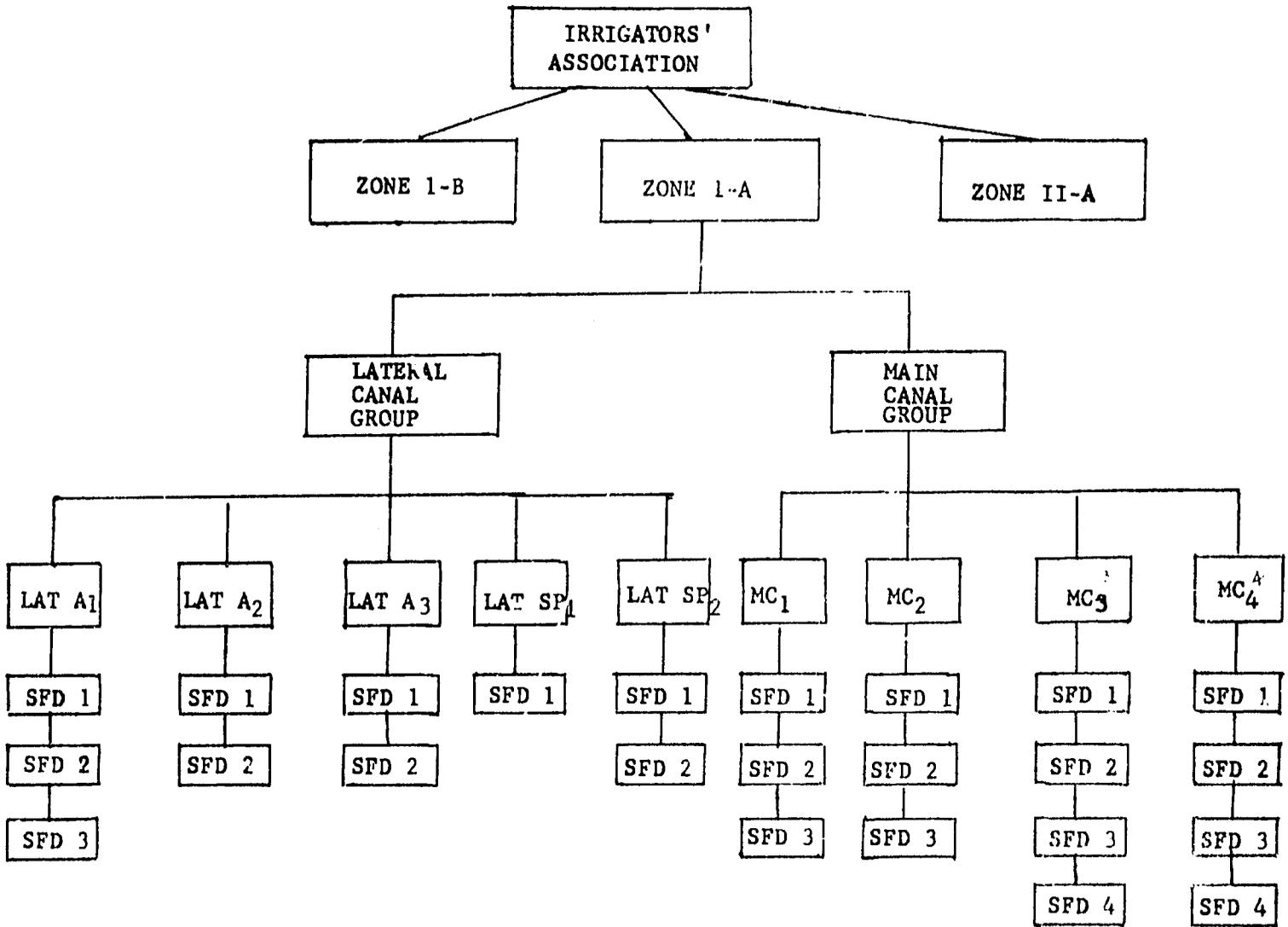
Footnote 15 (continued)

responsibilities. A systems-wide IA for Upper Lalo will eventually involved approximately 1,400 farmers and in Lower Lalo approximately 3,100 farmers with a dramatically expanded set of functions. It makes very good sense indeed to move through intermediate steps in the process (zones aggregate approximately 300 farmers each with an intermediate set of functions) and, thus, expand management responsibilities only as capacity is gained through increasingly more comprehensive levels. In addition, although it is possible that Bottrall's paper, written only two months ago, has had an impact on current PMO staff thinking, this evaluation team found their ideas no more hazy than is warranted by the current stage of the two-way communication process underway between them and farmer beneficiaries. Interviews with PMO staff suggest that ideas about the structure and functions of the two system-wide IAs will become more specific at the appropriate time.

The disagreement between the Evaluation Team and Bottrall's paper reflects a difference about timing and the organizational development process rather than about the objective to be achieved. That disagreement should not obscure the fact that Bottrall's paper is, in most respects, excellent and very helpful. For that reason, Bottrall's paper is attached to this Report as an annex.

FIGURE 4

Irrigators' Association of Upper Lalç:  
Organizational Structure



NOTE: The following designations of Leadership Positions is currently contemplated:

Main Canal Group or Lateral Canal Group: Farmer Water Master  
Rotational Area: Farmer Ditch Tender  
Supplementary Farm Ditch: Supplementary Farm Ditch Tender

SOURCE: Training/Farmer Consultation Materials, FMD/BIAD III.

Given the impatience normally manifest by senior government and donor agency policy planners and decision-makers, it cannot be stressed too much that the slow and careful step-by-step process currently underway in BIAD III is appropriate, sophisticated, and much more likely to succeed than would an effort based on speed and prematurely completed "results."

## 2. Functions

The current level of participation by farmer-beneficiaries is at the same time both high in terms of numbers and level of energy and narrowly limited in scope. Mobilization efforts by Zone Engineers and Community Organizers have been underway only since last January (i.e., 5-1/2 months).

In the Upper Lalo area, Rotational Area Main Canal and Lateral Canal Groups have been formed and farmers are actively participating in the review and revision of plans for the location of supplementary farm ditches, construction of supplementary farm ditches, and organization of Right-of-Way Committees. Consultation and working meetings are currently underway between Rotational Area Group leaders, Supplementary Farm Ditch Leaders, Community Organizers, and Zone Engineers in order to identify specific O&M functions and assign Zone level responsibilities. That activity should soon lead to the formal organization of farmer-beneficiaries at the Zone level.

In the Lower Lalo area, the organizational development process is not as far advanced. The effort of Zone Engineers and Community Organizers has not yet proceeded beyond discussions with farmer-beneficiaries, in informal Rotational Area groups, about design and location of terminal facilities and laterals.

Two factors account for differences in the extent of progress obtained to date in Upper and Lower Lalo:

- An irrigation system was built by the NIA approximately five years ago in Upper Lalo and rudimentary farmer irrigation groups had previously been formed. Construction activity in Upper Lalo involves rehabilitation of a pre-existing system. The system in Lower Lalo will be completely new.
- Because the rehabilitated irrigation system in Upper Lalo is expected to be operational much sooner than the new system in Lower Lalo, a considerably higher level of effort by Community Organizers has been recently concentrated there (five COs were transferred temporarily from Lower Lalo to Upper Lalo in April for approximately three months in order to limit each CO's span of responsibility to only two Rotational Area Groups).

It should be pointed out, however, that the experience of both COs and ZEs suggest that organizational development efforts in Upper Lalo have been difficult; more difficult than the PMO expects such

efforts to be in Lower Lalo. The primary reason for that is the fact that a high degree of resentment among farmers in Upper Lalo existed towards the NIA because of the failure to provide adequate O&M for the previously constructed system. This was especially the case among "tailenders" (those at the end of the main canal) who, because of leaks in the system and unauthorized turnouts installed by farmers downstream, found themselves being charged irrigation fees for water which often did not reach them. Thus, it has required intensive efforts by COs and ZEs to convince farmers that, by organizing themselves, they will be able to provide adequate O&M and enforce the rules concerning water distribution.

For the farmer, the important thing is to receive sufficient water, on a timely basis, and at a reasonable cost. Little value is apparently attached to participation and the assumption of responsibility for system O&M itself. After all, such responsibility involves additional work and energy. Thus, farmers must believe that only by assuming responsibility for O&M can they be assured of sufficient water, on a timely basis, and at reasonable cost.

## V. ISSUES

### A. ORGANIZATIONAL STRUCTURE AND DYNAMICS

#### 1. Concepts

BIAD III was designed as an Integrated Area Development (IAD) project involving decentralization vertically and integration and coordination of multi-sectoral inputs horizontally. Because terms such as IAD, integration, decentralization, and coordination often have different meanings for different people, it is necessary to first define the terms to be used here.

- Integrated Area (or Rural) Development. The process of combining multiple development services into a coherent effort to improve the well-being of rural populations.<sup>16/</sup>
- Decentralization. A process whereby authority for decision-making is located at sub-national levels. On a continuum from marginal to significant authority located at sub-national levels, the concepts of deconcentration, delegation, and devolution should be distinguished.<sup>17/</sup>
- Integration. A process whereby previously separated and independent functions, organizations, and/or human and/or material resources are brought together through an effective process of coordination or into a new, unitary structure.<sup>18/</sup>
- Coordination. Various efforts to alter or smooth the relationships of continuing, independent elements; such as organizations, staffs, and resources.<sup>19/</sup>

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<sup>16/</sup> George Honadle, et. al., op. cit., p.4

<sup>17/</sup> Although the concept of "decentralization" lacks clarity in recent theoretical and applied usage, the terms used above were developed by United Nations' Agencies in the mid-1960s and, if commonly used, could help reestablish clarity and precision of expression in that regard.

<sup>18/</sup> An effective process of coordination is not an automatic result of creating a structure for coordination. Also, the definition provided here is different from that provided in George Honadle, et. al., op. cit., p. 211. That other definition is inadequate because in that form it would be possible conceptually to properly label a project as an Integrated Area (or Rural) Development Project without making any provision for integration as defined therein.

<sup>19/</sup> George Honadle, et. al., op. cit., p. 210

- Cooperation. When two or more individuals carry out actions which are complementary in reaching a desired end.<sup>20/</sup> Note, that cooperative efforts need not necessarily be coordinated.
- Interface. The point at which interests of different groups or organizations intersect.

In terms of the definitions provided above, the current mode of implementation in BIAD III is only partially decentralized and only marginally integrated. Functionally, coordination between line agencies at the project level is on the point of collapse; although some cooperation is occurring.

## 2. Horizontal: Interagency Integration, and Coordination

### a. Interagency Functions

As originally designed,<sup>21/</sup> the administrative arrangements for providing integration of various functions across line agencies at the project level and for coordinating line agency inputs at the Regional and National levels were similar to those for BIAD I and BIAD II. Thus, "The National Irrigation Administration (NIA) will be the lead implementing agency responsible for implementing the project and for its subsequent operation and maintenance, working through NIA Region V. The Bicol River Basin Development Program Office (BRBDPO) will be responsible for interagency coordination. The Bicol River Basin Coordinating Committee (BRBCC), which is composed of the regional directors of key technical line agencies and the governors of the provinces of Albay, Camarines Sur and Sorsogon, will provide operating policies and guidelines for project planning and implementation." At the project level, "an interagency, Project Management Office (PMO) will be established by the NIA and BRBDP and staffed with full-time contract hire personnel and technicians detailed from the line agencies concerned with project implementation."

However, operationally, that is not what has occurred. The BIAD III PMO is staffed exclusively by NIA career or contract personnel. No other GOP agency is represented on the staff of the PMO itself. The PMO staff supported by NIA as an agency, wanted to avoid the type of interagency problems which emerged at Libmanan. Thus, they chose to limit their responsibility over other line agency personnel to monitoring, rather than direct management control. One result has been to temporarily suspend serious attempts to effectively integrate the activities of the ten GOP agencies operating in the project area until such time as the incentive allowance issue is resolved; as discussed further below.

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<sup>20/</sup> Ibid.

<sup>21/</sup> USAID/Philippines, Project Paper: Bicol Integrated Area Development III (Rinconada/Buhi-Lalo), Volume I (June 1979), p. 21-25.

Figure 6 on the next page describes the specific functions for which each agency is responsible. The primary mechanism for coordinating planning and implementation at the project level was the preparation by field supervisors (FS) and technicians (FTs) of a Five Year Plan for each of the five supervisory areas comprising the BIAD III project area. Those plans were prepared following an orientation seminar for FSs and FTs provided by the PMO. Subsequently, all FSs and FTs are responsible for preparing annual plans which specify actions to be taken in order to implement the overall Five Year Plan. The PMO has authority only to review those plans; they are actually submitted to their respective Agency Supervisors at the provincial level for approval. Any objections that the PMO might have to any part of those plans are submitted by the PMO to the PMG through the NIA Regional Director. In addition, FSs and FTs of cooperating agencies are supposed to submit Monthly Activity Reports to the PMO in order that the latter can perform its monitoring function.

b. Incentives for Cooperation

In the absence of substantive control by NIA or any other single agency over the broad range of activities to be undertaken in support of the Project, effective coordination between agencies must be based on incentives for voluntary cooperation. As conceived in the Original Project Design, the primary incentive for cooperation between various line agencies in seconding personnel to the PMO and for encouraging such personnel to work effectively within the PMO was money; a monthly "incentive allowance" to be paid to all eligible personnel according to the following schedule:

Figure 5

Incentive Allowance Schedule

1. Field Technicians	₱ 200/month
2. Field Supervisors	₱ 250/month
3. PMG	
a. Regular Members	₱ 200/meeting <sup>a/</sup>
b. Support Staff <sup>b/</sup>	₱ 150/meeting <sup>c/</sup>
4. ADCC (Provincial Level) members	₱ 50/meeting <sup>d/</sup>

Notes: <sup>a/</sup> But not to exceed the total of ₱400 per month.

<sup>b/</sup> The Assistant Project Manager and Chief, Farmer Assistance Division will received ₱200 per meeting, but not to exceed ₱400 per month.

<sup>c/</sup> But not to exceed the total of ₱300/month.

<sup>d/</sup> But not to exceed the total of ₱150/month.

Figure 6

Responsibilities of Cooperating Agencies

<u>Agency</u>	<u>Responsibilities</u>
I. National Irrigation Administration (Lead Implementing Agency)	<ul style="list-style-type: none"><li>● Constructing irrigation infrastructure and O&amp;M of system.</li><li>● Monitoring and evaluating the irrigation and agricultural support component.</li></ul>
II. The Bicol River Basin Development Program Office	<ul style="list-style-type: none"><li>● Evaluating the status of the different project components with emphasis on the physical accomplishment and the Institutional and Agricultural aspects.</li><li>● Discussing the findings of these evaluations with the Project Management Group.</li><li>● Stimulating and promoting close cooperation among agencies in the project.</li></ul>
III. Ministry of Agrarian Reform	<ul style="list-style-type: none"><li>● Implementing the agrarian reform program to convert tenant-tillers into owner-cultivators.</li><li>● Issuing certificates of land transfer to qualified tenant-tillers in the service area on or before June 30, 1983.</li><li>● Submitting to the PMG specific yearly targets to ensure completion of the land tenure improvement activities in Project service areas.</li><li>● Developing and implementing adequate procedures to allow farmers to secure title to the upland areas that they till, if not otherwise prohibited by law.</li></ul>
IV. Ministry of Agriculture	
A. Bureau of Cooperatives	<ul style="list-style-type: none"><li>● Formulating guidelines for the organization and supervision of Samahang Nayan and/or other cooperatives.</li></ul>

**B. Bureau of Agricultural Extension**

- Submitting quantified yearly targets of its cooperative development program to the PMG.
- Developing 20 Rural Improvement Clubs (RIC) within the project area on or before June 30, 1983.
- Training project farmers in improved crop cultural practices through permanently assigned farmers management technicians (FMTs).
- Organizing out-of-school youth into Anak Bukid (AB), envisioned to be the next generation farmers who are self-reliant.
- Submitting quantified yearly targets of its program of activities to the PMG.

**C. Bureau of Soils**

- Formulating programs for crop suitability and land capability classification of the different areas.
- Conducting soil analysis in order to recommend appropriate kinds and amounts of fertilizers.
- Providing technical assistance to farmers on mechanical and vegetative erosion control measures and cropping sequence.
- Conducting fertilizer use demonstrations for farmers.
- Assisting in the conduct of farmer training in the project area.
- Submitting a detailed program of activities to the PMG each year.

**D. Bureau of Plant Industry**

- Establishing plant pest and disease prevention and control systems and seed farms in the project area.
- Assisting in the activities of the pilot demonstration farms and in training farmers.

- Submitting a detailed program of activities to the PMG each year.
- E. Bureau of Forest Development
- Implementing the agro-forestation/watershed development component of the project.
  - Assisting two technical staff with the pilot project staff preparatory to its subsequent take-over as the lead implementing agency of this component.
  - Issuing appropriate forest occupancy permits, if required, to qualified farmers in the project area by December 1984.
- V. The National Food Authority
- Providing marketing services and post harvest facilities to the farmers.
  - Conducting training in post harvest technology and marketing for the farmer-beneficiaries.
  - Submitting a detailed program of activities to the PMG each year.
- VI. The National Power Corporation
- Maintaining its own facilities particularly the existing forebay dam and spillway.
  - Furnishing to NIA, upon request, all hydrological and power operations data and information necessary for the design of the irrigation headworks.

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Source: Adapted from: Project Management Office, BIAD III, Memorandum of Agreement Between NIA and Other Coordinating Agencies (August 15, 1981); and Project Management Office, BIAD III, Proposed IAD Support Services Implementation Guidelines and Policies (n.d.).

Work performance of all but supervisory personnel entitled to such allowances were to be certified by the Project Manager and disbursed by NIA. Those conditions, if met, would have tied the disbursement of those allowances to the Project Managers' assessment of work performance. That should have resulted in increased responsiveness to the leadership of the Project Manager on the part of FSs and FTs.

However, the PMO never was established as a multi-agency management unit. Rather, from the beginning, it has operated only as an NIA project office. Since the FSs and FTs are employed and supervised by their own agencies, it is inappropriate for NIA BIAD III project management to appear to supervise them through certification of their work. In addition, the NIA is responsible for implementing several large-scale irrigation projects which are either wholly funded by the GOP or which, if foreign donor funded, prohibit such allowances. Thus, the NIA has been reluctant to assume the responsibility for disbursing such funds because it is afraid it will set a negative example for its employees elsewhere.

The result is that those allowances have not been paid to date. That, in turn, has resulted in a significant reduction of two-way communication about the project between PMO staff and the FSs and FTs of other agencies working in the Project Area. It is now believed by all senior PMO staff that offering incentive allowances to line agency personnel was--in the first instance--a serious mistake. They believe that in the absence of its ever being offered, FS and FT personnel would have adequately performed their functions. Whether or not that is true cannot be determined. However, what is definitely true is that once offered and not paid, the issue now serves as a negative incentive to interagency coordination and cooperation at the project level. Other agency personnel blame NIA and the PMO for not paying them money they were promised. NIA/PMO personnel are also embarrassed to discuss substantive implementation issues with the staff of other agencies until those others begin receiving their allowances. This has also had a ripple effects, since NIA refuses to pay supervisory personnel for attendance at PMG meetings until such time as arrangements are finally resolved for payment to FSs and FTs.

Thus, the solution currently advocated by USAID, which would provide for those allowances to be paid by and through BRBDP directly to Provincial Supervisors of each agency, or some mutually agreeable solution, should be adopted by the NIA and BRBDP as soon as possible. However, it should also be understood that those payments, once they begin, are unlikely to have the effect of creating a positive incentive to work harder in the project area than would have otherwise been the case. Without the BIAD III Project Manager's certification of work performed by FSs and FTs during each month, disbursements will inevitably be routine and what was intended to be an

incentive allowance will be transformed into an automatic salary supplement entitlement.

c. Management of Coordination

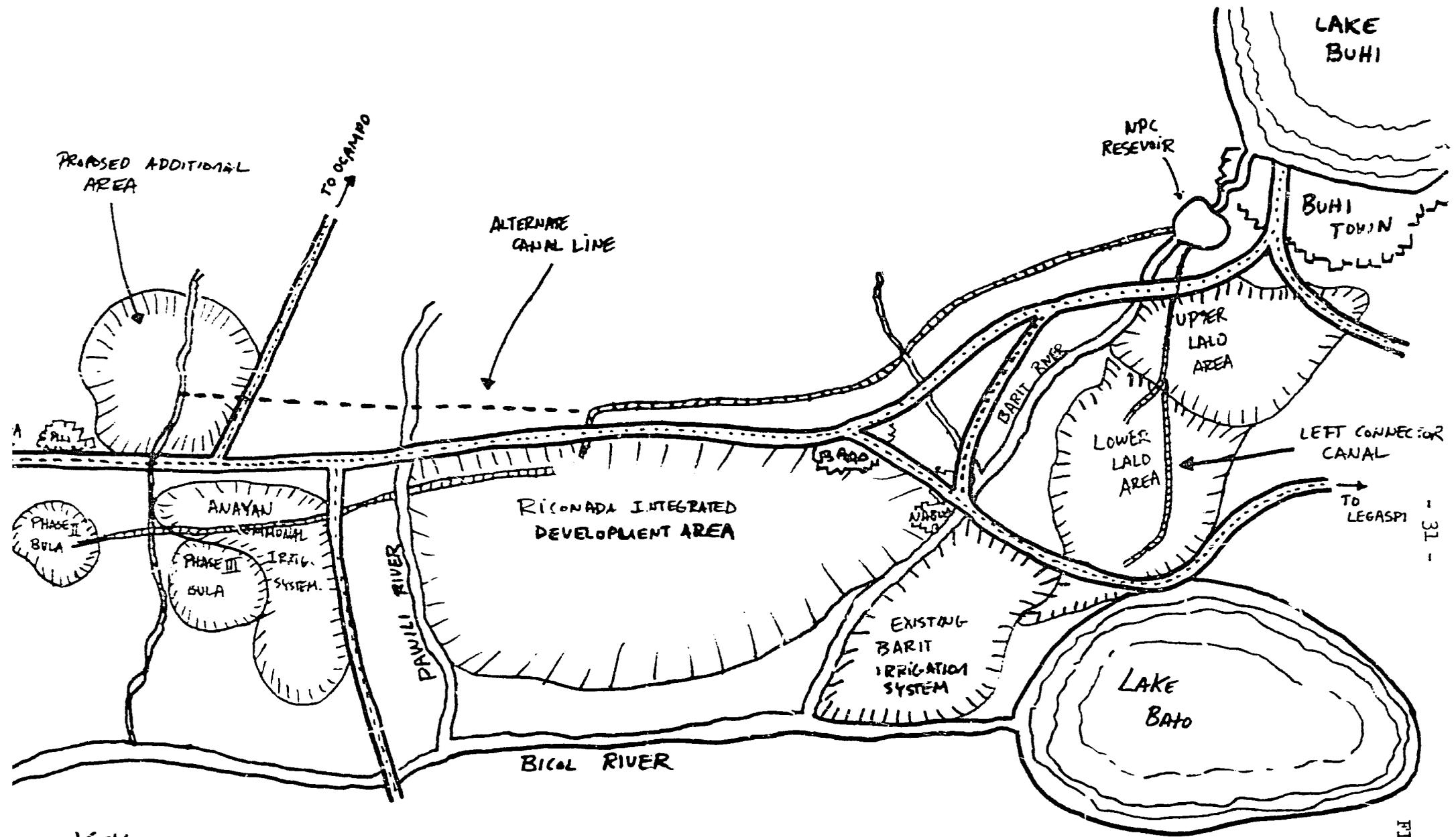
The PMG, under the auspices of the BRBDP, has responsibility for the coordination of inter-agency activities within the Project area. The BRBDP has the responsibility of coordinating the sum of interagency activities between projects. To date, insufficient attention has been given to that latter function. As an example, the BIAD III PMO must soon make a decision which requires a prior decision by the management staff of two other Bicol River Basin projects (BIAD II and ADB/RIDA).

Currently, the Lake Buhí Control Structure and the NPC Forebay Intake Structure have been designed to irrigate 2,200 hectares of the Buhí-Lalo Project and 9,300 hectares of the Rinconada (ADB) Project, the Anayan Communal Irrigation Project, and a total of 540 hectares currently included within the MAR BIAD II Project. Now, however, the Rinconada (ADB) Project is requesting the allocation of more water to irrigate an additional 1000 hectares for the Anayan (Pili) area which, at present, is not irrigated (refer to Figure 7 on the next page).

There are two major arguments against adding an alternate canal line and attempting to irrigate Phase II and Phase III of BIAD II and an additional 1000 hectares of the Rinconada (ADB) Project:

- In order to irrigate both areas from Lake Buhí, the height of the reservoir will need to be raised. This will flood part of Buhí town and require relocation of some houses.
- As the design of the control structure is already finished and bidding for the construction is now underway, redesigning the structure will result in further delays. Construction of the control structure has already been delayed for one year due to redesign requirements.

Because of the technical problems involved, the Lake Buhí Control Structure can irrigate either BIAD II, Phase II and III or the 1000 additional hectares for the Rinconada (ADB) Project, but not both. Current plans within the BIAD II project are already based on a decision that the Bicol River will provide irrigation water for the 230 hectares of Phase II. However, although MAR, as the lead line agency at Bula, is now drilling five ground water wells for Phase III, nothing has yet been definitely decided about who will provide irrigation water for Phase III. If MAR decides to continue to include Phase III development within BIAD II, the PMO of BIAD III could rechannel the main canal before it is built so as to provide water from



**KEY**

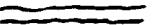
-  PUBLIC HIGHWAY
-  RIVER
-  CANAL
-  IRRIGATED AREA
-  CITY

FIGURE 7

Buhi Lake to the proposed ADB/RIDA project area instead of the BIAD II, Phase III area.

In order that proper decisions are made, the BRBDP should bring Project staff from all three projects (BIAD II, BIAD III, and ADB/RIDA) together for discussions about that issue as soon as possible.

### 3. Vertical: Decentralization and Interface

#### a. National to Project Level

The extent to which decision-making authority is located at sub-national levels of the BIAD III management structure varies by function. Figure 8 below illustrates what type of authority is located at different levels according to function.

The PMO of BIAD III has neither the level of integration of either BIAD I or BIAD II and substantially less decentralization of authority than BIAD II. However, as a Pilot Project to test approaches to farmer-beneficiaries' participation in a large-scale National Irrigation system, it has a significantly broader range of activities included within it than are found in other NIA National Irrigation systems. Thus, the PMO has been delegated substantial authority to design experimental approaches to the development of farmer group capacity.

#### b. Project to Beneficiary Level

Decentralization of functions from the GOP to farmer-beneficiary groups is underway and increasing. The conscious objective of project management is to develop the capacity of farmer-irrigators' groups to the point that the NIA will provide only a support, rather than a management, function. COs and ZEs avoid assuming leadership or management roles within farmer groups; rather they serve as technical resource persons and facilitators in the two-way communications process between farmers and the PMO.

To date, farmer-beneficiary authority has progressed to the point that they review and request changes in the design specifications and location of lateral canals (Lower Lalo), terminal facilities, farm ditches, and supplementary farm ditches. In addition, they assist the PMO in Right-of-Way negotiations and decide among themselves who will serve as construction team leaders and laborers on contracts with the PMO. They also manage those teams themselves (with ZEs monitoring for quality control). However, the longer term objective is that farmer-beneficiaries' Irrigators' Associations will eventually assume responsibility for managing the O&M functions of the two irrigation and drainage systems once construction is completed.

FIGURE 8

Authority by Management Level

	Physical Infrastructure Development	Organizational Development
NATIONAL (NIA)	<ol style="list-style-type: none"> <li>1. Design and approval of all major structures.</li> <li>2. Approval of Contracts up to ₱15 million (= \$2 million) and approval of force account work.</li> <li>3. Payment for contract work made in Manila.</li> </ol>	<ol style="list-style-type: none"> <li>1. Approval and supervision of process documentation by RSC, Ateneo de Naga.</li> <li>2. Approval of Program proposals.</li> <li>3. Hires/terminates CO personnel.</li> </ol>
REGIONAL (NIA)	<ol style="list-style-type: none"> <li>1. Location of all major structures.</li> <li>2. Reviews and recommends to Manila approval of infrastructure designs submitted by the PMO.</li> <li>3. Approval of Contracts up to ₱1 million (= \$138 thousand).</li> <li>4. Regional Director observes bidding in Manila.</li> </ol>	<ol style="list-style-type: none"> <li>1. Regional Director of NIA serves as chairman of PMG.</li> </ol>
PROJECT (NIA/PMO)	<p><u>PMO/NIA</u></p> <ol style="list-style-type: none"> <li>1. Design, and irrigation and drainage location of all structures except for former major structures.</li> <li>2. Consulted on major structures specification and attends pre-bidding conference. Project Manager observes bidding in Manila.</li> <li>3. PMO supervises contract work and certifies quality and extent of completion.</li> <li>4. Approval of contracts up to ₱300 thousands; including contracts with farmers at the Rotational Area level.</li> </ol>	<ol style="list-style-type: none"> <li>1. Design, implement and evaluate training programs for both PMO personnel and farmer-beneficiaries.</li> <li>2. Recruits and evaluates contract CO personnel.</li> <li>3. Recommends program proposals direct to NIA/Manila.</li> </ol>

SOURCE: Based on Discussions with PMO/BIAD III staff.

## B. MANAGING EXPANDING PARTICIPATION

As described above, almost total responsibility for O&M of the system, collection of fees, and adjudication of disputes will eventually devolve upon the farmers organized within a pyramidal structure from the Rotational Area level through the Zone to the systems-wide level.

If that is to happen, a greater range of functions will be performed by farmers and the structures within which they will be organized will necessarily expand and become much more complex. It will also be necessary for the NIA in particular and other Government agencies more generally to shift from leadership and initiating roles to more passive support/response roles.

### 1. Expanding Functions

One method for delineating the transition process which the NIA and the farmers must go through is illustrated by the Matrix in Figure 9.

An important task during the next twelve months is for the PMO and the farmer beneficiaries to--in effect--fill in that Matrix with as much specificity as possible. That is the first step toward determining the most appropriate structures for aggregating farmer participation and designing appropriate skill training programs for them.

There are essentially two sets of functions which a fully responsible Irrigators' Association should perform: O&M and Financing.

#### a. Operations and Maintenance (O&M)

O&M includes everything from keeping canals free of silt and weeds through rehabilitation construction work and adjudication of disputes between members over rights to water and other water distribution issues. The boundary between what NIA (with its heavy equipment and technically skilled personnel) is expected to do and what farmers are expected to do under what conditions, during each step in the transition process, must be specified.

#### b. Financing

Anthony Bottrall has already presented an excellent description of the issues involved. Therefore, he is quoted here:

"The principal reason that conventional methods of irrigation O&M financing tend to work badly in so many countries is the lack of any direct link between what farmers pay and what they receive back in the form of services. Whatever they pay goes into general

FIGURE 9

TRANSITION: RESPONSIBILITIES FOR O&M  
AND FINANCING

	BEGINNING OF PROJECT	I N T E R M E D I A T E			COMPLETION
		STAGE I	STAGE II	STAGE III	
NIA and OTHER GOP AGENCIES	1	1	1	1	1
	2	2	2	2	2
	3	3	3	3	3
	4	4	4	4	4
	5	5	5	5	5- - - - -
	6	6	6	6	6
	7	7	7	7	7
	8	8	8	8- - - - -	8
	9	9	9	9	9
	10	10	10- - - - -	10	10
	11	11	11	11	11
	12	12- - - - -	12	12	12
FARMER GROUPS	13	13	13	13	13
	14	14	14	14	14
	15	15	15	15	15

NOTE: Functions enclosed within a solid line indicate those of primary responsibility. Functions enclosed above the dotted line indicate those for which farmers would be responsible, but for which NIA would have supervisory responsibility.

PREPARED BY: Jerry Silverman

revenue and what is returned to the project from the centre rarely relates closely to farmers' levels of payment. Treasuries and Ministries of Finance are disinclined to be generous towards requests for O&M finance at project level and consequently supply less than is required. Quality of service suffers; and farmers are less interested than ever in paying their fees, which to them appear less of a service charge than yet another tax. A vicious circle then sets in of low farmer payment—▶low revenues to government—▶low disbursement to project agency—▶poor service—▶low farmer payment. Field staff meanwhile spend a disproportionate amount of their time trying to extract dues and overdues from farmers, further neglecting their principal tasks of operation and maintenance. By contrast, the pattern whereby farmers make their payments to the project organization, or preferably to their own Association at the system level, is able to provide the necessary linkage between payment and service. Farmers have an incentive to pay more if they are able to see that their payments will be locally re-invested; and the operating agency has an incentive to provide a good service since its members can benefit from bonus payments if the farmers pay more but they suffer correspondingly if the farmers pay less. The circle can then be established of better service—▶higher payment by farmers—▶more project revenue—▶more bonuses to field staff—▶better service. The same principle is, of course, applied on successful communal systems in order to maintain accountability of chosen irrigation officials to their local association's members."22/

Since the current system for financing the O&M of National Irrigation Systems in the Philippines conforms to the conventional process criticized by Bottrall in the quotation above, any changes required in terms of Bottrall's recommendation would require decisions at the highest levels of the GOP. Since BIAD III is a Pilot Project, it could serve the purpose of testing Bottrall's hypothesis about the close relationship between O&M financing and farmers' willingness to assume the burdens of effectively managing a complex irrigation system.

## 2. Expanding Structures

The process through which increasingly more comprehensive farmer organizations will emerge has been described above. It should be

22/ Anthony Bottrall, op. cit., p. 7.

reiterated here that designation of structures should follow performance of functions within initially informal farmer groups at each level of increasing aggregation. That is necessary to avoid premature commitment to group structures which might turn out to be inappropriate or inefficient. As COs have pointed out, assisting farmers to organize in Lower Lalo has been difficult because farm-lot and group boundaries have not been adequately defined. Thus, initial informal groupings have, in some cases, been broken up and recombined with different members and boundaries. It is expected that with additional surveying and actual experience with operating the system, further reorganization of initial farm groups might be required. In addition, land reform activities by MAR might result in further redrawing of boundaries which could affect both the membership and area coverage of farmer groups. The current approach of the PMO, which places stress on the need for flexibility in implementation based on a process of experiential learning is most appropriate given the level of complexity of BIAD III.

Another point to be made here is that progressing towards more comprehensive organizations does not mean that those larger groups should simply perform the same functions as subordinate levels, but over a broader management area. Different functions are most appropriately performed at different levels of aggregation. For example, responsibility for maintaining supplementary farm ditches is probably most appropriately assigned to farmer groups at the Rotational Area level; while responsibility for adjudicating disputes about water distribution might--depending on who is accused of what by whom--be the responsibility of larger Zone or system-wide groups.

### 3. Role of GOP

The PMO faces a very tricky problem: how to develop the capacity within itself to perform the wide-range of functions required of it during initial stages while intending to reduce the scope and level of its activities over time as functions are transferred to the farmers. There is a sense in which the job of COs and ZEs is to make themselves--as soon as possible--superfluous.

Although that conundrum is clearly understood by PMO staff and they do not view it as a potential problem, experience elsewhere suggests that bureaucracies seldom relinquish control over assets once they have obtained control. The possible tendency on the part of NIA staff not to turnover control of the system to farmers might be reinforced by the desire of the farmers to avoid responsibility for the more odious requirements of O&M if the NIA is perceived by them as having performed well during the interim phase. The irony is that the better the PMO and its extension staff perform their tasks, the more difficult it might become to "let go" and turn the system over to the farmers.

C. Information Systems

As a Pilot (i.e., experimental) project, proper implementation of BIAD III requires three different types of information to meet three different objectives:

- . Information for Project staff which is immediately useful for project implementation decision-making;
- . Information for national level personnel responsible for designing other projects based on the BIAD III Pilot model; and
- . Information to audit the use of inputs in terms of desired outputs.

These three purposes require different types of information for three different client groups. Three different systems are currently in use to provide all three types of information for BIAD III.

1. Formal Reporting Systems

Internal periodic formal reports consist of the following:

- . Weekly Reports by COs to PMO;
- . Monthly Progress Reports to the PMO by Field Supervisors and Field Technicians employed by cooperating GOP Agencies;
- . PMO Monthly Progress Reports; and
- . PMO Quarterly and Annual Progress Reports.

PMO Monthly, Quarterly, and Annual Progress Reports are submitted by the PMO to the NIA Regional Director who, in turn, distributes copies to the BRBDP/Bicol, USAID/Naga, and NIA/Manila.

A review of the contents of these formal reports clearly demonstrates that they provide only the kind of information required for the third listed--i.e., auditing--function. Management issues or problems are not identified, defined, nor analyzed nor are specific requests for remedial actions included. Although the "auditing" function is important, it is not the only function for which information is required.

2. Informal Reporting Systems

Information required for adequate performance of the first listed function--i.e., project level implementation decision-making--is provided almost exclusively through an informal reporting system. The most significant components of that system are:

- . Regularly scheduled meetings between farmer leaders and COs/ZEs to exchange views, identify issues, and submit requests for action;
- . Public meetings between all farmers within a Rotational Area and a ZE and CO to reach decisions on specific actions to be undertaken;
- . Weekly (on average) visits by ZEs and COs to the PMO in order to exchange information on the identification of issues and submit requests for action; and
- . Regularly scheduled consultation meetings every four to six weeks between all PMO management staff, COs and ZEs to exchange information in a comparative context.

The informal system described above apparently works well, as illustrated by the extent to which decisions have been changed (e.g., changes in location of supplementary farm ditches and farm ditches) and issues between farmers and PMO staff have been expeditiously resolved (e.g., speeding-up payments to farmers for contracted construction work). Direct access is provided between individuals at each link throughout the chain.

In addition, the Project Manager and other PMO staff make frequent visits to Manila to discuss and resolve issues which require NIA national level decisions.

The one major deficiency in the system is that horizontal communication between the PMO and the FSS/FTs assigned to the Project Area by other agencies is declining and the resolution of issues through interactions between agencies at provincial, regional, and national levels has also deteriorated.

### 3. Documentation Process Reports

The Research and Service Center (RSC) of the Ateneo de Naga under contract to NIA<sup>23/</sup> is engaged in an on-going research effort to document the process of beneficiary participation in the implementation of BLAD III. One product of that effort is a monthly Documentation Research Report on each of the Upper and Lower Lelo Systems. Each report contains a substantial section in which issues and problems are identified, defined and analyzed. A review of the eight Reports prepared to date (January--April 1981) illustrate the substantial utility these Reports should have for identifying issues to be resolved by project management and those which should be considered by the designers of future

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<sup>23/</sup> Funds for the contract are provided by the Ford Foundation.

projects.<sup>24/</sup> If the RSC effort continues, <sup>25/</sup> and its clients use the information provided, BIAD III will serve as one of the few instances in the history of development efforts worldwide in which adequate monitoring for the purpose of "lessons learned" will have occurred.

#### D. Institutionalization

For the purpose of this paper, Institutionalization is defined as the "ability of an organization to continue to adequately perform its functions without regard to replacement of significant personnel." The point is that a group has achieved sufficient institutionalization when the roles which must be performed within it continue to be performed without being dependent on the unique qualities of the specific individuals assigned to them.

##### 1. Project Management

Given the definition provided above, the assessment team believes--based on just a few observations--that the NIA/PMO office is staffed in sufficient depth. If Senior Management personnel are transferred, they could be replaced by subordinates currently employed within the organization without suffering a significant deterioration of institutional performance. This is a credit to current PMO senior management personnel.

##### 2. Farmer Organizations

It is still too early to make a judgement about the institutionalization of capacity at the farmer group level. However, the team was impressed by the leadership qualities demonstrated by eight farmers in the meeting of 23 farmers which we observed. It is also true that farmers are not normally subjected to "transfers" and, thus, once effective farm level leadership emerges, it is likely to be retained.

#### E. Transportation and Access

Project Management Staff complain about a transportation and access

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<sup>24/</sup>While the PMO is in general terms, committed to the intended purpose of the Documentation Research effort conducted by the RSC, project managers complain that it focuses too much on the activities of COs and ZEs and not enough on the attitudes and behavior of farmer beneficiaries. This is a problem from PMO point of view because it wants to use the reports as a barometer of how farmers are responding to the program and with the present emphasis, the reports are inadequate in that regard.

<sup>25/</sup>Ford Foundation financial support for the RSC effort is scheduled to end this month (June 1981). Project management has expressed a concern that if that effort is allowed to lapse, it will deprive them of an important source of useful information for project level decision-making. Therefore, NIA has submitted an informal request that USAID provide the funds necessary to continue the "Process Documentation Effort". A desire by Project Managers for "monitoring of their activities" by Outsiders is itself a very healthy sign.

problem which has developed with regard to the work of Community Organizers. This problem has developed because of the expanded scope of the participatory approach being use in the project. Two examples of this problem have been presented in RSC-NIA Process Documentation Reports.

- . "In interviews with the participant observer, the COs in the documentation zones confided that the distance between sitios /sic/ have to cover in a day slows their ground work: they spend so much time walking instead of working."<sup>26/</sup>
- . "According to the CCD, motorcycles had been requisitioned for the field use of ZEs. Through the provision of transportation facilities, their problem of mobility will be solved. CCD said that he felt assured that the motorcycles are forthcoming because the NIA assistant administration /sic/ for project development and implementation had made their commitment. He therefore advised ZEs who do not have driving permits to secure one. (In an interview, CCD said that 9 out of 20 motorcycles requested will be for the construction division; the others, for the agricultural development division)."<sup>27/</sup>

The current situation concerning the provision of transportation for the field staff is that Zone Engineers will be provided motorcycles while CO are given a ₱150 per month travel allowance.

However, it should be pointed out that problems have often arisen when motorcycles or other vehicles are provided to extension agents on other projects. Whether or not a problem does occur depends to a considerable extent on whether or not the terms by which O&M allowances are provided to COs (and ZEs, for that matter) result in a positive or negative incentive structure. A fixed O&M payment which allows COs and ZEs to retain the difference between the amount received and amount spent on O&M and/or which requires them to pay for any actual O&M costs required above the fixed payment they receive will create a disincentive to use the motorcycle for field visits.<sup>28/</sup> In addition, the loss by COs of approximately ₱143 per month (the difference between the current travel allowance and the actual approximate cost of transportation used by COs) if the transportation allowance is withdrawn in favor of materials

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<sup>26/</sup> Research and Service Center, Ateneo de Naga, RSC-NIA Documentation Research on the NIA Rinconada/Buhi-Lalo National Irrigation Project in Camarines Sur; Lower Lalo Area: Report No. 2 (February, 1981) p. 33.

<sup>27/</sup> Research and Service Center, Ateneo de Naga, RSC-NIA Documentation Research on the NIA Rinconada/Buhi-Lalo National Irrigation Project in Camarines Sur; Upper Lalo Area: Report No. 4 (April, 1981). pp. 35-56.

<sup>28/</sup> George Honadle, et. al., op.cit., p. 88.

might not be desired by the COs. Thus, Project Management should consider convening a meeting with the active participation of COs to determine how best to solve their transportation problem.

#### F. Right of Way

Right of Way is one problem that farmers are always very concerned about in projects of this type.

Project staff are aware of the farmers' concerns and are consciously attempting to ameliorate them to the extent possible. Three different approaches are used to reduce conflict over that issue:

- . Right of Way considerations are taken into account when the location of project infrastructure is determined and farmers are given the opportunity to suggest revisions in that regard.
- . Right of Way Committees, consisting of farmer-beneficiaries, are elected from among the farmers themselves at the Rotational Area level. Those committees assist project management in negotiating right of way for laterals and supplementary farm ditches.
- . The PMO is trying to induce a change in the current laws which prohibit payment for Right of Way on land owned under the terms of Free Patent Titles. Farmers who own their land through what is essentially a homesteading process are required to provide the GOP with an easement of 30 meters without compensation if the government needs it. Farmers who own their land under the terms of the Torrens system (i.e., who pay for their land and receive a title from the Bureau of Lands) are entitled to payment for Right of Way. These different entitlements under current GOP laws cause resentment among those farmers who are not entitled to Right of Way payments and significantly increase conflict over right of way questions. Thus, the PMO staff would prefer a change in the regulations which would allow them to make equal payments to farmers without regard to what type of title they hold.

G. Budget<sup>29/</sup>

1. Funding Levels

Consultation with PMO staff indicates little concern over proposed budget levels. The allotment of funds approved for the next six months is sufficient and, barring unforeseen major problems, the staff does not feel constrained by the overall project budget of P73 million through 1985.

2. Fixed Amount Reimbursement Agreement

USAID is presently drafting a Fixed Amount Reimbursement Agreement (FARA) for the Project. A review of the preliminary draft of the agreement indicates that a conscious effort has been made to structure the repayment schedule so as to avoid any cash flow problems for the project. PMO and USAID staff believe that it is necessary to write a very detailed FARA in order to reduce the risk that delays due to farmer participatory construction on laterals would delay reimbursement of major construction costs. USAID should be commended for devoting the time and energy required to prepare an appropriately detailed FARA for BIAD III.

3. Budget Comparisons

A comparison of current PMO overall cost estimates with those in the Project Paper indicates a significant increase in the budget over original estimates. New projected costs of P73 million (=P9.73 million) are P10 million (=P1.3 million) above Project Paper figures. Given this revision, initial project development has apparently been very successful to date. PMO records indicate that the actual completion of activities through the second quarter of 1981 is on schedule.<sup>30/</sup> At the same time, actual project costs are significantly below projected figures.<sup>31/</sup> Actual expenditures are P5.3 million (=P707 thousand) or more than 50%, below projected levels.

This situation has provided a comfortable buffer against cost overruns early on in project life and, if the present trend continues, it is possible that this project could be completed in 1985 at a cost closer to earlier estimates.

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<sup>29/</sup>The initial draft of this section was written by Paul Novick, USAID/Philippines

<sup>30/</sup>Refer to Overall Project Implementation Schedule Annex F of this report.

<sup>31/</sup>Refer to Overall Project Scheduled Expenditures Annex G of this report.

## VI. CONCLUSIONS

BIAD III represents an interesting model of a project involving the construction of major infrastructure, decentralization of management, integration of multi-sectoral inputs, and a high level of beneficiary participation. On balance, project management demonstrates a high degree of sophistication in the analysis of the problems they face and in the approaches being used to resolve them.

However, to date, horizontal relationships between the PMO and other GOP line agencies providing services in the project area have not been properly developed. Because of increasing resentments caused by the non-resolution of the incentive allowance issue, cooperation of other agencies has been seriously eroded during the last two months. In addition, farmers have complained that organizing efforts by different agencies fill their lives with too many meetings. Although historical experience suggests that single-purpose farmers associations are more likely to be successful than multi-purpose organizations, some attempt should be made to coordinate farmer mobilization/organization efforts between agencies so that they complement, rather than compete with, each other at the farmer level.

The project is "on target" in its physical infrastructure development and beneficiary participation aspects. However, it is not yet integrated across sectors nor is authority decentralized to any significant extent.

VI. ANNEXES

## SCOPE OF WORK AND METHODOLOGY

### INTRODUCTION

The Assessment of the Bicol Integrated Area Development 111 (BIAD 111) Project to which this Annex is attached was conducted by two persons: Jerry Silverman and Keith Ogden.

Jerry Silverman, 1/ a Senior Development Specialist of Development Alternatives, Inc. (DAI) was engaged by USAID under the terms of the Organization and Administration of Integrated Rural Development Project (#936-5300) of AID/DS/RAD. Keith Ogden, 2/ a student Summer Intern assigned to OCD, USAID/Philippines was assigned to assist.3/

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- 1/ Dr. Silverman is Director of Development Alternatives, Inc. (DAI)'s Regional Office for Ais; located in Jakarta, Indonesia. He is a rural development planning and implementation specialist with broad experience in project design, implementation, and evaluation in South-east Asia, East Africa, and the Middle East.
- 2/ Mr. Ogden has completed his second year of undergraduate civil engineering studies at the University of Virginia (Charlottesville). He also served during Summer 1980 as a USAID/Philippines, Student Summer Intern, assigned to the OCD. In addition to the United States, Mr. Ogden has previously resided with his parents in Germany and Thailand.
- 3/ Although Mr. Ogden was assigned only to "assist" Dr. Silverman, his participation in the assessment exceeded the normal understanding of that role. Mr. Ogden contributed substantively to both the process of assessment and the writing of the draft Report.

## SCOPE OF WORK

The Scope of Work was established during informal discussions between Donald Wadley and David Heesen (ORAD/USAID/Philippines) and Jerry Silverman (Consultant/DAI) in Manila on Saturday, June 13, 1981 and was further refined by David Heesen, Jerry Silverman, and Keith Ogden on Wednesday, June 17, 1981. Pedro Olanó of the Bicol River Basin Development Program and Virgilio Brusas, Arturo M. Gonzales, and Felix Pena of the NIA Buhi/Lalo project staff in Bicol also assisted in establishing the Team's agenda during meetings on June 17 and 18, 1981.

Due to the extremely limited time available to the team (8 days), it was decided that: (1) a brief assessment rather than an evaluation would be conducted primarily focused on the identification of issues rather than specific recommendations for the resolution of problems; (2) emphasis would be placed on an understanding of the Project in terms of its role as an experiment in organization and local beneficiary management of a large irrigation system rather than on the construction of physical infrastructure; (3) interaction with project staff in an attempt to assist them in thinking about strategies they might use to approach the resolution of problems would be more important than the written product; and (4) the Report should provide useful background for the AID/W Bicol River Basin Impact Evaluation Team due to arrive in the Philippines in July 1981.

## METHODOLOGY

Eight (8) calendar days were devoted to the assessment process as a whole. Jerry Silverman and Keith Ogden arrived in Naga City on Wednesday, June 17, 1981, met with Project staff on June 17th, 18th, and 19th in Iriga City, conducted interviews with one Zone Engineer, one Community Organizer and one Farmer Group Leader (June 18th), and observed a Rotational Area farmers' meeting on June 18th. Additional interviews were conducted with PMO project staff and a portion of a farm leader consultation meeting was observed on June 22nd. The initial draft Report was further refined during a presentation meeting with PMO staff on Wednesday afternoon, June 24th. Silverman and Ogden departed Naga City for Manila in the morning of June 25th.

Given the extremely limited time available, the Team consciously chose to use a Rapid Reconnaissance Approach 4/ in order to identify the areas of primary concern and pride to Project Managers, assist them in thinking about approaches which they might use to solve problems, and identify issues which might provide background information for the use of the AID/W Bicol River Basin Impact Evaluation Team.

The assessment team relied on three types of information sources:

- (1). Documents accumulated by USAID/Manila, USAID/Naga, the GOP in Iriga City, and other publications of Development Alternatives, Inc. (listed in Annex H);

4/ George Honadle, Rapid Reconnaissance Approaches to Organizational Analysis for Development Administration (Wash. D.C.: Development Alternatives, Inc., 1979), 56 pages.

- (2). Interviews with a variety of USAID and GOP personnel and beneficiaries (listed below); and
- (3). Observation of farmer organization activities.

An important element of the approach used in this assessment was PMO staff participation in the setting of the team's agenda.

#### SCHEDULE

June 13, 1981 (Saturday): Meeting: Don Wadley, David Heesen and Jerry Silverman

June 15, 1981 (Monday/Holiday): Meeting: D. Wadley, D. Heesen, J. Silverman, George Honadle, and James Mayfield (BIAD 1 Workshop and Assessment).

June 16, 1981 (Tuesday): National Holiday

June 17, 1981 (Wednesday): Manila to Naga  
Meetings in Naga City: Silverman and Keith Ogden with (1) Heesen\* (2) Pedro Clano and (3) Carmelo Villacorta (Deputy Directors of BRBDP) and (4) Director, MA\*;

Meeting at PMO, BIAD 11, Bula:  
 Gregorio Beluang (MAR, Project Manager BIAD 11);\*

Meetings at PMO, BIAD 111, Iriga City  
 (1) Virgilio Brusas (Deputy Project Manager)  
 (2) Felix Pena (Chief, Farmer Assistance Division), and Arturo Gonzales (Chief, Construction Division)\*\*

#### OVERNIGHT IRIGA CITY

- June 18, 1981 (Thursday)
- (1) Meeting at PMO, BIAD 111 with Brusas, Pena, Gonzales, Manuel Silerio (Chief, Design Section), and Catalino Tria, Jr. (Chief, Plans and Programming Section).
  - (2) Visit to Rotational Area Zone 7 (upper Lalo) to observe meeting of 23 farmer-beneficiaries; accompanied by Lito Leonardo (Zone Engineer) and Edilberto Mendez (Community Organizer). Allowed 2 hours, 20 minutes for direct interviews with Zone Engineer, Community Organizer, and Celedonia Naldo (RAMC-7 Farmer Leader).

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\* Heeson, Honadle and Mayfield also present.

\*\* Heesen also present.

OVERNIGHT IRIGA CITY

- June 19, 1981 (Friday):
- (1) Meeting at PMO, BIAD 111 with Brusas, Pena, Gonzales, Silerio, and Tria.
  - (2) Meeting at USAID Office/Naga City with Heesen and Oscar Bermillo (USAID Civil Engineer).

OVERNIGHT IN NAGA CITY

June 20, 1981 (Saturday): Began writing draft Assessment Report.

OVERNIGHT IN NAGA CITY

- June 22, 1981 (Monday):
- (1) Meeting at PMO, BIAD 111 with Feliciano Berdin, Brusas, Gonzales, Silerio and Tria.
  - (2) Meeting at NIA Regional Training Center in La Trinidad with Ted Ehera, Berdin, and Pena.

OVERNIGHT IN NAGA CITY

June 23, 1981 (Tuesday): Continued writing draft Assessment Report.

OVERNIGHT IN NAGA CITY

- June 24, 1981 (Wednesday):
- (1) Finished Writing draft Assessment Report.
  - (2) Meeting at PMO, BIAD 111 with Berdin, Brusas, Pena, Gonzales, Silerio, Tria, Ursua, Ehera, Heesen, and Paul Novick to review and revision of draft assessment report.

OVERNIGHT IN NAGA CITY

PERSONS INTERVIEWED

USAID

Donald Wadley, Deputy Chief (ORAD)  
David Heesen, Area Development Advisor (ORAD)  
Oscar Bermillo, Civil Engineer (Naga City)  
Paul Novick, Agricultural Economist (ORAD)

GOP

BRBDP

Carmelo Villacorta, Deputy Director BRBDPO  
Pedro Olano, Deputy Director BRBDPO

NIA

Feliciano Berdin, Project Manager (PMO, BIAD 111)  
Virgilio Brusas, Assistant Project Manager (PMO, BIAD 111)  
Felix Pena, Chief, Farmer Assistance Division (PMO, BIAD 111)  
Arturo M. Gonzales, Chief Construction Division (PMO, BIAD 111)

Manuel Silerio, Chief Design Section (PMO, BIAD 111)  
Catalino Tria, Jr., Chief, Plans and Programming Section (PMO, BIAD 111)  
Ted Ehera, C.O. Supervisor (PMO, BIAD 111)  
Raoul R. Ursua, Chief, Administrative Division (PMO, BIAD 111)  
Lito Leonardo, Zone Engineer (PMO, BIAD 111)  
Edilberto Mendez, Community Organizer (PMO, BIAD 111)

BENEFICIARIES

Celedonio Naldo, Leader, RAMC-7 farmers group (Upper Lalo)  
Observed 22 other members of RAMC-7 participate in meeting.

Development Alternatives, Inc. (DAI)

George Honadle, Senior Development Specialist  
James Mayfield, Associate.

Deep down an irrigation canal in Camarines Sur, a group of farmers sweat it out digging, heaving piles of muddy earth in the midday sun.

At another place in the same area, a larger group of farmers is busy lugging and hammering as they begin construction of a bodega in the midst of a green countryside.

In the real spirit of "Bayanihan", these farmers are engaged in a unique experiment in social participation which can revolutionize their lives and change the face of the rural community.

What is people's participation? What is the process which appears to shatter the age-old practices of Filipino farmers and points out a completely different way of doing things? Before we answer these questions, let's take a brief look at the development of communal irrigation systems in the country.

As far back as the early 1900s, the government had already started assisting farmers in the construction of physical facilities of gravity irrigation system. These are called communal systems in which farmers own the system, distribute water and maintain the facilities. In contrast, in national systems, the National Irrigation Administration owns the system, hires personnel to distribute water and maintain the structures and conveyance facilities.

In the 1950s and 60s, assistance to small gravity systems was dominated by the "pork barrel". This was a practice in which aid to communals was provided on a gift basis by politicians. The practice resulted in complete dependence on government and less of farmer's self-reliance. Furthermore, funds allotted were usually insufficient for constructing systems adequately.

## People's Participation: A LEARNING PROCESS

By Benjamin U. Bagadion\*



\*Asst. Administrator for Operations. He also co-authored with Frances Kortan, Program Officer of Ford Foundation Manila, the treatise, "History of Government Assistance to Communals."

In 1974, Presidential Decree No. 562 was issued adding an all too important dimension to the issue of government assistance to comunals. The decree specifies that NIA recover the costs of constructing or rehabilitating communal irrigation systems that it undertakes. Under this the farmers are to pay back the government the cost of construction or rehabilitation.

The obvious implication of this was clear enough: unless a communal association consists of a viable group capable of managing the system, resolving conflicts in unequal water distribution, and collecting membership fees to pay loans, it would be impossible to implement the new policy.

The NIA was aware that majority of the comunals did not have the capacity to operate and maintain the system due to lack of strong associations. Consequently, two moves were taken by NIA towards solving this problem.

One was the signing in 1975 of a memo agreement between NIA and Farm Systems Development Corporation which stipulated that FSDC would do the institutional work in developing communal associations. NIA in turn would do the engineering and construction work.

The second action was to start in 1976 a pilot project — or more accurately a learning laboratory — with support from Ford Foundation. This was done in Laur, Nueva Ecija, adopting a more integrated approach whereby both the technical as well as institutional work would be done by NIA.

In this integrated approach, the capacity of the water user association would be developed thru active involvement in planning and construction activities like participation in surveys, obtaining right of ways, and acquisition of water permit and constructing the physical facilities.

#### "Bottom-up Approach"

Needless to say putting into ac-

tion the new concept of people's participation especially in construction activities is no easy task. As experts in rural organization have time and again stressed, "citizen participation does not mean the illusion of participation, the semblance of involvement, the opportunity to speak without being heard, the receipt of token benefits, or the enjoyment of stop-gap Palestine measures. Participation means participation in every dimension of life."

The "top-down" strategy in which development was perceived as being done *for* the people, not *by* them or even *with* them, was replaced with the "bottom-up" approach.

Inasmuch as the policy of "No strong organization, no construction" is being religiously adhered to in Camarines Sur pilot projects, the "bottom-up" approach is utilized there. Farmer members are heavily involved in both institutional as well as technical activities.

Our experience with the approach of people's participation is quite limited and experimental. But the Camarines Sur experience has highlighted the fact that it is possible to engage local farmers in a significant way of planning, management and construction activities. On the whole, it seems that it is only in involving farmers in all phases of irrigation development that the much-sought-after farmer system identification can be attained.

With the initial lessons of Laur, the NIA has continued to improve on the participative approach since it started its learning laboratories in March, 1979, in two additional systems in Camarines Sur: The Taisan and Aslong Communal Irrigation Systems.

The over-all success of the participative process in a communal irrigation project depends a great deal on the close cooperation among the community organizer — or CO, the technical staff — or TS, and the farmers' association.

#### Community Integration

But first and foremost, a strong, active association must be organized and maintained. In order to do this, the CO must be integrated with the community.

This means the CO should live in the community and take part in the social life of the people in the area. This kind of integration is hardly possible if the organizer lives outside the community.

More specifically, the CO experiences for himself the problems, desires and needs of the farmers technically and institutionally. She assesses the mobilizable force of the community for projects like the association, if any, its officers and members.

This is done in many ways she can think of like, house-to-house visits, joining planting and harvesting activities, attending church functions and social gathering.

In the process, the CO gets initial acceptance as a working partner in the community. However, integration is a continuous process which develops deeper as she continues working with the farmers.

Planning and reflection sessions with the COs in the background for example, are extremely important part of the association's work throughout its existence — particularly as it tries to keep track of labor counterpart, of fee payment, of expenses, of water distribution rules and other decisions made by the association.

In this matter, officers of both the Taisan and Aslong Associations have at first encountered difficulties over all these procedures and legalities. This is where the CO's vital role of overseeing the grassroots organization of farmer associations come in.

She guides the association on basic requirements like: how to obtain a water permit, how to

(Continued on the next page)

## People's . . .

register with the Securities and Exchange Commission, how to obtain rights of way, how to do association banking, and finally, how to prepare for construction.

However, even in these preliminary requirements, the CO needs the assistance and cooperation of the technical staff. There has to be a system of close coordination between them.

To give concrete examples of the need for this coordination, these are some of the questions raised in both systems:

"In Talsan, the owner of a private dam refused to give the right of way. How is this problem likely to be solved? In Aslong, some farmers don't want to join the association since they say it will only mean they'll have to pay for construction costs. Also, in Talsan, there are five small dams above the proposed dam site. Is there going to be any future conflict with these private dam owners?"

### Close Coordination Needed

In the aforementioned systems, regular coordination meetings are held between the CO and TS to discuss problem areas, plans and schedules so they can appraise each other of what they are doing. This will also indicate to them what kind of coordination is necessary in order to carry out the program effectively.

The TS-CO coordination is necessary to anticipate difficulties in the process of implementing the project, to assess accomplishments, and to maximize each other's efforts for smooth and continuous flow of the process.

After the initial organization process and other preliminary procedures, the role of the technical staff becomes all the more important. From preparation of lay-out of system to monitoring use of equipment, from surveys to can-

vassing of construction materials, the guidance and cooperation of the TS are needed.

In all these technical activities, the "bottom-up" participative approach is fully utilized. Farmer members contribute labor daily, including hauling of locally-available materials. They conduct a canvass of materials independent from the ones done by NIA. They monitor use of oil and heavy equipment in the project site. They institute effective cost control measures to reduce construction expenditures.

In order for the "bottom-up" approach to be followed as closely as possible, the farmers and technical staff "walk thru" preliminary canal locations to identify potential problems. Further modifications are agreed upon as found necessary.

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If government agencies hope to elicit people's participation among farmer organizations, they should make themselves more responsive to the challenges of popular participation.

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The Camarines Sur experience has shown that the design of the system is best drawn up after many meetings and consultations with farmers. Such arrangement is made possible through frequent field checks which allow the association to have maximum input into the design of the system. A compromise is usually made between the TS and association before the final design is drafted.

In matters of procurement of construction materials, the association conducts its own independent canvass. Whenever the price canvassed by the association appears more reasonable, awards are granted accordingly.

### NIA Modifies Policy

With the Camarines Sur experience, the NIA has also modified its usual policy of not allowing outside participation in the committee on bids and awards. Now, the NIA not only allows but requires official representation of

the association during actual opening and awarding of bids. This helps dispel possible doubts some farmers might have as to the legality of the procedure.

Pre-construction conference and contract signing are the final agreements made in preparation for construction. A temporary loan agreement is designed by representatives of NIA and the association to signify commitment of each group towards the project. A simple ceremony is usually held to manifest this commitment to NIA, and more importantly, to members of the association itself.

The Association asks the NIA to construct the system. Once construction is over, the Association pays the NIA. Because of this the association has a say in controlling

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costs of construction. For example, all purchase orders are first noted by the president of the association before purchases can be made by NIA.

The association also monitors not only the quantity, but also the quality of materials delivered to the field site. If there are materials found to be inferior or below proper specifications these are returned to NIA or the supplier for replacement.

A tight control in the use of gasoline and diesel fuel is exercised by the association. Before each day's work, the association president checks the fuel gauge of the bulldozer. In the afternoon, after each day's work, he checks the gauge again to estimate how much fuel--based on per hour consumption--has been used.

To further cut cost, the association sees to it that any equipment not committed for the night shift is impounded after 5 o'clock in the afternoon.

(Continued on page 14)

## People's . . .

(from p. 14)

During actual construction, engineers utilize fully the manual labor of farmer members in gathering of construction materials like boulders, sand and gravel and in excavating certain portions of the main as well as lateral canals.

Farmers are naturally anxious to know the status of the system under construction. Regular reports on construction including financial reports are done formally either in general assembly meeting or their district meetings. In any case, farmers are generally aware of the status because of their direct involvement in the construction.

## Importance of Farmer Consultation

Needless to say, putting into action the concept of people's participation especially in construction activities is no easy task. There are many constraints that go against the idea like uncertainties of fund releases and delivery of materials or difficulties in managing free labor which keeps shifting every so often.

In Camarines Sur, for example, there have been a few incidents that may be useful for future reference. Foremost among these is the idea of consultation on certain decisions.

In Taisan, farmers waited hours in discouragement for the surveyor who failed to come because he had changed his schedule without informing the association. This may seem like a small matter, but to farmers who have to walk fairly long distances, it is clearly of importance to them.

However, as we said at the start, pilot projects are considered learning laboratories. In these laboratories, teams of NIA personnel work out ways to integrate the social and technical aspects of system construction thru full involvement of farmers in planning and construction.

They build an understanding of the unique problems posed by these methods and of the capacities NIA would require to use them effectively. They identify conflicts between the new methods and the existing policies and procedures of NIA.

If government agencies hope to elicit people's participation among farmer organizations, it appears that the first thing they should do is to take a hard look at themselves — their organizational structures and procedures. Above all, they should make themselves more responsive to the challenge of popular participation.

Actual experience has shown that most often the difficulty encountered in involving farmers in development projects is due not so much to the so-called "backwardness" of these people. Rather it points to the difficulty of govern-

## Dawn Breaks. . .

(from p. 6)

ment machineries to make a radical shift in their procedures to make people's participation feasible.

plain was covered with rice plants crowned with golden pinacles.

During the briefing at the CRIP conference room in Bulanao, we commented on the cargo trucks and jeepneys we had met in the Agbannawag road.

"And buses plying the Baguio-Tabuk route also use the NIA-constructed road," a CRIP engineer said.

We learned that the NIA, through the CRIP, has made, and would make, more facilities to help the Agbannawag valley farmers join the group of prosperous farmers in other communities. An access road has already been completed joining Agbannawag with sitio Pulo. And of course, the greater portion of the valley would be extended reliable irrigation services to be provided by the CRIP.

"The nomenclature of the place is not a mishomer, after all," we commented, "Agbannawag" is an Ilokano word meaning "dawn will break."\*

## A Breakthrough

The NIA-Ford Foundation learning laboratories in Taisan and Aslong, however, have proved that a breakthrough can, indeed, be made in achieving a significant popular participation among farmer associations in communal irrigation projects.

Whether such favorable headway can also be achieved in the thousands of other communal irrigation systems throughout the country remains to be seen at this time. Nonetheless, it is reassuring for them to know that such concept is no longer a promise nor an illusion. For them and their progeny, it can very well become a lasting, living reality.

## Farmers' Corner. . .

(from p. 11)

his experience is nothing short of deprivation.

He needs education and reorientation of Filipino values in order to make him aware that a Filipino farmer, after all, is not the unchanging creature he has been stereotyped to be. That when presented with viable alternatives for modifying his life and his ways, he will be enthusiastically responsive as any modern man. Until then, he will realize that he, on his own initiative, can increase his income and productivity and be able to look forward to a bright future with confidence.

How many of the government agencies dare to handle this sort of information or dialogue? The government through the National Irrigation Administration for one, has launched an information campaign two years ago to awaken farmers on their responsibility and obligation to the Agency. It's small wonder why no farmer has been jailed so far for non-payment of irrigation fees.

Plans for the Farmers' Participation in the Management of the  
Buhi-Lalo Irrigation System

(Comments following a visit to the system on 9 and 10 March 1981)

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I visited Buhi-Lalo at the suggestion of Dr. Frances Korten of the Ford Foundation, Manila. The Buhi-Lalo system is being developed as the first "jointly managed" system in the Philippines. (1) The hope was that, as a result of my observations of the organizational structures and decision-making processes on larger jointly-managed irrigation systems in other countries, I might have something to contribute to present thinking on possible future patterns of farmers' participation in management in Buhi-Lalo. Experience of participatory irrigation management in this country has so far been largely confined to smaller community-operated systems.

Most of my time was spent in discussions with the Project Manager of Buhi-Lalo, the Assistant Project Manager, the heads of the Engineering Division (in charge of survey and design), the Construction Division (in charge of rehabilitation as well as new construction), and the Institutional and Agricultural Development Division, together with the two senior supervisors of the Community Organisers (whose section falls within the Institutional and Agricultural Development Division). On the second day I visited the field. Various parts of the already irrigated sections of Upper Lalo were visited, including a farm ditch where farmers were engaged in clearing and improving the cross-section on a pakyaw contract under the supervision of the Local Zone engineer (Construction Division); and a village where farmers had gathered to discuss possible realignment of their farm ditches and the election of local group leaders. Visits were also made to the proposed dam site on Buhi-Lake; to the downstream reservoir, from which additional water from Buhi Lake will be distributed through two Branch Canals --one supplying the Lower Lalo area and the other conveying water to the ADB-financed areas which form part of a separate development project; and to parts of the Upper and Lower Lalo areas to which irrigation has still to be introduced. There were only limited opportunities to talk to engineering field staff and Community Organisers (COs).

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(1) The term 'jointly-managed' is used to refer to those systems on which responsibility for management at different levels of the system (main canals, laterals, farm ditches, etc.) is divided between the staff of professional irrigation agencies and the water users. This is in contrast to the community systems on which sole responsibility for internal management rests with the water users.

Joint management and community management: two different contexts for participation

There are significant differences between pilot communal systems and jointly managed systems such as Buhi-Lalo regarding the respective roles of farmers and NIA in the decision-making process. These have important implications for the bases on which effective participatory strategies can be developed in each case. For example:

- (a) Initiation of the participatory programme. On pilot comunals, the original request for technical assistance comes from local farmers who agree in principle to make substantial financial contributions towards the physical improvement of systems which, it is clearly understood, will remain under their direct management control once construction has been completed. On Buhi-Lalo, the proposals to improve and extend the existing system and to adopt a participatory approach have come from the NIA; the nature and degree of the farmers' financial commitments towards the development programme at the time of its initiation were unclear; and so was the nature and degree of their eventual management responsibilities.
- (b) Flows of finance. The present basis for financing O & M on Buhi-Lalo is the same as on all NIA schemes: the farmers are required to pay irrigation fees which go into the NIA's general revenues in Manila, and the level of budget received by the project management for O & M -- likewise decided in Manila -- may bear little or no relation to the level of farmers' irrigation fee payments.
- (c) Size of hydrological unit to be managed. On comunals, farmers are in a position to manage their own relatively small and independent irrigation systems: size of membership is fairly easy to handle, most people know each other, information about what is happening on other parts of the same system is easily obtainable, etc. On larger systems, however, the hydrological units to be managed are larger -- often much larger -- than local "communities"; many groups of farmers become dependent on the same irrigation system, people at the top of the system do not necessarily have close dealings with those at the bottom, information about happenings elsewhere on the system is often difficult to obtain; the scope for conflicts of interest is greater; the greater complexity of the management task calls for a division of functions and responsibilities, and a specialist agency is needed to take executive responsibility for distributing water between communities, maintaining main channels, helping to arbitrate in inner-community disputes, etc.

As a result of these factors, the vision of the future which can at present be offered to farmers on Buhi-Lalo as an incentive to participatory action is much less compelling than the one being offered to farmers on pilot communals (ideally, systems which will be under their total management control, with the NIA acting as servants and advisers). Indeed, the vision is still blurred. It can never be the same as the communal's vision for the simple reason of hydrological interdependence discussed in (c) above -- and also because the government's substantial capital investment in Buhi-Lalo gives it the right to assign an important role to the NIA in the system's future development. On the other hand, factors (a) and (b) and other institutional factors are capable of change, provided higher authorities are prepared to agree to the necessary experiments. If the idea of participation on jointly-managed systems is to be developed to its logical conclusions, every encouragement should be given to the evolution of a management system in Buhi-Lalo which is as like the pilot communals' management system as possible, within the inevitable constraints referred to. This would mean that NIA staff at the project level would have to make it one of their principal tasks to strengthen the bargaining position of farmers in relation to themselves -- a task which it would be unrealistic to expect them to undertake with enthusiasm unless they could also hope for some return benefit from the changed relationship. There are ways in which this could be achieved, and these are discussed later in the paper.

Another point regarding context concerns the differences between the Upper Lalo area (already largely irrigated) and the Lower Lalo area (due to receive an entirely new irrigation system). The scope for motivating farmers towards greater participation by mobilising them around activities of immediate concern to them appears substantially greater on Lower Lalo, where major decisions still have to be made about the location of lateral canals, turnouts and farm ditches and where a large construction programme will follow. On Upper Lalo, most of the major canals and structures are already in situ and unamenable to significant changes: participation in design and rehabilitation construction activity will therefore be mainly confined to the turnout and farm ditch levels. On the other hand, the Upper Lalo area offers good opportunities for fairly rapid movement into new experiments in reallocating responsibilities for operation and maintenance.

The present division of CO activity on an 'Upper' and 'Lower' Lalo basis seems unsatisfactory. Zone 11-B and at least part of Zone 11-C, currently classified as belonging to Upper Lalo, will eventually be incorporated into an irrigation block of about 2000 hectares fed by the Left Branch Canal of the new Buhi Lake system. This block will become hydrologically independent of the remaining 900 hectares currently irrigated from the Lalo River. (1) Hence Zone 11-B and part of Zone 11-C are hydrologically part of the Lower Lalo and the farmers in these zones

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(1) Surplus water from the upper system fed by the Lalo River will be transferrable to the lower system fed by Buhi Lake, but not vice versa.

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will need to be part of the Lower Lalo irrigators' organization if farmers' participation in decision making is eventually to span all of an area that is hydrologically interdependent.

Current NIA project organization and concepts of participation

The present senior NIA field officials, from the Project Director downwards, seem genuinely committed to the idea of promoting greater farmer participation; and an organizational structure has been developed which indicates a serious interest in achieving sustained improvements in current levels of day-to-day system management. For example, the Agricultural Wing contains 4 Agricultural Engineers and 4 Water Management Technicians who are currently assigned to applied research and training activities but are ultimately intended to take over system operation functions. Plans to separate the operation and maintenance functions, placing the operations under Agricultural and Institutional Development and maintenance under Construction, are well conceived. The Engineering Division already appears to have modified some of the design assumptions on which the original Upper Lalo system was built, on the basis of revised estimates of crop-water requirements. The two senior CO supervisors appear to have close and good relations with the technical staff and are actively seeking to identify practical ways in which farmers' participation in decision-making might be extended in future.

But despite the open-mindedness and enquiring thinking of some senior staff members, including the Project Manager, the prevailing conception of the kinds of management responsibilities which farmers might undertake in the name of "participation" is still rather limited. The main strategy at this early stage of the project's development is, quite rightly, to concentrate on organising small groups at the farm-ditch or turnout levels. Activities around which they are being initially organised are planning, design and construction works at the farm-ditch and turnout levels; and the intention is then to extend their interests to activities at the lateral level. Once groups have been formed at the turnout level, NIA officials envisage the members of these small groups forming larger Associations at the Zone (250-300 ha.) level. (1) These Associations would then take over direct responsibility for operating and maintaining lateral canals, in addition to their traditional O & M responsibilities below the turnouts. This would enable the NIA to reduce its O & M costs by withdrawing its ditchtenders and there is also an idea that farmers would be attracted into assuming their greater responsibilities by a corresponding reduction in their payment of irrigation fees. Some officials see the formation of a water users' Association at the system level as a 'long-term goal', but ideas about its possible functions are hazy.

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(1) The project area is currently divided into 13 zones. In the irrigated area, each zone contains several (up to 9) laterals or independent farm ditches.

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I fully accept the need to approach the task of organisation-building slowly and cautiously, consolidating small groups at the local level before proceeding to higher level federations, particularly in order to ensure the emergence of responsible and representative leaders. However, I am less convinced of the need to confine farmers' interests in participation to immediate small group activities. If longer-term goals could be more clearly conceived from the outset, they could help to stimulate additional interest on the farmers' part in the participatory programme at all stages. And while a programme with the limited objectives outlined in the previous paragraph might well succeed in achieving improved levels of system performance in the short term, I am not at all convinced that most farmers will see the formation of Zone Associations with expanded O & M responsibilities as an inspiring vision on which to base a sustained programme of long-term development. In addition to this, Zone Associations (1), in the absence of any higher Association at the system level, are likely to be inherently weak and unstable: if farmers' management responsibilities are confined to activities within each zone, their capacities to monitor the activities of NIA staff on the main canal system will be limited, and so will their capacities to deal with conflicts and differences between zones. Moreover, a mere reduction in irrigation fees is unlikely to be very exciting to farmers (especially if they have to carry the costs of additional O & M work themselves): what could be much more interesting to them would be a new system of payment which carried with it some promise of improved service from NIA field staff.

#### Taking participation further

The two main keys to more sustained long-term development based on participatory management are (a) the eventual establishment of a water users' Association at the system level; and (b) revisions in the current methods of levying irrigation fees which would enable the revenues raised from farmers to be retained at the system level for local reinvestment.

The first of these measures would appear to present no major difficulties. The timing for the establishment of a system level Association (2) would need to be determined by the judgement of the COs and their Supervisors as to when sufficiently reliable local-level leadership had emerged. The responsibilities of the Association could initially be fairly limited, and it should not be too difficult to devise a sequential accumulation of responsibilities of increasing weight and complexity which could be assumed by the Association over time in accordance with increased experience

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(1) Why associate at the Zone level? Zones do not appear to have any particular hydrological significance and they certainly do not have any social or local administrative significance. They appear to have been used by NIA and USAID for planning purposes.

(2) The Buli-Lalo area would require two such Associations because of the hydrologically independent nature of the Upper and Lower areas, as discussed above

and management capacity. Examples of possible responsibilities, listed in ascending order of complexity, are:

- (i) helping NIA staff to monitor main system operation by improving information flows between different sections of the system (e.g. through the inspection of records, gauges and fields).
- (ii) helping NIA staff to plan and monitor the timing of crop operations, particularly through the controlled staggering of land preparation activities.
- (iii) discussing uses to which the O & M budget will be put and monitoring its expenditure.
- (iv) (provided agreement is given to changing present water charging methods) collecting fee payments from members and discussing their expenditure with NIA staff.
- (v) (considerably later) appointing their own management and professional staff and deciding on all major issues of policy with regard to operation, maintenance and conflict resolution.

Progression from steps (i) to (v) might take a considerable period of time. Irrigation Associations in countries such as Taiwan and Spain have made the full progress to (v), although the activities of independent IAs have always tended to be quite closely watched by governments in view of their often substantial financial contributions towards major rehabilitation and construction work. In Spain, IAs are assisted and supervised by professional irrigation staff for a "tutelage" period before they are given full independence. The period usually last a minimum of 5 years and may often last much longer.

The second measure -- organising retention of farmers' payments at the system level instead of letting them go into general NIA revenue in Manila -- would require agreement from a high level within the NIA. Though it would clearly be an impossible decision to agree suddenly on a nationwide basis, a pilot programme like Buhi-Lalo would seem to provide an ideal opportunity for experimenting with a new approach of this kind. This measure may seem inappropriate to some irrigation officials who are accustomed to conventional methods of budgeting. However, experience elsewhere (e.g. Taiwan) indicates that it is an approach which is capable not only of increasing farmers' incentives to pay their fees but also of bringing two forms of benefit to the professional operating agency: the first is a reduction in the need to subsidise O & M activities and the second is an increase in incentives to field staff. In the absence of such incentives, it is difficult to imagine field staff accepting the proposed increases in farmers' management responsibilities with equanimity.

The principal reason that conventional methods of irrigation O & M financing tend to work badly in so many countries is the lack of any direct link between what farmers pay and what they receive back in the form of services. Whatever they pay goes into general revenue and what is returned to the project from the centre rarely relates closely to farmers' levels of payment. Treasuries and Ministries of Finance are disinclined to be generous towards requests for O & M finance at project level and consequently supply less than is required. Quality of service suffers; and farmers are less interested than ever in paying their fees, which to them appear less of a service charge than yet another tax. A vicious circle then sets in of low farmer payment ----> low revenues to government ----> low disbursement to project agency ----> poor service ----> low farmer payment. Field staff meanwhile spend a disproportionate amount of their time trying to extract dues and overdues from farmers, further neglecting their principal tasks of operation and maintenance. (1) By contrast, the pattern whereby farmers make their payments to the project organisation, or preferably to their own Association at the system level, is able to provide the necessary linkage between payment and service. Farmers have an incentive to pay more if they are able to see that their payments will be locally reinvested; and the operating agency has an incentive to provide a good service since its members can benefit from bonus payments if the farmers pay more but they suffer correspondingly if the farmers pay less. The circle can then be established of better service ----> higher payment by farmers ----> more project revenue ----> more bonuses to field staff ----> better service. The same principle is, of course, applied on successful communal systems in order to maintain the accountability of chosen irrigation officials to their local association's members.

As with the proposal to form Associations at the system level, it may well be advisable to move cautiously with this financial proposal. If necessary, ways could be found of introducing it on a modified basis or in stages. In any case both proposals would need to be thoroughly discussed with farmers beforehand. It is conceivable that they might reject one or both of them because of unwillingness to face the possible risks involved, at least in the immediate future. Nevertheless, if the full range of options with regard to participative management are to be explored, serious consideration should be given to discussing them at a fairly early stage in the project. This in turn implies an early need for high level consultations as to whether the proposal for a new approach to fee payment can be entertained.

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(1) See, e.g., RSC-NIA Documentation Research on the Upper Lalo Area, Report No. 1, February 1981, p. 13, top paragraph.

Other observations on Buhi-Lalo

A number of other points arising out of my brief visit to Buhi-Lalo may also be worth recording:

- (a) CO's training. Since Buhi-Lalo is the first jointly-managed project on which a participatory approach is being developed, it has not been possible to provide COs with a training programme tailor-made to its particular problems and needs. Instead, their pre-service training inevitably referred to earlier experience on communals, not all of which is likely to have been relevant. (The principle of getting people to participate may always be the same, but the purposes of participation vary from one situation to another). The COs' Supervisors have already conducted some further in-service training, but I would expect the tasks of all parties to become considerably easier once the longer-term objectives of the project have been clarified.
- (b) Process documentation. This appears to be a valuable record of the experience being gained on this project. However, more attention may need to be given to understanding the organisational structure, plans and activities of NIA personnel in order to keep reporting on technical and institutional activities in balance.
- (c) The Project Manager and other members of his staff, including the COs' Supervisors, expressed particular concern about the need to improve present methods of water distribution. It is clear from the job descriptions of watermasters and ditchtenders (1) that report-back procedures are quite inadequate for good day-to-day irrigation management and monitoring at the system level. Project staff agreed that the data collection was largely done for the purposes of reporting back to Provincial Irrigation Office and to headquarters in Manila rather than for local management purposes. Moreover much of the data (e.g. on irrigated and planted area) seems to be collected with a view to fee collection rather than water distribution. The development of improved operational procedures, with a clear definition of the respective tasks of field staff and farmers, will be an important activity to be addressed in the near future. This is a subject on which help could perhaps be provided by IRRI.

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(1) RSC-NIA Documentation Research on the Upper Lalo Area, Report No. 1, January 1981, pp. 5-6.

b.b.

- (d) In Upper Lalo some rehabilitation activities, including construction of terminal facilities, had been completed before the COs were introduced in late 1980. Work on construction was then halted to allow the COs time to organize farmers to participate in design work. Although the Construction Division have been able to proceed with certain activities since (including the building of canal access roads), I would expect some of them to be feeling somewhat frustrated and impatient -- though senior project staff said that they were not. (According to the Project Manager, engineers are being evaluated by their organizational as well as their technical work). But whatever the feelings of construction staff there seems to be an inevitable danger in Upper Lalo that insufficient time will be given for organizational work before technical decisions are taken. For example, on one farm ditch which I visited in order to see a walk-through, we were told that the walk-through had already occurred earlier that morning; and farmers were already busy reconstructing their ditch under pakyaw contract. There were good reasons for the urgency of their work (water was getting short and they had an immediate need to clear the ditch) -- but it was not clear that it really formed part of the new participatory process. Another manifestation of the tendency for the design-construction process to be speeded up is the presence of Construction staff (Zone engineers) with COs at the time of walk-throughs, when I would have expected Engineering (design) staff to be present.
- (e) There seems to be some uncertainties among senior project staff as to the likely environmental consequences of the construction of the diversion structure at Buhl Lake. According to one, the level of the lake is likely to be raised up to 1 meter (this is also the fear of the mayor of Buhl), while another is confident that there will be no change in the level of the lake. This is clearly a matter of major importance to those living near the lake. A clarification of plans and their likely consequences should be made as soon as possible.
- (f) Project staff raised the longer-term question of what is likely to happen after all the USAID-financed and ADB-financed projects are completed, since the plan is then to place all 13,000 ha. under one Irrigation Superintendent for O & M. He is clearly going to have difficulties if part of his system has been developed to operate participatively and part has not. Project staff mentioned that farmers in areas adjacent to the Buhl-Lalo project were expressing interest in greater participation in their areas too.

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- (g) In the eventual assessment of this project in comparison with NIA projects which have not used a participatory approach, it will be important to record all respects in which its staffing pattern differs from the norm. It appears that on Buhi-Lalo it is not only the COs and their Supervisors that are additional but also most of the staff of the Agriculture Wing.

Acknowledgement

Finally, I should thank all the staff of the Buhi-Lalo project who gave me so much of their time and hospitality. I was most impressed by their enthusiasm and determination to make this a successful pilot project which would produce lessons capable of being applied widely elsewhere.

FARMERS PARTICIPATORY SCHEME FOR  
RINCONADA/BUHI-LALO (BICOL INTEGRATED AREA DEVELOPMENT III) PROJECT

I. BACKGROUND:

The RINCONADA/BUHI-LALO (BIAD III) PROJECT is a project component of the Bicol River Basin Development Program (BRBDP). The project is about 485 kilometers south of Manila, about 40 kilometers after Naga City. It covers the entire 1,100 hectares of the existing Lalo River Irrigation System and 1,900 hectares of extension area (Lower Lalo). The 3,000 hectares, involving about 4,500 farmer-beneficiaries, are in the municipalities of Buhi, Nabua, Bato and Iriga City, all in the province of Camarines Sur.

The United States Agency for International Development (USAID) has granted a loan to the Government of the Philippines (GOP) Loan No. 492-T-056 A & B) amounting to \$5.0 million to finance the project. The GOP counterpart will not be less than \$3.859 (Article 3, Sec. 3.2 b, Loan Agreement).

The concept of Integrated Area Development will be used in the implementation of the project. The lead implementing agency is the National Irrigation Administration (NIA) with MAR, MLGCD, BPI, BAEx, BS, NGA and NAPOCOR as participating agencies, with the BRBDPO providing the inter-agency coordinations.

Lake Buhi will be developed as a reservoir by constructing a control structure at the outlet with a two-lane bridge at the top. To increase low flow in the 6 kms. Tabao River, 3 kms. will be deepened. This will ensure water for the extension area of 1,900 hectares, 8,200 hectares of the Bicol River Basin Irrigation Project (ADB-funded) and the NAPOCOR existing hydro-electric plant. To divert water to the Lalo System and ADB Project, a headwork structure will be constructed thru the NPC Forebay Dam.

From the headwork at the NPC Forebay Dam, a 2 km. left connector canal will be constructed to irrigate the lower Lalo River Irrigation System combined bridge and flume will be constructed across Daraga Creek.

The Upper Lalo system to be rehabilitated has 8.00 km. of main canal and 10.55 km. of laterals. The Lower-Lalo will have 10 kms. of main canal and 25 kms. laterals. The entire project will have 125 kms. of main and supplementary farm ditches; 56.91 kms. of roads along main canal and laterals which will link the area to other secondary and feeder roads; and 61 kms. of on-farm, secondary and main drainage ditches.

II. RATIONALE:

In the development of effective water management measure in an irrigation system, it has been recognized that people's participation through a strong farmer's organization is crucial if WATER IS TO BE EQUITABLY DISTRIBUTED TO THE RICEFIELDS. The capacity of the water user association could be developed thru active involvement in the planning and construction activities of the system.

Unless a farmer's association can capably manage the operation and maintenance of a system; resolving conflicts in unequal water wastages, promptly and diligently pay irrigation water fees, the benefits derived from water management may not be fully achieved. Identified approaches for developing the farmers capacities in organizational work had been piloted in several communal projects. Finding that many concepts in resolving potential management problems in these pilot communal projects can be applicable to national systems, NIA, thru the Assistant Administrator for Operation, will try the new concept of people's participation in a small national project - the Rinconada/Buhi-Lalo. The traditional NIA method of organizing farmers is to start organizing from the turnout level where farmers served by the turnout will

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be members of a Farmer Irrigator's Group, and a number of FIG'S are federated into a Farmer Irrigator's Association. The proposed scheme for this Project will start organization of farmers by laterals, which later will be go down to by main farm ditch (MFD) and SFD level as a Farmer Irrigator's Group.

The operation and maintenance starting from lateral level down to the supplementary farm ditch and drainage ditches shall be under with the Irrigation association.

### III. OBJECTIVE:

The project shall involve active farmers participation in the planning, design, construction, operation and maintenance by providing adequate incentives, thereby developing a cohesive and FUNCTIONAL Irrigators association.

### IV. STRATEGY OF IMPLEMENTATION:

Farmer participation and irrigators association organization for the Buhi-Lale Project will be different from a communal project. While the farmer of a communal irrigation will participate from the inception of the project up to completion of construction then to operation and maintenance, in the Buhi-Lale Project, farmer participation will enter only in the design of laterals and farm level facilities. Design and planning of the major structures, project facilities (Buildings) will be undertaken by a task force of the NIA Central Office especially formed for the Buhi-Lale and BRBIP Projects. While the main canal, laterals, roads, laterals structure and all other terminal facilities will be done by the Engineering Division of the project.

There will be two distinct system organizations for the project. The Upper Lale will have an irrigators organization

geared for rehabilitation works and operation and maintenance while Lower Lalo irrigator's organization will be actively involved in the pre-construction, and operation and maintenance, & construction, The Lower Lalo will have the continuous water supply allocation schedule from the Buhí Lake Reservoir and the Upper Lalo will draw water from the Lalo river.

A. PRE-CONSTRUCTION

1. Fielding of Community Organizers among Client-Farmers.

The entire project area will be divided into water management districts with an area of 500 hectares, more or less. Each district will have two (2) or three (3) zones, for facility and proper responsibility in construction supervision under a field engineer. Each zone will have one community organizer working in close coordination with the field engineer and both will work as a team.

The CO's will live among the farmers and should be able to integrate themselves with the community and be accepted as a member of the community. The CO's will be the linkage between the project and the farmers.

Immediately after the first three-weeks field exposure in the respective place of assignments of the Community Organizers, they will be convened for a two-day Workshop together with the Field engineers. The output of the workshop is to come up a flow chart showing the activities to be undertaken by the community organizers and Field engineers in the program implementation.

2. Information Drive.

An information drive will be conducted at barangay level. It will be jointly conducted by the community organizer and Field engineers assigned to the area. This

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properly inform the farmers and community on the objectives and activities to be undertaken. The activities during the information drive includes:

- a. Posting at each barangay hall a general layout of the project including the parcellary map as obtained from the Bureau of Lands showing other things the following:
  - 1) Main source of water and location of diversion works.
  - 2) Main canal, laterals, tentative location of MFD and SFD, drainage ditches, canal structures and turnouts.
  - 3) Areas covered by each lateral or sectoral water use, each colored differently for easy distinction.
  - 4) Dialogue with farmers to gather feedbacks relative to the project activities affecting them.

3. Mobilization of Farmers.

a. Pre-Organization

Informal meeting of farmers belonging to each water use sector will be held. The goals and objectives of organizing irrigator's association shall be discussed and reactions of farmers will be noted. The community organizer shall establish contact farmers and potential leaders will be identified.

The suggestions of farmers on location of turnouts, carabao/thresher crossings division boxes and farm ditches, shall be considered in the preparation of final design.

b. Formation of Lateral Irrigator's Association

In the formation of irrigators association, the community organizer will consider the viability of the association. The members of this association will be composed of farmers actually served by a lateral and the turnouts near the lateral. However, the farmers from those turnouts

should be given the option to select. The set of officers to be selected shall be decided upon by the members. A lateral supervisor and record and finance officer shall be included among the officers to be elected by the general membership.

The officers shall create working committees, as: By-Laws, Survey, R-O-W, Membership, Registration, Manpower Inventory, Placement and Contract, Quality and Quantity and other committees deemed necessary. Every committee shall have from 3 to 5 members including the Chairman. These committees are to work closely with the appropriate unit of the project and will see to it that farmers problems relative to pre-construction phase are solved, suggestions are channeled and acted upon accordingly by all concerned.

The officers of the organization, with the help of the CO, will provide the communication link between the farmers and NIA. In effect, NIA will deal with the organization.

1. MFD Farmer Group.

The second level of organization will be among the farmers served by the turnout or main farm ditch. They will elect the MF Supervisor and other leaders. The MFD Supervisor will work closely with the working committees of the lateral farmer's association.

2. SFD Farmer's Group.

The third level of organization will be the supplementary farm ditch group. The supplementary farm ditch leader shall be elected. The SFD leader shall see to it that the suggestions of his members regarding the implementation of the project are channeled to the ap-

appropriate section of the project management through the working committees of the association.

- c. Formalization of the Lateral Irrigator Association including approval of by-laws and firming-up of membership.

Immediately after the would-be association members are already viable and capable to operate and manage from the lateral down to the supplementary and drainage ditches, formalization of the lateral irrigators association including approval of by-laws and firming-up of membership can be undertaken. However, other indicators for an association to be said organized must be considered. This includes the capability of the association to resolve their own conflicts, pay the required fees and others.

- d. Registration of Association

The lateral irrigators association, like any other farmer's association will be registered with the Securities and Exchange Commission (SEC) to attain the juridical personality through the assistance of the CO. Once recognized, the association can own and dispose property, can enter into contract, can sue and be sued and can perform of its objectives.

#### 4. Trainings/Seminars.

- a. Community Organizers and Field Engineers;

CO's together with the Field Engineers will undertake orientation training on the objectives of the project. The training will give emphasis on the need for close coordination between the CO and Field Engineers and the CO/FE's responsibility as the extension arm and direct linkage of

the project to the farmer-beneficiaries.

Monthly coordination meetings or as need arise shall be held between the CO and Field Engineer to discuss problem areas, plans and schedules. Each other can be appraised on what they are doing. This will also indicate the kind of coordination necessary in the effective implementation of the project.

b. Development of Farmers:

A two-day seminar will be conducted and attended by all farmers within the sectoral water use area. This will provide the farmer the basic knowledge and information on the method of irrigation operation, their duties and responsibilities in the operation and maintenance of the system. This will be supported by actual field demonstration and on-the-job training.

A series of trainings based on the felt needs such as pre-membership education, leadership development, financial and record keeping, irrigated crop production, committee functions, water management and post harvest technology shall be conducted jointly by the CO, project management and the participating line agencies. Said trainings will result in the efficient use of resources, and will make each member of the association understand their respective responsibilities to the association, to NIA and to themselves.

The trainings will be a continuing activity to the completion of the project.

**B. CONSTRUCTION**

The concept of farmers' participation can be fully realized if they would be involved in the construction where they can get remunerations. If the farmers themselves construct the farm level facilities, there is an assurance of completion and functionality. The "bottom-up" approach is utilized. In the process of construction the farmers will identify with the system. Functional facilities will lessen operational problems and increase irrigation efficiency.

The project is committed to generate employment opportunity among farmers affected. Considering that farmers will be fully employed on their ricefield only after construction, i.e.: when the facilities are completed and water is flowing to the farm lots, when they can cultivate year round, it is deemed necessary that while construction is going on, farmers must have some sources of income.

The Placement and Contract Committee shall firm up the manpower scheduling for the different construction activities and sees to it that all members are given equal opportunities. It also sees to it that all work group observe the time schedule to keep pace with the over-all construction schedule.

The farmer association will be given the pacquiao contracts for the farm ditches and drainage canals. For laterals not needing equipment, pacquiao contracts shall be given to the association. The project management will see to it that the pacquiao contracts should be apportioned in such a manner that it could be completed in one or two weeks time, as such, farmers could be paid within one quincena.

The association will be given pacquiao labor contracts for small canal structures, which will be of two types. One is where IA has the technical know-how and all workers will

be members of the IA, including the leadman. Another is where the leadman will be directly hired by NIA with the laborers coming from IA members.

All these pacquia contracts shall follow strictly the plans and specifications. All contracts by the association shall be under the supervision of NIA construction personnel.

Another way for employment of farmers will be to be directly hired by contractors for the major works. It is stipulated in major contracts with NIA that local laborers should have priority in the hiring. The IA shall make arrangement with the contractors for the hiring of IA members.

The Quality and Quantity Control Committee shall check on the work of the IA members as to the quality of the work being undertaken and see to it that all materials for the farm level structures are used only for the project.

The IA shall monitor the construction activities and give feedback to the project management on the manner of implementation.

### C. OPERATION AND MAINTENANCE

The farmer irrigator's association shall be given the contract for the operation and maintenance of the laterals and turnouts serving the farmer's farm lots. Major repairs on these laterals will be undertaken by NIA. The O & M shall include activities such as, water distribution, maintenance of canals, obtaining hectareage serviced, billing, irrigation fee collections and repair of MFD's and SFD's. All these activities shall be under the general supervision of the Water Management Technologist (WMT) in charge of the district.

1. Incentives for operation and maintenance. Maintenance of

laterals and MFD's shall be given to the association by way of yearly contract, at an amount to be set between NIA and the IA, but not to exceed the annual amount to be paid to regular NIA O & M personnel. The IA shall decide on the manner of distributing the proceeds from the contract.

The IA shall employ the ditchtenders from among their members. To give equal opportunity for all members to become ditchtenders, the IA may adopt group rotation of ditchtenders every cropping season. This will ensure that all members would benefit from the incentives.

The contract may include a provision that the IA shall guarantee payment of irrigation water fee. A stipulation maybe such that if 100% irrigation fee collection is achieved, the IA will be paid 100% of the contract work, if only 80% collection was obtained only 80% of the contract amount shall be paid to the IA. This needs consultation and approval by IA.

2. Collection and remittance of irrigation fees.

The association shall be given the responsibility to collect irrigation fees from the members and to remit daily collection to the NIA collecting officer. The IA collection shall be bonded. Timely irrigation fee payment shall entitle the payer to a 10% discount. A certain percentage of this discount may go to the fund of the association.

An incentive bonus that may go to the IA fund shall be the bonus to be given if the IA collect irrigation fees in excess of the predetermined collection limit. The bonus that usually are given to the NIA collectors shall be given to the IA.

### 3. Savings in government funds.

In this scheme, regular NIA ditchtenders maintaining laterals will be replaced by association members. The total amount of salaries of these personnel will be the contract amount with the IA. Savings will come from ~~the~~ fringe benefits (leave credit, allowances, 13th month pay) customarily given to NIA regular personnel.

#### D. REPORTING AND EVALUATION SYSTEM:

In the Workshop mentioned above (part IV, letter A), a reporting and monitoring scheme will be developed. It will be installed to assess the progress of implementation and will identify problem areas and constraints that may impede the program. Thus, remedial measures can be instituted.

#### V. EXPECTED BENEFITS

Farmers who are organized are given certain remunerations either directly or indirectly for every service they render to the Project/System. They will be more inclined to the participative approach to achieve the project goals. They will be project partners in the creation of an ideal system which will satisfy both the objectives and needs of the program and the farmer-beneficiaries.

The social, economic and cultural development services provided by the government will be channeled through the lateral associations and its effects could easily be monitored. The farmers involvement in the O & M activities will change the notion of farmers that operation of a system is NIA's sole business and they will be less dependent on the government.

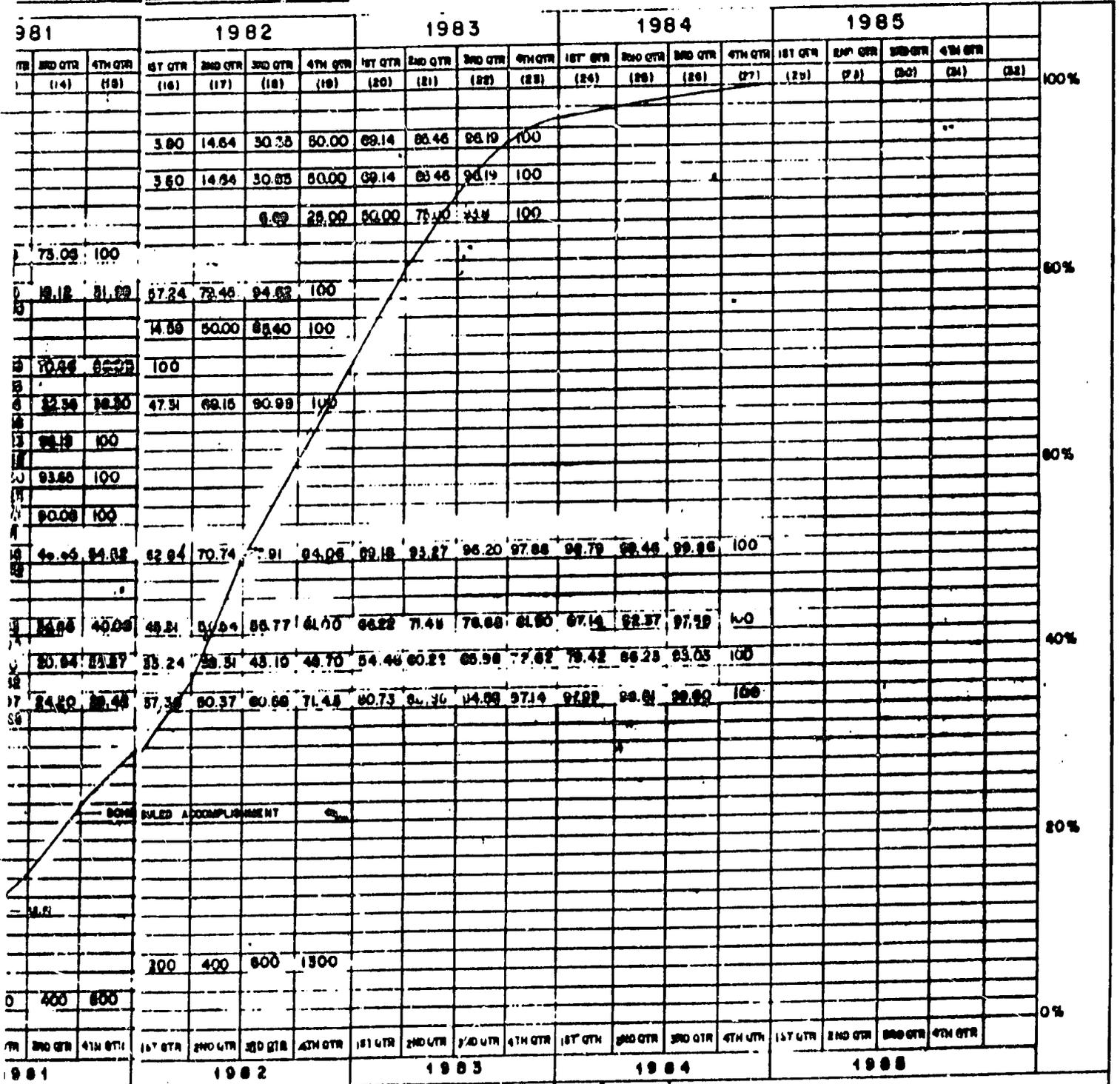
Awareness of the needs and responsibilities of an efficient organization will lead to the development of a well responsive

farmer ready to accept changes for better production. To ensure the functionality of farm level facilities, the project shall accept comments and suggestions based on the experiences of the farmers and incorporate the beneficial suggestions with the project/system.



**MNH/LALO (BIAD III) PROJECT**

LEGEND:  CUMULATIVE PROJECTED % ACCOMPLISHMENT  
 CUMULATIVE ACTUAL % ACCOMPLISHMENT



SUBMITTED BY:

FELICIANO D. BERRIN JR.  
PROJECT MANAGER

NLA CND FORM Y-2  
**OVERALL PROJECT SCHEDULED EXPENDITURES**

PROJECT TITLE **RINCONADA/SUHI-LALO (SIAD B)**

NO.	WORK ITEMS	CLASS	ESTIMATED COST	% WEIGHT	PARTI- CULARS	1979	1980				1981				NET QTR	BUDG		
						4TH QTR	1ST QTR	2ND QTR	3RD QTR	4TH QTR	1ST QTR	2ND QTR	3RD QTR	4TH QTR			(13)	(14)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
<b>A. DIRECT</b>																		
1	LAKE BASH CONTROL STRUCTURE	C	8,082	12.41	PROJECTED ACTUAL												348	128
2	BARTY RIVER CHANNEL IMPROVEMENT	C	9,084	12.41	PROJECTED ACTUAL												348	128
3	DARABA RIVER PLANE / BRIDGE	C	2,118	2.09	PROJECTED ACTUAL													
4	FORESBY HEADWORKS AT KPC DAM	FA	1,000	1.80	PROJECTED ACTUAL							209	796	1090				
5	LEFT CONNECTOR DECL. LAT. I EXT'N.	FA	6,109	6.88	PROJECTED ACTUAL					9	59	19	488	1104	1954	3487	4654	
6	LALO EXT'N. LAT. B LAT. X	FA	2,833	3.48	PROJECTED ACTUAL		4.10	8.00	8.00	8.00	8.00	800				870	1287	
7	UPPER LALO REHABILITATION	FA	3,085	4.22	PROJECTED ACTUAL		4.80	8.747	8.747	8.747	0.747							
8	TERMINAL FACILITIES	FA	2,270	3.10	PROJECTED ACTUAL		.91	17	52.72	101.88	202.87	202.88						
9	PROJECT FACILITIES	FA	1,588	2.13	PROJECTED ACTUAL		7.2	31.08	61.67	87.61	140.34	140.34						
10	PRE-CONSTRUCTION WORKS	FA	873	0.79	PROJECTED ACTUAL		108.08	236.3	310.30	708.88	812.00	828.48						
11	RIGHT OF WAY	FA	318	0.48	PROJECTED ACTUAL		21.32	174.88	247.8	322.07	374.70	384.31						
12	PROCUREMENT BY GOVERNMENT	FA	8,899	7.28	PROJECTED ACTUAL		6	22	48	75	140	196	284	315				
13	REPAIR OF USAID PROPERTY	FA	14	0.02	PROJECTED ACTUAL		0.18	4.18	8.88	17.84	27.60	33.0						
14	INST'L. & AGRIC'L. DEVELOPMENT	FA	6,428	8.78	PROJECTED ACTUAL		182.87	434.88	886.88	1014.00	1691.88	1977.48						
15	OPERATION & MAINTENANCE	FA	873	0.78	PROJECTED ACTUAL		2	7	12	14								
<b>TOTAL DIRECT COST</b>			<b>80,230</b>		PROJECTED ACTUAL		802	764	1728	3150	4928	7338	11011	13713	17884	23017		
<b>B. INDIRECT</b>																		
1	ENG'G SUPERVISION & ADMINISTRATION		13,124	17.94	PROJECTED ACTUAL		172	698	1255	2726	3499	4405	6685	7072	7772	8501		
2	CONSULTING SERVICES		21	0.03	PROJECTED ACTUAL		88.72	238.18	522.24	918.08	1388.00	1894.88						
3	CONTINGENCIES		9,800	18.80	PROJECTED ACTUAL		3	13	28	49	112	182	564	478	1638	2748		
4	EXPECTED PRICE INCREASE				PROJECTED ACTUAL		2.0	8.81	19.40	38.81	88.18	150.88						
<b>TOTAL PROJECT COST</b>			<b>78,178</b>	<b>100%</b>	PROJECTED ACTUAL		891	1495	3711	5225	6535	11785	17060	21263	27002	34271		
<b>PROJECT DURATION</b>						4TH QTR	1ST QTR	2ND QTR	3RD QTR	4TH QTR	1ST QTR	2ND QTR	3RD QTR	4TH QTR	1ST QTR	2ND QTR	3RD QTR	4TH QTR
						1979	1980				1981				1982			

REMARKS: TOTAL EXPENDITURES AS OF APRIL 15, 1981 EXCLUDE EXPENDITURES INCURRED IN THE CENTRAL OFFICE FROM FEBRUARY 10, 1980 TO APRIL 15, 1981

**SUMI - LALO (SIAD 80 PRO-1987)**

LEGEND:  CALCULATED EXPENSES (AS PERMITTED)  
 CALCULATED EXPENSES (AS PERMITTED)

1981				1982				1983				1984				1985			
QTR	2ND QTR	4TH QTR	1ST QTR	2ND QTR	3RD QTR	4TH QTR	1ST QTR	2ND QTR	3RD QTR	4TH QTR	1ST QTR	2ND QTR	3RD QTR	4TH QTR	1ST QTR	2ND QTR	3RD QTR	4TH QTR	
11	(14)	(10)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
			548	1120	1872	2624	3376	4128	4880	5632	6384	7136	7888	8640	9392	10144	10896	11648	12400
			548	1120	1872	2624	3376	4128	4880	5632	6384	7136	7888	8640	9392	10144	10896	11648	12400
				140	280	420	560	700	840	980	1120	1260	1400	1540	1680	1820	1960	2100	2240
9	796	10 90																	
8	110*	1954	3487	4684	5881	7078	8275	9472	10669	11866	13063	14260	15457	16654	17851	19048	20245	21442	22639
10			370	1287	1874	2461	3048	3635	4222	4809	5396	5983	6570	7157	7744	8331	8918	9505	10092
4	2180	2710	3095																
28																			
8	734	670	1074	1070	2008	2070													
84																			
9	1800	1539																	
149																			
3	536	573																	
21																			
3	284	315																	
0																			
18	2630	2544	3303	3610	4266	4820	5374	5928	6482	7036	7590	8144	8698	9252	9806	10360	10914	11468	12022
149																			
6	1102	1516	1745	2007	2269	2531	2793	3055	3317	3579	3841	4103	4365	4627	4889	5151	5413	5675	5937
23																			
1	120	162	191	219	248	276	305	334	363	392	421	450	479	508	537	566	595	624	653
7																			
18	11011	13713	17584	23077	28570	34063	39556	45049	50542	56035	61528	67021	72514	78007	83499	88992	94485	100000	105493
38																			
15	6688	7072	7777	8501	9224	9948	10672	11396	12120	12844	13568	14292	15016	15740	16464	17188	17912	18636	19360
22				11	12	21													
2	564	478	1639	2748	3857	4966	6075	7184	8293	9402	10511	11620	12729	13838	14947	16056	17165	18274	19383
89																			
5	17060	2263	27002	34271	42222	49497	56772	64047	71322	78597	85872	93147	100422	107697	114972	122247	129522	136797	144072
149																			
TOTAL EXPENDITURES																			
QTR	YEAR	QTR	YEAR	QTR	YEAR	QTR	YEAR	QTR	YEAR	QTR	YEAR	QTR	YEAR	QTR	YEAR	QTR	YEAR	QTR	YEAR
9 8 1				1982				1983				1984				1985			

REVIEWED BY:

RECOMMENDATION FOR COMPARATIVE STUDY

A rare opportunity exists for AID in general, and USAID/Philippines and the GOP (BRBDP, MAR, NIA, and MOA) in particular, to learn significant lessons about beneficiary participation and the organization and management of complex integrated area development projects and irrigation systems through an in-depth comparative study of BIAD I, II and III. Because all three have almost identical objectives but vary considerably in terms of management structure, functions, degree and type of beneficiary participation, a comparative study could identify and analyze issues which are generic to projects of this type. The results of such a study would be valuable to project designers, managers, and evaluators, as well as the development community as a whole.

An in-depth study would involve a team of at least three persons full time over a period of six weeks. The study would focus on generic issues and problems from both a descriptive and prescriptive point of view. First, the study would focus on the identification of common problems, their definition, and analyses of why and in what form they occur. Second, the study would provide practical guidance to three distinct groups - (1) project designers, (2) project managers, and (3) project evaluators - concerning the avoidance of such problems and how to resolve them if they do occur.

An illustrative list of some of the questions that might usefully be addressed in the study follows:

- . What methods have been or could be used to measure the extent of decentralization?
- . What positive and negative effects result from decentralization?
- . Did decentralization and participation proceed simultaneously and to what effect?
- . What do project managers want an information system to provide and what do they do with the information they receive?
- . In what forms do internal management information systems operate?
- . Which is the most effective type of information system: formal or informal?
- . How does the choice of various organizational strategies affect decentralization, coordination, and beneficiary participation?
- . Under what conditions do mechanisms for coordination work best?

- . What is the effect of alternative design options for sequencing project activities on the success of centralization and beneficiary participation efforts?

What strategies are best designed for achieving project sustainability and what methods should be used to measure progress towards that objective?

Although illustrated here in the form of only a partial list of questions, the significance of such a study is apparent.

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