APPENDIX V

PCM WORKSHOPS

APPENDIX – CHAPTER V

PCM WORKSHOPS

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CHAPTER V PCM WORKSHOPS

1. PCM Workshop

The participatory workshops are conducted in this study aiming at formation of "Ownership" in the Philippine side. In order to organize and facilitate workshops effectively, a participatory method termed Project Cycle Management (PCM) is adopted.

The 1st and 2nd workshops were held last August and September 2000. The 1st workshop was conducted for the NIA Central Office involving the members of Internal Task Force (ITF) and Inter-Agency Coordination Committee (IACC). The aim of the workshop was to establish a common understanding among the participants on the problems and objectives related to the NIA what it ought to be in the future. The 2nd workshop was held in San Fernando, Pampanga involving the staff of the field offices in Region III. The aim of the workshop was to formulate a basic concept of Capability Improvement Plan. The summary of these workshops is reported in the "Progress Report, November 2000".

The 3rd, 4th and 5th workshops were held last November and December 2000 involving the staff of three (3) NISOs, namely: Nayom-Bayto, UPRIIS Ditrict III and Aganan-Sta.Barbara, aiming at formulating the action-oriented short-term capacity improvement plan for the above field offices.

The 6th workshop was held on February 2001 in Quezon City involving Division Managers of NIA Central Office, aiming at formulation of the logical framework for basic approaches to tackle the issues of NIA's management. Prior to the workshop, the JICA Study Team proposed a Logical Framework for NIA's Management Strengthening Plan. And in the workshop, participants discussed it, modified it and developed it.

The 7th and 8th workshops were held on June 2001 in Quezon City involving Department Managers of NIA Central Office, members of Inter Agency Coordination Committee (IACC) and members of NIA's Internal Task Force (ITF) aiming at formulation of sector/department based specific plan of operation for NIA's Management Strengthening. The participants of the 7th workshop were requested to make a plan of operation by developing the Logical Framework that was formulated in the 6th workshop. The results of the 7th workshop were presented in the 8th workshop.

The 9th workshop was held on July 2001 involving the staff of three (3) NISOs, namely: Aganan-Sta.Barbara, Nayom-Bayto, UPRIIS Ditrict III and IA representatives in Aganan, aiming at evaluating the implementation of the Capacity Improvement Plan for Aganan NISO and UPRIIS District III and assessment of impact of provision of equipment in Nayom-Bayto.

The below is the summary of the workshops from 3rd to 9th. For the full report, refer to the respective separated workshop reports.

2. 3rd Participatory Workshop on Capacity Improvement Plan for NISO

The "3rd Participatory Workshop on Capacity Improvement Plan for NISO" (3rd Participatory Workshop) was held on November 7, 9, 13, 2000 involving the staff of three (3) NISOs,

namely: Nayom-Bayto, UPRIIS Ditrict III and Aganan-Sta.Barbara, aiming at formulating the action-oriented short-term capacity improvement plan for the above offices.

Prior to this workshop, capacity improvement plan for the NIA's field offices was prepared by the JICA Study Team (the Study Team). In order to substantiate this capacity improvement plan, a case study was implemented in three offices. Nayom-Bayto NISO was selected as a model office, whose performance was replicated to the other two replication offices. UPRIIS District III and Aganan-Sta.Barbara NISO were selected as replication offices to which capacity improvement plan was applied. (For the detail of selection procedure and review of these offices, refer to the "Progress Report, November 2000".)

Proposed capacity improvement plan is composed of different forms of interventions and time perspectives. Policy and structural changes constitute the long-term capacity improvement plan (the long-term plan), while operational solutions that can be implemented immediately comprise the short-term capacity improvement plan (the short-term plan). (For the detail of the long-term and the short-term plans, refer to the "Progress Report, November 2000".)

The long-term plan is targeting to increase income of NISO focusing upon the four (4) outputs, i.e. (a) organizational restructuring, (b) improvement of water management, (c) proper maintenance of irrigation facilities and (d) increase of ISF collection.
The short-term plans are derived from this long-term plan. Each output of the long-term plan will be the project purpose of the short-term plan. This means that four (4) short-term plans will be formulated from the long-term plan.

As for the case study to substantiate the proposed capacity improvement plan, only the short-term plans were implemented mainly due to time constraints. "Water Management" and "ISF Collection" were chosen to be the themes/purposes of the case study.
The conceptual relationship of the long-term plan and the short-term plans is presented below in the form of Project Design Matrixes (PDM) (Table V.1).

The proposed short-term plan for "Water Management" was tried in Aganan-Sta.Barbara NISO and the plan for "ISF Collection" was implemented in both UPRIIS District III and Aganan-Sta.Barbara NISO. These short-term plans were implemented within 3 months period from November 2000 to February 2001.

The 3rd Participatory Workshop was held on

1) November 7 in Zambales city involving the staff of Nayom-Bayto NISO
2) November 9 in Cabanatuan city involving the staff of UPRIIS Ditrict III
3) November 13 in Iloio city involving the staff of Aganan-Sta.Barbara NISO.

2.1 Objectives

The workshop was intended:

1) to analyze the strength, weakness, opportunities and threats of Nayom-Bayto NISO as a model office
2) to formulate frameworks of short-term capacity improvement plans for UPRIIS District III and Aganan-Sta.Barbara NISO

3) to create “Ownership” of the trial projects in the above NISOs by introducing participatory methods in planning.

2.2 Participants

1) Workshop in Nayom-Bayto NISO

Twenty five (25) participants attended the workshop. They consist of staff of Nayom-Bayto NISO, a counterpart personnel for the Study Team and members of the Study Team.

2) Workshop in UPRIIS District III

Nineteen (19) participants attended the workshop. They consist of staff of UPRIIS District III, a counterpart personnel for the Study Team and members of the Study Team.

3) Workshop in Aganan-Sta.Barbara NISO

Twenty (20) participants attended the workshop. They consist of staff of Aganan-Sta.Barbara NISO including one Japan Overseas Cooperation Volunteer, a counterpart personnel for the Study Team and members of the Study Team.

2.3 Workshop Outcome

(1) Workshop in Nayom-Bayto NISO

The first session was held involving the staff of Nayom-Bayto NISO in order to analyze the essential factors for good performance as the model office. Those factors are expected to be replicated to the other two (2) replication offices. The analysis was done separately about two different functions of the office, i.e. “ISF Collection” and “Water Management” with using a participatory analysis tool termed “SWOT Analysis”.

SWOT stands for Strengths, Weaknesses, Opportunities and Threats. Strengths are things that have worked well, Weaknesses are things that have not worked so well, Opportunities are ideas on how to overcome weaknesses and build on strengths and Threats are things that exist which reduce the range of opportunities for change. Strengths and Weaknesses can be as factors that are internal to an organization, and so can be controlled by management; Opportunities and Threats can be seen as external factors affecting the environment in which an organization is working.

In terms of the strengths, the participants emphasized work attitudes as “cooperation”, “teamwork”, “self-sacrifice” and even “working religiously”, rather than work system they employ. “Good leadership” of Irrigation Superintendent was also mentioned as the Study Team preconceived. Relating to work system, the employments of “target-oriented taskforce”, “regular meeting for good communication”, “execution of proper monitoring” and “voluntary based foot patrol during night time” were highly appreciated as strengths.
“Strong links with LGUs” and “Inactive IAs” were listed under the categories of external factors as opportunities and threats. This implies that the participants consider that collaboration with LGUs and IAs is not sufficient and should be further improved.

Most weaknesses and threats are related to the "shortage of resources as manpower, materials and equipment". "Institutional development (training for farmers)" is also considered not to be sufficient for ISF collection neither for water management. "AO17" was apparently recognized to be one of the threats for ISF collection.

Results of the SWOT Analysis are summarized in Table V.2.

(2) Workshop in UPRIIS District III

The second session was held involving the staff of UPRIIS District III in order to formulate a framework of a short-term capacity improvement plan for "ISF Collection" of the office.

The formulation of the short-term plan was carried out using a participatory planning method termed "Project Cycle Management (PCM)". Not all the steps of PCM method was carried out, but only the formulation of Project Design Matrix (PDM) was done after the prototype PDM for the short-term plan was introduced to the participants. That was because of the workshop was not intended to create the improvement plan unique to the office, but was expected to substantiate applicability and efficiency of the proposed capacity improvement plan prepared by the Study Team. PDM (or Logical Framework) is a matrix that shows logical inter-relationships among the components of a project, such as objectives, activities and inputs, as well as the important assumptions related to the project.

The prototype PDM prepared by the Study Team was highly adaptable to the situation of UPRIIS District III. With minor modification on the prototype, the participants elaborated and completed the PDM for "ISF Collection".

Project Purpose was decided to be "Billed area is increased by 10 %". This is the objective that is expected to be achieved within the implementation period of 3 months or by the end of February 2001.

In order to achieve the Project Purpose, four (4) Outputs are expected to be realized, i.e. (a)Service area is firmed-up, (b)Data base is updated, (c)Skill is enhanced and (d)Billing procedure is revised.

Activities are specific actions intended to produce the Outputs. Activities for each Output were enumerated and Persons in Charge (P/C) were also designated.

PDM formulated by the workshop is as presented in Table V.3

(3) Workshop in Aganan-Sta.Barbara NISO

The third session was held involving the staff of Aganan-Sta.Barbara NISO in order to formulate frameworks of short-term capacity improvement plans for "ISF Collection" and "Water Management" of the office.

Aganan-Sta.Barbara NISO is responsible for the operations of two river irrigation systems, namely Aganan and Sta.Barbara. The short-term plan will be implemented in Aganan NIS Division 3.

1) PDM of the Short-Term Capacity Improvement Plan for "Water Management"

In the discussion, it was found that water management in Aganan NIS is relatively less problematic and fairly well operated. But it was admitted that there was still a room to be improved and the project was welcomed to the office.

The prototype PDM for water management prepared by the Study Team was adaptable to the situation of Aganan-Sta.Barbara NISO as a whole. Because of the time constraints, only the Narrative Summary was elaborated and confirmed by the participants.

Project Purpose was decided to be "Cropping intensity is increased". This was expected to be achieved within the implementation period of 3 months or by the end of February 2001. The indicators were planed to be discussed and decided after studying baseline data.

PDM formulated by the workshop is as presented in Table V.4.

2) PDM of the Short-Term Capacity Improvement Plan for "ISF Collection"

Although major problems of Aganan-Sta.Barbara NISO are related to farmers and IAs, the prototype PDM for ISF collection was still adaptable to the situation of the office. With minor modification on the prototype, the participants elaborated and completed the PDM.

Project Purpose was decided to be "ISF collection efficiency is increased". The item for indicator was decided but the quantitative figure was not agreed upon. The figure was planed to be discussed and decided after studying baseline dada.

Five (5) Outputs are expected to be realized, i.e. (a)Service area is firmed-up, (b)Data base is updated, (c)Skill is enhanced, (d)Billing procedure is revised and (e)Collection strategy is improved. According to the staff of the office, out of five outputs, (a) was already completed and (b) was in the process. Confirmation about how they were completed/processed was required as activities.

Activities for each Output were enumerated and Persons in Charge (P/C) were designated.

PDM formulated by the workshop is as presented in Table V.5.

2.4 Workshop Evaluation

At the end of the workshop, Workshop Evaluation Sheets were passed for the participants to answer. A total of 42 participants answered the evaluation sheets. Summary of the results of evaluation are as follows.

1) What was your impression on the workshop?

a.	Excellent	2	(5%)
b.	Very Good	38	(90%)
c.	Fairly Good	1	(2%)
d.	Not so Good	0	(0%)
e.	No Answer	1	(2%)

2) Please state reasons for your answer.

- We have learned about our strengths, weaknesses, opportunities and threats on this organization. Additional knowledge I thoughts to be applied to our work.
- We have been given a chance to participate and give our suggestions for the improvement of our office.
- Although some are still shy, almost all of the participants have participated in the discussion.
- Goals are properly set and actions are identified.

3) What are your suggestions to improve the conduct of workshop?

- Enough time – make it one or two days to give/share more opinions/ideas.
- May we have enough time (longer time) in order to be able to discuss everything that is necessary for the improvement of the system.
- With the use of audiovisual samples.

3 4th & 5th Participatory Workshop on Strengthening of NIA's Management System

The "4th & 5th Participatory Workshop on Strengthening of NIA's Management System (4th & 5th Participatory Workshop) was held on December 7, 8, 13, 2000 involving Department Managers and Division Managers of NIA Central Office and the NIA Streamlining Committee members, focusing upon the problem/solution finding concerning functions/organization of NIA.

Prior to this workshop, the JICA Study Team reviewed organization and management of NIA Central Office, and adduced problems/issues concerning each sector and department. The 4th Participatory Workshop was held, involving high-level management officials, intending to deepen understanding and analysis about these problems/issues.

3.1 Objectives

The workshop was intended:

1) to analyze the problems/issues and find solutions specific to each sector and department of the NIA Central Office.
2) to analyze the problems/issues and find solutions concerning the organizational restructuring of NIA.

3.2 Participants

1) Workshop with Managers of the NIA Central Office

Forty (40) participants attended the workshop. They consist of Department Managers and Division Managers of the NIA Central Office, counterpart personnel for the Study Team and members of the Study Team.

2) Workshop with NIA Streamlining Committee Members

Twelve (12) participants attended the workshop. They consist of the NIA Streamlining Committee members, counterpart personnel for the Study Team and members of the Study Team.

3.3 Workshop Outcome

(1) Workshop with Managers of the NIA Central Office

The participants were divided into four (4) groups on sector basis, i.e. PDI, SOEM, Finance & Management and Administrative sector and discussed about problems/issues concerning each department. The followings are major issues that were discussed in the workshop.

1) Project Development & Implementation (PDI) Sector

Projects are not implemented enough because project documents prepared by PDD cannot be cleared by ECC, ICC nor EGA. Clearance by ECC, ICC and EGA are relatively newly started system and PDD cannot cope with this requirement. In other words, PDD does not have enough capability to satisfy these conditions. A solution conceived by the participants is to set up a specific unit to handle the securing these conditions and other legal requirements.

Weak monitoring and evaluation was also identified as a problem relating to project implementation. Most of the monitoring is mere report making without systematic monitoring activities. The solutions prepared by the participants are not specific enough as "to implement disciplinary action for project implementation" or "PDD needs experts in all discipline to support RIO & FO in project preparation".

Relating to DSD, the problem of "Good designers migrate abroad or to consulting firms because of the low incentives" was stated. The solution is to contract out design works to consulting firms. However there was an argument on this solution among the participants. A ground of the counterview is that if the design works were to be contracted out, the capability of DSD as designers group would be further deteriorated.

Most of the projects are behind schedule because of some reasons. One of the major reasons is Right of Way Acquisition (ROWA) problem. And the solution to solve the problem is to legislate a new law on ROWA. The participants of the workshop deemed to solve ROWA problems with legal execution. However, this solution would be effective only after the problem takes place. There must be an idea to avoid ROWA problems in the first place with technical measures as proper implementation of feasibility study and design.

2) Systems Operation and Equipment Management (SOEM) Sector

"Implementation of Memorandum Circular (MC) #29 which allocates 5% of the project cost for Irrigation Development Project (IDP) activities" was proposed as one of the way to promote Institutional Development activities. This MC was approved and issued in December 2000 and expected to be implemented.

Disposal of unserviceable equipments takes time, because the COA formula (appraised value) is higher than NIA's. The solution for this problem is to request COA to amend the formula and suggest the PPRD mode on RIO bases or Island bases.

3) Finance & Management Sector

In order to cope with the timely submission of financial report, computerization was proposed. Computers are installed in offices, but not used as a database but only as typewriters. It means that there is no need of hardware improvement but software introduction for the efficient management.

There were two suggestions relating to management fee. The one is to increase the rate of management fee from 5% to the higher rate. The other is to include management fee in the Program of Work (POW). Management fee is supposed to be computed by Project Management Office (PMO) and included in POW. But the problem here is that management fee is frequently incorrectly calculated and not included in POW. It was pointed out that the proper computation and declaration is more practical and effective way to increase income from management fee. Appropriate instruction and training for PMO will be a realistic way to improve the situation.

Shortage of auditor was emphasized in the workshop. Four (4) different types of audit for 203 responsible offices in a year must be too much work for seven (7) internal auditors. As a way to lighten the workload of auditors, Monitoring Performance Indicators prepared by CORPLAN was proposed to be used.

4) Administrative Services (AS) Sector

Common problems/issues with other sectors were stated as computerization (refer to Finance & Management Sector), weak monitoring & evaluation (refer to PDI Sector) and delay of procurement. Computerization was specially emphasized in the workshop.

5) Workshop with NIA Streamlining Committee Members

Following the explanation about the progress and present situation of NIA Streamlining Proposal, the participants started the discussion about organizational restructuring of NIA. They firstly listed up existing duplication of function and staff redundancy, and then tried to find some alternatives of organizational restructuring plan. The workshop was carried out with using color cards in order to visualize the information and contents of discussion. The followings are major results of the discussion.

a. Duplication of Function and Staff Redundancy

There are functional duplications among departments as follows.

1) CMD and SMD : New construction is duplicated.
2) PDD and SMD : Feasibility study is duplicated.
3) PDI and PPRD : Procurement of supplies and equipment is duplicated.
4) PDD and NIA Consultant : No duplication but depletion.

The participants didn't spare much time for discussing the specific issues concerning staff redundancy.

b. Organizational Restructuring Proposals

Advantages of NIA Streamlining Proposal presented in the workshop are as follows; “Each region can concentrate on regional irrigation development”, “Easy to manage an office” and “Can reduce overhead cost”. These are not specific enough and ill founded. On the other hand, disadvantages are as follows; “Too many RIOs” and “May encounter financial difficulty”. “Too many RIOs” means “bloated organization”. Bloated organization and financial difficulty are the most serious issues NIA is facing now. This implies that with NIA Streamlining Proposal, the critical situation of NIA would not be changed.

Other reorganization proposals presented were as follows; “Island based corporation”, “No more RIO but only PIMO” and “Regional distribution by river basin”. But the discussion was relatively leaned toward disadvantages of these proposals rather than advantages.

3.4 Workshop Evaluation

At the end of the workshop, Workshop Evaluation Sheets were passed for the participants to answer. A total of 29 participants answered the evaluation sheets. Summary of the results of evaluation are as follows.

1) What was your impression on the workshop?

a.	Excellent	0	(0%)
b.	Very Good	19	(66%)
c.	Fairly Good	5	(17%)
d.	Not so Good	1	(3%)
e.	No Answer	4	(14%)

2) Please state reasons for your answer.

- The workshop brought out the insistent problems that were plaguing our office; hence a feeling of hope was established that the JICA consultants could at last help give solutions, given their expertise on those matters.
- Exchange of views with different departments broadens one’s perspective on the solutions for specific problems.
- There was a lively participation/sharing of views, inter group discussions.

3) What are your suggestions to improve the conduct of workshop?

- The study team should have informed the NIA staff of the workshop the information data to be needed in the discussion.
- The workshop should have made sure that all the concerned sectors are adequately represented.
- The data and information needed in the workshop should be required from the participants at least one week before the actual conduct of the workshop.

4 6th Participatory Workshop on Strengthening of NIA's Management System

The "6th Participatory Workshop on Strengthening of NIA's Management System" was held on February 26, 2001 in Quezon City involving Division Managers of NIA Central Office, aiming at formulation of the logical framework for basic approaches to tackle the issues of NIA's management.

Prior to the workshop, the JICA Study Team proposed a Logical Framework for NIA's Management Strengthening Plan. And in the workshop, participants discussed it, modified it and developed it. (For the detail of the proposed Logical Framework, refer to the "Interim Report, March 2001" prepared by the JICA Study Team.)

4.1 Objective

The workshop was intended to develop the Logical Framework of NIA's Management Strengthening Plan.

4.2 Participants

Thirty nine (40) participants including Division Managers of NIA Central Office. They consist of:

- One (1) member from CORPLAN
- Nine (9) members from PDI sector,
- Six (6) members from SOEM sector,
- Six (6) members from Finance & Management sector,
- Five (5) members from Administrative Services sector,
- Nine (9) counterpart personnel for the JICA Study Team,
- Three (4) members of the JICA Study Team.

4.3 Workshop Outcomes

The Logical Framework prepared by the JICA Study Team was presented at the beginning of the workshop, and then the participants started discussion on it with using color cards.

Logical Framework or Project Design Matrix (PDM) presents the key elements of a development intervention and their interrelationships. The intervention is usually termed a project. The framework clearly identifies the impacts or objectives the project will achieve. It also allocates measurable and/or tangible performance targets to them. The framework also clearly identifies the inputs and outputs the project will deliver to enable achievement of the proposed objectives. Thus, the framework presents a means and ends matrix where inputs lead to outputs and outputs lead to immediate objectives, which in turn lead to longer-term objectives. Although the matrix usually comprises 16 frames organized under 4 major headings, it is somewhat modified here in order to cope with the wider and comprehensive scope of the issues of NIA.

In the workshop, the participants modified and developed the proposed framework in order to formulate a realistic and effective NIA's Management Strengthening Plan. The "Narrative Summary" was fully discussed and almost completed. But, because of the time limitation,

"Objectively Verifiable Indicators", "Means of Verification", "Important Assumptions", "Pre-conditions" and "Inputs" were not covered. Thus the further discussion will be required for the completion of the Logical Framework or the NIA's Management Strengthening Plan.

The Logical Framework for NIA's Management Strengthening Plan formulated by the participants is presented in Table V.6.

4.4 Workshop Evaluation

At the end of the workshop, Workshop Evaluation Sheets were passed for the participants to answer. A total of 26 participants answered the evaluation sheets. Summary of the results of evaluation are as follows.

1) What was your impression on the workshop?

a.	Excellent	1	(4%)
b.	Very Good	25	(96%)
c.	Fairly Good	0	(0%)
d.	Not so Good	0	(0%)
e.	No Answer	0	(0%)

2) Please state reasons for your answer.

- During the workshop presentation, sector representatives were informed of issues/concerns of other sector in NIA aside from their own. This will enable the participants to extend their support to cooperation in the solution to the problem if necessary.
- Most of the activities needed to attain its purpose were properly identified.
- There was active participation of almost all the participants, thus critical thinking was encouraged by the facilitators.

3) What are your suggestions to improve the conduct of workshop?

- Suggest that everybody should contribute/participate in the discussion, participatory on deciding which is best among the affirmative solutions.
- After the sector workshop, there should also be conference with top management officials (Administrator, Deputy Administrator and the Assistant Administrators) so that all prevailing problems could be addressed.
- To conduct similar workshop with the field personnel (NISO, PIO, RIO) to obtain their impression.

5 7th and 8th Participatory Workshop on Strengthening of NIA's Management System

The "7th Participatory Workshop on Strengthening of NIA's Management System" was held on June 8, 2001 in Quezon City involving Department Managers of NIA Central Office, members of Inter Agency Coordination Committee (IACC) and members of NIA's Internal Task Force (ITF) aiming at formulation of an implementation schedule for NIA's Management Strengthening Plan.

The participants were requested to make an implementation schedule prioritizing the conceivable programs proposed in the form of the Logical Framework that was formulated in the 6th workshop.

The 8th Participatory Workshop was held under the title of the "Meeting with Regional Managers & Project Managers on JICA's Study on Strengthening of NIA's Management System" on June 20, 2001 in Quezon City involving Regional Managers, Project Managers and members of Internal Task Force (ITF). In the workshop, the results of the 7th workshop were presented.

The below is the summary of the 7th workshop. For the full report, refer to the separated workshop report.

5.1 Objective

The workshop was intended to formulate an implementation schedule for NIA's Management Strengthening Plan.

5.2 Participants

Twenty nine (29) participants including Department Managers of NIA Central Office, IACC members and ITF members. They consist of:

- One (1) member from DBM
- One (1) member from DILG
- Three (3) members from PDI sector,
- Three (3) members from SOEM sector,
- Two (2) members from Finance & Management sector,
- Two (2) members from Administrative Services sector,
- Nine (9) counterpart personnel for the JICA Study Team,
- Eight (8) members of the JICA Study Team.

5.3 Workshop Outcomes

Although the number of the participants decreased from the estimated number of 60 to the actual number of 29 (probably because the workshop was held in their workplace) and the time was quite limited, the participants prioritized all the conceivable programs proposed in the Logical Framework (Table V.6) that was formulated in the 6th workshop. And the participants from NIA and the Study Team, both parties agreed upon the prioritization of the programs in due consideration of the urgency of respective program/project and availability of resources. Because the work result of the workshop was not elaborate enough to be an implementation schedule, the Study Team developed a specific implementation schedule based on the work result of the workshop. Developed implementation schedule is presented in the Table V.7.

5.4 Workshop Evaluation

At the end of the workshop, Workshop Evaluation Sheets were passed for the participants to answer. A total of 10 participants answered the evaluation sheets. Summary of the results of evaluation are as follows.

1) What was your impression on the workshop?

a.	Excellent	0	(0%)
b.	Very Good	7	(70%)
c.	Fairly Good	3	(30%)
d.	Not so Good	0	(0%)
e.	No Answer	0	(0%)

2) Please state reasons for your answer.

- Objectives sufficiently satisfied but limited participation by members of top management.
- The workshop clarifies issues according to priority.
- The workshop was not carried out according to what was planned. The participants were supposed to be divided into groups but they didn't like to work in the small groups. The top management did not participate in the workshop. Some issues were not discussed thoroughly.

3) What are your suggestions to improve the conduct of workshop?

- Conduct workshop outside NIA central office compound so that participants will be obliged to attend the whole day workshop.
- Attendance of participants at all levels should have been observed to gain a wider perspective or opinion about the interim report.
- The participants in the 6th participatory workshop were Division Managers & Study Team counterparts. Those in the 7th workshop were Department Managers & counterparts. The Managers could not relate with the result of the 6th workshop as basis for the Action Plan to be prepared (in the 7th workshop). Maybe, the Study Team should have briefed the managers of the results of the 6th workshop.

6 9th Participatory Workshop on Capacity Improvement Plan for NISO

The "9th Participatory Workshop on Capacity Improvement Plan for NISO" was held on July 13, 14, 16 and 17, 2001 involving the staff of three (3) NISOs, namely: Aganan-Sta.Barbara, Nayom-Bayto, UPRIIS District III and IA representatives in Aganan, aiming at evaluating the implementation of the Capacity Improvement Plan for Aganan-Sta.Barbara NISO and UPRIIS District III and assessment of impact of provision of equipment (computer hardware with software and fax machine) in Nayom-Bayto.

Prior to this workshop, the 3rd Participatory workshop was conducted last November 7~9 and 13, 2000 involving the staff of these three (3) NISOs. In the workshop, the strength, weakness, opportunities and threats of Nayom-Bayto as model office were identified. And based on the analysis of Nayom-Bayto, short-term capacity improvement plan for UPRIIS District III and Aganan-Sta.Barbara NISO were formulated.

The formulated plans for "Water Management" was piloted in Aganan NISO and "ISF Revenue Improvement" was piloted in UPRIIS District III and Aganan NISO. These plans were originally scheduled to be conducted for a 3-month period (November 2000 ~ February 2001). However, the GOP requested for an extension because 3-month period was too short to obtain a reliable result. The request was conveyed by the study team to JICA Headquarters Tokyo and was granted, hence the team continued to implement the plan until the early part of the Phase II Study.

The "9th Participatory Workshop on Capacity Improvement Plan for NISO" was held on

1) July 13, 14 in Iloilo City involving the staff of Aganan-Sta.Barbara NISO and farmers/IA representatives in Aganan
2) July 16 in Zambales involving the staff of Nayom-Bayto NISO
3) July 17 in Cabanatuan City involving the staff of UPRIIS District III.

6.1 Objectives

The workshop was intended:

1) to explain the Scope and Schedule of Phase II Study
2) to evaluate the impact of improvement plan for gate control operations and water delivery formulated in the 3rd workshop in Aganan-Sta.Barbar NISO
3) to evaluate the impact of improvement plan for ISF collection formulated in the 3rd workshop in Aganan-Sta.Barbar NISO and UPRIIS District III.
4) to evaluate the impact of provision of equipment (computer hardware with software and fax machine) in Nayom-Bayto NISO.

6.2 Participants

1) Workshop in Aganan-Sta.Barbara NISO

Thirty (30) participants including key personnel of Aganan-Sta.Barbara NISO. They consist of: eight (8) staff from Aganan-Sta.Barbara NISO, twenty (20) IA representatives among six (6) IA's (Validation Survey Respondents), one (1) counterpart personnel, one (1) member of the JICA Study Team

2) Workshop in Nayom-Bayto NISO

Twenty one (21) participants including the staff of Nayom-Bayto NISO attended the workshop. They consist of sixteen (16) staff from Nayom-Bayto NISO, three (3) counterpart personnel, and two (2) members of the JICA Study Team.

3) Workshop in UPRIIS District III

Sixteen (16) participants attended the workshop. They consist of eleven (11) staff from UPRIIS District III, three (3) counterpart personnel and, two (2) members of the JICA Study Team.

6.3 Executive Summaries:

(1) Workshop in Aganan-Sta.Barbara NISO

The first session was held involving the staff of Aganan-Sta Barbara NISO and representatives of the IAs covering Aganan, in order to evaluate the implementation of the Capacity Improvement Plan for the NISO both in "Water Management" and "ISF Collection."

1) Capacity Improvement Plan for Water Management

Four (4) outputs were expected to be achieved by the Capacity Improvement Plan for Water Management, i.e., 1) cropping calendar is prepared, 2) water delivery and distribution scheduled properly, 3) gate operation conducted properly and 4) water delivery and distribution is conducted properly. The actual outputs were compared with the expected outputs and the result showed that all four outputs were successfully achieved.

Prior to the Workshop, the Study Team conducted a "Validation Survey on Water Delivery and Distribution" to assess the impact of water delivery schedule and gate control introduced by the Study Team. (Details are discussed in the "Capacity Improvement Plan Report") Respondents of the survey were representatives from the 9 IA's covering the 5 divisions of Aganan area. Eighty (80) farmers answered the questionnaires for the dry cropping 2001 and one hundred twenty (120) representatives for the wet season 2001. Highlights of the survey results were discussed and confirmed with the IA representatives in the workshop. 69/120 or 86% of the respondents for the dry season and 88/120 or 73% of the respondents for the wet season were aware of the "Bulletin Boards" showing water delivery schedule installed by the Study Team beside the head gates of lateral canals. 70/180 or 87.5% of the respondents were satisfied with the water delivery distribution schedule during the dry season 2001 (Oct. 2000~Feb. 2001). Farmers whose farms are located in the tail end of the canals practice the dry seeding method "Kabsaka" to catch with the cropping schedule. 10/80 or 12.5% who were not satisfied were those whose farm lots are located at the downstream area. Water could reach their farm because canals are silted. The volume of water was sufficient according to the IA representatives. 50/80 or 62.5% of the farmers' respondents have not paid their ISF for dry crop. Reasons why farmers did not pay ISF are presented below in item 4). Respondents affirmed that water reached their farms timely for land soaking and for land preparation both for dry and wet seasons 2001. Permanent bulletin boards show the specific month and date when to open/close the head gate/check gate, thus the water delivery schedule can be effectively disseminated in farmers, and eventually lead to the increase of irrigated area and yields.

Measures for proper gate control introduced by the Study Team gained positive results. The Study Team, WRFTs and representatives of the concerned IAs jointly prepared a "Job Aid" on gate operation and water delivery schedule detailing the person in charge, the witness and the date and time of opening/closing of head gate/check gate. "Foot Patrol Teams" composed of the chief of the operations section, WRFTs and representatives of IAs were organized to ensure success of water delivery. And simple "Manuals" were also prepared by the Study Team to improve O&M practices to sustain irrigation systems.

2) Capacity Improvement Plan for ISF Collection

Four (4) outputs were expected to be achieved by the Capacity Improvement Plan for ISF Collection, i.e., 1) service area is firmed-up, 2) database is updated, 3) skill is enhanced, 4) collection strategy is improved. The actual outputs were compared with the expected outputs and the result showed that outputs 1)~3) were successfully achieved but not output 4).

Prior to the workshop, the Study Team conducted a "Validation Survey on ISF Collection" to assess the impact of the strategy for ISF collection increase. (Details are discussed in the "Capacity Improvement Plan Report").

"Capacity Improvement Plan for ISF Collection" was implemented aiming to prove that by updating the parcellary maps and the master lists, and reconciling the master lists and the IFRs, the NISO can prevent losses due to understatement in reporting of benefited and exempted areas, the consequent effect of which is the increase in billable area.

(a) Problems encountered in the process of updating parcellary maps

The respondents mentioned that they encountered the following problems in the process of updating parcellary maps: 1) lot sizes shown in parcellary maps do not tally with those found in the field, 2) names of tenant farmers in parcellary maps do not tally with the names of farmers in master lists, 3) it is difficult to secure the cadastral number of lots from the Assessor's Office.

(b) Problems encountered in the process of reconciliation of master lists with IFRs:

Lot sizes shown in master lists differ from those of the IFRs. Some farmers with IFR are not listed in master lists.

During the implementation of the Capacity Improvement Plan for ISF Collection, the following outputs were produced: 1) parcellary maps are updated, 2) master lists & IFRs are updated.

The decrease of service area is primarily attributed to land conversion. Aganan-Sta.Barbara NISO has been updating parcellary maps and master lists since 1997. Understatement of reported billing and exempted areas has been corrected at the time the Capacity Improvement Plan was introduced.

Lessons learned from the implementation of the Capacity Improvement Plan is the importance of regular updating of three documents (parcellary maps, master lists and IFRs) in so far as control of ISF billing is concerned.

3) Reasons why farmers do not pay ISF & how IA can help in increasing ISF collection

The workshop participants were divided into five groups representing the different IA's in Aganan area. Reasons common among the participants are: 1) education of children is always the first priority, 2) NIA does not accept collection in kind, 3) untimely arrival of NIA's collectors, 4) high cost of production, 5) farmers' tenure status.

IA representatives committed themselves to help in convincing their fellow farmers to pay their ISF through intensive collection campaign, enter into Type II contract, convince farmers to pay on time to avail of the 10% discount.

(2) Workshop in Nayom-Bayto NISO

Nayom-Bayto NISO was chosen as a model office in connection with the study on Capacity Improvement Plan. In the 3rd Participatory Workshop the staff analyzed their strengths, weaknesses, opportunities and threats in relation to ISF collection and water management.

The 2nd session for the 9th Participatory Workshop was held involving the staff of Nayom-Bayto NISO aiming at re-assess its weaknesses and threats and to assess the impact of the equipment provided by the Study.

1) Analysis of weaknesses and threats in ISF collection and water management

In the 3rd Participatory Workshop the staff have identified their Strengths, Weaknesses, Opportunities and Threats applying SWOT analysis. Seven months since the start of the implementation of the Capacity Improvement Plan, the staff re-analyzed whether the identified weaknesses and threats remained the same. The lack of equipment was given attention hence the JICA Study provided computer hardware with software and a fax machine to the NISO. Inactive IA's were attended to and series of meetings and information dissemination were conducted to strengthen the IAs. To some extent, some weaknesses were overcome. The Nayom-Bayto NISO maintains its high performance. It is basically attributed to the commitment and dedication of the staff.

2) Analysis of impact produced by the provision of equipment

The workshop also assessed impact of the inputs provided by the JICA Study. In general the provision of the computer hardware with software and a fax machine is of great help of the NISO. With these inputs the database is regularly updated, bills and statement of accounts are prepared on time and distributed to farmers before harvest season to ensure ISF payments. It also helps in the preparation of POWs and hastens and improves report preparation. The fax machine improved the communication process and reduced communication expenses.

(3) Workshop in UPRIIS District III

The third session was held involving the staff of UPRIIS District III in order to assess the impact of the implementation of the Capacity Improvement Plan for "ISF Collection."

The actual output was compared with the expected output using the indicators identified in the Project Design Matrix. Increase of ISF collection could not be verified, probably because the cut-off date for dry crop 2001 was July 31, 2001.

1) Capacity Improvement Plan for ISF Collection

The followings are comparisons of expected outputs and actual outputs:

(a) Service area is firmed-up: The office had a hard time securing documentation of declaration of real property from the Assessors Office. Actual field survey

should have been done but was not undertaken during the implementation period due to luck of funds.

(b) Data base updated: For the 5 sample IA's field investigation was conducted and it was found that the lot size shown in the master list differ from that in the IFR. Some farmers with IFR are not listed in the master list. Changes were reflected to the master list database.

(c) Skill is enhanced: The staff were given hands on training on spreadsheet application (MS Excel) using the spreadsheet templates developed by the Study Team. Selected staff attended the GIS training conducted by the Study Team.

(d) Billing procedure is revised: The Study Team recommended the office to revise the existing billing system.

The results of the validation survey on ISF Collection was also discussed in the worrshop. Highlights in the discussion were the problems encountered during the updating of the parcellary maps and in reconciling the master list with the IFRs (details are discussed in Capacity Improvement Plan.)

6.4 Workshop Evaluation

Out of the fifty five (55) participants who attended the 9th Participatory Workshop, fifty (50) submitted their evaluation of the workshop.

In general, the workshop for three (3) NISO were successfully conducted. There was an active participation among the representatives of the NISOs and IAs. The workshop in Aganan especially served as a venue for NIA staff and IA representatives to exchange their views on how to strengthen the O&M and how to increase ISF collection. The workshop in Nayom-Bayto served as a venue for the NISO to evaluate its performance during the Study period. UPRIIS staffs believe that the workshop gave them the chance to assess the problems, find solutions in the implementation of the Capacity Improvement Plan.

TABLES

Table V.1 The Conceptual Relationship of the Long-term Plan and the Short-term Plans

PDM 1 (The long-term plan)

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<Overall Goal> Strong and viable organization.			
<Project Purpose> Income of NISO is increased.			
<Outputs> 1. Organization 2. Water Management 3. Maintenance 4. ISF Collection			
<Activities> 1-1 1-2 -------- 2-1 2-2 -------- 3-1 3-2 ・ ・	<Inputs>		<Pre-conditions>

PDM 2 (The short-term plan for Water Management)

Narrative Summary	Indicators	MoV	IAs
<Overall Goal> - Crop Yield increased.			
<Project Purpose> - Irrigated Area increased.			
<Outputs> 1. Water Delivery Schedule 2. Gate Operation Manual 3. On-the-Job Training 4. Foot Patrol			
<Activities> 1-1 1-2 -------- 2-1 ・ ・	<Inputs>		<Pre-c>

PDM 3 (The short-term plan for ISF Collection)

Narrative Summary	Indicators	MoV	IAs
<Overall Goal> - ISF Collection increased.			
<Project Purpose> - Billed Area increased.			
<Outputs> 1. Parcellary Map 2. Update of Data Base 3. Skill Enhancement 4. Revision of Procedure			
<Activities> 1-1 1-2 -------- 2-1 ・ ・	<Inputs>		<Pre-c>

Table V.2 SWOT Analysis of Nayom-Bayto NISO

About "ISF Collection"

Internal	Strengths

1. Cooperative — To attain target/goal. -------- No collection, no salary.
2. Diligent — Creation of collection taskforce.
3. Initiative — Extra work without additional payment.
4. Team Work — Concern & love for work because it's the source of living.
5. Self-sacrifice — Helping others works without being told.
6. Work overtime — So that work will not be disrupted.
   Collectors have collection target in their responsible area.
7. Work religiously — Work honestly
   Work without supervision

8. Self confidence
9. Qualified & competent staff

10. Good leadership
11. Strong and effective management

12. ISF collection activity is prioritized.

13. Well informed ----- Weekly meeting
14. Target plans are well disseminated.
15. Open communication internally and with farmers.

16. Staff accomplishment is well monitored.
    ------ Monitoring system : MC71S.'91(color code)
17. Bills are prepared on time.

18. Good facilities
↓
19. Good services ------ ISO is saturated with IAs with O&M contract
↓
20. In good rapport with farmers
↓
21. Farmers willingly pay ISF.

Internal	Weaknesses
	1. Limited resources Spare parts New motorcycles Collection expenses subsidy 2. Limited personnel 3. Lack of equipment 4. Minimal research and development activities 5. Training /seminars for staff & farmers
External	Opportunities
	1. Strong links with LGUs 2. Effective education to farmers 3. Sufficient trainings for advancement of staff 4. Recruitment of young labor force 5. Proper coordination with other government agencies/NGOs to extent trainings Government agencies : DA, DAR, DENR NGO : ??? 6. Seek assistance from RIO/CO for additional resources & equipment
External	Threats
	1. Inactive IAs 2. Peace & order situation 3. AO17 4. Environmental degradation (watershed) 5. Land conversion 6. Natural calamities 7. No police power 8. Oil price increases.

About “Water Management”

Internal	Strengths
	1. O&M plan, cropping calendar and cropping pattern is well prepared. 2. Water delivery schedule is well implemented. (This is called Rotation of schedule in N-B) 3. Close monitoring of water schedule. ----- Foot patrol after office hours, voluntary 4. Good maintenance of irrigation canal & facilities ----- Type 1 contract 5. Installation of staff gauges 6. Water re-use ----- drainage water is re-used with check gates 7. Regular meeting ----- coordination meeting with IAs
Internal	Weaknesses
	1. Unauthorized and/or illegal diversion 2. Defective tertiary level facilities 3. Series of turn-outs 4. Lack of tertiary level facilities
External	Opportunities
	1. Effective education to farmers to change their attitudes & values 2. Improvement of tertiary level facilities 3. Additional improvement of existing canals 4. Consolidation of turn-outs 5. Further education on water management 6. Modern apparatus to use in monitoring/recording water discharge at main/lateral canals
External	Threats
	1. Quarrying within restricted zone 2. Peace & order situation 3. Destruction of watershed

Table V.3 PDM of Short-term Capacity Improvement Plan for "ISF Collection" for UPRIIS District III

Duration : 3 months (20 November, 2000 ~ End of February, 2001)

Target Area : 1000ha of 5 IAs

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<Over-all Goal> ISF Collection is increased.			
<Project Purpose> Billed area is increased.	Billed area is increased by 10% by the end of February 2001.	Periodic report of billed area.	-Water is available. -No rat infestation takes place. -Farmers adherence to water delivery schedule.
<Outputs> 1. Service area is firmed-up. 2. Database is updated. 3. Skill is enhanced. 4. Billing procedure is revised.	1. Compare old parcellary maps with updated ones. 1. Compare old IFRs with updated ones. 1. Number of farm lot size and area. 2. Updated database. 3. Reports and computer outputs. 4. Revised billing collection manual.	1. Prepared documentation of declaration of real property assessors' office. 1. Field observation.	None
<Activities and Person in Charge> 1.1 Inventory taking of farm lots within the 1000ha sample area. 1.1.1 Analysis of inventory records and deciding on farm area. 1.1.2 Require conformity of farmers for revised area. 1.1.3 Confirmation of the existing data of parcellary maps. 1.2 Verification of lot sizes from farmers. <P/C I.1 ~ 1.2: Zone Supervisor, WRFT> 1.3 Drawing and printing of updated parcellary maps. <P/C 1.3: Operation Engineer> --- 2.1 Reconciliation of IFR (as to no. of lots and sizes) based on updated master list. 2.1.1 Coordination between WMT and billing clerk regarding the reconciliation of IFR & master list. 2.2 Prepare statement of account of individual farmers. <P/C 2.1 ~ 1.2: Billing Clerk> 2.3 Update of master list based on the updated parcellary maps. <P/C 2.3: Operation Engineer> --- 3.1 Assign an encoder for the program. <P/C 3.1: District Chief Engineer> 3.2 Train ISO staff in computer operation. 3.3 On-the job training in word processing and spreadsheet application. <P/C 3.2 ~ 3.3: JICA Study Team> --- File Conversion - Design and development of templates for LIPA, LLTCF and ALLP. <P/C JICA Study Team> - Encoding of data on developed templates. <P/C Assigned Encoder> --- 4.1 Proposal of revised procedure. 4.2 Discussion on the revised billing procedure. 4.3 Design and development of a revised billing and collection manual. <P/C JICA Study Team>	<Inputs> -Computer -Printer -Fax machine -Supplies and materials Maylar, technical pens, computer paper, ribbons, lettering set (Leroy), Gestetner ink, bond papers		None <Pre-conditions> - Inputs are available on time.

Table V.4 PDM of Short-term Capacity Improvement Plan for "Water Management" for Aganan-Sta.Barbara NISO

Duration : 3 months (20 November 2000 ~ End of February 2001)

Target Area : Aganan NIS Division 3 (900ha / two IAs)

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<Over-all Goal>			
<Project Purpose> - Cropping intensity is increased.			
<Outputs> 1. Copping calendar is prepared. (Completed.) 2. Water delivery & distribution schedule is prepared. (Completed.) 3. Gate operation is conducted properly. 4. Water delivery & distribution is conducted properly.			
<Activities and Person in Charge> 1. To confirm the cropping calendar. <P/C JICA Study Team> ---------- 2. To confirm the water delivery & distribution schedule. <P/C JICA Study Team> ---------- 3.1 To prepare simple instruction materials for gate operation. 3.2 To do the on-the-job training on proper gate operation to WRFs, ditch tenders and IA members <P/C Engineers > ---------- 4. To do foot patrol when necessary. <P/C >	<Inputs> -Computer -Printer -Fax machine		<Pre-conditions>

Table V.5 PDM of Short-term Capacity Improvement Plan for "ISF Collection" for Aganan-Sta.Barbara NISO

Duration : 3 months (20 November, 2000 ~ End of February, 2001)

Target Area : Aganan NIS Division 3 (900ha / two IAs)

Narrative Summary	Indicators	Means of Verification	Important Assumptions
<Over-all Goal>			
<Project Purpose> ISF collection efficiency is increased.	Collection efficiency is increased by __% basis after AO17 by the end of February 2001.	Collection report	
<Outputs> 1. Service area is firmed-up. (Completed.) 2. Database is updated. (In the process.) 3. Skill is enhanced. 4. Billing procedure is revised. 5. Collection strategy is improved.	1. Compare old parcellary maps with updated ones. 1. Compare old IFRs with updated ones. 1. Number of farm lot size and area. 2. Updated database. 3. Reports and computer outputs. 4. Revised billing collection manual. 5. Number of farmers who willingly pay ISF.	1. Prepared documentation of declaration of real property assessors office 1. Field observation. 5. Collection report	None
<Activities and Person in Charge> 0. Baseline data survey to determine the indicator for Project Purpose. <P/C Engineers and JICA Study Team> --- 1. Confirmation of firmed-up service area. <P/C JICA Study Team> --- 2. Confirmation of updated database. <P/C JICA Study Team> --- 3.1 Train ISO staff in computer operation. 3.2 On-the job training in word processing and spreadsheet application. <P/C JICA Study Team> --- File Conversion - Design and development of templates for LIPA, LLTCF and ALLP. <P/C JICA Study Team> - Encoding of data on developed templates. <P/C Encoder> --- 4.1 Proposal of revised procedure. 4.2 Discussion on the revised billing procedure. 4.3 Design and development of a revised billing and collection manual. <P/C JICA Study Team> --- 5.1 Utilize IAs in ISF collection. - IAs enter contract among TSA groups. - Combined efforts of NIA personnel with IAs. 5.2 Intensive monitoring of ISF collection performance. 5.3 Provision of other support services. - IGP: Income Generation Project - CBU Bldg.: Capital Build-Up Building - TEP: Technology Enhancement Program 5.4 Post harvest facilities can be availed by farmers who pay ISF. 5.5 Encourage payment of current account. <P/C Institutional Development Section>	<Inputs> -Computer -Printer -Fax machine		None <Pre-conditions> None

Table V.6 Logical Framework for NIA's Management Strengthening Plan

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
National Level Goal I. Self-sufficiency rate in rice is increased II. Poverty in rural area is alleviated	I. Self-sufficiency rate in rice II. Poverty incidence is decreased	I. Statistics of Bureau of Agricultural Statistics (BAS) II. Farmers' Income & Expenditure Survey Report	
Sector Level Goal Production/productivity of irrigation farmers is increased	- Crops Yield is increased	- Farmers' Income & Expenditure Survey Report	- Market price of rice is not slumped - Market price of agricultural inputs and labor cost is not jack-upped
Agency Level Goal Delivery of irrigation services to farmers is improved	- Delivery of right amount of water on right time		
Project Purpose Financial and Technical viability* of NIA is improved	- Financial viability index is positive - Cropping Intensity is increased	- Financial Statement - Performance Evaluation Report	- No serious damage by natural calamity, pest or rats
Outputs 1. NIA organization is strengthened 2. Income is increased 3. Cost is reduced 4. Project implementation is improved 5. O&M is strengthened 6. IA is strengthened	1 Lean but strong organization 2 Total income 3 Total cost 4 Number of accomplished projects 5 Irrigated area 6 Number of active IA	1 NIA Corporate Culture Survey 2 Financial Statement 3 Financial Statement 4 Project Accomplishment Report 5 O&M Report 6 IA Functionality Survey Report	- Rainfall is not drastically changed by irregular weather like El Nino or La Nina - Watershed maintains capacity of holding water
Activities 1.1 Consolidate the NIA management system 1.2 Restructure NIA organization 1.3 Implement a training and retooling program --- 2.1 Increase income from ISF 2.2 Increase income from other sources --- 3.1 Reduce the functional duplication and staff redundancy of NIA 3.2 Accelerate the retirement program 3.3 Strengthen the NIA's subsidiary business and relocate staff to it --- 4.1 Transfer functions (PDD, DSD, SMD & IDD) to RIO 4.2 Strengthen the capability of planning and monitoring/supervising 4.3 Facilitate the project execution by eliminating obstacles in procurement, ROW and others --- 5.1 Set-up O&M fund to secure the regular maintenance of facilities and rehabilitation of NIS 5.2 Provide adequate equipment for O&M of NIS --- 6.1 Prepare and implement a turnover (IMT) program of NIS or laterals to IA/CIA 6.2 Monitor IA activities 6.3 Hire an independent institution (e.g. an academic institution such as an university) to conduct an assessment of IA development to determine the deficiencies of NIA's efforts 6.4 Find legislative measure to fully fund institutional development and sustenance of IA 6.5 IDO must have permanent appointment			
	Inputs - GOP allocates the necessary fund for activities (ex. In order to finance retirement and training programs, GOP provides a continuing fund for the 5-year restructuring program.) - Services (consultants/experts in institutional development, finance & accounting, auditing, corporate management, operation management, irrigation facilities, GIS, MIS, etc.) - Equipment and materials for construction and O&M		Pre-conditions - GOP and LGU provide political support and commitment - Leadership of top management of NIA - Ownership of the NIA's Management Strengthening among NIA staff - Good governance - No populist politics - No political interventions - Consistent agricultural development policy & strategies

*** technical viability : quality of service 1) skills (human resource), 2) system's operation**

Activities and Sub-activities

1. NIA organization is strengthened

1.1 Consolidate the NIA management system

(1) Restructure the Corporate Board of Directors (CBOD) → Possible. However it needs some legislative measures.

1) Strong Technical Secretariat for CBOD
2) Delegation of attendance to BOD meetings should be limited to 2nd highest ranking officials
3) BOD private sector representative must come from IA
4) Enforce RA 7607 re:NCIA President to occupy seat in BOD

(2) Strengthen the management support system (focus on Corplan)

(3) Improve the management information system (MIS)

1) Computerize MIS
2) Maintain computerized MIS
3) Develop & improve data base
4) Use MIS for decision making, planning, etc.
5) Recruit/hire additional programmers at EDP
6) Provide & install internet for RIO nation wide

(4) Strengthen the auditing function (to be independent = directly under the Administrator's Office)

1) Restructure internal audit system

(5) Others

1) Review, monitor, rewrite and strengthen Policy
2) Provide term tenure ship to AA (CESO : Career Executive Service Officer)
3) Implement laws on merit promotion program
4) Implement devolution effectively
5) Impose sanctions on erring officials & employees
6) Develop doable career development plan
7) Provide good career pattern & incentives (fringe benefit, bonus etc.)for NIA personnel
8) Strict implementation of EO439 s.1995 (about promotion)
9) Recruit young qualified/competent personnel
10) NIA must have effective/working monitoring & evaluation system as tool in

(a) determining/measuring performance of offices
(b) policy & decision making

1.2 Restructure NIA organization

(1) Integrate the organizational units

(Functional analysis of offices prior to merging is required.)

1) Merger overlapping units in CO
2) Regroup RIOs
3) Delegate the CO power and functions to RIO
4) Carry out devolution of CIS to LGU (MOA is needed between NIA and DILG)
5) Create one irrigation responsibility center (PIMO) for the operations and management of NIS by integrating NISO and PIO(Further study is required in terms of financial viability. Ex. 5 years after merging, Region 3 has no impact.)
6) Consolidate the supporting structure for IA and LGU

(2) Prepare and implement an effective/attractive retirement program

1) Explore possibility of borrowing funds for early retirement program from WB, ADB or JBIC as program/development loan

(3) Transfer or re-assign redundant personnel

1.3 Implement training and retooling program (include Human Resource Development → fund is needed)

2. Income is increased

2.1 Increase income from ISF

(1) Restore the ISF rate to 1975 rate (1st step)

1) Increase the ISF rate to market base (2nd step)

(2) Increase ISF collection efficiency up to 60% on the national average

1) Entrust or contract out ISF collection to a private sector including the regrouped IA (CIA) → Not accepted by the participants

Alternative for 1) : Review & strengthen policy on IA's ISF collection under Type 2 contract

2) Develop strong & effective collection strategies
3) Intensify annotation program
4) Strengthen internal audit on ISF collection in irrigation systems and PIO
5) Collect ISF arrears by court actions

(3) Amend certain ISF related policies

2.2 Increase income from other sources

(1) Promote subsidiary businesses

1) Lease idle equipment
2) Lease idle buildings

(2) Increase Management Fee rate to 10%

1) Collect the right amount of 5% Management Fee

(3) Accelerate disposal of non-performing asset

1) Maximize disposal of unserviceable equipment
2) Accelerate disposal of non-performing land

3. Cost is reduced

3.1 Reduce/Eliminate the functional duplication and staff redundancy of NIA

3.2 Accelerate the retirement program

3.3 Strengthen the NIA's subsidiary business and relocate staff to it

3.4 Establish a standard

3.5 National government shoulders or subsidizes maintenance cost for completed major structures (dams, roads)

4. Project implementation is improved

4.1 Transfer functions (PDD, DSD, SMD & IDD) to RIO → Not accepted by the participants

Alternative for 4.1 Strengthen RIO to have capability in planning & design by transferring or reassigning redundant staff

4.2 Strengthen the capability of planning and monitoring/supervising

(1) Collaborate with concerned Agencies/stakeholders in addressing the watershed & environmental problems affecting NIA's system (DENR, LGU, etc.)

4.3 Facilitate the project execution by eliminating obstacles in procurement, ROWA and others

(1) Train members of Bidding Award Committee (BAC) and technical secretariat

(2) Let PDI to handle/monitor all construction related activities, eliminating duplication of functions with SOEM

4.4 Encourage private sector to participate in irrigation implementation

1) Build & Operation & Transfer (BOT)
2) Build & Transfer (BT)
3) Build & Operation & Own (BOO)

5. O&M is strengthened

5.1 Set-up O&M fund to secure the regular maintenance of facilities and rehabilitation of NIS

Revision of 5.1 Set-up adequate O&M/emergency funds to secure the proper operation and regular maintenance as well as the rehabilitation/restoration of NIS facilities

5.2 Provide adequate A1 equipment for O&M of NIS

(1) Implement MC10s99 on "Equipment Group Pooling" in field offices

5.3 Improve MIS on O&M

5.4 Enforce legal sanction on illegal diversion and other prohibited activities

(1) Coordinate with LGU in checking water distribution

5.5 Set aside a part of equipment rental collected to establish "Equipment Trust Fund" for equipment repair & maintenance

5.6 NISO must concentrate only on O&M activities (contradicting)
SOEM must concentrate only on O&M activities (contradicting)
Repair & rehabilitation must be done by RIO (contradicting)

5.7 Firm up & update irrigated area regularly

6. IA is strengthened

6.1 Prepare and implement a turnover (IMT) program of NIS or laterals to IA/CIA

(1) Develop and implement a workable and effective IA strengthening program of IMT
(2) Conduct trainings for both officers & members of IA
(3) Conduct on-the-job trainings instead of classroom type
(4) NIA finance group trains IA on financial management

6.2 Monitor IA activities

(1) Develop a system to measure effectiveness of IA
(2) Carry out internal audit on regions and systems
(3) Audit IA cashbooks
(4) Accountant in RIO (senior management analyst) audit IA
(5) Include a penal code in the MOA between NIA and IA

6.3 Hire an independent institution (e.g. an academic institution such as an university) to conduct an assessment of IA development to determine the deficiencies of NIA's efforts → Not accepted by the participants

Alternative 6.3 NIA internal audit conduct regular IA assessment (This is stipulated in MOA between NIA and IA on Type 2 contract.)

(1) Assess not only failure but also success in IDP implementation

6.4 Find legislative measure to fully fund institutional development and sustenance of IA (Part of the program is included in GAA)

6.5 Institutional Development Officers must have permanent appointment.

Table V.7 Implementation Schedule for NIA's Management Strengthening Plan

Programs and Projects

1. Strengthening of NIA's Organization is
1.1 Consolidation of the NIA's management system **(1) Restructuring of the Corporate Board of Directors (CBOD)** 1) Strong Technical Secretariat should be a member of CBOD 2) BOD private sector representatives must come from IA 3) Enforce RA 7607 re:NCIA President to occupy seat in BOD **(2) Strengthening of the management support system focusing upon Corplan** **(3) Improvement of the management information system (MIS)** 1) Computerize MIS 2) Maintain computerized MIS 3) Develop & improve data base 4) Use MIS for decision-making, planning, etc. 5) Recruit/hire additional programmers at EDP 6) Provide & install internet for RIO nation wide **(4) Improvement of the financial system** 1) Improve Accounting System 2) Improve Budgeting system 3) Improve Financial Forecasting System 4) Improve Bidding System 5) Improve Tariff Formulation System **(5) Strengthening of the auditing function**
1.2 Restructuring of NIA's organization **(1) Integration of the organizational units** (Functional analysis of offices prior to the merging is required.) 1) Merger overlapping units in CO 2) Regroup RIOs 3) Delegate the CO power and functions to RIO 4) Carry out devolution of CIS to LGU (MOA is needed between NIA and DILG) 5) Create one irrigation responsibility center (PIMO) for the operations and management of NIS by integrating NISO and PIO 6) Consolidate the supporting structure for IA and LGU **(2) Preparation and implementation of effective/attractive retirement programs** 1) Explore possibility of borrowing funds for early retirement program from WB, ADB or JBIC as program/development loan **(3) Transfer or re-assignment of redundant personnel**
1.3 Implementation of training and retooling programs (including Human Resource Development)

2. Income Increase

2.1 Increase income from ISF

(1) Restoration of the ISF rate to 1975 rate (1st step)

1) Increase the ISF rate to market base (2nd step)

(2) Increase of ISF collection efficiency up to 60% on the national average

1) Review & strengthen policy on IA's ISF collection under Type 2 contract
2) Develop strong & effective collection strategies
3) Intensify annotation program
4) Strengthen internal audit on ISF collection in irrigation systems and PIO
5) Collect ISF arrears by court actions

(3) Amendment of ISF related policies

2.2 Increase income from other sources

(1) Increase of the Management Fee rate to 10%

1) Collect the right amount of 5% Management Fee

(2) Acceleration of disposal of non-performing asset

1) Maximize disposal of unserviceable equipment
2) Accelerate disposal of non-performing land

3 Cost reduction

3.1 Elimination of the functional duplication and staff redundancy of NIA

3.2 Acceleration of the retirement programs

3.3 Establishment of cost standard

4. Improvement of project implementation

4.1 Transfer of functions (PDD, DSD, SMD & IDD) to RIO

4.2 Collaboration with concerned Agencies/stakeholders in addressing the watershed & environmental problems affecting NIA's system (DENR, LGU, etc.)

4.3 Facilitation of the project execution by eliminating obstacles in procurement, ROWA and others

4.4 Strengthening of Bidding Award Committee (BAC) and technical secretariat

4.5 Elimination of functional duplication of PDI and SOEM to let PDI to handle/monitor all construction related activities,

4.6 Encouragement of participation of private sector in irrigation implementation

1) Build & Operation & Transfer (BOT)
2) Build & Transfer (BT)
3) Build & Operation & Own (BOO)

5 Strengthening of O&M
5.1 Set-up of an adequate O&M/emergency funds to secure the proper operation and regular maintenance as well as the rehabilitation/restoration of NIS facilities
5.2 Establishment of "Equipment Trust Fund" for equipment repair & maintenance by setting aside a part of equipment rental collected
5.3 Provision of adequate A1 equipment for O&M of NIS 1) Implement MC10s99 on "Equipment Group Pooling" in field offices
5.4 Improvement of MIS for O&M
5.4 Enforcement of legal sanction on illegal diversion and other prohibited activities 1) Coordinate with LGU in checking water distribution
5.6 Elimination of functional duplication on O&M NISO must concentrate only on O&M activities SOEM must concentrate only on O&M activities Repair & rehabilitation must be done by RIO
5.7 Firm up & update irrigated area regularly

6 Strengthening of IA
6.1 Preparation and implementation of a turnover (IMT) program of NIS or laterals to IA/CIA (1) Develop and implement a workable and effective IA strengthening program of IMT (2) Conduct trainings for both officers & members of IA (3) Conduct on-the-job trainings instead of classroom type (4) NIA finance group trains IA on financial management
6.2 Monitoring of IA activities (1) Develop a system to measure effectiveness of IA (2) Carry out internal audit on regions and systems (3) Audit IA cashbooks (4) Accountant in RIO (senior management analyst) audit IA (5) Include a penal code in the MOA between NIA and IA
6.3 Regular IA assessment by the NIA internal audit (1) Assess not only failure but also success in IDP implementation
6.4 Finding of legislative measures to fully fund institutional development and sustenance of IA (Part of the program is included in GAA)

APPENDIX VI

STUDY ON INTEGRATION OF REGIONAL OFFICES AND PROVINCIAL OFFICES / NISO

APPENDIX – CHAPTER VI

STUDY ON INTEGRATION OF REGIONAL OFFICES AND PROVINCIAL OFFICES/NISO

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1.1 Review of Present Organizational Structure and Responsibilities

1.1.1 Mandate of Regional Offices

The basic mandate of the Regional Offices is essentially to oversee the performance of the field operations composed of the provincial irrigation offices (PIOs) and the national irrigation systems offices (NISOs). Broadly included in the mandate is the supervision of the construction of foreign-assisted projects. The latter function, however, is being superficially performed by the RIOs as the Central Office (CO) has direct control and supervision in the construction of foreign-assisted projects through the specially created project management offices (PMOs). In the supervision of national irrigation systems, this is likewise loosely treated as dam and reservoir types of irrigation systems have established their operations offices similar to the structure of the RIOs, notable cases of which are UPRIIS and MARIIS.

1.1.2 Organizational and Administrative Linkages

Region III and UPRIIS Operations Office have exactly the same organizational structure as shown in Figure VI.1.1. Region III is composed of 6 divisions, while UPRIIS operations office is made up of 4 divisions. The reduction of division in UPRIIS was necessitated by the acute lack of manpower since originally UPRIIS had the same divisions as the RIO.

These offices are basically performing staff support in the form of coordination and technical assistance to the lower offices. In the case of Region III, this implies support to the PIOs and NISOs, while UPRIIS is focused on the 4 District Offices, including the dam and reservoir division. UPRIIS operations office is likened as the overseer in terms of water allocation policy among the 4 District Offices.

In the organizational hierarchy, Region III and UPRIIS operations offices are organizational layers whose existence are dependent on financial support, in the form of ISF collection, coming from the NISOs and District Offices. They are essentially cost centers. The financial viability of their existence is being threatened unless there are opportunities for generating their own revenues as the NISOs and District offices have also been saddled with poor collection of ISFs. It is to be noted that 15 per cent of the ISF collections of the District Offices are being used to pay the personnel and overhead costs of UPRIIS Operations office, while 20 per cent of the NISOs' ISF collections are used to defray the personnel and overhead cost of Region III.

1.1.3 Administrative Workload

In terms of responsibility, Region III is directly assisting the 6 PIOs and 9 national irrigation systems. UPRIIS operations office, on the other hand is confined to the 4 District offices and the Dam and Reservoir Division. UPRIIS operations office is almost equivalent to Region III, where both offices independently report to the CO. A comparative profile of the scope of

responsibility of the two offices is given below. Obviously, UPRIIS operations office has the bigger scope in terms of service area. This may have greatly influenced the decision to establish an operations office. In the global context of water resource development in the region, Region III has the overall supervision responsibility, however.

Size in terms of irrigation service area, complexity of the irrigation system, and geographic accessibility have apparently dictated the establishment of two separate offices whose main concern is support and technical assistance to proper O and M of national irrigation systems. At the beginning, this was not a serious problem, but now that direct subsidies from the CO to the regions and UPRIIS have been eliminated, the cost of maintaining two separate offices within the same regional confines has indeed become prohibitive. *This observation is also true in the case of smaller regions that have individually maintained separate offices*. Political rather than economic consideration has been the primordial reason for the establishment of the offices.

Region III and UPRIIS operations office, as well as Region II and MARIIS are perfect examples of compartmentalized workload. To a certain extent, this is advantageous as there is focus of work and this may be equated to specialization. However, a closer review of this is the perceived absence of integrative planning and coordination on a geographic standpoint because both offices are co-equal and do not share the same horizon and perspective. Physically, this is quite evident in Region III and UPRIIS where the offices are located far apart unlike in Region II and MARIIS where they are housed under one roof. In effect, there is hardly any synergy of activities between Region III and UPRIIS.

Scope of Work and Supervision

Region III		UPRIIS Operations Office	
PIOs (CIS)	Service Area (ha)	District Offices	Service Area (ha)
1 Bataan		District I	24962
2 Pampanga		District II	23913
3 Nueva Ecija		District III	29846
4 Tarlac		District IV	23811
5 Zambales		Dam and Reservoir	
NISOs			
1 Angat-Maasin	31485		
2 Camiling	8580		
3 Bucao	1231		
4 Colo-Caulaman	1021		
5 Nayom-Bayto	1948		
6 Nueva Ecija PIS	1313		
7 Porac-Gumain	4004		
8 Sto. Tomas	3924		
9 Tasmoris	13297		

Source: NIA Region III and UPRIIS

1.1.4 Divisions

Region III

A brief assessment of the functions of the 6 divisions of Region III is summarized in Table VI1.1 The divisions are essentially the counterpart of departments in the CO. The assessment pointed out the following observations:

(a) Distinct functional relationship among the technical divisions (engineering, operations, equipment and IDD) is quite loose given the degree of overlapping among them. For instance, engineering and operations have respective responsibility in design of new construction and repairs and rehabilitation projects, respectively. Similarly, operations and institutional development have both responsibilities in training irrigation end-users and field officers. With the new thrusts on IMT and devolution, these responsibilities are likely to be fragmented if the same functional divisions are maintained. The need to fuse overlapping divisions becomes deemed imperative.

(b) Equipment management division (EMD) is a revenue earner to the extent that there are projects. Without projects, EMD is likened as simply a motor pool of idle and mothballed equipment. Region III may be an exception, although based on the financial reports, income from equipment rentals has not been promising. Maintaining it as a division needs a closer review. Subsuming it under the engineering division to minimize redundancy also merits consideration.

(c) Administrative is generally concerned with routine day-to-day administrative transactions. It can be expanded to assume the role of the finance and management division. Given this dimension, the finance and management division can be part and parcel of the administrative division.

The basic weakness of the divisional structure in Region III (which is generic to the Regional Offices and even to the CO) is the individualized nature of the divisions. Each division is doing its day-to-day functions, but not a single division is doing planning and investigative functions relative to shifting time dimensions that would allow the office to respond for changed conditions. Pieces of information coming from the various divisions go directly to the Regional Manager without the benefit of being analyzed from strategic and operational viewpoints. A support staff directly attached to the office of the Regional irrigation manager is plainly doing public relations. Communal irrigation projects transferred to the LGUs, for instance, has been totally abandoned (except for foreign-assisted projects) when in fact the Region could establish a technical assistance relationship with the LGUs. Under this circumstance, the Region could continue generating projects for and in behalf of the LGUs and the latter could reimburse for the services rendered through the GESA. This scheme could certainly defray part of the overhead cost of the Regions. Essentially, the divisions' modes of doing their work invariably suffer from short sightedness.

UPRIIS Operations Office

The functions of UPRIIS Operations Office' divisions are essentially similar to Region III. The only difference is the administrative workload. As earlier pointed out, UPRIIS is only responsible for the irrigation service area of the Upper Pampanga systems of close to 100,000 ha.

The number of divisions has been reduced into 4 from 6 by fusing engineering and operations divisions and administrative and finance divisions as shown in Figure 1.1. UPRIIS has gone ahead with its streamlining informally out of necessity. For one, it can not maintain its usual structure due to manpower depletion and acute lack of financial resources to pay for personnel salaries. UPRIIS operations office is practically relying on the ISF contributions of the District Offices. Its equipment division can not generate enough revenues as major rehabilitation and repair works have been very small for UPRIIS, in general, over the past several years, as evidenced by the deteriorating condition of the system's roads, canals and laterals.

The merging of 4 divisions into 2 was a good step. Notwithstanding with the reduced divisions, UPRIIS does not have any distinct advantage over the divisions in Region III, however. The merging was physical and nothing was new with respect to functions and thrust vis-à-vis future direction of UPRIIS and other adjacent river basin projects. The operations office whose divisional structure is patterned after the Regional offices may not all be essential if the concern is mere coordination and water planning about the needs of the District Offices and the Dam and Reservoir division. Such a responsibility can be equally performed by a smaller office (rather than an operations office) placed directly under the ambit of Region III.

1.1.5 Manpower Complement

The comparative manpower complement is given below. Of particular importance is the number of permanent employees. Region III and UPRIIS do not differ significantly in the number of authorized (permanent) personnel. But in terms of the number of filled-up, Region III is still intact with 76 per cent of its personnel or 103 people still available. UPRIIS has to date only 53 people or 43 per cent of the authorized personnel. Including the daily/contractual personnel, Region III has about 121 people while UPRIIS has about 76 people.

There are important implications about the extent of available permanent personnel. In terms of staffing, the permanent are the people who are secured vis-à-vis the daily/contractual who can only be employed subject to availability of project funds.

(a) In Region III, there is concentration of personnel in the equipment and management and administrative and finance divisions. Only a handful is available for the more important and technical divisions like engineering, operations and IDD. Although this is borne out by the original design of the staffing pattern (authorized), the degree of importance of maintaining such cadre of personnel for the concerned divisions may no longer be essential given the following considerations. Deployment of personnel under equipment and management division, for one, is contingent on the extent of projects being undertaken. Under this circumstance,

personnel can be mobilized on a job order basis which can be cheaper than maintaining permanent personnel as they can be employed and/or terminated on need basis. In the case of administrative and finance, the high number of employees is mainly composed of accounting processors, clerks, utility workers, and security guards (Table VI.1.2).

(b) In UPRIIS, the manpower issue is entirely different from Region III. It has retrenched to the extent that only 40 per cent of the permanent items are filled up. It has only 9 people in equipment and management division and 20 people in administrative and finance division. Engineering and operations combined have only 8 people or 50 per cent of the authorized, while IDD has only 9 out of 12 people. The step taken by UPRIIS was borne out of necessity. If UPRIIS, in general, could go on with this magnitude of manpower, *further reduction of its personnel is arguably not going to pose a major constraint in the context of integration.*

Comparative Manpower Complement of Region III and UPRIIS

	Region III		UPRIIS	
	Authorized	Filled-up	Authorized	Filled-up
1 Regional/Operations Manager Office	3	3	11	4
2 Engineering Division	18	12	16/a	8/a
3 Operations Division	11	9		
4 Institutional Devt. Division	11	9	19	12
5 Equipment Management Division	40	29	39	9
6 Administrative Division	30	22	38/b	20/b
7 Finance and Mgt. Division	23	19		
Total Permanent	136	103	123	53
Add: Daily/contractual		18		23
TOTAL		121		76

/a Combined with operations division

/b Combined with finance and management division

Source: Ref. Table 1.2

1.2 Proposed Integration of Region III and UPRIIS

If only to eliminate the weaknesses cited above, the integration of Region III and UPRIIS merits favorable consideration. The following considerations are cited:

(a) Region III (*and possibly the other Regional offices*) will have to undergo organizational strengthening in view of the weaknesses of its structures. The divisions will have to be reorganized congruent with the new challenges such as devolution, decentralization and IMT. This reorganization should globally be taken in parallel with the absorption of UPRIIS to establish a unified structure.

(b) UPRIIS operations office is essentially crippled with its depleted manpower. Annexing it with Region III offers an alternative form of pooling its depleted manpower and thus regaining its strategic importance in the planning for UPRIIS.

(c) The consolidation of revenue-generating assets, and eliminating redundant structures/divisions of two separate offices to meet the new challenges in the development of national irrigation systems and technical support to the LGUs is essential to ensure financial viability.

(d) A single office overseeing the entire irrigation and water resource development offers ease in the coordination and attainment of integrated planning and technical assistance within the same geographic region. The contribution of UPRIIS' waste-water, for instance, to supplement supply to the other systems during critical periods can be planned and implemented under a unified structure.

1.2.1 Organizational Framework

In presenting the proposed integration plan, it is important to discuss the organizational framework presented in Figure VI.1.2. The framework stresses the distinct role that the regional and provincial irrigation management offices will perform under the proposed strengthening of NIA's management systems. The regional offices (e.g. Region III) are envisaged to do project preparation and execution. This would mean assuming most of the responsibilities that the CO used to do before. Under the proposed framework, the special project offices or project management office (PMO) will now be directly under the regional offices.

The PIMO will focus on operations and maintenance and will not be involved in any construction activity. The reason is simply to give attention to O and M, an activity that has been neglected because of the priority given in favor of construction under the old organizational arrangement. With the transfer of communal irrigation projects to the LGUs, construction activity by the provincial offices will certainly disappear except maybe in special foreign-funded projects.

The new role being given to the regional and PIMO offices is essential in the context of decentralization, and would justify their continued existence. There are basic principles that should be met to activate these offices:

(a) The Region and the PIMO/District Offices should be adequately provided with budget. They can do so by giving them greater authority, generate revenues, and operate as semi-autonomous profit centers. Cross subsidization among the offices should be discouraged to allow flexibility in the use of their revenues, especially for maintenance of the systems.

(b) While greater autonomy is proposed for these offices, accountability should also be co-existent with greater freedom. This means that control in the use of funds will be given prime consideration. Within the offices, appropriate systems and oversight committees composed of government and non-government representatives will be created to ensure transparency in the bidding and approval of contracts.

(c) The manpower should be adequately compensated to ensure morale. It is thus proposed that the new staffing will be upgraded and will be only composed of qualified and competent staff competitive with the staffing structure of similar agencies.

1.2.2 Proposed Organizational Structure

The proposed organizational structure of the integrated office is given in Figure VI.1.3. The proposed structure is composed of three (3) major services and/or divisions with Region III as the surviving institution. *This structure is also proposed for the other consolidated regional offices*. The divisions have been upgraded to have the equivalent of department in the CO by virtue of greater responsibilities. The reduction in the number of divisions should not be construed as diminution of responsibilities but rather part of unifying the functions and responsibilities aimed at producing synergistic effect. Thus, under the proposed structure corresponding adjustments relative to line and staff authority, manpower and compensations were made.

The engineering, operations and administrative services comprised the new divisions. Equipment and management was placed under engineering; institutional development division was fused with operations, while finance and management was put under administrative. A small unit directly under the office of the Regional Director is the planning and monitoring which will serve as the instrument of control.

1) Engineering Services

The bulk of activities under project preparation and execution are essentially physical infrastructures and civil works, and these will be carried out under the engineering services. Specific activities are:

(a) Planning and investigation
(b) Design and specification
(c) Feasibility study
(d) Construction management
(e) Contract preparation and supervision
(f) Equipment management

The engineering services will assume the responsibilities of the PDD under a decentralized and consolidated structure. It is to be noted that a number of these activities will be contracted out to reputable institutions, and thus the engineering services will be greatly involved in selection and evaluation works.

The importance of good planning and adhering to the plan can not be overemphasized. This is the very essence of decentralizing project preparation and implementation so that the requirements can be calibrated appropriately and avoid costly delays.

The engineering services will be staffed with competent engineers and economists and will be managed by services/division manager equivalent to the rank of a department manager. A principal engineer will head each section.

2) Operations Services

The importance of operations services is essential especially in the institutional aspects of systems and water management. This division will be given the premier role of designing and coordinating innovative aspects of physical and institutional aspects of water delivery and allocation, including ISF. The division will combine the functions of the former operations and IDD. Institutional development will be given a new dimension in view of the importance of the IAs in the maintenance of the systems under the IMT. Specific activities under the heading of operations are:

(a) Systems management
(b) Water management
(c) IAs technical and managerial assistance
(d) IAs build-up and monitoring

The operations will be managed by a division chief with the rank of a department manager and each section will be headed by a principal engineer and/or institutional development personnel who are extensively involved in community/water-users organizing and managerial support.

3) Administrative Services

Administrative will combine the functions of day-to-day administrative matters including finance/cash management. Specific activities are:

(a) Budget
(b) Personnel
(c) Records
(d) Accounting
(e) General services
(f) Legal

A chief with the rank of a department manager will head the administrative services. The budget, personnel, records, general services and legal will be headed by a management chief, while the finance and accounting will be headed by a chief accountant

4) Planning and Monitoring Unit

The planning and monitoring unit will be the region's instrument of control. This unit will draw up annual and quarterly plans consistent with long-range plans and programs. It would monitor work progress and expenditures, gather and analyze data and present these to the management for policy and operational decision-making. The unit will also be responsible for backstopping the 3 divisions on strategic and policy planning.

The deputy regional director/irrigation manager will directly supervise the unit. Its staff will consist of senior engineer, economist and accountant.

1.2.3 Proposed Manpower Complement

The proposed manpower complement, including their salaries is presented in Table VI.1.3. Consistent with the proposal to strengthen the region, the salaries of the proposed manpower have been upgraded. The new staffing pattern is composed of only 83 personnel, 47 percent less than the combined permanent staffing of Region III and UPRIIS operations office.

The new staffing pattern for the Regional office can be summarized as follows: (a)the Regional Director assisted by a deputy Regional Director will head the Office; (b) Division Manager will manage the division, equivalent to a department at the CO; and (c) Principal engineer and/or section chief will head the different sections.

1.3 Financial Effects

1.3.1 Personnel Redundancy

Region III and UPRIIS operations office have total permanent personnel of 156. Including the daily and contractual personnel of 41, the total number is close to 200 (see section 1.5). Under the proposed integration, only the permanent personnel were considered. Given this consideration, the number of redundant permanent personnel is about 82, the detail of which is given in Table VI.1.4. Including the contractual, the total personnel due to be displaced is 123.

1.3.2 Savings in Personnel Salaries

With the upgraded salary structure, the annual cost of salaries is estimated at around 12.69 million pesos. The proposed annual cost of salaries is 66 percent less than the existing salaries of combined Region III and UPRIIS operations office.

Present Annual Salaries (million Pesos)/		Proposed Annual Salaries (million Pesos)	
Region III	18338	Region III & UPRIIS	12693
UPRIIS Operations	18956		
Total	37294/a		12693/b
Saving			24601

Source: NIA CO, Region III and UPRIIS

2. Integration of Pampanga PIO and Porac-Gumain NISO

2.1 Review of Present Organizational Structure

2.1.1 Organizational Structure

Pampanga PIO and Porac-Gumain NISO were merged to become the Pampanga Provincial Irrigation Management Office. The organizational structure of the merged PIO and Porac-Gumain NISO is given in Figure VI.2.1. The two offices were fused and retained a single administrative section. The engineering and operations and maintenance were individual sections under the provincial and PG NISO, respectively.

The two offices were merged physically under a single roof, but functional integration is partially done. Accounting and finance transactions are still separately done. This is because the merging was internal to NIA and did not have the concurrence of the CSC and DBM.

The merging of the two offices provided an avenue to fully utilize the personnel of the PIO that became dormant in the absence of new communal irrigation projects. It should be stressed that with the Pinatubo incident in the early 90's, several communal as well as national irrigation systems in Pampanga were destroyed and thus a lull in construction activity. This was aggravated with the transfer of communal irrigation projects to the LGUs through the local government code. Notwithstanding these factors, the merging was a good step (*and a worthwhile model at the provincial level*) to consolidate depleted manpower of both offices and focused the activities on the O & M of existing systems.

Organizationally, the existing structure retains the bias in construction activity with the retention of the engineering section. This is all right but with the eventual disappearance of communal irrigation projects, this section is again likely to become inactive. The organizational structure will have to be slightly modified to be congruent with the framework as earlier discussed in section 2.1.

2.1.2 Manpower Complement

The existing manpower complement is given in Table VI.2.1. There are 52 personnel, 33 of which are permanent and the balance of 19 are daily/contractual. It is clearly evident that the personnel comprising the engineering section were former employees of the PIO, while the operations section comprises mostly the PG-NISO. The two sections are reinforced with daily/contractual personnel. Accordingly, there was no problem with the appointment of the head, as the PIO irrigation engineer had to be reassigned elsewhere. The position, however, remains and never was abolished. In reality, the staffing was made out of mere convenience to accommodate existing people who can not be forced to retire due to civil service rules.

Given the present quality of personnel, the engineering section appears weak with a single senior engineer and two assistants. The rest of the people are skilled or technicians. The existing structure of the PIO restricts its engineering section with reference to planning and design. It is still the Regional office that has the overall responsibility relative to design and planning. Thus, the people in the engineering section can be considered empty unless mobilized to do repairs of civil work.

With the exception of WRF tenders who should have been gone in lieu of Type II contract, the people under operations and maintenance appear intact and can be considered adequate relative to qualifications. The presence of WRFTs, agriculturist and IDOs can at least assume the important activities in water delivery/allocation, crop management and technical support to the IAs.

The people under the administrative are generally composed of non-technical, except for the cashier and accounting processors. Although the number of people has been reduced, the qualification of the personnel may have to be upgraded.

2.2 Proposed Integration of PIO and NISO

2.2.1 Rationale for Merging PIO and NISO

The merging of the PIO and NISO is inevitable for the following reasons:

(a) With the devolution in place, there is no more major responsibility for the PIOs that have been established primarily for the construction and rehabilitation of communal irrigation projects. The provincial LGUs can absorb the PIOs similar to the former Bureau of Agricultural Extension (BAEX).

(b) With the full-scale implementation of the IMT, small NISOs (e.g. systems whose service area of 3000 ha and below) are likely to be abolished since the O & M responsibility will be completely transferred to the IAs.

(c) A new organization overseeing the maintenance of national irrigation systems becomes imperative at the provincial level; otherwise NIA will be unprepared to overcome the challenges of the new thrust on irrigation management. This thrust is minimum government intervention and more reliance on private initiatives. Reliance on private initiatives, however, requires serious and tedious institutional support that the existing provincial offices have not been crafted for.

2.2.3 Proposed Organizational Structure

The proposed organizational structure, composed of 3 sections is given in Figure VI.2.2. The structure is patterned after the proposed organizational framework described in section 1.2 where there is a distinct responsibility of the proposed PIMOs. It is proposed that the PIMO will focus on operations and_maintenance and leave construction activity to the regions through their special project offices. There are strong arguments for this focus of responsibility:

(a) It has become very costly for NIA to undertake major rehabilitation given the termination of direct subsidies from the national government. The only way it can prevent rapid deterioration of the facilities is to institute a strong policy of preventive maintenance.

(b) Allowing the PIMO to focus on O&M will give them the opportunity to consolidate their efforts on technical and managerial assistance to the IAs essential to full implementation of IMT.

(c) Water management has been virtually neglected with the diffused attention of the NISO and PIO. With concentration on O & M, the previous responsibility on water management planning to institute proper water delivery and allocation vis-à-vis water supply will be resuscitated.

(d) Prompt and efficient service is synonymous to the institution of appropriate O & M practices. Appropriate service given to the IAs can minimize the problem of delinquent farmers. This should ensure the financial viability of the PIMO.

(1) Operations

The operations section is mainly associated with software and/or institutional support. Specific activities under the heading of operations include:

(a) systems management
(b) water management
(c) IAs build-up
(d) IAs managerial assistance
(e) Community/LGU assistance

Systems and water management is important in the maintenance of available water supply. If the systems are not properly maintained, the consequence is poor water management. Water measuring instruments can help the realization of proper systems and water management.

IAs build-up and managerial assistance are important in ensuring the over-all maturity of the IAs. This activity can not overemphasized with the thrust on IMT. IMT can only be realized should the IAs are technically and managerially prepared to assume such important role. The institutional development of the IAs will thus take a new dimension and should be jointly undertaken by the PIMO and reputable civil societies. The traditional concept of IAs organization will be reinforced with a continuing training on managerial and entrepreneurship to transform the IAs as market-driven organizations.

Community and LGU assistance is essential to get a broad-based support from the community. The problem of delinquent farmers with respect to payment of ISF can be minimized if the support of the community and the LGU is harnessed.

Competent staff will manage the operations section.

(2) Repair and Maintenance

Repair and maintenance will enforce a strict policy on preventive maintenance. It will focus on the hardware support of the irrigation systems. While engineering works are involved in major repairs, the section should not be construed to be concerned with construction. Specific activities under this section include:

(a) dam and major/minor lateral canals
(b) heavy equipment dredging
(c) other infrastructure

Competent staff will manage the section.

(3) Administrative

The section will take care of the day-to-day administrative needs of the PIMO. Specific activities under the section are:

(a) Personnel
(b) Budget/finance
(c) ISF collection and billing
(d) Procurement

2.2.4 Proposed Manpower Complement

The proposed manpower complement, including the salaries is given in Table VI.2.2. The total workforce is 31, about 40 per cent less than the present manpower. Compared with the existing permanent staff of 33, the proposed staff is just about the same number. Positions and qualification differ from the old staffing pattern due to the upgrading of positions.

2.3 Financial Effects

2.3.1 Personnel Redundancy

The number of redundant personnel is given in Table VI.2.3. The number of redundant personnel is about 27 or 50 per cent of the total workforce. The number of new positions and upgrading of qualifications physically increase the number of displaced personnel. Note that of the proposed 31 personnel, only 25 people of the existing workforce will be absorbed. About 6 personnel will be recruited elsewhere or can be considered new.

3. Restructuring District Offices

3.1 Review of Organizational and Functional Structure

3.1.1 Organizational Structure

The 4 district offices of UPRIIS, including the dam and reservoir division will retain their identity at the provincial level. Based on the review, the organizational structure of the district offices is appropriate as given in Figure VI.3.1. The present structure is in congruent with the thrust on O & M at the provincial level. It is to be noted that the proposed PIMO organization is patterned after the district offices. However, some district offices have informally created organization units to address specific concerns because of manpower problems. There is nothing wrong with the present organizational structure.

The present organizational structure of the dam and reservoir division, however, requires reorganization. The present structure as shown in Figure VI.2.3 is composed of 3 sections, 2 sections of which pertains to operations of dam and the last section is watershed management. The basic weakness of the organization is the existence of several maintenance units under the Pantabangan section. Consolidating these units and into a single unit is proposed to improve coordination.

3.1.2 Manpower Complement

The existing workforce is given in Tables V.3.1 and V.3.2. What are noticeable among the 4 district offices are the WRF tenders. They have not been retired despite the policy on Type II contract. As regards the dam and reservoir, 70 per cent of the total workforce is assigned in the Pantabangan dam section. It is claimed that the present workforce of the district and dam and reservoir is overstaffed.

3.2 Proposed Organizational Structure of the Dam and Reservoir Division

The proposed organizational structure of the dam and reservoir division is presented in Figure VI.3.3. The proposal considered the consolidation of several maintenance units under the Pantabangan dam section.

3.2.1 Proposed Staffing Pattern

The proposed staffing pattern, including salaries is shown in Tables V.3.3 and V.3.4. The total workforce by district is given below:

District	Personnel
I	71
II	70
III	76
IV	70
Dam and Reservoir	57

3.3 Financial Effects

3.3.1 Personnel Redundancy

Estimates on the number of redundant personnel are given in Tables V.3.5 and V.3.6, a summary of which is given below.

Office	Number of Personnel
District I	52
District II	41
District III	76
District IV	41
Dam and Reservoir	58

TABLES

Table VI.1.1 Assessment of Divisional Responsibilities of Region III Office

Division	Assessment
1. Engineering	Engineering division is basically oriented to design, planning and construction. This division was primarily intended to assist and support the PIOs in the construction of CIS. This became a necessity because the PIOs were restricted with design standards. Had the PIOs been given design engineers as those posted in the Region, the PIOs can proceed with bigger and more responsible construction works.
2. Operations	Operations division is geared toward systems and water management, including repair and rehabilitation. This division was meant to support the NISOs. With the task assigned to repair and rehabilitation, it has also design engineers primarily for designing major repairs and rehabilitation. This task is perceived to overlap with the function of the engineering division. Over the years, the operations is perceived to have weakened its role because it was limited to monitoring and allocating repair and rehabilitation budgets among the competing NISOs instead of training irrigation end-users and field officers.
3. Institutional Development	IDD or institutional development division is primarily involved in organizing and build-up of IAs. Another important task rendered is dissemination of improved farm technologies, a major part of water management. Certainly this overlaps with the responsibility of the operations division on research and development, although this has been a dormant activity brought about by funding constraint.
4. Equipment Management	Equipment management division is basically in charge of pooling and dispatching of heavy and construction equipment. The extent of work of this division is contingent on the number of projects undertaken and availability of serviceable equipment. Presently, the condition of equipment is far from satisfactory.
5. Administrative	Administrative division is primarily concerned with personnel, records, general services, procurement and other services. Legal is one of the services assigned in this division, but because of low pay, no legal personnel has ever attempted to apply for the position. It has been dormant for quite sometime and this affects the capability of the region to address legal suits and prosecute erring IA members relative to non-payment of ISF.
6. Finance and Management	Finance and management division is primarily responsible for cash and budget transactions. One of the bigger tasks of the division is management control. However, this task is superficially done because it does not have any linkage with the other divisions with respect to planning and technical control. It can thus be integrated with administrative and focused on budget and finance activities.

Table VI.1.2 Present Personnel Of Region III and UPRIIS Operations Office

Division/Position	Permanent		
	III	UPRIIS	Total
Head Office			
1 Regional Manager	1	1	2
2 Clerk		1	1
Sub-total	1	2	3
Support Staff			
3 PR/Information Officer	2	1	3
4 Sr Financial Analyst		1	1
5 Clerk/Stenographer			
Sub-total	**2**	**2**	**4**
Engineering Division			
6. Division Manager	1	1	2
7. Supervising Engineer	2	2	4
8. Sr Engineer	3	2	5
9. Engineer	3	1	4
10. Economist			
11.Draftsman	2	1	3
12. Engineering Assistant			
13. Survey Aide			
14. Clerk	1	1	2
Sub-total	**12**	**8**	**20**
Operations Division			
15 Division Manager	1		1
16 Supervising Engineer	1		1
17. Sr Engineer	2		2
18. Engineer	2		2
19. Agronomist			
20. Soil Technologist	1		1
21. Utility Worker	1		1
22. Clerk	1		1
Sub-total	**9**		**9**
Equipment Division			
23. Division Manager	1	1	2
24.Transport Maint. Supervisor	2	1	3
25. Sr Engineer	1		1
26. Engineer		1	1
27. H E Operator	7	1	8
28. Sr. Material Inspector		1	1
29. Driver Mechanic	6	2	8
30. Auto Mechanic	7	1	8
31. Transport Dispatcher			
32. Utility Worker	4		4
33. Clerk	1	1	2
Sub-total	**29**	**9**	**38**
IDD Division			
34. Division Manager	1	1	2
35. Irrigators Devt Chief	1	2	3
36. Supg Irrigators Devt Officers	2		2
37. Sr Irrigators Devt Oficer	1	4	5
38. Irrigators Devt Officer		1	1
40. Sr Engineer		1	1
41. Sr Economist	1	1	2
42. Information/CR Officer	1	1	2
43. Agriculturist	1		1

Table VI.1.2 Present Personnel Of Region III and UPRIIS Operations Office

Division/Position	Permanent		
44. Clerk	1	1	2
Sub-total	**9**	**12**	**21**
Administrative Division			
4.5 Division Manager	1	1	2
46. Sr IRM Officer	1	1	2
47. Sr Supply Officer	1	1	2
48. IRM Officer		1	1
49. IRD/Supply Officer	1	1	2
50. IRM/Administrative Assistant		1	1
51. Electronic Operator	1	1	2
52. Attorney			
53. Medical Officer			
54. Dentist			
55. Store Keeper	1		1
56. Security Guard	7	1	8
57. Utility/Skilled Worker	4	3	7
58. Clerk	5	2	7
Sub-total	**22**	**13**	**35**
Finance Division			
59. Division Manager	1		1
60. Sr Corporate Accountant	1	1	2
61. Sr Management Analyst	1		1
62. Cashier	1	1	2
63. Corporate Account Analyst	2	2	4
64. Financial Planning Analyst	1		1
65. Sr Accounting Processor	8	2	10
66. Engineer			0
67. Collection Representative	3		3
68. Cashiering Assistant	1	1	2
69. Clerk			0
Sub-total	**19**	**7**	**26**
TOTAL Permanent	**103**	**53**	**156**
Add: Daily and Contractual	18	23	41
TOTAL	121	76	197

Source: Region III and UPRIIS

Table VI.1.3 Proposed Staffing Pattern for Combined Region III and UPRIIS Operations Office (1/2)

				Salary (PHP)	
Director' s Office	SG	Rate/mo	No	Monthly	Annual
1. Regional Director	28	22,000	1	22,000	264,000
2. Deputy Regional Director	27	21,300	1	21,300	255,600
3. Secretary	11	9,580	2	19,160	229,920
Sub-total			**4**		**749,520**
Planning and Monitoring					
4. Sr Engineer	16	12,820	1	12,820	153,840
5. Sr Economist	16	12,820	1	12,820	153,840
6. Sr Finance/Accountant	16	12,820	1	12,820	153,840
7. Clerk	9	7,900	1	7,900	94,800
Sub-total			**4**		**556,320**
Engineering Division					
8. Division chief	25	19,700	1	19,700	236,400
9. Clerk	9	7,900	1	7,900	94,800
Sub-total			**2**		**331,200**
Planning and Design					
10. Principal Engineer	22	17,500	1	17,500	210,000
11. Supervising Engineer	18	14,400	2	28,800	345,600
12. Sr Engineer	16	12,820	4	51,280	615,360
13. Sr Draftsman	11	9,600	1	9,600	115,200
Sub-total			**8**		**1,286,160**
Construction					
14. Principal Engineer	22	17,500	1	17,500	210,000
15. Supervising Engineer	18	14,400	2	28,800	345,600
16. Sr Engineer	16	12,820	2	25,640	307,680
17. Engineer	14	11,000	1	11,000	132,000
Sub-total			**6**		**863,280**
Investigation and Survey					
18. Principal Engineer	22	17,500	1	17,500	210,000
19. Supervising Engineer	18	14,400	2	28,800	345,600
20. Sr Engineer	16	12,820	3	38,460	461,520
Sub-total			**6**		**1,017,120**
Feasibility Report & Contract					
21. Principal Engineer	22	17,500	1	17,500	210,000
22. Supervising Engineer	18	14,400	1	14,400	172,800
23. Sr. Engineer	16	12,820	1	12,820	153,840
24. Sr Economist	16	12,820	1	12,820	153,840
Sub-total			**4**		**690,480**
Equipment					
25. Principal Engineer	22	17,500	1	17,500	210,000
26. Supervising Engineer	18	14,400	1	14,400	172,800
27. Sr Engineer	16	12,820	2	25,640	307,680
28. Drivers	7	7,400	4	29,600	355,200
29. Equipment Operators	9	7,900	2	15,800	189,600
30. Auto-Mechanic	9	7,900	2	15,800	189,600
Sub-total			**12**		**1,424,880**
Operations Division					
31. Division Chief	25	19,700	1	19,700	236,400
32. Clerk	9	7,900	1	7,900	94,800
Sub-total			**2**		**331,200**
Systems and Water Management					
33. Principal Engineer	22	17,500	1	17,500	210,000
34. Supervising Engineer	18	14,400	2	28,800	345,600

Table VI.1.3 Proposed Staffing Pattern for Combined Region III and UPRIIS Operations Office (2/2)

				Salary (PHP)	
Director' s Office	SG	Rate/mo	No	Monthly	Annual
35. Sr Engineer	16	12,820	4	51,280	615,360
36. Soil and Water Specialist	16	12,820	1	12,820	153,840
Sub-total			**8**		**1,324,800**
Institutional					
37. Irrigators Development chief	22	17,500	1	17,500	210,000
38. Supervising IDO	18	14,400	2	28,800	345,600
39. Sr IDO	16	12,820	2	25,640	307,680
Sub-total			**5**		**863,280**
Administrative Division					
40. Division Chief	25	17,500	1	17,500	210,000
41. Clerk	9	7,900	1	7,900	94,800
Sub-total			**2**		**304,800**
Personnel, Records & Gen. Services					
42. Administrative Services chief	22	17,500	1	17,500	210,000
43. Personnel Officer	16	12,820	1	12,820	153,840
44. Records Officer	16	12,820	1	12,820	153,840
45. Procurement and Supply Officer	16	12,820	1	12,820	153,840
46. General Services Officer	16	12,820	1	12,820	153,840
47. Legal Officer	22	17,500	1	17,500	210,000
48. Industrial Security Guards	7	7,400	2	14,800	177,600
49. Utility Workers	7	7,400	2	14,800	177,600
Sub-total			**10**		**1,390,560**
Finance					
50. Chief Accountant	22	17,500	1	17,500	210,000
51. Sr Accountant	16	12,820	2	25,640	307,680
52. Sr Financial Analyst	16	12,820	2	25,640	307,680
53. Sr Cashier	16	12,820	1	12,820	153,840
54. Accountants	15	12,100	4	48,400	580,800
Sub-total			**10**		**1,560,000**
TOTAL			83		12,693,600

Table VI.1.4 Estimate of Redundant Personnel for Combined Region III and UPRIIS Operations Office

A. Position	Proposed	Existing	Def/Excs	Remarks	Reclassified
1. Regional Director	1		-1	N	
2. Deputy Regional Director	1		-1	N	
3. Regional/Operations Irrigation Engineer		2	2	R	2
4. Services chief(Dept)	3		-3	N	
5. Division Manager		10	10	R	10
6. Principal Engineer	6		-6	N	
7. Supv Engineer	10	5	-5		
8. Sr Engineer	17	9	-8		
9. Engineer	1	7	6	R	6
10. Sr Economist	2	2	0		
11. Sr Finance/Accountant	5	3	-2		
12. Sr Draftsman	1	3	2	R	
13. Soil and Water Specialist	1	1	0		
14. Irrigators Devt chief	1	3	2	R	
15. Supervising IDO	2	2	0		
16. Sr IDO	2	5	3	R	
17. Administrative section chief	1		-1	N	
18. Personnel Officer/Sr IRM	1	2	1	R	1
19. Records Officer	1		-1		
20. Procurement Officer/Sr Supply	1	2	1	R	1
21. General Services Officer	1		-1		
22. Legal Officer	1		-1		
23. Section Chief Accountant	1		-1	N	
24. Sr Cashier	1	2	1	R	
25. Accountants	4		-4		
26. Drivers	4	8	4	R	
27. HE Operators	2	8	6	R	
28. Auto Mechanic	2	8	6	R	
29. Secretary	2		-2	N	
30.Clerk	4	14	10	R	2
31. Security Guards	2	8	6	R	
32. Utility Workers	2	12	10	R	
B. Sub-total	**83**	**116**	**33**	**70**	**22**
C. Other Positions					
33. Sr Material Inspector		1		R	
34. Irrigators Devt Officers		1		R	
35. Community Relations Officers		2		R	
36. Sr. IRM Officer					
37. IRM Officer		1		R	1
38. IRM/Administrative Assistant		1		R	
40. Electronin Operator		2		R	
41. Storekeeper		1		R	
42. Sr. Management Analyst		1		R	1
43.Corporate Account Analyst		5		R	4
44.Financial Planning Analyst		1		R	
45. Sr Accounting Processor		11		R	
46.Collection Representative		3		R	
47. Cashiering Assistant		2		R	
48.Transport Maintenance Supervisor		3		R	
49.Soil Technologist		1		R	
50. IRD/Supply Officer		1		R	
51. PR/Information Officer		3		R	
D. Sub-total		40		40	6
Total(B+D)	83	156		110	28

Source: JICA Study Team
Code: R – Redundant; N – New; Def – Deficit; Excs - Excess
Reclassified – Excess personnel but will be absorbed to replace new positions

Table VI.2.1 Existing Manpower Complement of PIMO Pampanga

Provincial Irrigation Management Office	PIMO	PG NISO	Pampanga PIO
Head Office			
1. Irrigation Superintendent/Officer	1	1	1
Engineering			
2. Sr Engineer	1		1
3. Engineer	2		
4. Engineering Assistant	3		1
5. WRFO	1	1	
6. Drafstman	1		
7. Driver-Mechanic	2	2	1
8. Auto-Mechanic	1		1
9. Data Encoder	1		
10. Utility Worker	1		
11. Foreman	1		1
12. HE Operator	2		
Sub-total	**16**	**3**	**5**
Operations & Maintenance			
13. Agriculturist	1	1	
14. Sr WRFT	5		5
15. WRFT	3	3	
16. WRF Tender	6	8	
17. IDO	3		
18. Utility Worker	2	1	
Sub-total	**20**	**13**	**5**
Administrative			
19. Cashier	1		1
20. Sr Accounting Processor	2	1	
21. Accounting Processor	1	2	
22. Clerk	3	1	1
23. Storekeeper	1	1	1
24. Utility Worker	4		
25. Security Guards	2	2	1
26. Electronic Computer Operator	1		
Sub-total	**15**	**7**	**4**
TOTAL	**52**	**24**	**15**

Source: NIA Region III
Note: PG NISO and Pampanga personnel are all permanent positions
Combined PIMO has the following breakdown::

Permanent 33
Contractual 19
Total 52

Table VI.2.2 Proposed Staffing Pattern for PIMO Pampanga

Provincial Irrigation Management Office	No	SG	Salary (PHP)	
Head Office			Monthly	Annual
1. Irrigation Superintendent	1	25	19,700	236,400
2. Clerk	1	9	7,900	94,800
Sub-total	**2**		**27,600**	**331,200**
Operations Section				
3. Supvg Engineer	1	18	14,400	172,800
4. Sr Engineer	1	16	12,820	153,840
5. Sr WRFT/IDOs	4	16	12,820	615,360
6. WRFT(Operator)	2	12	10,160	243,840
7. Agronomist	1	14	11,000	132,000
8. Soils Specialist	1	14	11,000	132,000
9. Utility worker	1	7	7,400	88,800
Sub-total	**11**		**79,600**	**1,538,640**
Repair and Maintenance Section				
10. Supvg Engineer	1	18	14,400	172,800
11. Sr Engineer	1	16	12,820	153,840
12. Engineer	1	14	11,000	132,000
13. Auto Mechanic	1	9	7,900	94,800
14. Driver Mechanic	1	9	7,900	94,800
15. HE Operator	1	9	7,900	94,800
16. Survey Aide	1	9	7,900	94,800
Sub-total	**7**		**69,820**	**837,840**
Administrative Section				
17. Administrative Services Officer	1	18	14,400	172,800
18. Cashier	1	16	12,820	153,840
19. Sr Accounting Processor	1	16	12,820	153,840
20. Property Officer	1	16	12,820	153,840
21. Records Officer	1	16	12,820	153,840
22. IRM/Personnel Officer	1	16	12,820	153,840
23. Collection Representative	1	12	10,160	121,920
24. Accountants	1	15	12,100	145,200
25. Clerk	1	9	7,900	94,800
26. Security Guards	1	7	7,400	88,800
27. Utility Worker	1	7	7,400	88,800
Sub-total	**11**		**123,460**	**1,481,520**
Total	**31**			**4,189,200**

Table VI.2.3 Estimate of Redundant Personnel of PIMO Pampanga

	Proposed	Existing	Def/Excs	Remarks	Reclassified
1. Irrigation Superintendent	1	1	0		
2. Supvg Engineer	2		-2	N	
3. Sr Engineer	2	1	-1		
4. Sr WRFT/IDOs	4	5	1	R	
5. WRFT(Operator)	2	3	1	R	
6. Engineer	1	2	1	R	1
7. Agronomist	1	1	0		
8. Soils Specialist	1		-1		
9. Auto-mechanic	1	1	0		
10. Driver Mechanic	1	2	1	R	
11. HE Operator	1	2	1	R	
12. Survey Aide	1		-1		
13. Administrative Services Officer	1		-1		
14. Cashier	1	1	0		
15. Sr Accounting Processor	1	2	1	R	
16. Property Officer	1		-1		
17.Records Officer	1		-1		
18. IRM/Personnel Officer	1		-1		
19. Collection Representative	1		-1		
20. Accountants	1		-1		
21. Clerk	2	3	1	R	
22. Security Guards	1	2	1	R	
23. Utility worker	2	7	5	R	
Sub-total	**31**	**33**	**2**	**13**	**1**
Other Personnel					
24. Engineering Assistant		3		R	2
25. Draftsman		1		R	
26. WRFO		1		R	
27. Foreman		1		R	
28. Data Encoder		1		R	
29. WRF Tender		6		R	1
30. IDO		3		R	
31. Accounting Processor		1		R	1
32. Store keeper		1		R	
33. Electronic computer operator		1		R	
Sub-total		**19**		**19**	**4**
Total	**31**	**52**		**32**	**5**

Code: N – New; R - Redundant
Reclassified – Excess personnel but will be absorbed.

Table VI.3.1 Existing Personnel of UPRIIS District Offices

District Offices of UPRIIS	I	II	III	IV
District Head Office				
1. Irrigation Superintendent	1	1	1	1
2. Supvg. Engineer	2	2	2	2
3. Engineer(Hydrologist)	1	1	1	1
4. Engineering Assistant	1		1	1
5. Draftsman	1	1	1	1
Sub-total	6	5	6	6
Operations Section				
6. Sr Engineer	3	3	3	3
7. Sr WRFT	22	17	20	17
8. WRFT(Operator)	9	4	15	13
9. WRF Tender	38	34	62	30
10. WRF Technician		3	2	1
Sub-total	72	61	102	64
Repair and Maintenance Section				
11. Engineering Assistant	1	1		
12. Foreman	1			1
13. Carpenter	1	1	1	
14. Auto Mechanic	2	2	2	2
15. Driver Mechanic	4	5	7	6
17. HE Operator	3	3	3	3
18. Survey Aide		1	1	
Sub-total	12	13	14	12
Administrative Section				
19. Administrative Services Officer	1	1	1	1
20. Cashier	1	1	1	1
21. Sr Accounting Processor	1	1	1	1
22. Property Officer	1	1	1	1
23. Records Officer			1	
24. IRM/Personnel Officer	1	1		1
25. Transport Dispatcher	1	1		1
26. Collection Representative	2	2	1	2
27. Electronic Comm. System Operator	1	1	1	1
28. Store keeper	1	1	1	1
29. Cashiering Assistant	1	1	1	1
30. Security Guards	3	3	3	3
31. Clerk	4	4	3	3
32. Accounting Processor	9	7	7	6
33. Foreman		1	1	1
34. Mason	1	1	1	
35. Utility worker	1	1	2	1
Sub-total	29	28	26	25
Total	119	107	148	107

Table VI.3.2 Existing Manpower of Dam and Reservoir Division, UPRIIS

Dam and Reservoir Division UPRIIS	Section			
	Head Office	Pantabangan Dam	Canili-Diayo Dam	Watershed Mgt Section
Head Office				
1. Division Manager	1			
2. Clerk	1	1	1	
3. Principal Engineer		1		
4. Supvg Engineer			1	
5. Watershed Mgt. Chief				1
6. Draftsman		1		
7. Transport Electrician		1		
8. Mason		1		
9. Welder			1	
10. Forester				2
11. Agriculturist				1
12. Forestry Assistant				6
13. Driver Mechanic				1
		5	3	11
Mechanical Electrical Unit				
14. Sr Engineer		3	1	
15. Engineer		3		
16. Engineering Assistant		5	2	
17. Sr. Instrument Technician		1		
18. Auto Mechanic		1	1	
10. Plant Electrician		4	1	
11. Foreman				
12. Electronic Comm. Syst. Operator		1	1	
13. WRF Operator		5		
14. Utility Worker		3		
		26	6	
Maintenance Unit				
15. Sr Engineer		3	1	
16. Engineer		1		
17. Agriculturist		1		
18. Carpenter		2		
19. Sheet Metal Worker		1		
20. Plant helper		2		
21. Foreman		3	1	
22. Plumber			1	
23. Utility worker		17	5	
		30	8	
Equipment Unit				
24. Auto Mechanic		1		
25. HE Operator		2		
26. Driver Mechanic		4		
27. Utility Worker		1		
		8		
Administrative Unit				
28. Administrative Officer		1		

Table V 3.2 Existing Manpower of Dam and Reservoir Division, UPRIIS

Dam and Reservoir Division UPRIIS	Section			
	Head Office	Pantabangan Dam	Canili-Diayo Dam	Watershed Mgt Section
29. Cashier		1		
30. Property Officer		1		
31. IRM Officer		1		
32. HSD		2		
33. Sr Accounting Processor		1		
34. Electronic Computer Systems Operator		2		
35. Cashiering Assistant		1		
36. Security Guards		1		
37. Clerk		1		
38. Utility Worker		5		
39. Nurse		1		
		18		
Total	2	87	17	11
	117			

Table VI 3.3 Proposed Staffing Pattern for UPRIIS District Offices

District		I			II		III		IV	
	SG	No.	Monthly (PHP)	Annual (PHP)	No	Annual (PHP)	No.	Annual (PHP)	No	Annual (PHP)
District Head Office										
1.Irrigation Superintendent	25	1	19,700	236,400	1	236,400	1	236,400	1	236,400
2.Clerk	9	1	7,900	94,800	1	94,800	1	94,800	1	94,800
Sub-total		**2**	**27,600**	**331,200**	**2**	**331,200**	**2**	**331,200**	**2**	**331,200**
Operations Section										
3.Supvg Engineer	18	1	14,400	172,800	1	172,800	1	172,800	1	172,800
4.Sr Engineer	16	2	12,820	307,680	2	307,680	2	307,680	2	307,680
5.Sr WRFT/IDOs	16	25	12,820	3,846,000	24	3,692,160	30	4,615,200	24	3,692,160
6.WRFT(Operator)	12	10	10,160	1,219,200	10	1,219,200	10	1,219,200	10	1,219,200
7.Agronomist	14	2	11,000	264,000	2	264,000	2	264,000	2	264,000
8. Soils Specialist	14	2	11,000	264,000	2	264,000	2	264,000	2	264,000
9. Utility worker	7	2	7,400	177,600	2	177,600	2	177,600	2	177,600
Sub-total		**44**	**79,600**	**6,251,280**	**43**	**6,097,440**	**49**	**7,020,480**	**43**	**6,097,440**
Repair and Maintenance Section										
10. Supvg Engineer	18	1	14,400	172,800	1	172,800	1	172,800	1	172,800
11. Sr Engineer	16	2	12,820	307,680	2	307,680	2	307,680	2	307,680
12. Engineer	14	1	11,000	132,000	1	132,000	1	132,000	1	132,000
13. Auto Mechanic	9	2	7,900	189,600	2	189,600	2	189,600	2	189,600
14. Driver Mechanic	9	2	7,900	189,600	2	189,600	2	189,600	2	189,600
15. HE Operator	9	2	7,900	189,600	2	189,600	2	189,600	2	189,600
16. Survey Aide	9	1	7,900	94,800	1	94,800	1	94,800	1	94,800
Sub-total		**11**	**69,820**	**1,276,080**	**11**	**1,276,080**	**11**	**1,276,080**	**11**	**1,276,080**
Administrative Section										
17. Administrative Services Officer	18	1	14,400	172,800	1	172,800	1	172,800	1	172,800
18. Cashier	16	1	12,820	153,840	1	153,840	1	153,840	1	153,840
19. Sr Accounting Processor	16	1	12,820	153,840	1	153,840	1	153,840	1	153,840
20. Property Officer	16	1	12,820	153,840	1	153,840	1	153,840	1	153,840
21. Records Officer	16	1	12,820	153,840	1	153,840	1	153,840	1	153,840
22. IRM/Personnel Officer	16	1	12,820	153,840	1	153,840	1	153,840	1	153,840
23. Collection Representative	12	2	10,160	243,840	2	243,840	2	243,840	2	243,840
24. Accountants	15	3	12,100	435,600	3	435,600	3	435,600	3	435,600
25. Clerk	9	1	7,900	94,800	1	94,800	1	94,800	1	94,800
26. Security Guards	7	1	7,400	88,800	1	88,800	1	88,800	1	88,800
27. Utility Worker	7	1	7,400	88,800	1	88,800	1	88,800	1	88,800
Sub-total		**14**	**123,460**	**1,893,840**	**14**	**1,893,840**	**14**	**1,893,840**	**14**	**1,893,840**
Total		**71**		**9,752,400**	**70**	**9,598,560**	**76**	**10,521,600**	**70**	**9,598,560**

Table VI.3.4 Proposed Staffing Pattern on Dam and Reservoir Division, UPRIIS

Dam and Reservoir	No	SG	Monthly (PHP)	Annual (PHP)
Head Office				
1. Division Manager	1	25	19,700	236,400
2. Clerk	1	9	7,900	94,800
Sub-total	2			331,200
Pantabangan Dam Section				
Head Unit				
3. Principal Engineer	1	22	17,500	210,000
4. Clerk	1	9	7,900	94,800
Sub-total	2			304,800
Electrical/Mechanical Unit				
5. Supervising Engineer	1	18	14,400	172,800
6. Sr Engineer	2	16	12,820	307,680
7. Engineer	2	14	11,000	264,000
8. Plant Electrician	2	10	8,600	206,400
9. Plant Mechanic	2	10	8,600	206,400
Sub-total	9			1,157,280
Maintenance Unit				
10. Supervising Engineer	1	18	14,400	172,800
11. Sr Engineer	2	16	12,820	307,680
12. Engineer	1	14	11,000	132,000
13. HE Operator	1	9	7,900	94,800
14. Auto-Mechanic	1	9	7,900	94,800
15. Driver-Mechanic	2	9	7,900	189,600
16. WRF Operator	2	9	7,900	189,600
17. Other skilled/utility worker	2	9	7,900	189,600
Sub-total	12			1,370,880
Canili-Diayo Dam Section				
Head Unit				
18. Principal Engineer	1	22	17,500	210,000
19. Clerk	1	9	7,900	94,800
Sub-total	2			304,800
Electrical/Mechanical Unit				
20. Supervising Engineer	1	18	14,400	172,800
21. Sr Engineer	1	16	12,820	153,840
22. Engineer		14	11,000	
23. Plant Electrician	1	10	8,600	103,200
24. Plant Mechanic	1	10	8,600	103,200
Sub-total	4			533,040
Maintenance Unit				
25. Supervising Engineer	1	18	14,400	172,800
26. Sr Engineer	1	16	12,820	153,840
27. Engineer	1	14	11,000	132,000
28. HE Operator	1	9	7,900	94,800
29. Auto-Mechanic	1	9	7,900	94,800
30. Driver-Mechanic	1	9	7,900	94,800
31. WRF Operator	1	9	7,900	94,800
32. Other skilled/utility worker	1	9	7,900	94,800
Sub-total	8			932,640

Table VI.3.4 Proposed Staffing Pattern on Dam and Reservoir Division, UPRIIS

Watershed Management Section				
Dam and Reservoir	No	SG	Monthly (PHP)	Annual (PHP)
Head Unit				
33. Watershed Mgt. Chief	1	22	17,500	210,000
34. Clerk	1	9	7,900	94,800
Sub-total	2			304,800
Maintenance Unit				
35. Forester	2	16	12,820	307,680
36. Agriculturist	1	16	12,820	153,840
37. Forest Assistant	6	10	8,600	619,200
38. Driver-Mechanic	1	9	7,900	94,800
Sub-total	10			1,175,520
Administrative Section				
39. Administrative Services chief	1	22	17,500	210,000
40. Property & Suply Officer	1	16	12,820	153,840
41. Personnel Officer	1	16	12,820	153,840
42. Sr Accountant	1	16	12,820	153,840
43. Cashier	1	16	12,820	153,840
44. Clerk	1	9	7,900	94,800
45. Security Guard	1	7	7,400	88,800
46. Utility worker	1	7	7,400	88,800
Sub-total	8			1,097,760
TOTAL	59			7,207,920

Table VI.3.5 Redundant Personnel for UPRIIS District Offices

District	I			II			III			IV		
	Proposed	Existing	Def/Exc	Proposed	Existing	Def/Excs	Proposed	Existing	Def/Excs	Proposed	Existing	Def/Excs
1. Irrigation Superintendent	1	1	0	1	1	0	1	1	0	1	1	0
2. Supvg Engineer	2	2	0	2	2	0	2	2	0	2	2	0
3. Sr Engineer	4	3	-1	4	3	-1	4	3	-1	4	3	-1
4. Engineer	1	1	0	1	1	0	1	1	0	1	1	0
5. Engineering Assistant		2	2		1	1		1	1		1	1
6. Sr WRFT/IDOs	25	22	-3	24	17	-7	30	20	-10	24	17	-7
7. WRFT (Operator)	10	9	-1	10	4	-6	10	15	5	10	13	3
8. Agronomist	2		-2	2		-2	2		-2	2		-2
9. Soils specialist	2		-2	2		-2	2		-2	2		-2
10. Utility worker	3	1	-2	3	1	-2	3	2	-1	3	1	-2
11. Auto Mechanic	2	2	0	2	2	0	2	2	0	2	2	0
12. Driver Mechanic	2	4	2	2	5	3	2	7	5	2	6	4
13. HE Operator	2	3	1	2	3	1	2	3	1	2	3	1
14. Survey Aide	1		-1	1	1	0	1	1	0	1		-1
15. Administrative services officer	1	1	0	1	1	0	1	1	0	1	1	0
16. Cashier	1	1	0	1	1	0	1	1	0	1	1	0
17. Sr Accounting Processor	1	1	0	1	1	0	1	1	0	1	1	0
18. Property Officer	1	1	0	1	1	0	1	1	0	1	1	0
19. Records Officer	1		-1	1		-1	1	1	0	1		-1
20. Personnel Officer	1	1	0	1	1	0	1		-1	1	1	0
21. Collection Representative	2	2	0	2	2	0	2	1	-1	2	2	0
22. Accountants	3		-3	3		-3	3		-3	3		-3
23. Clerk	2	4	2	2	4	2	2	3	1	2	3	1

Table VI.3.5 Redundant Personnel for UPRIIS District Offices

District	I			II			III			IV		
	Proposed	Existing	Def/Exc	Proposed	Existing	Def/Excs	Proposed	Existing	Def/Excs	Proposed	Existing	Def/Excs
24. Security Guards	1	3	2	1	3	2	1	3	2	1	3	2
Sub-total	**71**	**64**	**-7**	**70**	**55**	**-15**	**76**	**70**	**-6**	**70**	**63**	**-7**
Others												
25. Draftsman		1			1			1			1	
26. WRF Tender		38			34			62			30	
27. WRF Technician					3			2			1	
28. Transport Dispatcher		1			1						1	
29. Electonic Comm. Ssystems Operator		1			1			1			1	
30. Storekeeper		1			1			1			1	
31. Cashiering Assistant		1			1			1			1	
32. Accounting Processor		9			7			7			6	
33. Foreman		1			1			1			2	
34. Mason/carpenter		2			2			2				
Sub-total		**55**			**52**			**78**			**44**	
Total	**71**	**119**			**107**			**148**			**107**	
		-16			-24			-21			-19	
	(55+9-12)	52		(52+9-20)	41		(78+15-17)	76		(44+12-15)	41	
		4			4			4			4	

Table VI.3.6 Estimate of Redundant Personnel, Dam and Reservoir, UPRIIS

	Proposed	Existing	Def/Excs	
1 Division Manager	1	1	0	
2 Watershed Mgt. Chief	1	1	0	
3 Principal Engineer	2	1	-1	
4 Supervising Engineer	4	1	-3	
5 Sr Engineer	6	8	2	2
6 Engineer	4	4	0	
7 Plant Electrician	3	5	2	2
8 Plant Mechanic	3		-3	
9 HE Operator	2	2	0	
10 Auto-Mechanic	2	2	0	
11 Driver-Mechanic	4	5	1	
12 WRF Operator	3	5	2	
13 Forester	2	2	0	
14 Agriculturist	1	1	0	
15 Forest Assistant	6	6	0	
16 Administrative Services chief	1	1	0	
17 Property & Suply Officer	1	1	0	
18 Personnel Officer	1	1	0	
19 Sr Accountant	1		-1	
20 Cashier	1	1	0	
21 Clerk	5	4	-1	
22 Security Guard	1	1	0	
23 Utility worker	4	31	27	
Sub-total	59	84	25	
Others				
24 Draftsman		1		
25 Transport Electrician		2		
26 Mason		2		
27 Welder		1		
28 Sr Instrument Technician		1		
29 Engineering Assistant		7		2
30 Foreman		4		
31 Electronic Comm. Syst. Opr		4		
32 Carpenter		2		
33 Sheet Metal worker		1		
34 Plant Helper		2		
35 Plumber		1		
36 Sr Accounting Processor		1		1
37 HSD		2		1
38 Cashiering Assistant		1		
39 Nurse		1		
		33		

Deficit	-9
Redundant (33+34-9)	58

FIGURES

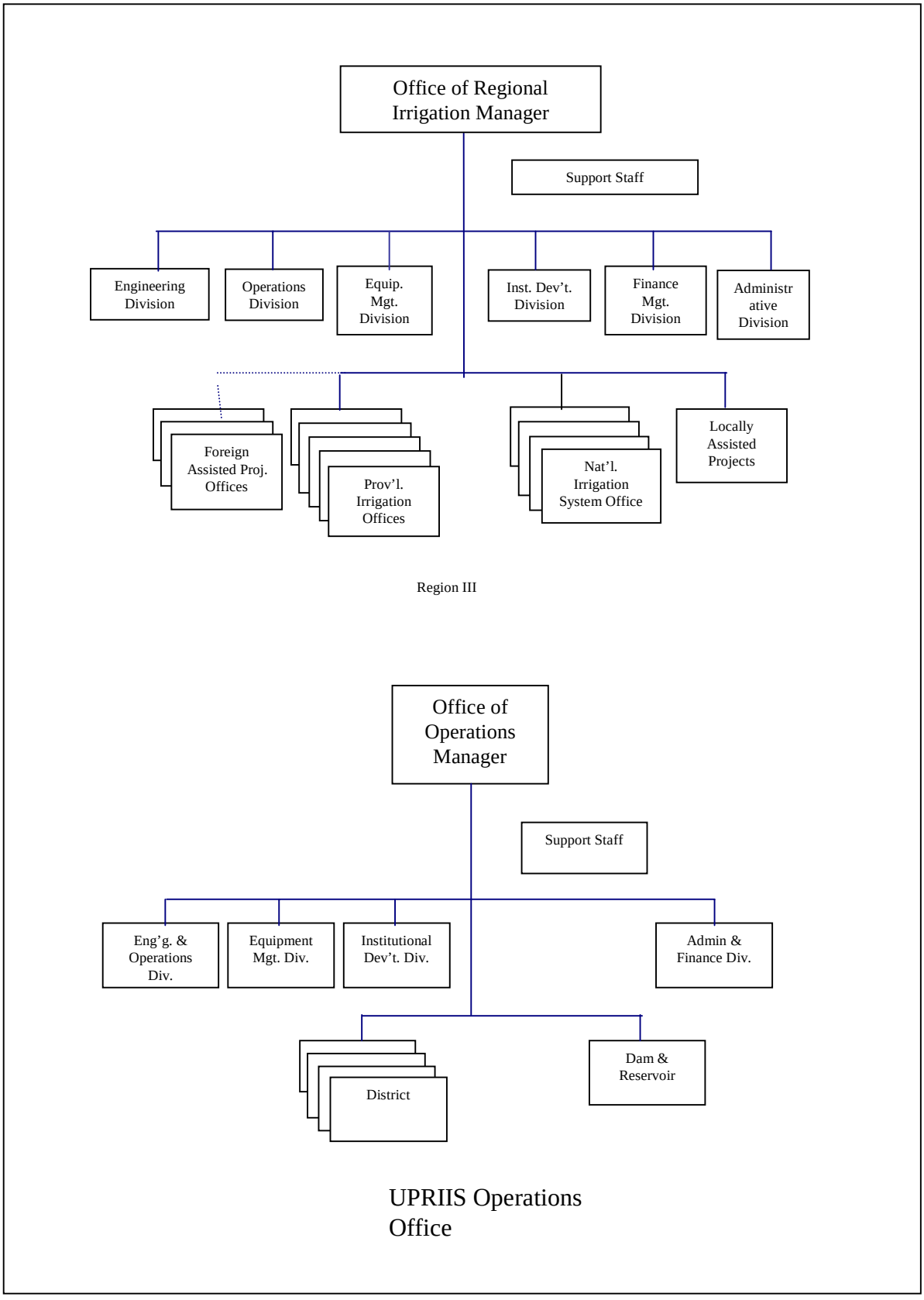

Figure VI.1.1 Existing Organizational Structure of Region III and UPRIIS

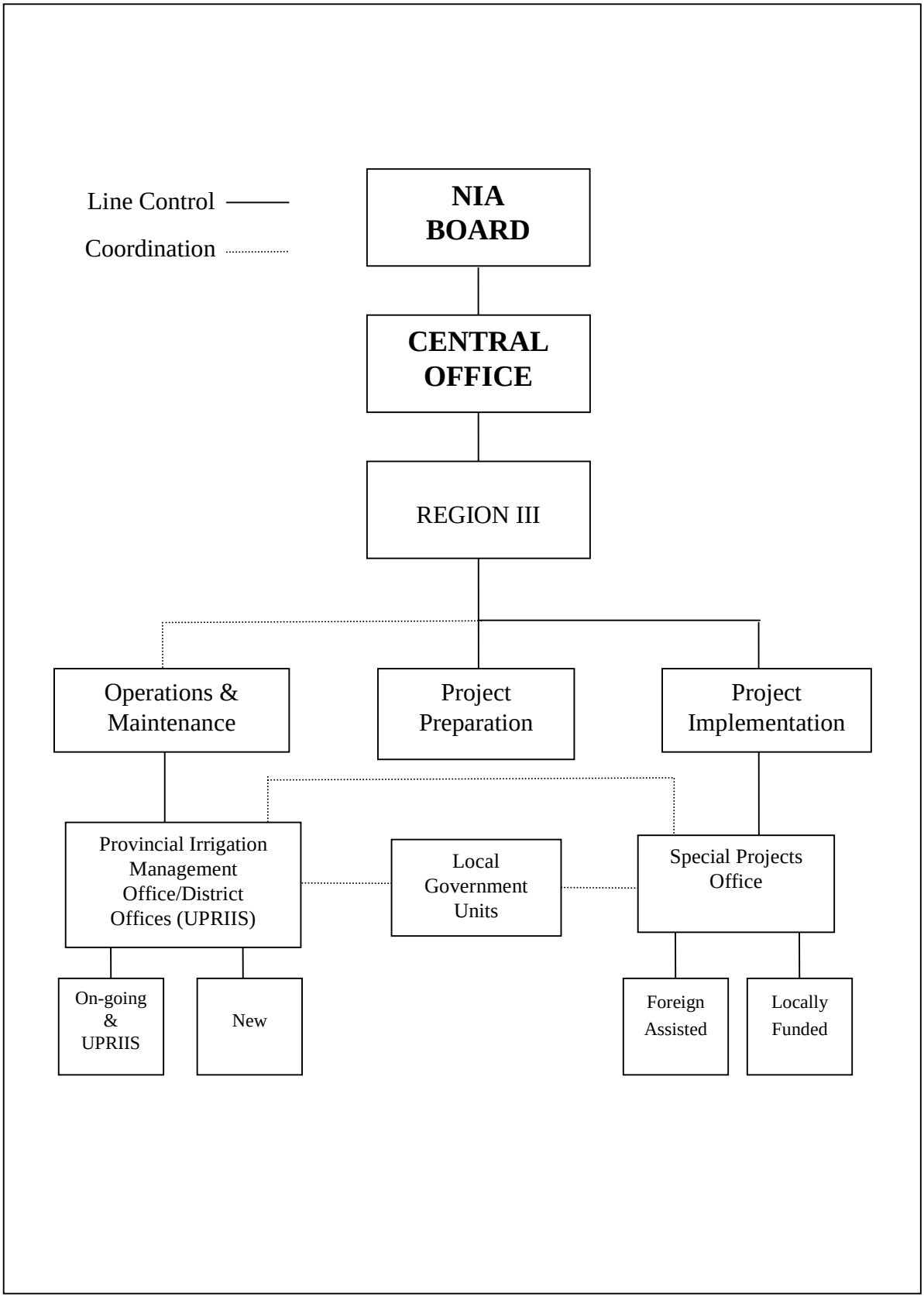

Figure VI.1.2 Organizational Framework for Implementation and Operation and Maintenance o National Irrigation Systems

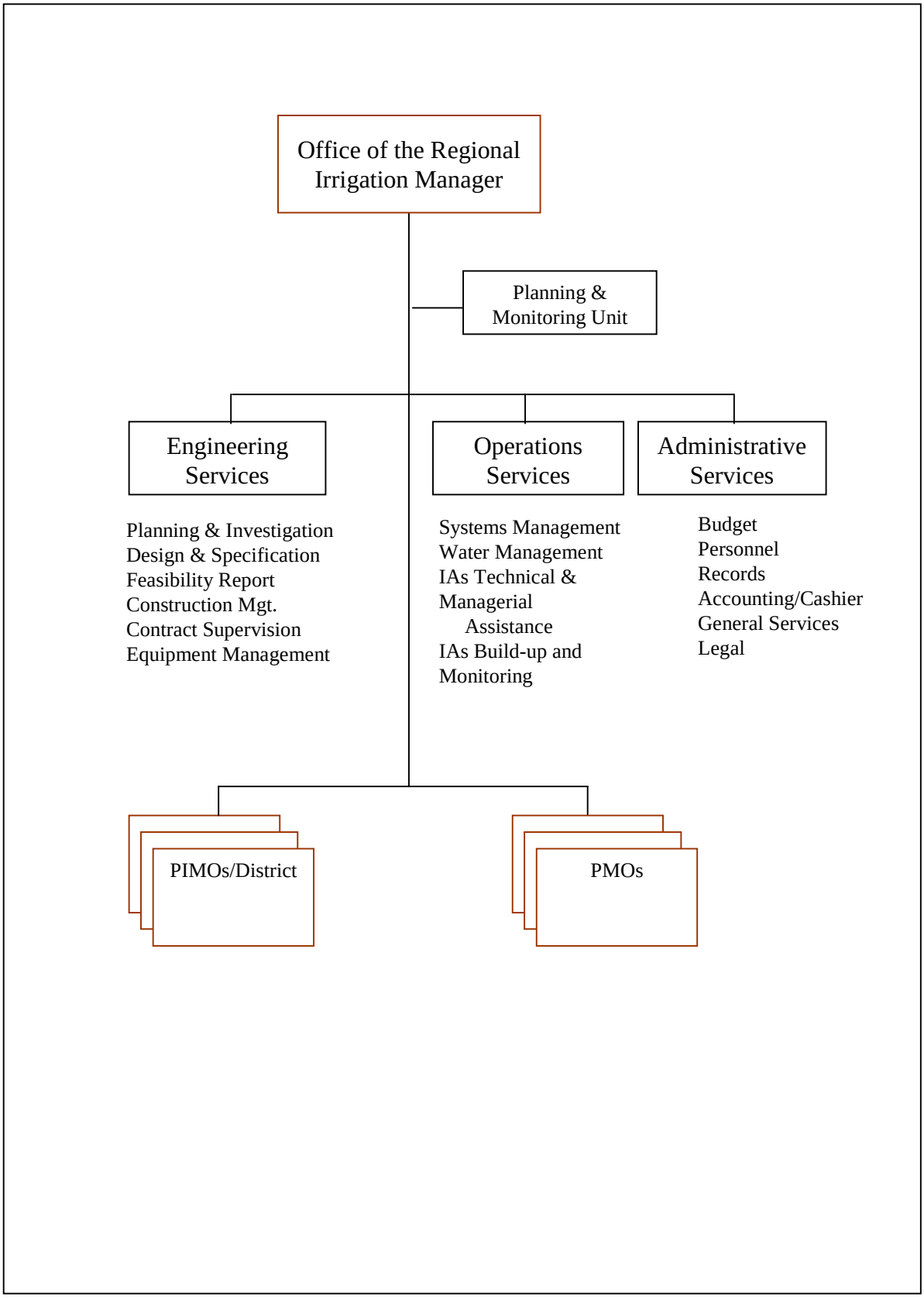

Figure VI.1.3 Proposed Organizational Structure of Combined Region III and UPRIIS

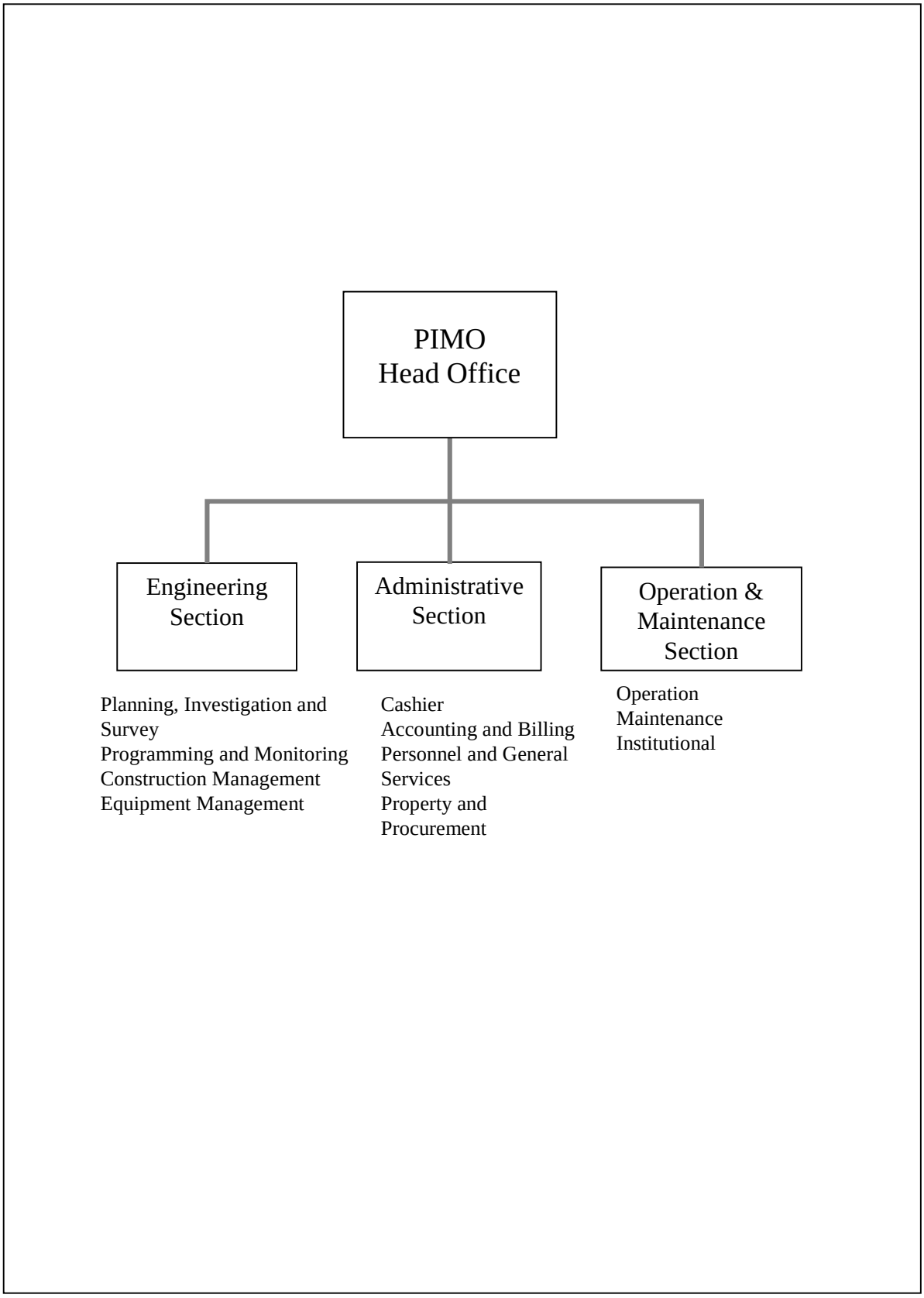

Figure VI.2.1 Existing Organizational Structure of PIMO Pampanga

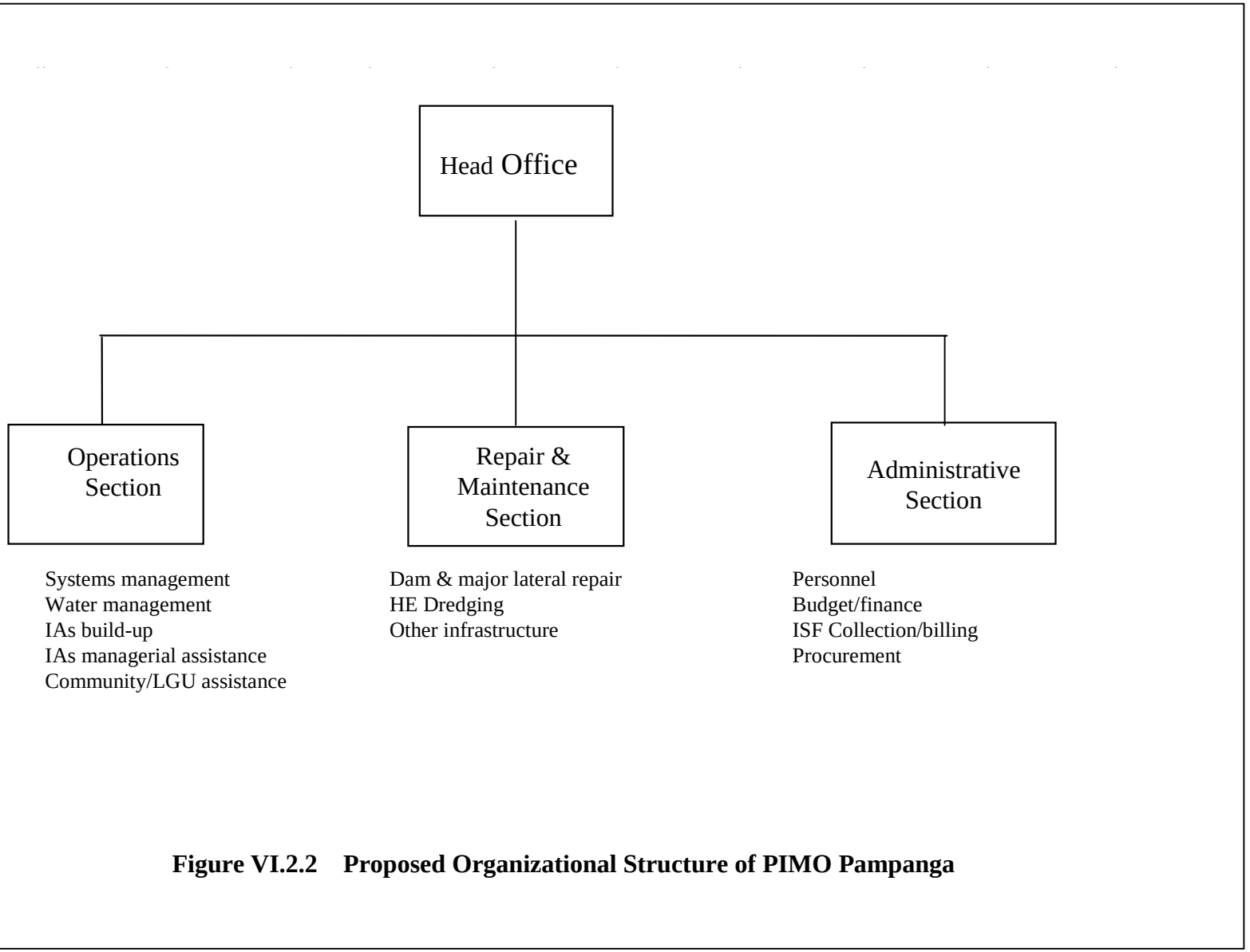

Figure VI.2.2 Proposed Organizational Structure of PIMO Pampanga

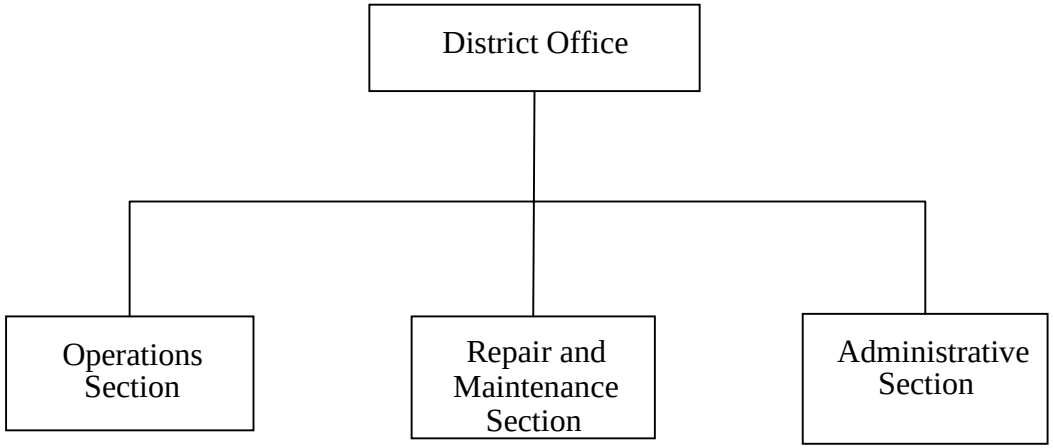

Figure VI.3.1 Existing Organizational Structure of UPRIIS District Offices

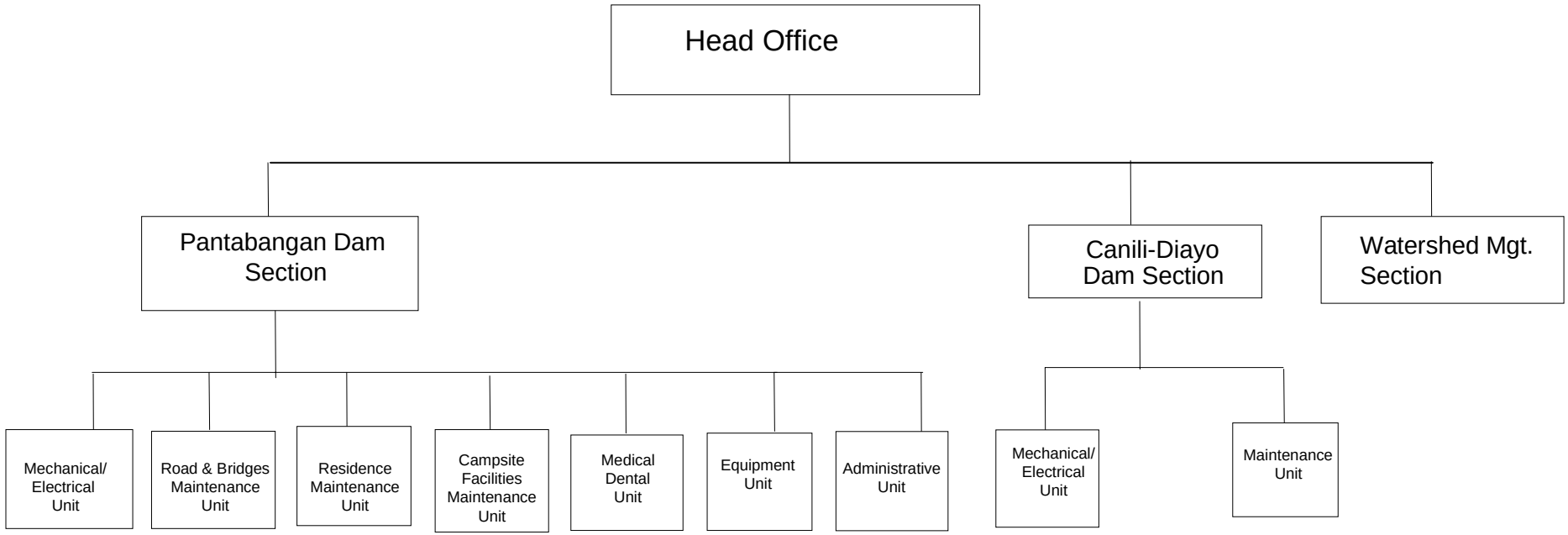

Figure VI.3.2 Existing Organizational Structure of UPRIIS Dam and Reservoir Division

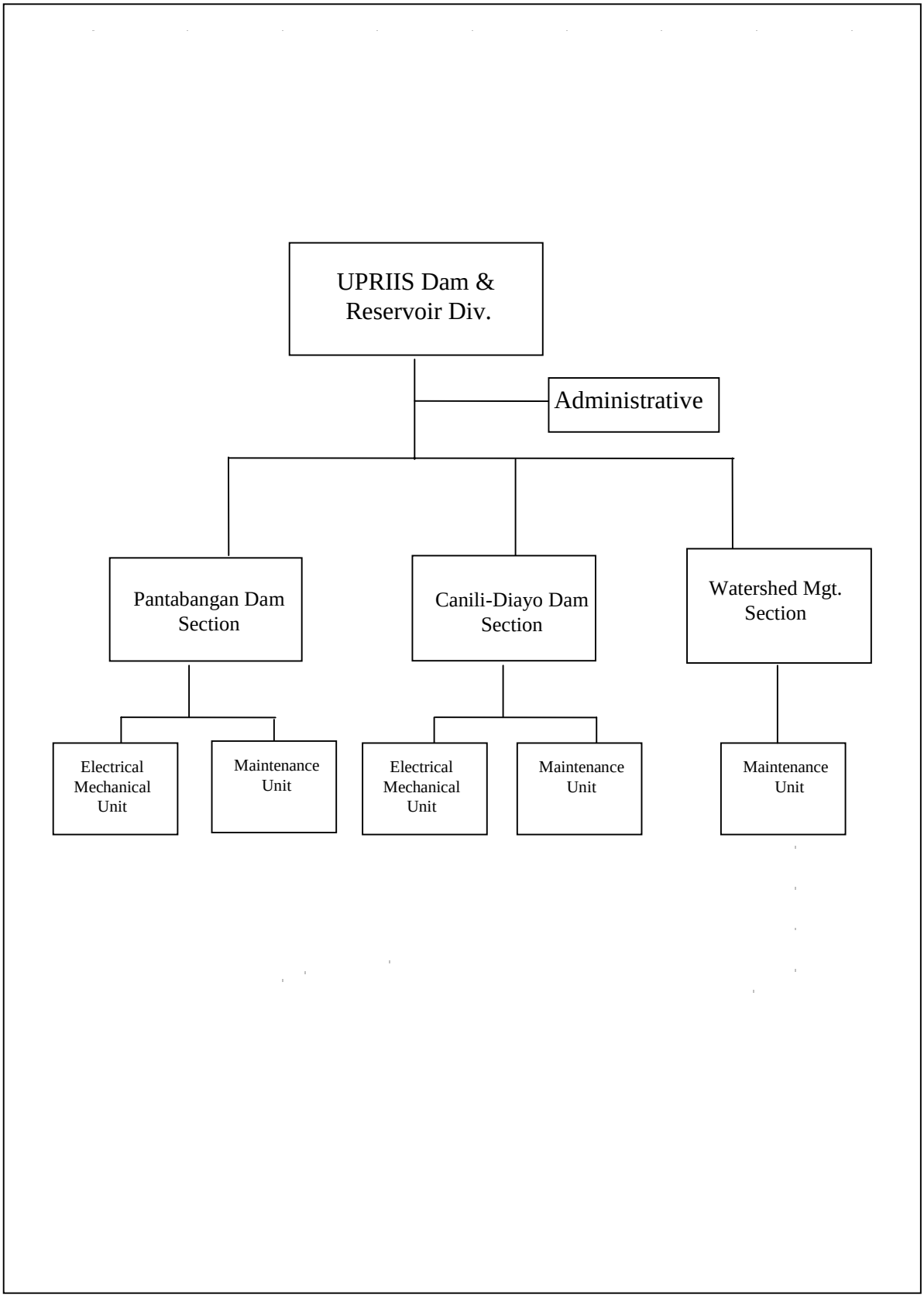

Figure VI.3.3 Proposed Organizational Structure Of UPRIIS Dam and Reservoir Division

APPENDIX VII

REFERENCE DATA

CHAPTER VII REFERENCE DATA

A number of basic data were collected during the course of the Study and the key analyzed data only have been attached to the Main Report in the form of tables and figures.

The other informative data and documents are compiled in this Chapter VII: Reference Data, as follows:

APPENDIX – CHAPTER VII

REFERENCE DATA

TABLE OF DATA AND DOCUMENTS

VII.3 Personnel Data (Functions of NIA's Offices)

VII.4 Legislations Related to NIA Management

VII.5 Status of Implementation of the AFMA of 1997

REFERENCE DATA VII.1

NIA Corporate Plan

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
A. ON-GOING PROJECTS																				
1.Malitubog-Maridagao Irrigation Project	Construction of Diversion Works bridge,siphon irrigation canals and laterals, drainage canals & laterals,on-farm development, project facilities, pilot farms and access roads in Maridagao area (6,625 ha) & Upper Malitubog area (4,215 ha) construction of flood protection dikes & development of strong and effective farmers organization	North Cotabato, Carmen Pagalungan Maguindanao Pikit	OECF	1989	2003	T(P)	2,500,000	1,858,782	111,561	433,960	95,697	-	-	-	-	-	-	641,218	0
						L(P)	1,348,689		58,610	433,960	95,697	-	-	-	-	-	-	588,267	0
						F($)	27,412		1,261	-	-	-	-	-	-	-	-	1,261	0
						New	10,840	764	2,672	4,000	3,404	-	-	-	-	-	-	10,076	0
						Rehab	-		-	-	-	-	-	-	-	-	-	0	0
						Dam Constn	1	37.10%	30%	-	-	-	-	-	-	-	-	0	0
						Bridge Construction	1		50%	-	-	-	-	-	-	-	-	1	0
						Siphon	1		50%	-	-	-	-	-	-	-	-	1	0
						Canals (km)	143	47	13	-	-	-	-	-	-	-	-	13	0
						Roads (km)	182	85	40	28	-	-	-	-	-	-	-	68	0
						Drainage	76	41	25	25	-	-	-	-	-	-	-	50	0
						Pumps			-	-	-	-	-	-	-	-	-	0	0
						On-farm Facilities			-	-	-	-	-	-	-	-	-	0	0
						Pilot farm			-	-	-	-	-	-	-	-	-	0	0
2. Kabulnan Irrigation & Area Development Project	Construction of irrigation & drainage facilities and rural roads to serve 12,030 ha; Program for institutional development, watershed/soil conservation, social infrastructure, and women in development.	Maguindanao Ampatuan, Maganoy, Sultan sa Barongis Datu Piang	ADB	1992	2001	T(P)	1,998,542	1,938,222	25,000	-	-	-	-	-	-	-	-	25,000	0
						L(P)	770,683		25,000	-	-	-	-	-	-	-	-	25,000	0
						F($)	30,696		-	-	-	-	-	-	-	-	-	0	0
						New	12,030	6,165	5,865	-	-	-	-	-	-	-	-	5,865	0
						Rehab	-		-	-	-	-	-	-	-	-	-	0	0
						Canals (km) (Lining)	183	127	56	-	-	-	-	-	-	-	-	56	0
						Drainage	234	213	21	-	-	-	-	-	-	-	-	21	0
						Roads (km)	244	128	-	-	-	-	-	-	-	-	-	0	0
3. Pampanga-Delta Development Project -IC	Construction of Diversion Dams, including supply and erection of gates, irrigation and drainage canals and appurtenant structures and provision of farm and project facilities.	Pampanga Apalit, Arayat, Candaba, Sta Ana, Mexico, San Luis, San Simon	OECF	1992	2003	T(P)	3,407,697	2,414,843	157,925	561,320	319,797	-	-	-	-	-	-	1,039,042	0
						L(P)	870,740		157,925	0	0	-	-	-	-	-	-	157,925	0
						F($)	60,404		0	13,365	7,614	-	-	-	-	-	-	20,979	0
						New	7,209	1,346	4,000	1,000	863	-	-	-	-	-	-	5,863	0
						Rehab	3,331	3,331	0	0	-	-	-	-	-	-	-	0	0
						Dam Constn	1	80.40%	-	-	-	-	-						
						Pumps	6	5	-	-	-	-	-						
						Canals (km)	120	38	30	18	-	-	-	-	-	-	-	48	0
						Drainage	36	49	5	1	-	-	-	-	-	-	-	6	0
						Roads(km)	162	14	60	30									
4. Lower Agusan Development Project -IC	Construction of two pumping plants along Agusan River to supply year-round irrigation to 7,922 ha in Butuan City and Buenavista.	Agusan del Norte Butuan City, Buenavista	OECF	1996	2003	T(P)	2,263,584	1,286,506	75,488	483,520	125,319	-	-	-	-	-	-	684,327	0
						L(P)	788,759		75,488	244,470	125,319	-	-	-	-	-	-	445,277	0
						F($)	30,185		0	5,692	-	-	-	-	-	-	-	5,692	0
						New	7,082	0	3,000	2,000	2,082	-	-	-	-	-	-	7,082	0
						Rehab	840	0	0	840	-	-	-	-	-	-	-	840	0
						Pump Station	2	1	1	-	-	-	-	-	-	-	-	1	0
						Regulating Ponds	2	1	1	-	-	-	-	-	-	-	-	1	0
						Canals (km)	111	4	66	25	-	-	-	-	-	-	-	91	0
						Drainage	116	0	39	15	-	-	-	-	-	-	-	54	0
						Pumps	10	10	6	2	-	-	-	-	-	-	-	8	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
5. Irrigation Systems Improvement Project II	Improvement of 16,105 ha and extension area of 1,609 ha. Improvement of rural roads, monitoring and control and provision of extension services and schistosomiasis control.	Northern Leyte Ormoc City, Palo, Alang-alang, Sta Fe, San Miguel, Dulag, Pastrana, Dagami, Barawen, Julieta, Tabon-tabon, Abuyog	ADB	1997	2003	T(P)	1,883,350	603,125	155,473	728,900	395,849	-	-	-	-	-	-	-	1,280,222	0
						L(P)	703,719		55,204	259,540	144,039	-	-	-	-	-	-	-	458,783	0
						F($)	28,086		2,387	11,175	5,995	-	-	-	-	-	-	-	19,558	0
						New	1,609	70	280	700	559	-	-	-	-	-	-	-	1,539	0
						Rehab	16,105	3,294	4,230	5,000	3,581	-	-	-	-	-	-	-	12,811	0
						Canals (km)	384	131	110	83	-	-	-	-	-	-	-	-	193	0
						Srv Roads	357	38	141	53	-	-	-	-	-	-	-	-	194	0
						Drainage	100	47	32	17	-	-	-	-	-	-	-	-	49	0
						Brg/Access Roads (km)	183	60	65	9	-	-	-	-	-	-	-	-	74	0
						Post Harvest Facilties (No.)	47	7	11	19	-	-	-	-	-	-	-	-	30	0
6. Casecnan Multipur-pose Irrig. & Power Project -IC	Construction of irrigation facilities & improvement of drainage systems in 35,000 ha of farmlands. Establishment of re-use points & intermediate farm ponds both in new & rehab areas. Rehabilitation of irrigation and drainage facilities in UPRIIS. Insti-tutional development in new areas, pilot areas for diversified irrigation	Nueva Ecija: Nampicuan, Guimba, Talugtog, Cuyapo, Munoz Entire UPRIIS area Portions of: Bulacan Pampanga Nueva Vizcaya Quirino	OECF	1997	2004	T(P)	3,495,930	1,278,129	155,048	557,160	718,084	787,509	-	-	-	-	-	-	2,217,801	0
						L(P)	1,407,340		155,048	126,190	116,054	83,003	-	-	-	-	-	-	480,295	0
						F($)	49,728		0	10,261	14,334	16,774	-	-	-	-	-	-	41,369	0
						New	38,000	2,037	8,166	2,850	15,150	9,797	-	-	-	-	-	-	35,963	0
						Rehab	20,000		0	5,000	8,000	7,000	-	-	-	-	-	-	20,000	0
						Div. Work	3		1	1	-	-	-	-	-	-	-	-	2	0
						Canals (km)	524	58	150	150	100	59	-	-	-	-	-	-	459	0
						Drng Canals	372	10	70	70	70	142	-	-	-	-	-	-	352	0
						Road Resurfacing	555	30	150	150	100	90	-	-	-	-	-	-	490	0
7. Tarlac Groundwater Irrigation System Reactivation Project	Rehabilitation of the existing tubewells and installation of pumps & uppurtenant equip-ment construction of additional tubewells.	Tarlac Capaz, Concepcion, Gerona, La Paz, Mayantoc, Moncada, Paniqui, Pura,Ramos, Tarlac & Victoria	OECF	1999	2002	T(P)	632,600	261,300	102,450	259,850	-	-	-	-	-	-	-	-	362,300	0
						L(P)	248,700		40,000	123,700	-	-	-	-	-	-	-	-	163,700	0
						F($)	8,926		1,487	3,242	-	-	-	-	-	-	-	-	4,729	0
						New	2,200	436	956	808	-	-	-	-	-	-	-	-	1,764	0
						Rehab	300	248	44	8	-	-	-	-	-	-	-	-	52	0
						Canals (km)	33	8	-	-	-	-	-	-	-	-	-	-	0	0
						Pumps	50	10	15	17	-	-	-	-	-	-	-	-	32	0
						Irrigation Struc	442	110	-	-	-	-	-	-	-	-	-	-	0	0
						On-farm Facilities			-	-	-	-	-	-	-	-	-	-	0	0
						Institutional Streng-thening (# of IAs)			23	-	-	-	-	-	-	-	-	-	23	0
8. Water Resources Development Project	Improvement of selected existing irrigation system, expand irrigated area, facilitate policy,institutional reform and environmental improvement. Implemented with DENR, NWRB and DOF Cost of all components is P 2.418 B. For NIA and DOH components, total cost is P 1.85 B.	Nationwide	IBRD	1997	2002	T(P)	2,418,223	1,071,733	245,993	534,370	-	-	-	-	-	-	-	-	780,363	0
						L(P)	748,075		50,993	35,930	-	-	-	-	-	-	-	-	86,923	0
						F($)	50,730		4,643	11,868	-	-	-	-	-	-	-	-	16,510	0
						New	3,125	408	639	2,078	-	-	-	-	-	-	-	-	2,717	0
						Rehab	62,646	30,658	6,688	25,300	-	-	-	-	-	-	-	-	31,988	0
						Canals (km)	1,382	500	359	629	-	-	-	-	-	-	-	-	988	0
						Drainage	513	154	108	199	-	-	-	-	-	-	-	-	307	0
						Silt Excluders	8	0	5	-	-	-	-	-	-	-	-	-	5	0
						Repair of Structures	9	0	5	-	-	-	-	-	-	-	-	-	5	0
						Erosion Control	1,142	0	400	383	-	-	-	-	-	-	-	-	783	0
						Schistosomiasis Control	3	0	1	-	-	-	-	-	-	-	-	-	1	0
						Sediment Monitoring	3	0	3	-	-	-	-	-	-	-	-	-	3	0
						Environment Monitoring	1	0	-	-	-	-	-	-	-	-	-	-	0	0
						Institutional Streng-thening	8	0	-	8	-	-	-	-	-	-	-	-	8	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
9. Southern Philippines Irrigation Sector Project	Construction and improvement of small-to-medium scale irrigation systems, strengthen O&M through beneficiary participation & institutional capacity of executing agencies. Construction of four core proj. Calayagon CIP (250 ha) Gibong RIP (665 ha),Malaig RIP (2,750 ha) & Can-Asujan SRIP (950 ha). Subprojects consist of 6 NIPs, 2 CIPs & 3 SRIPs. Other components include environmental & social measures & institutional development.	Core Projects: Agusan del Sur Buenavista Agusan Norte; Prosperidad Lanao del Sur Butiq Cebu Carcar Subprojects: To be selected in Agusan del Norte & Sur, ARMM, Regions 6 & 7	ADB	2000	2006	T(P)	4,065,364	165,732	160,732	541,680	996,342	1,247,033	661,937	291,908	-	-	-	-	3,899,632	291,908
						L(P)	1,730,964		75,732	189,290	395,485	529,699	283,118	191,908	-	-	-	-	1,665,232	191,908
						F($)	55,581		2,024	8,390	14,306	17,079	9,020	2,381	-	-	-	-	53,200	2,381
						New	12,195		0	260	995	4,010	2,900	4,030	-	-	-	-	12,195	4,030
						Rehab	2,970		270	0	467	1,065	1,168	0	-	-	-	-	2,970	0
10. Bohol Irrigation Project II	Construction of fill-type dam at Bayongan to irrigate 4,140 ha and link canal to supplement the water supply of Capayas Reservoir to irrigate 1,160 ha; Canal network and on-farm development works will be undertaken.	Bohol Ubay, San Miguel, Trinidad	OECF	2000	2005	T(P)	2,384,000	70,000	80,000	407,230	613,000	500,000	713,770	-	-	-	-	-	2,314,000	0
						L(P)	748,000		50,000	154,840	213,000	100,000	190,160	-	-	-	-	-	708,000	0
						F($)	38,952		714	6,009	9,524	9,524	12,467	-	-	-	-	-	38,238	0
						New	4,550	0	0	900	1,200	1,000	1,450	-	-	-	-	-	4,550	0
						Rehab	750	0	550	-	-	200	-	-	-	-	-	-	750	0
						Dam Constn	1	0	60%	40%	-	-		-	-	-	-	-	1	0
						Canals (km)	80	0	-	20	20	30	10	-	-	-	-	-	80	0
						Drainage Canals	65	0	5	10	15	15	20	-	-	-	-	-	65	0
						Land leveling V Works	2,800	0	200	500	500	1,000	600	-	-	-	-	-	2,800	0
11.San Roque Multipurpose Irrigation Project	Modification of existing Agno RIS diversion dam, enlargement of existing main canals & laterals, construction of new irrigation distribution and drainage facilities for about 23,700 ha of new area & rehab & improvement of existing Agno RIS, LARIS and AMDRAS.	Pangasinan Basista, Binmaley, Urbiztondo, Bayambang, Calasiao, Mapandan, Malasiqui, San Carlos C. Sta. Barbara, Dagupan City, Laoac,Alcala, Manaoag, Mangaldan, Bautista, Binalonan, Sto. Tomas, Urdaneta City, Villasis, Asingan, Balungao, Natividad, Rosales, San Manuel, San Nicolas, San Quintin, Sta. Maria, Tayug Tarlac: Moncada, San Manuel	JBIC	1999	2008	T(P)	8,634,040	250,000	-	63,100	700,000	700,000	1,860,900	1,900,000	1,800,000	1,610,040	-	-	8,634,040	5,310,040
						L(P)	8,634,040		-	63,100	700,000	700,000	1,860,900	1,900,000	1,800,000	1,610,040	-	-	8,634,040	5,310,040
						F($)	0		-	0	0	0	0	0	0	0	-	-	0	0
						New	23,700		-	0	0	0	4,000	5,000	5,000	9,700	-	-	23,700	19,700
						Rehab	47,100		-	0	4,000	4,000	9,500	10,000	10,000	11,000	-	-	48,500	31,000
						Costs include P250 M released in 1999 was for detailed design.														

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
12. Balog-Balog Multipurpose Project	Construction of a 113-m high earth and rockfill dam across Bulsa River to generate electricity & provide year-round irrigation water to a service area of about 39,150 ha. New irrigation facilities and appurtenant structures will be provided and existing areas rehabilitated to include the drainage network.	Tarlac Concepcion, Gerona, Ramos, Tarlac, La Paz, Paniqui, Victoria, Pura	GAA	1999	2008	T(P)	12,028,368	650,000	100,000	175,611	600,000	600,000	2,500,000	2,500,000	2,350,000	2,024,389	-	-	10,850,000	6,874,389
						L(P)	12,028,368		100,000	175,611	600,000	600,000	2,500,000	2,500,000	2,350,000	2,024,389	-	-	10,850,000	6,874,389
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	24,849	0	-	-	1,000	1,000	4,500	5,000	6,349	7,000	-	-	24,849	18,349
						Rehab	14,301	3,839	800	0	1,000	1,000	1,000	1,000	2,662	3,000	-	-	10,462	6,662
						Dam	1	0	50%	-	-	-	-	-	-	-	-	-	1	0
						Repair of Diversion Dam	1	0	-	-	-	-	-	-	-	-	-	-	0	0
						Intake & Canal	2	0	1	-	-	-	-	-	-	-	-	-	1	0
						Siphon	2	0	-	1	1	-	-	-	-	-	-	-	2	0
13. Apayao-Abulog Irrigation Systems Improvement Project	Construction of 1.8-m high ogee type dam across Abulog River, irrigation & drainage facilities, rehab of existing canals and structures	Cagayan: Pamplona, Abulog, Ballesteros, Aparri, Allacapan Apayao: Pudtol, Flora, Luna, Sta. Marcela	GAA	1996	2003	T(P)	850,000	546,778	200,000	75,000	28,222	-	-	-	-	-	-	-	303,222	0
						L(P)	850,000		200,000	75,000	28,222	-	-	-	-	-	-	-	303,222	0
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	6,465	0	1,000	3,400	1,565	-	-	-	-	-	-	-	5,965	0
						Rehab	10,535	500	9,000	1,035	-	-	-	-	-	-	-	-	10,035	0
						Dam Construct	1	100.00%	-	-	-	-	-	-	-	-	-	-	0	0
						Canals (km)	269	8	190	-	-	-	-	-	-	-	-	-	190	0
						Drainage	201	0	150	-	-	-	-	-	-	-	-	-	150	0
						Roads (km)	250	39	141	-	-	-	-	-	-	-	-	-	141	0
						Project Facilities														
						Terminal Facilities														
						Institutional Dev't														
14. Addalam River Irrigation Project	Construction of an overflow type, ogee-shaped rubble masonry diversion dam across Addalam River; Construction of canal distribution system, drainage network, access and service roads.	Quirino Aglipay & Saguday Isabela Echague & Jones	GAA	1997	2003	T(P)	993,994	239,986	175,000	74,500	504,508	-	-	-	-	-	-	-	754,008	0
						L(P)	993,994		175,000	74,500	504,508	-	-	-	-	-	-	-	754,008	0
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	5,830	0	0	0	5,830	-	-	-	-	-	-	-	5,830	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
						Diversion Dam	1	0	25%	25%	25%	-	-	-	-	-	-	-	1	0
						Canals (km)	520	22	20	27	26	-	-	-	-	-	-	-	73	0
						Roads (km)	119	20	18	21	22	-	-	-	-	-	-	-	61	0
						Institutional Dev't			-	-	-	-	-	-	-	-	-	-	0	0
15. Itbayat Integrated Agric'l Dev't Project	Construction of facilities to divert water from Cabaywan River to irrigate 200 hectares of farmlands in Itbayat.	Batanes Itbayat	GAA	1996	2002	T(P)	132,620	105,713	17,000	9,907	15,000	-	-	-	-	-	-	-	41,907	0
						L(P)	132,620	CY 2003 allotment is	17,000	9,907	15,000	-	-	-	-	-	-	-	41,907	0
						F($)	-	for Batan Island	-	-	-	-	-	-	-	-	-	-	0	0
								Irrig. Dev't Program												
						New	200		50	150	-	-	-	-	-	-	-	-	200	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
16. Catubig Irrigation Project	Repair & improvement of Irawahan & Hibubullao CISs & construction of Palapag CIP.	Northern Samar Catubig, Las Navas, Palapag, Laoang	GAA	1996	2003	T(P)	243,500	109,404	45,000	-	89,096	-	-	-	-	-	-	-	134,096	0
						L(P)	243,500		45,000	-	89,096	-	-	-	-	-	-	-	134,096	0
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	950	250	0	-	700	-	-	-	-	-	-	-	700	0
						Rehab	1,010	400	200	-	410	-	-	-	-	-	-	-	610	0
						Roads (km)	21	11	5	-	5	-	-	-	-	-	-	-	10	0
						IA Strengthening														
17. Dolores Irrigation Project	Rehabilitation & restoration of Jicontol CIS, construction of Sulong SRIP.	Eastern Samar Dolores, Jicontol, Hinolaso, Gap-ang, Can-avid Sulong	GAA	1996	2004	T(P)	560,000	178,051	80,000	-	100,000	201,949	-	-	-	-	-	-	381,949	0
						L(P)	560,000		80,000	-	100,000	201,949	-	-	-	-	-	-	381,949	0
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	1,629	445	350	-	250	584	-	-	-	-	-	-	1,184	0
						Rehab	500	500	0	-	-	-	-	-	-	-	-	-	0	0
						Canals (km)	15	14	5	-	5	5	-	-	-	-	-	-	15	0
						Drainage	45	10	5	-	5	10	-	-	-	-	-	-	20	0
						Roads (km)	62	30	4	-	-	4	-	-	-	-	-	-	8	0
						Pumps (#)	7	7	-	-	-	-	-	-	-	-	-	-	0	0
						IA Strengthening														
						Project Facilities														

VII.1 NIA Irrigation Development Program : 2001 to 2010

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NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
18. Basey Irrigation Project	Construction of irrigation facilities to divert water from Bugasan River to irrigate 3,000 ha in Basey. (Phase I and II)	Western Samar Basey	GAA	1996	2006	T(P)	700,500	82,186	-	-	120,000	130,000	250,000	118,314	-	-	-	-	618,314	118,314
						L(P)	700,500		-	-	120,000	130,000	250,000	118,314	-	-	-	-	618,314	118,314
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	3,000	15	-	-	500	650	1,150	685	-	-	-	-	2,985	685
						Rehab	-	0	-	-	-	-	-	-	-	-	-	-	0	0
						Canals (km)	66	0	-	-	15	15	24	12	-	-	-	-	66	12
						Drainage	110	9	-	-	8	8	16	3	-	-	-	-	35	3
						Roads (km)	39	9	-	-	6	6	11	5	-	-	-	-	28	5
						Divrsn Works	1	0	-	-	-	-	-	-	-	-	-	-	0	0
						IA Strengthenir Proj Fclts	100%	8%	-	-	20%	24%	35%	10%	-	-	-	-	1	0
19 Bubunawan Irrigation Project	Construction of two diversion dams & appurtenant structures. One diversion dam would be constructed across Bubunawan River to serve 2,000 ha located at the the left bank. The other diversion dam would be constructed across Tumalaong River to serve 1,000 ha. Canal distribution system consists of an 18 km main canal & 11 km lateral & sub-lateral canals.	Bukidnon Libuna, Baungon	GAA	1996	2003	T(P)	500,000	244,248	100,000	63,100	92,652	-	-	-	-	-	-	-	255,752	0
						L(P)	500,000		100,000	63,100	92,652	-	-	-	-	-	-	-	255,752	0
						F($)	0		-	-	-	-	-	-	-	-	-	-	0	0
						New	3,000	0	2,000	350	650	-	-	-	-	-	-	-	3,000	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
20. Aulo Irrigation Project	Construction of small water impounding dams & its appur-tenant structures to store water for irrigation & provision of irrigation & drainage & on farm facilities.	Palayan City	GAA	1996	2003	T(P)	294,200	60,239	30,000	35,200	168,761	-	-	-	-	-	-	-	233,961	0
						L(P)	294,200		30,000	35,200	168,761	-	-	-	-	-	-	-	233,961	0
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						Dam Construction			-	-	-	-	-	-	-	-	-	-	0	0
						New	810		0	0	810	-	-	-	-	-	-	-	810	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
21. Grain Sector Development Program -IC	Rehabilitation & expansion of National Irrigation Systems & Communal Irrigation Systems covering about 18,500 has. located in 8 identified grain trading sub-system areas.	Nationwide	ADB	2001	2006	T(P)	2,232,200		-	317,870	565,000	565,000	537,200	247,130	-	-	-	-	2,232,200	247,130
						L(P)	727,234		-	139,290	185,150	185,150	178,148	39,496	-	-	-	-	727,234	39,496
						F($)	35,833		-	4,252	9,044	9,044	8,549	4,944	-	-	-	-	35,833	4,944
						New	1,544		-	-	1,160	0	362	22	-	-	-	-	1,544	22
						Rehab	16,456		-	-	4,184	5,284	4,398	2,590	-	-	-	-	16,456	2,590
22. Small Reservoir Irrigation Project (SRIP)	Construction of small water impounding dams and its uppurtenant structures to store water for irrigation & provision of irrigation & drainage and on farm facilities.	Nationwide	GAA	1989	2009	T(P)	7,985,100	1,232,599	78,000	89,300	300,000	300,000	1,000,000	1,371,912	1,402,589	1,300,000	910,700	-	6,752,501	4,985,201
						L(P)	7,985,100		78,000	89,300	300,000	300,000	1,000,000	1,371,912	1,402,589	1,300,000	910,700	-	6,752,501	4,985,201
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						Dam construction														
						New	68,298	5,873	1,095	0	2,000	2,000	10,000	12,000	12,000	13,330	10,000	-	62,425	47,330
						Rehab	25,102	7,783	0	0	0	0	2,000	4,000	5,319	6,000	-	-	17,319	15,319
						Service/Access Roads														

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
23. Repair, rehab of existing groundwater irrigation Systems, Establish-ment of Groundwater Pump Proj. (Pump Irrig. Development Program)	Rehabilitation/repair and improvement of groundwater pump irrigation projects to sustain the operation of the existing wells. Construction & installation of new deep wells and shallow tubewells nationwide. (Includes P10M allocation for pump irrigation projects for CY 2000)	Nationwide	GAA	1996	2009	T(P)	4,103,044	594,114	50,000	63,100	200,000	200,000	657,347	655,422	665,766	576,840	440,455	-	3,508,930	2,338,483
						L(P)	4,103,044		50,000	63,100	200,000	200,000	657,347	655,422	665,766	576,840	440,455	-	3,508,930	2,338,483
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	49,680	13,321	1,373	400	3,479	3,479	6,970	6,150	5,971	5,441	3,096	-	36,359	20,658
						Rehab	8,000	1,461	196	220	1,491	1,491	1,333	537	671	600	0	-	6,539	1,808
24. Repair, Rehab, Restoration & Preventive Maintenance of existing National & Communal Irrigation Facilities	A. Rehabilitation of irrigation facilities and structures of NISs & CISs (non-functional areas) (Balikatan Sagip Patubig Program)	Nationwide	GAA			T(P)	2,000,000		-	1,500,000	500,000	-	-	-	-	-	-	-	2,000,000	0
						L(P)	2,000,000		-	1,500,000	500,000	-	-	-	-	-	-	-	2,000,000	0
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	0		-	-	-	-	-	-	-	-	-	-	0	0
						Rehab	63,060		-	47,295	15,765	-	-	-	-	-	-	-	63,060	0
	B. Preventive maintenance of existing irrigation facilities & structures in NIS.Activities include minor repairs of measuring & control structures	Nationwide	GAA			T(P)	1,363,100	Annual	100,000	63,100	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,363,100	750,000
						L(P)	1,363,100	Program	100,000	63,100	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,363,100	750,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						Preventive Maintenance of Irrig facilities			35,760	20,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	535,760	300,000
						Activities include:														
						Desilting of Irrig. Canals (km/cu.m.)														
						Canal Lining or Reshaping (km)														
						Raising of Embankment (km/cu.m.)														
						Grouted Ripraping (km/cu.m.)														
						Construction of New Canals (km)														
						Clearing and Weeding (km/cu.m.)														
						Construction & Modification of Turn-outs (No.)														
						Repair of Diversion Structures (No.)														
						Repair of Irrigation Structures (No.)														
						Repair/Inst. of Steel Gates,Flash Boards,Staff Guages (No.)														
						Installation of Reinforcing Concrete Pipes														
						Repair of Transmission lines														
25. Repair & Rehab of Existing Service & Access Roads	Rehabilitation and repair of existing service and farm to market roads to facilitate the movement of farm produce & inputs, as well as farm equipment.	Nationwide	GAA			T(P)	1,337,275	Annual	95,000	42,275	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,337,275	750,000
						L(P)	1,337,275	Program	95,000	42,275	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,337,275	750,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						Road Repair (km of roads)	16,469		1,189	280	1,875	1,875	1,875	1,875	1,875	1,875	1,875	1,875	16,469	9,375

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
26. Rehab, Repair and Improvement of Drainage & Flood Protection System in CIS & NIS	Construction of drainage & flood protection measures to increase cropping intensities in NIS & CIS.	Nationwide	GAA			T(P)	1,331,000	Annual Program	90,000	41,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,331,000	750,000
						L(P)	1,331,000		90,000	41,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,331,000	750,000
						F($)	0		-	-	-	-	-	-	-	-	-	-	0	0
						Repair of Drainage	14,560 (km canals)		180	40	300	300	300	300	300	300	300	300	2,620	1,500
27. Feasibility Study, Detailed Eng'g of Proposed Projects	Preparation of potential projects for implementation.	Nationwide	GAA			T(P)	948,300	Annual Program	100,000	48,300	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	948,300	500,000
						L(P)	948,300		100,000	48,300	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	948,300	500,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
28. Agri-Institutional Dev't Program, Nationwide	Organization and training of Irrigators' Associations to develop and strengthen their capabilities for O&M of NISs and CISs.	Nationwide	GAA			T(P)	553,800	Annual Program	30,000	43,800	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	553,800	300,000
						L(P)	553,800		30,000	43,800	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	553,800	300,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
Sub-Total A (On-going Projects)						T(P)	71,840,331		2,559,670	7,213,153	7,857,327	5,841,491	8,791,154	7,694,686	6,828,355	6,121,269	1,961,155	610,000	55,478,260	23,215,465
						L(P)	54,651,744		2,034,000	4,094,503	5,302,983	3,639,801	7,529,673	7,387,052	6,828,355	6,121,269	1,961,155	610,000	45,508,791	22,907,831
						F($)	416,534		12,516	74,254	60,818	52,421	30,035	7,325	0	0	0	0	237,368	7,325
						New	288,795		31,446	18,896	42,197	22,520	31,332	32,887	29,320	35,471	13,096	0	257,165	110,774
						Rehab	293,006		21,978	84,698	38,898	20,040	19,399	18,127	18,652	20,600	0	0	242,392	57,379
						Preventive Maintenance in NISs	0		35,760	20,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	535,760	300,000
						Sust. O&M	0		0	0	0	0	0	0	0	0	0	0	0	0
						Urgent Rep.	0		0	0	0	0	0	0	0	0	0	0	0	0
						Canals (km)	3,830		999	952	166	109	34	12	0	0	0	0	2,272	12
						Drainage	16,428		641	377	398	475	336	303	300	300	300	300	3,729	1,503
						Roads (km)	1,619		474	141	33	10	11	5	0	0	0	0	674	5

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
B. PIPELINE PROJECTS																				
1. Bago RIS Rehab & Improvement Project	The project aims to improve the operating capability of the Bago RIS thru 5 major compo-nents: system rehabilitation/ improvement, improved water management, institutional dev't. IA dev't.& watershed management & protection.	Negros Occidental Bago City, Murcia, Pulupandan, La Carlota, Valladolid, San Enrique, Bacolod City Pontevedra	JBIC	2002	2005	T(P)	958,697		-	132,030	300,000	300,000	226,667	-	-	-	-	-	958,697	0
						L(P)	681,386		-	95,720	200,000	162,689	222,977	-	-	-	-	-	681,386	0
						F($)	6,603		-	865	2,381	3,269	88	-	-	-	-	-	6,603	0
						New	1,325		-	0	0	325	1,000	-	-	-	-	-	1,325	0
						Rehab	11,952		-	0	3,525	3,500	4,927	-	-	-	-	-	11,952	0
						Improvement	-													
2. Help for Catubig Agric'l Advancement Project Stage I	Construction of 4 irrigation systems with an area of 4,550 ha, flood protection & drainage facilities, improvement of rural infrastructure, schisto-somiasis control and other agricultural support services.	Northern Samar Catubig, Laoang, Los Navas	JBIC	2002	2008	T(P)	2,480,989	FS completed	-	145,000	236,994	546,002	650,000	550,000	352,993	-	-	-	2,480,989	902,993
						L(P)	620,299	DE on-going	-	40,950	65,422	137,380	150,000	150,000	76,547	-	-	-	620,299	226,547
						F($)	44,302		-	2,477	4,085	9,729	11,905	9,524	6,582	-	-	-	44,302	16,106
						New	4,550		-	0	800	1,000	1,000	1,000	750	-	-	-	4,550	1,750
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
3. Banaoang Irrigation Project	Construction of pumping station 150 m upstream of Banaoang Bridge with 7 units of pumps each with capacity of 1.75 cms; construction of 20.6 km main canal and network of lateral and sublateral canals	Ilocos Sur Vigan, Magsingal, San Vicente, Bantay, San Ildefonso, Sto. Domingo	GAA	2002	2006	T(P)	1,477,430	FS completed	-	-	211,504	300,000	630,000	335,926	-	-	-	-	1,477,430	335,926
						L(P)	822,200	DE on-going	-	-	113,215	100,000	360,000	248,985	-	-	-	-	822,200	248,985
						F($)	15,601	Submitted to ICC	-	-	2,340	4,762	6,429	2,070	-	-	-	-	15,601	2,070
						New	6,000		-	-	0	0	2,000	4,000	-	-	-	-	6,000	4,000
						Rehab	0		-	-	-	-	-	-	-	-	-	-	0	0
4. Angat Afterbay Regulatory Dam		Bulacan		2002	2003	T(P)	590,280		-	10,000	30,000	-	-	-	-	-	-	-	40,000	0
						L(P)	90,000		-	10,000	30,000	-	-	-	-	-	-	-	40,000	0
						F($)	11,911		-	-	-	-	-	-	-	-	-	-	0	0
5. Balingasag Irrigation Project	Construction of concrete diversion weir 1.5 m high with a span of 551 m. across the Balatucan River.	Misamis Or. Balingasag	GAA	2002		T(P)	150,000	Pre FS	-	-	150,000	-	-	-	-	-	-	-	150,000	0
						L(P)	150,000	completed	-	-	150,000	-	-	-	-	-	-	-	150,000	0
						F($)	-	DE completed	-	-	-	-	-	-	-	-	-	-	0	0
						New	2,000		-	-	2,000	-	-	-	-	-	-	-	2,000	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
6. Agricul-tural Productivity Improvement and Environmental Conservation in Lubang Island	Provision of stable irrigation water (through surface and groundwater) for CIPs covering 1,500 ha, recharging wells to maintain groundwater resources post-harvest facilities, and social infrastructure	Occ. Mindoro Lubang Looc	JICA grant	2003	2004	T(P)	252,630	Survey	-	-	101,052	151,578	-	-	-	-	-	-	252,630	0
						L(P)	25,263	ongoing	-	-	10,105	15,158	-	-	-	-	-	-	25,263	0
						F($)	5,414		-	-	2,165	3,248	-	-	-	-	-	-	5,414	0
						New	1,500		-	-	0	1,500	-	-	-	-	-	-	1,500	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
7. Rizal (Aliog) Irrigation Project	Involves use of transbasin conveyance system; contruction of a 3-m deflatable rubber dam diversion tunnel, networks of water conveyance, drainage channels and service roads along the main canals and laterals.	Kalinga Rizal	GAA	2003	2006	T(P)	465,700	FS completed	-	-	50,000	100,000	190,700	125,000	-	-	-	-	465,700	125,000
						L(P)	193,300	DE ongoing	-	-	50,000	50,000	68,300	25,000	-	-	-	-	193,300	25,000
						F($)	6,486	Submitted to ICC	-	-	0	1,190	2,914	2,381	-	-	-	-	6,486	2,381
						New	1,465		-	-	0	465	500	500	-	-	-	-	1,465	500
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
8. Rehabilitation of CIADP	Project revolves the improvement of intake facilities and rehabilitation of pumps for IAAPIS and Magapit PIS, to make these systems fully operational. Equipment will also be provided.	Cagayan Iguig,Lallo, Amulong, Alcala, Aparri, Camalaniugan, Buguey	Grant JICA	2003	2005	T(P)	376,000	Submitted to ICC	-	-	40,000	40,000	296,000	-	-	-	-	-	376,000	0
						L(P)	376,000		-	-	40,000	40,000	296,000	-	-	-	-	-	376,000	0
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	-		-	-	-	-	-	-	-	-	-	-	0	0
						Rehab	14,551		-	-	0	0	14,551	-	-	-	-	-	14,551	0
9. Procurement of Pumps, Drilling Rigs & Related Equipment			Spanish Grant	2003	2005	T(P)	892,920		-	-	30,000	60,000	90,000	-	-	-	-	-	180,000	0
						L(P)	180,000		-	-	30,000	60,000	90,000	-	-	-	-	-	180,000	0
						F($)	16,974		-	-	-	-	-	-	-	-	-	-	0	0
10.Malitubog-Libungan Transbasin Irrigation Project	Construction of a diversion dam across Malitubog River & a transbasin tunnel to carry water to Libungan River to augment water supply for 9,310 ha of existing area in Libungan RIS & generate 4,870 ha new area.	Maguindanao Pigkawayan North Cotabato Libungan Midsayap	IBRD	2003	2008	T(P)	1,351,200	FS completed	-	-	50,000	200,000	300,000	300,000	282,600	218,600	-	-	1,351,200	801,200
						L(P)	682,600	Submitted	-	-	50,000	100,000	150,000	150,000	132,600	100,000	-	-	682,600	382,600
						F($)	15,919	to ICC	-	-	0	2,381	3,571	3,571	3,571	2,824	-	-	15,919	9,967
						New	4,870		-	-	0	0	0	500	1,500	2,870	-	-	4,870	4,870
						Rehab	9,310		-	-	-	1,000	2,000	2,000	2,000	2,310	-	-	9,310	6,310
11.Participatory Irrigation Development Project Phase I	Project envisions the optimization of irrigation potentials of both NIS & CIS nationwide. It covers a total service area of 323,917 ha and involves restoration/rehabilitation/construction of irrig. facilities, augmentation of water supply, institutional strengthening, dev't of appropriate technologies, watershed protection & erosion control & the augmentation/improvement of NIA's technical capability for FS, DE & PBME.	Nationwide	IBRD	2003	2011	T(P)	9,826,900	FS ongoing	-	-	50,000	300,000	1,215,640	885,700	867,610	1,744,300	1,143,740	689,650	6,896,640	5,331,000
						L(P)	1,965,400		-	-	50,000	100,000	283,130	177,140	173,520	268,860	228,750	137,930	1,419,330	986,200
						F($)	187,179		-	-	-	4,762	22,203	16,870	16,526	35,130	21,785	13,136	130,412	103,448
						New	8,247		-	-	-	0	500	1,000	1,000	1,000	1,000	1,000	5,500	5,000
						Rehab	315,670		-	-	-	0	19,000	40,000	40,000	40,000	40,000	40,000	219,000	200,000
						Additional Irrig. Area														
						WS	83,293													
						DS	111,687													
12.Irrigation Management Improvement Project	The project aims to replace & or upgrade the ageing O&M equipment of NIA. Project components are: a)strengthening of equipment management, b)re-fleeting of NIA equipment and c)construction of Equipment Service Centers(3) and Group Pools(10).	Nationwide		2003	2006	T(P)	4,130,000	Submitted	-	-	480,000	1,250,000	1,200,000	1,200,000	-	-	-	-	4,130,000	1,200,000
						L(P)	1,150,000	to ICC	-	-	200,000	350,000	300,000	300,000	-	-	-	-	1,150,000	300,000
						F($)	70,952		-	-	6,667	21,429	21,429	21,429	-	-	-	-	70,952	21,429
13. Bicol River Basin Flood Control and Irrigation Development Project-IC	Rehabilitation of Libmanan-Cabusao RIS; construction & rehab of communal projects, drainage & flood protection works.	Libmanan, Cabusao, Nabua, Iriga,Baao Bulan,Pili, Buhi, Oas Libon, Bato, Pulangui	ADB	2003	2009	T(P)	3,876,000	FS completed	-	-	150,000	300,000	388,000	536,000	720,000	904,000	878,000	-	3,876,000	3,038,000
						L(P)	1,440,000	DE completed	-	-	50,000	100,000	100,000	200,000	300,000	400,000	290,000	-	1,440,000	1,190,000
						F($)	58,000		-	-	2,381	4,762	6,857	8,000	10,000	12,000	14,000	-	58,000	44,000
						New	10,000		-	-	0	100	1,000	1,000	2,000	2,000	3,900	-	10,000	8,900
						Rehab	4,304		-	-	0	500	1,695	935	174	1,000	0	-	4,304	2,109
14. River Basin and Watershed Program (with DPWH)		Bicol and Mindanao	IBRD	2003	2011	T(P)	2,500,000		-	-	50,000	150,000	300,000	400,000	400,000	400,000	400,000	400,000	2,500,000	2,000,000
						L(P)	646,000		-	-	50,000	150,000	50,000	75,000	96,000	75,000	75,000	75,000	646,000	396,000
						F($)	44,143		-	-	0	0	5,952	7,738	7,238	7,738	7,738	7,738	44,143	38,190
						New	-		-	-	-	-	-	-	-	-	-	-	0	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
15.Irrigation Sector Development Program, Package II	The SISDP will consist of two pilot projects for irrigation modernization & siltation management (MRIIS & AMRIIS) once subproject for generating new areas & restoration of nonfunctional service area (Sibalom San Jose Reservoir Project in Antique, 4,4485 ha) & one storage dam across Bayabas River in Bulacan as an alternative source of water supply to replace water allocation for irrigation from Angat Reservoir.	MARIIS AMRIS Antique Sibalom, San Jose, Hamtic	ADB	2004	2009	T(P)	5,000,000	TA for project preparation Submitted to ADB	-	-	-	400,000	500,000	900,000	1,200,000	1,100,000	900,000	-	5,000,000	4,100,000
						L(P)	2,000,000		-	-	-	160,000	200,000	400,000	500,000	400,000	340,000	-	2,000,000	1,640,000
						F($)	71,429		-	-	-	5,714	7,143	11,905	16,667	16,667	13,333	-	71,429	58,571
						New	10,000		-	-	-	0	0	1,000	2,000	3,000	4,000	-	10,000	10,000
						Rehab	130		-	-	-	0	0	130	0	0	0	-	130	130
						Dam Construction	2													
						O&M Improvement														
						Sedimentation & Siltation control & prevention														
16. Saug Reservoir Project	Construction of a 46-m high storage dam, irrigation & drainage facilities to irrigate 6,730 ha; construction of powerhouse & installation of hydropower plant with 1,000 KW capacity.	Davao del Norte New Corella	ADB	2004	2009	T(P)	1,960,610	FS completed	-	-	-	50,000	325,000	450,000	500,000	375,000	260,610	-	1,960,610	1,585,610
						L(P)	885,060	DE on-going	-	-	-	50,000	125,000	200,000	250,000	175,000	85,060	-	885,060	710,060
						F($)	25,608	Submitted to ICC	-	-	-	0	4,762	5,952	5,952	4,762	4,180	-	25,608	20,846
						New	5,000		-	-	-	0	0	500	1,500	1,500	1,500	-	5,000	5,000
						Rehab	1,730		-	-	-	0	500	500	730	0	0	-	1,730	1,230
17.Kadingilan Irrigation Project	Construction of diversion dam across Maridugo River & canal distribution system to irrigate 6,000 hectares.	Bukidnon Kadingilan, Don Carlos, Pangantucan & Kalilangan	IBRD	2004	2007	T(P)	1,423,100	FS completed	-	-	-	50,000	450,000	550,000	373,100	-	-	-	1,423,100	923,100
						L(P)	679,600	DE on-going	-	-	-	50,000	200,000	250,000	179,600	-	-	-	679,600	429,600
						F($)	17,702	Submitted to ICC	-	-	-	0	5,952	7,143	4,607	-	-	-	17,702	11,750
						New	6,000		-	-	-	0	1,000	1,500	3,500	-	-	-	6,000	5,000
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
18. Tumauini Reservoir Project	Construction of a storage dam, new irrigation & drainage facilities & rehabilitation of the existing NIS. Available head from reservoir will also be used to separate hydro electric power	Isabela Cabagan, Ilagan, Tumauini	JBIC	2004	2009	T(P)	2,349,000	FS completed	-	-	-	50,000	375,000	500,000	600,000	450,000	374,000	-	2,349,000	1,924,000
						L(P)	469,800	DE on-going	-	-	-	50,000	75,000	100,000	100,000	100,000	44,800	-	469,800	344,800
						F($)	44,743	Submitted to ICC	-	-	-	0	7,143	9,524	11,905	8,333	7,838	-	44,743	37,600
						New	2,385		-	-	-	0	0	500	500	500	885	-	2,385	2,385
						Rehab	3,615		-	-	-	0	1,000	1,000	1,000	615	0	-	3,615	2,615
19. Malitubog-Maridagao Irrigation Project II	Development of the Lower Malitubog and Pagalungan Extension areas. Water will be diverted from the Maridagao Diversion Works.	North Cotabato Pikit Maguindanao Pagalungan	JBIC	2004	2010	T(P)	2,803,370	FS completed	-	-	-	50,000	184,000	310,000	456,000	545,000	694,000	564,370	2,803,370	2,569,370
						L(P)	688,250	DE completed	-	-	-	50,000	100,000	100,000	120,000	125,000	106,000	87,250	688,250	538,250
						F($)	50,360		-	-	-	0	2,000	5,000	8,000	10,000	14,000	11,360	50,360	48,360
						New	8,760		-	-	-	0	0	0	0	500	3,000	2,760	6,260	6,260
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
20. Participatory Irrigation Development Program Phase II	Project envisions the optimization of irrigation potentials by improving efficiency and augmentation of water supply for water supply for existing systems. It will cover 340,213 ha with about 253,135 farm families.These were not included in phase I of the project.	Natiowide	GAA	2004	2012	T(P)	8,468,320	FS ongoing	-	-	-	632,780	1,219,950	763,260	747,620	1,589,330	985,650	594,290	6,532,880	4,680,150
						L(P)	1,693,660		-	-	-	126,550	243,990	152,650	149,520	317,870	197,130	118,860	1,306,570	936,030
						F($)	161,301		-	-	-	12,053	23,237	14,538	14,240	30,273	18,774	11,320	124,436	89,146
						New	10,540		-	-	-	255	600	1,200	1,200	1,500	1,500	1,500	7,755	6,900
						Rehab	329,673		-	-	-	6,500	20,000	42,000	42,000	42,000	42,000	42,000	236,500	210,000
						Additional Irrg Area														
						WS	72,870													
						DS	79,391													
21. North Lawis Irrigation Project	Construction of diversion dam across North Lawis River to irrigate 1,270 ha; 7.7 km main canal & 20.66 km lateral canal improvement of natural drainage/waterways.	Zambales Candelaria	GAA	2005	2006	T(P)	190,500	FS completed	-	-	-	-	90,500	100,000	-	-	-	-	190,500	100,000
						L(P)	190,500		-	-	-	-	90,500	100,000	-	-	-	-	190,500	100,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	1,270		-	-	-	-	0	1,270	-	-	-	-	1,270	1,270
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
22. Quipot Irrigation Project Phase I and II	Construction of a 4.5-m high & 100-m long dam, irrigation & drainage facilities	Quezon Tiaong Sariaya Candelaria Batangas San Juan	GAA	2005	2008	T(P)	750,000	FS & DE completed	-	-	-	-	100,000	150,000	250,000	250,000	-	-	750,000	650,000
						L(P)	750,000		-	-	-	-	100,000	150,000	250,000	250,000	-	-	750,000	650,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	3,410		-	-	-	-	0	560	0	2,850	-	-	3,410	3,410
						Rehab	770		-	-	-	-	0	620	0	150	-	-	770	770

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
23. Ilocos Norte Irrigation Project (Palsiguan) Phase II	Construction of a 143.5 m.high fill type dam with 232 MCM reservoir capacity; 9.1-km headrace and tailrace tunnels; afterbay concrete gravity dam; powerplant (6.8 mw);irrigation facilities to cover 12,400 ha & supplement water supply for 7,240 ha in Stage I	Ilocos Norte Badoc,Pinili, Nueva Era, Batac,Paoay, Solsona,Cura Ilocos Sur Sinait (Dam is in Abra.)	JBIC	2005	2013	T(P)	14,994,000	FS completed Submitted to ICC	-	-	-	-	145,194	209,194	569,318	1,289,318	1,960,000	2,270,000	6,443,024	6,297,830
						L(P)	5,049,380		-	-	-	-	144,480	149,680	299,720	599,720	700,000	800,000	2,693,600	2,549,120
						F($)	236,777		-	-	-	-	17	1,417	6,419	16,419	30,000	35,000	89,272	89,255
						New	12,400		-	-	-	-	0	0	1,000	1,000	2,000	2,000	6,000	6,000
						Rehab	0		-	-	-	-	0	0	0	0	0	0	0	0
24. Talakag Irrigation Project	Construction of a 2.0-m high & 110-m long concrete ogee-shaped rubble masonry dam across Batang River, canal distribution network, drainage facilities, O&M roads, on-farm & other facilities.	Bukidnon Talakag	GAA	2005	2007	T(P)	339,661	FS completed	-	-	-	-	75,000	139,661	125,000	-	-	-	339,661	264,661
						L(P)	339,661	DE completed	-	-	-	-	75,000	139,661	125,000	-	-	-	339,661	264,661
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	2,800		-	-	-	-	0	500	2,300	-	-	-	2,800	2,800
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
25. Alcala Amulung West Pump Irrigation Project	Construction of pumping station irrigation & drainage facilities to irrigate 7,700 hectares consisting of stages I, II & III.	Cagayan Alcala Amulung		2005 (Stage I & II)	2008	T(P)	1,388,000	Stage I - FS completed.	-	-	-	-	138,800	250,800	250,700	250,700	-	-	891,000	752,200
						L(P)	347,000		-	-	-	-	55,520	100,320	100,280	100,280	-	-	356,400	300,880
						F($)	24,786		-	-	-	-	1,983	3,583	3,581	3,581	-	-	12,729	10,746
						New	7,700		-	-	-	-	0	500	1,000	2,500	-	-	4,000	4,000
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
				2014 (Stage III)	2017															
26. Mibolo-Tipanoy Irrigation Project	Water coming from Blue Spring would be conveyed through a piping system ans stored in a number of pressure tanks or reservoir to irrigate an area of 300 has. through sprinkler irrigation.Crop diversification would be introduced in the area.	Iligan City Lanao del Norte		2005		T(P)	70,000	For Study No ICC clearance needed	-	-	-	-	70,000	-	-	-	-	-	70,000	0
						L(P)	70,000		-	-	-	-	70,000	-	-	-	-	-	70,000	0
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	300		-	-	-	-	300	-	-	-	-	-	300	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
27. Upland Irrigation and Rural Development Project in Southern Luzon	Provision of irrigation for upland vegetable crops & introduce crop diversification.	Laguna Nagcarlan, Liliw, Majayjay	GAA	2005	2007	T(P)	504,500	FS completed Submitted to ICC	-	-	-	-	50,000	250,000	204,500	-	-	-	504,500	454,500
						L(P)	504,500		-	-	-	-	50,000	250,000	204,500	-	-	-	504,500	454,500
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	320		-	-	-	-	0	100	220	-	-	-	320	320
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
28. Infanta Impounding Irrigation Project	Construction of an impounding dam & facilities to irrigate additional 560 ha and augment water supply for 620 ha	Pangasinan Infanta	Proposed for JICA grant	2005	2006	T(P)	250,000	FS completed	-	-	-	-	100,000	150,000	-	-	-	-	250,000	150,000
						L(P)	250,000	DE completed	-	-	-	-	100,000	150,000	-	-	-	-	250,000	150,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	560		-	-	-	-	0	560	-	-	-	-	560	560
						Rehab	620		-	-	-	-	0	620	-	-	-	-	620	620
29. Tineg River Irrigation Project	Construction of 2 m high diversion dam & its appurtenant structures across Tineg River, 13.54 km main conveyance systems 20,21 km lateral & sub-lateral canals & on-farm facilities. Flood protection dikes along the river will also be constructed. Irrigation facilities shall cover 1,950 ha.	Abra Lagayan, La Paz	GAA	2006	2009	T(P)	592,300	FS completed	-	-	-	-	-	50,000	100,000	250,000	192,300	-	592,300	592,300
						L(P)	266,700	DE on-going	-	-	-	-	-	50,000	50,000	100,000	66,700	-	266,700	266,700
						F($)	7,752	Submitted to ICC	-	-	-	-	-	0	1,190	3,571	2,990	-	7,752	7,752
						New	1,950		-	-	-	-	-	0	0	500	1,450	-	1,950	1,950
						Rehab	0		-	-	-	-	-	-	-	-	-	-	0	0
30. Mapanuepe Lake Irrigation Project	Construction of a barrage type weir across the cut-off channel. to raise the water level by about 3.5 m from the mouth of the lake & store about 17.995 mcm of water for irrigation.	Zambales San Marcelino, San Antonio, San Narciso	GAA	2006	2007	T(P)	160,095	FS completed	-	-	-	-	-	70,000	90,095	-	-	-	160,095	160,095
						L(P)	160,095	DE on-going	-	-	-	-	-	70,000	90,095	-	-	-	160,095	160,095
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	1,900		-	-	-	-	-	0	1,900	-	-	-	1,900	1,900
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
31. Watershed & and Erosion Control For Ten Irrigation Systems	Watershed protection/reforesta-tion & erosion control measures in 10 NISa: Camiling RIS, Maranding RIS, Baco-bucayo RIS, Agos, Tumauini, Barit, Cura, Pongso,Cantingas & Matogdon. To be implemented with DA, DENR, LGUs and NGOs	Tarlac Mayantoc,Tarlac,San Clemente Zambales Candelaria,Masinloc Pangasinan San Manuel Lanao del Norte Salvador, Sapad, Nunungan Oriental Mindoro Naujan, Baco, San Teodoro Occidental Mindoro Sta. Cruz Quezon Infanta, Gen.Nakar Rizal Tanay Isabela Tumauini,Cabagan, Divilacan, Maconacon,San Pablo, Camarines Sur Buhi Ilocos Norte Carasi Northern Leyte Carigara,Jaro,Tunga Romblon Magdiwang, Cajidiocan,San Fernando Camarines Norte Labo	GAA	2006	2010	T(P) L(P) F($) Refstn(ha) Assisted regeneration(ha) Hill farming(ha) Road Improv't(km) Wd lots(ha) Streambanks Protection (km) Soil Conservation(ha) Orchard Plantation(ha) Livelihood Assistance Pasture Improvement (ha) Social Forestry(ha)	289,000 289,000 - 4,200 1,000 31,600 195 7,300 4 2,000 700 500 500	FS completed No ICC clearance needed.	- - - - - - - - - - - - - - -	- - - - - - - - - - - - - - -	- - - - - - - - - - - - - - -	- - - - - - - - - - - - - - -	- - - - - - - - - - - - - - -	57,800 57,800 - 840 200 6,320 39 1,460 0 400 100 100 100	57,800 57,800 - 840 200 6,320 39 1,460 0 400 100 100 100	57,800 57,800 - 840 200 6,320 39 1,460 0 400 200 100 100	57,800 57,800 - 840 200 6,320 39 1,460 0 400 200 100 100	57,800 57,800 - 840 200 6,320 39 1,460 0 400 100 100 100	289,000 289,000 0 4,200 1,000 31,600 195 7,300 0 2,000 700 0 500 500	289,000 289,000 0 4,200 1,000 31,600 195 7,300 0 2,000 700 0 500 500
32. Sto. Domingo Pump Irrig. Project	Construction of facilities and installation of pump for irrigation at Buyo River to irrigate 720 ha of farmlands.	Catanduanes Virac	GAA	2006	2007	T(P) L(P) F($) New Rehab	72,000 72,000 0 720 0	FS on-going	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	55,000 55,000 - 0 -	17,000 17,000 - 720 -	- - - - -	- - - - -	- - - - -	72,000 72,000 0 720 0	72,000 72,000 0 720 0
33. Muleta Reservoir Irrigation Project	Construction of an impounding earthfill dam across Muleta River at about 1km upstream of Muleta RIS Dam; generation of additional 7,341 ha and rehabilitation of 2,429 ha of existing service areas.	Bukidnon Maramag, Valencia Don Carlos	IBRD	2006	2011	T(P) L(P) F($) New Rehab	1,550,000 387,500 27,679 7,341 2,429	FS on-going	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	80,000 80,000 0 0 0	248,000 80,000 4,000 0 1,000	285,000 75,000 5,000 1,000 1,000	369,000 75,000 7,000 1,000 429	344,000 50,000 7,000 2,000 0	1,326,000 360,000 23,000 4,000 2,429	1,326,000 360,000 23,000 4,000 2,429
34. Mabini Irrigation Project	Construction of a 88.5-m high, 530-m long, 4.12 million cubic meters volume embankment 1dam; 92 km irrigation canals; hydropower plant w/ installed capacity of 10 mw, and other appurtenances	Pangasinan Alaminos, Mabini, Bani, Sual	Proposed BOT	2007	2013	T(P) L(P) F($) New Rehab	6,164,000 1,015,300 122,588 11,500 -	FS completed For DE	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	206,000 80,000 3,000 0 -	520,000 100,000 10,000 0 -	880,000 250,000 15,000 0 -	1,200,000 360,000 20,000 500 -	2,806,000 790,000 48,000 500 0	2,806,000 790,000 48,000 500 0
35. Alip River Irrigation System	Construction of Damalipao stream check, silt ejector & repair/rehab of existing irrigation facilities.	Maguindanao Datu Piglas	GAA	2007		T(P) L(P) F($) New Rehab	108,000 108,000 0 300 3,000		- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	108,000 108,000 - 300 3,000	- - - - -	- - - - -	- - - - -	108,000 108,000 0 300 3,000	108,000 108,000 0 300 3,000

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
36. Western Legaspi Irrigation and Rural Development Project-IC	The project has five components. The lowland rural development component involves the cons-truction of diversion weir in Lamalag to irrigate 130 ha & 16.8 m high dam in Daraga to irrigate 395 ha.The upland rural dev't to increase yields & production of corn, coconut & other diversified crops.Other components are rural road upgrading, rural water supply rehabilitation & integrated support services.	Albay Camalig, Daraga	Proposed for JICA grant	2007	2008	T(P)	423,700	FS completed	-	-	-	-	-	-	150,000	273,700	-	-	423,700	423,700
						L(P)	186,400	For DE	-	-	-	-	-	-	50,000	136,400	-	-	186,400	186,400
						F($)	5,650		-	-	-	-	-	-	2,381	3,269	-	-	5,650	5,650
						New	525		-	-	-	-	-	-	0	525	-	-	525	525
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
37. Titay Valley Irrigation Project	Construction of a 30-m high storage dam, irrigation & drainage facilities & installation of groundwater pumps to provide year-round irrigation to 4,100 hectares.	Zamboanga del Norte & Sur Titay, Kalawit	GAA	2007	2010	T(P)	1,100,000	FS on-going	-	-	-	-	-	-	100,000	200,000	300,000	500,000	1,100,000	1,100,000
						L(P)	1,100,000		-	-	-	-	-	-	100,000	200,000	300,000	500,000	1,100,000	1,100,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	3,800		-	-	-	-	-	-	0	800	1,500	1,500	3,800	3,800
						Rehab	300		-	-	-	-	-	-	300	0	0	0	300	300
38.Pila River Multipurpose Project	Project areas to provide irri-gation water supply to one NIS & 36 CIS (rehab of total area of 8,252) & generate additional area of 6,138 ha. It involves the construction of 111 m storage dam & appurtenant structures across Pila River & hydroelectric power plant with installed capacity of 9000 kw.	Pangasinan Mangatarem Aguilar Bugallon	JBIC	2007	2014	T(P)	6,076,400	FS completed	-	-	-	-	-	-	200,000	400,000	600,000	950,000	2,150,000	2,150,000
						L(P)	3,396,800	DE on-going	-	-	-	-	-	-	100,000	150,000	200,000	410,000	860,000	860,000
						F($)	63,800		-	-	-	-	-	-	2,381	5,952	9,524	12,857	30,714	30,714
						New	6,138		-	-	-	-	-	-	0	0	0	500	500	500
						Rehab	8,252		-	-	-	-	-	-	0	1,000	2,000	2,000	5,000	5,000
39. Puyo Small Reservoir Irrigation Project	Construction of reservoir & appurtenant structures to provide irrigation water to 1,250 hectares.	Agusan Norte Jabongan	GAA	2007	2008	T(P)	254,000	For FS	-	-	-	-	-	-	54,000	200,000	-	-	254,000	254,000
						L(P)	254,000		-	-	-	-	-	-	54,000	200,000	-	-	254,000	254,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	1,250		-	-	-	-	-	-	250	1,000	-	-	1,250	1,250
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
40. Talayan River Irrigation System	Construction/rehabilitation of 50 units structures, rehab of canals & construction of canal lining & construction of Farm to Market Roads.	Maguindanao	GAA	2008		T(P)	104,000	For Detailed	-	-	-	-	-	-	-	104,000	-	-	104,000	104,000
						L(P)	104,000	Engineering	-	-	-	-	-	-	-	104,000	-	-	104,000	104,000
						F($)	0		-	-	-	-	-	-	-	-	-	-	0	0
						New	388		-	-	-	-	-	-	-	388	-	-	388	388
						Rehab	700		-	-	-	-	-	-	-	700	-	-	700	700
41. Loboc Valley Irrigation Project	Construction of pipeline & irrigation facilities for 250 hectares.	Bohol Loboc	GAA	2008	2009	T(P)	60,000	For FS	-	-	-	-	-	-	-	30,000	30,000	-	60,000	60,000
						L(P)	60,000		-	-	-	-	-	-	-	30,000	30,000	-	60,000	60,000
						F($)	0		-	-	-	-	-	-	-	-	-	-	0	0
						New	250		-	-	-	-	-	-	-	-	250	-	250	250
						Rehab	50		-	-	-	-	-	-	-	50	-	-	50	50
42.Pagalungan RIS Reha-bilitation Project	Construction of Terrubian Dam, repair/rehab of canals, canal structures, terminal & drainage facilities & construction of trapezoidal canal lining.	Maguindanao	GAA	2008	2010	T(P)	699,000	For FS	-	-	-	-	-	-	-	200,000	200,000	299,000	699,000	699,000
						L(P)	699,000		-	-	-	-	-	-	-	200,000	200,000	299,000	699,000	699,000
						F($)	0		-	-	-	-	-	-	-	-	-	-	0	0
						New	380		-	-	-	-	-	-	-	0	145	235	380	380
						Rehab	820		-	-	-	-	-	-	-	0	400	420	820	820
43. Sibuguey RIS Extension	Provide irrigation for irrigable areas within the valley not irrigated by the existing Sibuguey RIS.	Zamboanga Sur Bayug, Buug, Diplahan, Imelda,Payao, Lakewood, Cisiay	GAA	2008	2010	T(P)	500,000	FS on-going	-	-	-	-	-	-	-	75,000	200,000	225,000	500,000	500,000
						L(P)	500,000		-	-	-	-	-	-	-	75,000	200,000	225,000	500,000	500,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	3,000		-	-	-	-	-	-	-	0	500	2,500	3,000	3,000
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
44. Jalaur Irrigation Systems & Rural Area Development Project	Improvement of irrigated agriculture through rehabilitation/improvement of existing systems, applying adequate farming technology & introducing crop diversification.	Iloilo Barotac,Pavia Nuevo, Mina, Dingle, Zarraga, Pototan, Dumangas, San Miguel, Oton,Leganes New Lucena	JBIC	2008	2013	T(P)	2,187,000	FS completed	-	-	-	-	-	-	-	164,000	226,000	436,000	826,000	826,000
						L(P)	546,750	For Detailed	-	-	-	-	-	-	-	80,000	100,000	100,000	280,000	280,000
						F($)	39,054	Engineering	-	-	-	-	-	-	-	2,000	3,000	8,000	13,000	13,000
						New	-		-	-	-	-	-	-	-	-	-	-	0	0
						Rehab	21,760		-	-	-	-	-	-	-	0	3,000	4,000	7,000	7,000
45. Ilocos Sur Transbasin Project	Construction of two diversion dams (10 m & 6.7 m high); 192 km of irrigation and drainage canals; hydro power plant w/ installed capacity of 6.5 mw;20 km transmission lines and other appurtenances	Ilocos Sur Sta. Lucia, Sta. Cruz, Burgos, Luna Sta. Maria, Luna, Narvacan, San Esteban	JBIC	2008	2013	T(P)	2,000,000	FS completed	-	-	-	-	-	-	-	144,000	268,000	436,000	848,000	848,000
						L(P)	500,000	Needs	-	-	-	-	-	-	-	60,000	100,000	100,000	260,000	260,000
						F($)	35,714	updating For DE	-	-	-	-	-	-	-	2,000	4,000	8,000	14,000	14,000
						New	4,000		-	-	-	-	-	-	-	0	500	700	1,200	1,200
						Rehab	5,830		-	-	-	-	-	-	-	0	1,000	1,000	2,000	2,000
46. Maganoy Dam No. 3 Development Project	Construction of impounding earthfill dam 45 m above the riverbed of Cabilaan River for irrigation, power generation and fisheries.	Maguindanao Maganoy, Ampatuan, Sultan Kudarat, Esperanza, Isulan, Bagumbayan	IBRD	2008	2013	T(P)	1,500,000	FS on-going	-	-	-	-	-	-	-	163,500	260,000	369,000	792,500	792,500
						L(P)	375,000		-	-	-	-	-	-	-	37,500	50,000	75,000	162,500	162,500
						F($)	26,786		-	-	-	-	-	-	-	3,000	5,000	7,000	15,000	15,000
						New	8,800		-	-	-	-	-	-	-	0	0	500	500	500
						Rehab	0		-	-	-	-	-	-	-	-	-	-	0	0
47. Lake Lanao Irrigation Development Project	Construction of new Small Scale Irrigation Projects & rehabilitation of existing CIS located around Lake Lanao.	Lanao del Sur Taraka,Masiu, Bubong,Pualas,Bayang, Lumba-Bayabao,Maguing, Balindong,Tubaran, Marawi City,Mulondo, Buadipuso-Buntong, Ditsaan-Ramain,Ganassi, Lumbatan,Madalum,Madamba, Lumbayanagui,Marantao, Poona-Bayabao,Bacolod-kalawi	GAA	2009	2016	T(P)	2,820,000	For FS	-	-	-	-	-	-	-	-	100,000	150,000	250,000	250,000
						L(P)	2,820,000		-	-	-	-	-	-	-	-	100,000	150,000	250,000	250,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	15,000		-	-	-	-	-	-	-	-	0	2,000	2,000	2,000
						Rehab	7,000		-	-	-	-	-	-	-	-	0	1,000	1,000	1,000
48. Adgaoan - Umayan Irrigation Project	Construction of rubber dams at two independent projects. The Adgaoan rubber dam & the Umayan rubber dam.	Agusan Sur Lapaz, Loreto	ADB	2009	2014	T(P)	1,853,306	For FS	-	-	-	-	-	-	-	-	136,500	258,000	394,500	394,500
						L(P)	455,000		-	-	-	-	-	-	-	-	52,500	90,000	142,500	142,500
						F($)	33,293		-	-	-	-	-	-	-	-	2,000	4,000	6,000	6,000
						New	16,000		-	-	-	-	-	-	-	-	0	1,000	1,000	1,000
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
49. Tago RIS Extension		Surigao del Sur Tago San Miguel		2009	2011	T(P)	1,800,000	For FS	-	-	-	-	-	-	-	-	501,500	500,000	1,001,500	1,001,500
						L(P)	1,800,000		-	-	-	-	-	-	-	-	501,500	500,000	1,001,500	1,001,500
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	-		-	-	-	-	-	-	-	-	-	-	0	0
						Rehab	6,927		-	-	-	-	-	-	-	-	1,000	2,000	3,000	3,000
50. Ojot Irrigation Project	Construction of irrigation and drainage facilities to serve 2,200 hectares of new areas in Agusan del Sur	Agusan del Sur		2009	2012	T(P)	500,000	For FS	-	-	-	-	-	-	-	-	80,000	100,000	180,000	180,000
						L(P)	500,000		-	-	-	-	-	-	-	-	80,000	100,000	180,000	180,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	2,200		-	-	-	-	-	-	-	-	-	245	245	245
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
51. Debibi Groundwater Irrigation Project	The project envisioned to irrigate a potential area of 4,000 has. It would include several communal irrigation systems.	Quirino Cabarruguis, Saguday	GAA	2009	2012	T(P)	640,000	For further	-	-	-	-	-	-	-	-	100,000	150,000	250,000	250,000
						L(P)	640,000	study	-	-	-	-	-	-	-	-	100,000	150,000	250,000	250,000
						F($)	0		-	-	-	-	-	-	-	-	-	-	0	0
						New	4,000		-	-	-	-	-	-	-	-	0	500	500	500
						Rehab	0		-	-	-	-	-	-	-	-	-	-	0	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
52. Balintingon Reservoir Project	Construction of 140 m high, rockfill central-core dam & its appurtenant structures across Sumacbao River, powerhouse w\ installed capacity of 44 MW, diversion weir & irrigation facilities to update 14,900 ha in Balintingon area & expand UPRIIS District 4 by 3,900 ha.	Nueva Ecija General Tinio	BOT	2009	2015	T(P)	5,083,000	FS completed	-	-	-	-	-	-	-	-	253,000	450,000	703,000	703,000
						L(P)	1,525,000	Submitted	-	-	-	-	-	-	-	-	75,000	100,000	175,000	175,000
						F($)	84,714	to ICC	-	-	-	-	-	-	-	-	4,238	8,333	12,571	12,571
						New	18,800		-	-	-	-	-	-	-	-	0	0	0	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
53. Magat Watershed and Erosion Control Project	Rehabilitation & protection of the Magat Watershed through reforestation involving NIA,FMB & private sector, smallhold agro-forestry, agro-forestry livestock & construction & maintenance of about 1,405 km forest roads.	Isabela:Ramon Nueva Vizcaya Aritao, Bagabag, Bambang, Bayombong, Diadi, Dupax Norte, Dupax Sur, Kayapa, Quezon, Sta. Fe, Solano, Villaverde Ifugao Aguinaldo Banaue, Hingyon, Hungduan, Kiangan, Lagawe,Lamut Mayoyao, Potia,Tinoc	GAA	2009	2013	T(P)	2,600,000	FS completed	-	-	-	-	-	-	-	-	268,000	520,000	788,000	788,000
						L(P)	920,000		-	-	-	-	-	-	-	-	100,000	184,000	284,000	284,000
						F($)	40,000		-	-	-	-	-	-	-	-	4,000	8,000	12,000	12,000
						Refores-tation	27,560		-	-	-	-	-	-	-	-	5,000	5,000	10,000	10,000
54. Asue Irrigation Project	Construction of a 48.5-meter high, 265-m long, 796,000-cubic meter volume embankment dam; 139 km irrigation & drainage canals; hydro power plant with installed capacity of 1.4 mw; 10 km transmission lines and other appurtenances	Iloilo Sara, San Dionisio, Ajuy, Concepcion	JBIC	2009	2015	T(P)	4,061,000	FS needs	-	-	-	-	-	-	-	-	134,000	586,000	720,000	720,000
						L(P)	1,685,000	updating	-	-	-	-	-	-	-	-	50,000	250,000	300,000	300,000
						F($)	56,571	For Detailed Engineering	-	-	-	-	-	-	-	-	2,000	8,000	10,000	10,000
						New	7,120		-	-	-	-	-	-	-	-	0	0	0	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
55. Lake Mainit Integrated Area Development Project-IC	Development of an irrigation projects for the agricultural lands along the periphery of Lake Mainit & the vast area south of the lake down to Cabad-baran plains. At each new development, appurtenant irrigation, drainange & on-farm facilities will be provided.	Agusan del Norte Surigao del Norte Mainit, Tubod, Alegria, Kitcharao Jabonga	ADB	2009	2016	T(P)	2,456,250	With Pre-FS	-	-	-	-	-	-	-	-	161,000	306,000	467,000	467,000
						L(P)	356,250		-	-	-	-	-	-	-	-	35,000	54,000	89,000	89,000
						F($)	50,000		-	-	-	-	-	-	-	-	3,000	6,000	9,000	9,000
						New	20,000		-	-	-	-	-	-	-	-	0	2,000	2,000	2,000
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
56. Gumain Reservoir Project	Construction of 108 m high, zoned embankment dam to store irrigation water to serve 11,000 ha of paddy & 5,200 ha. of sugarcane area & augment water supply to 7,900 ha in Porac-Gumain & Caulaman RIS	Pampanga Floridablanca Guagua,Lubao Sta. Rita Bataan Dinalupihan Hermosa		2010	2018	T(P)	7,590,000	FS completed,	-	-	-	-	-	-	-	-	-	134,000	134,000	134,000
						L(P)	1,900,000	for updating	-	-	-	-	-	-	-	-	-	50,000	50,000	50,000
						F($)	135,476		-	-	-	-	-	-	-	-	-	2,000	2,000	2,000
						New	16,200		-	-	-	-	-	-	-	-	-	0	0	0
						Rehab	7,900		-	-	-	-	-	-	-	-	-	0	0	0
57. Matuno Irrigation Project	Construction of a 147-m high, 580-m long, 10 million cubic meter volume embankment dam; 3 diversion dams (1.6 m, 1.8 m, and 2.5 m long); 335 km irrigation & drainage canals; 2 units @ 92.7 mw hydropower plant and other appurtenances	Nueva Vizcaya Bambang, Bagabag, Solano, Bayombong Villa Verde	BOT	2010	2019	T(P)	461,160	FS completed,	-	-	-	-	-	-	-	-	-	310,000	310,000	310,000
						L(P)	228,354	Submitted	-	-	-	-	-	-	-	-	-	100,000	100,000	100,000
						F($)	232,806	to ICC	-	-	-	-	-	-	-	-	-	5,000	5,000	5,000
						New	12,680		-	-	-	-	-	-	-	-	-	0	0	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
58. Negros Occidental Irrigation Package	Expansion of irrigated area for rice and sugarcane production by providing new irrigation & drainage facilities through construction of Sicaba-Manapla, Malogo, Binalbagan & Hilabangan irrigation projects.	Negros Occ. Kabangkalan, Ilog, Himamaylan, Cauayan, Binalbagan, Isabela, La Castellana, Talisay, Manapla, Moises Padilla, Hinigaran, Siluay	IBRD	2010	2015	T(P)	1,500,000	For FS	-	-	-	-	-	-	-	-	-	124,000	124,000	124,000
						L(P)	375,000		-	-	-	-	-	-	-	-	-	40,000	40,000	40,000
						F($)	26,786		-	-	-	-	-	-	-	-	-	2,000	2,000	2,000
						New	28,925		-	-	-	-	-	-	-	-	-	0	0	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
59. Jalaur Alternative Scheme Project	Construction of several small impounding dams upstream of the Jalaur service area to increase water supply for irrigation and construction of new facilities.	Iloilo Maasin, Alimodian, Lambunao, Calinog, Janiuay	JBIC	2010	2017	T(P)	6,000,000	For FS	-	-	-	-	-	-	-	-	-	226,000	226,000	226,000
						L(P)	1,500,000		-	-	-	-	-	-	-	-	-	100,000	100,000	100,000
						F($)	112,500		-	-	-	-	-	-	-	-	-	3,000	3,000	3,000
						New	20,000		-	-	-	-	-	-	-	-	-	0	0	0
						Rehab	0		-	-	-	-	-	-	-	-	-	0	0	0
60. Land Reclamation & Resettle-ment Project in Liguasan Marsh	The proposed project will involve reclamation through poldering of lands which are inundated during wet months but dry during the rest of the year.A complementary gravity irrigation & pumping scheme is expected.	North Cotabato Pikit Maguindanao Pagalungan	IBRD	2010	2016	T(P)	2,947,500	For FS	-	-	-	-	-	-	-	-	-	260,000	260,000	260,000
						L(P)	427,500		-	-	-	-	-	-	-	-	-	50,000	50,000	50,000
						F($)	60,000		-	-	-	-	-	-	-	-	-	5,000	5,000	5,000
						New	30,000		-	-	-	-	-	-	-	-	-	0	0	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
61. Chico-Mallig Irrigation and Dam Project	Construction of the Mallig No. 2 Storage Dam to provide water to a net irrigable area of 31,200 ha comprising of 4 separate areas. Irrigation & drainage facilities will also be constructed.	Kalinga, Isabela, Cagayan Rizal, Magsaysay, Enrile, Gadu Liwan,	GAA	2010	2015	T(P)	4,680,000	For FS	-	-	-	-	-	-	-	-	-	468,000	468,000	468,000
						L(P)	1,872,000		-	-	-	-	-	-	-	-	-	187,200	187,200	187,200
						F($)	66,857		-	-	-	-	-	-	-	-	-	6,686	6,686	6,686
						New	31,200		-	-	-	-	-	-	-	-	-	0	0	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
62. Salug Multipurpose Irrigation Project	Construction of rockfill dam or concrete dam with a maximum height of 100 meters. The project will irrigate about 22,000 ha, of 11,700 ha are presenty irrigated.	Zamboanga Sur Molave, Mahayag, Tambulig, Bonifacio, Magsaysay	GAA	2010	2016	T(P)	5,000,000	With project	-	-	-	-	-	-	-	-	-	100,000	100,000	100,000
						L(P)	1,250,000	identification	-	-	-	-	-	-	-	-	-	100,000	100,000	100,000
						F($)	89,286		-	-	-	-	-	-	-	-	-	-	0	0
						New	10,300		-	-	-	-	-	-	-	-	-	0	0	0
						Rehab	11,700		-	-	-	-	-	-	-	-	-	0	0	0
63. Dibuluan Irrigation Project	Construction of a 4 meter diversion dam across the Dibuluan River & irrigation facilities for 3,000 hectares of farmland.	Isabela San Agustin, Jones	GAA	2010	2011	T(P)	191,000	For FS	-	-	-	-	-	-	-	-	-	100,000	100,000	100,000
						L(P)	191,000		-	-	-	-	-	-	-	-	-	100,000	100,000	100,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	3,000		-	-	-	-	-	-	-	-	-	0	0	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
64. Villaverde Irrigation Project	Construction of an intake structure at the end check of the Lamut CIS & facilities to irrigate 3,000 hectares.	Nueva Vizcaya Villaverde, Solano	GAA	2010	2011	T(P)	150,000	For FS	-	-	-	-	-	-	-	-	-	70,000	70,000	70,000
						L(P)	150,000		-	-	-	-	-	-	-	-	-	70,000	70,000	70,000
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	3,000		-	-	-	-	-	-	-	-	-	0	0	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
65. Kulaman River Basin Project	Construction of small dams & irrigation facilities for 4 CIPs, namely, Kiadsam, Mati, Malegdeng and Basag.	Sultan Kudarat Sen. Ninoy Aquino	GAA	2010	2011	T(P)	170,000	For FS	-	-	-	-	-	-	-	-	-	80,000	80,000	80,000
						L(P)	170,000		-	-	-	-	-	-	-	-	-	80,000	80,000	80,000
						F($)			-	-	-	-	-	-	-	-	-	-	0	0
						New	1,140		-	-	-	-	-	-	-	-	-	0	0	0
						Rehab	0		-	-	-	-	-	-	-	-	-	-	0	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
Sub-Total B (PART 1) (Pipeline Projects)						T(P)	60,478,487		0	287,030	1,628,498	3,246,002	6,718,501	6,339,081	4,860,621	5,792,218	5,968,650	6,021,450	40,862,051	28,982,020
						L(P)	22,897,936		0	146,670	978,637	1,250,069	3,005,907	2,833,586	2,208,567	2,304,160	2,322,910	2,403,730	17,454,236	12,072,953
						F($)	894,775		0	3,342	15,473	47,522	88,395	83,464	63,144	83,049	86,803	86,136	557,329	402,597
						New	95,593		0	0	2,800	1,790	6,300	12,990	14,540	14,220	7,030	6,680	66,350	55,460
						Rehab	398,984		0	0	3,525	4,500	41,978	44,740	47,730	44,075	45,829	47,420	279,797	229,794
						Reforest	31,760		0	0	0	0	0	840	840	840	5,840	5,840	14,200	14,200
						Canals (km)													0	0
						Drainage													0	0
						Roads (km)													0	0
						Improvement													0	0
Sub-Total B (PART 2) (Pipeline Projects)						T(P)	83,684,031		0	0	301,052	1,684,358	2,591,950	3,029,260	4,369,715	6,391,030	6,944,450	8,205,660	33,517,475	28,940,115
						L(P)	28,827,572		0	0	110,105	601,708	693,990	1,047,650	1,635,615	2,213,270	2,467,330	3,447,310	12,216,978	10,811,175
						F($)	1,538,726		0	0	4,546	25,777	45,190	47,181	65,098	99,470	106,598	113,294	507,155	431,641
						New	307,616		0	0	0	1,855	1,600	3,200	7,100	9,213	16,100	14,760	53,828	50,373
						Rehab	370,009		0	0	0	7,000	21,695	43,065	42,474	44,750	44,000	45,000	247,984	219,289
						Reforest													0	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
Sub-Total B (Pipeline Projects)						T(P)	144,162,518		0	287,030	1,929,550	4,930,360	9,310,451	9,368,341	9,230,336	12,183,248	12,913,100	14,227,110	74,379,526	57,922,135
						L(P)	51,725,508		0	146,670	1,088,742	1,851,777	3,699,897	3,881,236	3,844,182	4,517,430	4,790,240	5,851,040	29,671,214	22,884,128
						F($)	2,433,501		0	3,342	20,019	73,300	133,585	130,645	128,242	182,519	193,401	199,430	1,064,484	834,238
						New	403,209		0	0	2,800	3,645	7,900	16,190	21,640	23,433	23,130	21,440	120,178	105,833
						Rehab	768,993		0	0	3,525	11,500	63,673	87,805	90,204	88,825	89,829	92,420	527,781	449,083
						Reforest	31,760		0	0	0	0	0	840	840	840	5,840	5,840	14,200	14,200
						Canals (km)	0		0	0	0	0	0	0	0	0	0	0	0	0
						Drainage	0		0	0	0	0	0	0	0	0	0	0	0	0
						Roads (km)	0		0	0	0	0	0	0	0	0	0	0	0	0
						Improvement	0		0	0	0	0	0	0	0	0	0	0	0	0
C. OTHER PROGRAMS																				
1. Operation and Maintenance Subsidy for NIS		Nationwide, covering all NISs	GAA			T(P)	100,000	284,673	100,000	-	-	-	-	-	-	-	-	-	100,000	0
						L(P)	100,000	284,673	100,000	-	-	-	-	-	-	-	-	-	100,000	0
						F($)	0	-	-	-	-	-	-	-	-	-	-	-	0	0
						Sust. O&M	669,767	-	669,767	-	-	-	-	-	-	-	-	-	669,767	0
2. San Roque Multipurpose Project (SRMP-MOA)	Allocation for the non-power costs component of SRMP.		GAA			T(P)	5,818,575	-	318,000	611,175	611,175	611,175	611,175	611,175	611,175	611,175	611,175	611,175	5,818,575	3,055,875
						L(P)	5,818,575		318,000	611,175	611,175	611,175	611,175	611,175	611,175	611,175	611,175	611,175	5,818,575	3,055,875
						F($)	0		-	-	-	-	-	-	-	-	-	-	0	0
3. Casecnan Multipurpose Irrigation & Power Project-BOT (Water Delivery)	Allocation to pay obligations to BOT proponents.		GAA			T(P)	42,505,000	-	-	3,440,000	3,708,000	3,995,000	4,305,000	4,640,000	4,997,000	5,382,000	5,796,000	6,242,000	42,505,000	27,057,000
						L(P)	42,505,000		-	3,440,000	3,708,000	3,995,000	4,305,000	4,640,000	4,997,000	5,382,000	5,796,000	6,242,000	42,505,000	27,057,000
						F($)	0		-	-	-	-	-	-	-	-	-	-	0	0
4.Irrigation Research and Development		Nationwide	GAA			T(P)	120,000	-	-	-	-	-	20,000	20,000	20,000	20,000	20,000	20,000	120,000	100,000
						L(P)	120,000		-	-	-	-	20,000	20,000	20,000	20,000	20,000	20,000	120,000	100,000
						F($)	0		-	-	-	-	-	-	-	-	-	-	0	0
Sub-Total C (Other Programs)						T(P)	48,543,575		418,000	4,051,175	4,319,175	4,606,175	4,936,175	5,271,175	5,628,175	6,013,175	6,427,175	6,873,175	48,543,575	30,212,875
						L(P)	48,543,575		418,000	4,051,175	4,319,175	4,606,175	4,936,175	5,271,175	5,628,175	6,013,175	6,427,175	6,873,175	48,543,575	30,212,875
						F($)	0		0	0	0	0	0	0	0	0	0	0	0	0
																			0	0
						New	0		0	0	0	0	0	0	0	0	0	0	0	0
						Rehab	0		0	0	0	0	0	0	0	0	0	0	0	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
D. AGRARIAN REFORM																				
1. CARP - Irrigation Component II		Nationwide, Covering Agrarian Reform Communities (ARCs)	ARF	1999	2004	T(P)	8,500,000	845,000	213,000	1,810,000	3,622,000	1,810,000	-	-	-	-	-	-	7,455,000	0
						L(P)	8,500,000	845,000	213,000	1,810,000	3,622,000	1,810,000	-	-	-	-	-	-	7,455,000	0
						F($)	0	-	-	-	-	-	-	-	-	-	-	-	0	0
						New	67,713	10,595	8,285	23,982	12,211	8,768	-	-	-	-	-	-	53,246	0
						Rehab	38,526	4,216	4,352	14,113	6,123	3,594	-	-	-	-	-	-	28,182	0
2. Agrarian Reform Infrastruc-ture Support Project II		Nationwide, Covering Agrarian Reform Communities (ARCs)	JBIC	2000	2004	T(P)	2,865,000	20,000	593,000	961,000	824,000	241,000	-	-	-	-	-	-	2,619,000	0
						L(P)	2,865,000	20,000	593,000	961,000	824,000	241,000	-	-	-	-	-	-	2,619,000	0
						F($)	-	-	-	-	-	-	-	-	-	-	-	-	0	0
						New	29,994	0	7,500	10,060	8,632	6,214	-	-	-	-	-	-	32,406	0
						Rehab	13,439	0	3,000	4,520	3,868	2,771	-	-	-	-	-	-	14,159	0
3. Agrarian Reform Communities Development Project-IC		Nationwide, Covering Agrarian Reform Communities (ARCs)	IBRD	1997	2002	T(P)	1,189,000	99,000	377,000	287,000	-	-	-	-	-	-	-	-	664,000	0
						L(P)	1,189,000	99,000	377,000	287,000	-	-	-	-	-	-	-	-	664,000	0
						F($)	-		-	-	-	-	-	-	-	-	-	-	0	0
						New	9,817	-	4,488	3,303	-	-	-	-	-	-	-	-	7,791	0
						Rehab	3,320	526	855	515	-	-	-	-	-	-	-	-	1,370	0
4. Mindanao Settlement Area Dev't Project						T(P)	949,000		57,000	192,000	353,000	347,000	-	-	-	-	-	-	949,000	0
						L(P)	949,000		57,000	192,000	353,000	347,000	-	-	-	-	-	-	949,000	0
						F($)	-						-	-	-	-	-	-	0	0
						New	6,000		-	1,000	2,500	2,500	-	-	-	-	-	-	6,000	0
						Rehab	-		-	-	-	-	-	-	-	-	-	-	0	0
																				0
Sub-Total D (Agrarian Reform)						T(P)	13,503,000		1,240,000	3,250,000	4,799,000	2,398,000	0	0	0	0	0	0	11,687,000	0
						L(P)	13,503,000		1,240,000	3,250,000	4,799,000	2,398,000	0	0	0	0	0	0	11,687,000	0
						F($)	0		0	0	0	0	0	0	0	0	0	0	0	0
						New	113,524		20,273	38,345	23,343	17,482	0	0	0	0	0	0	99,443	0
						Rehab	55,285		8,207	19,148	9,991	6,365	0	0	0	0	0	0	43,711	0

VII.1 NIA Irrigation Development Program : 2001 to 2010

idp0110d idp0110d

NAME OF PROJECTS	DESCRIPTION	PROVINCE/ Cagayan Alcala, Amulung COVERED	FUNDING SOURCE	SCHEDULE Start	SCHEDULE End	ESTIMATED PROJECT COST (P'000) AND PHYSICAL TARGETS(HA)		CUMULATIVE ACCOMPLISHMENT	FUNDING REQUIREMENT (P'000)/ PHYSICAL TARGETS (HA) 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TOTAL 2001 - 2010	TOTAL 2006 - 2010
GRAND TOTAL						T(P)	278,049,424		4,217,670	14,801,358	18,905,052	17,776,026	23,037,780	22,334,202	21,686,866	24,317,692	21,301,430	21,710,285	190,088,361	111,350,475
						L(P)	168,423,827		3,692,000	11,542,348	15,509,900	12,495,753	16,165,745	16,539,463	16,300,712	16,651,874	13,178,570	13,334,215	135,410,580	76,004,834
						F($)	2,850,035		12,516	77,595	80,837	125,721	163,620	137,970	128,242	182,519	193,401	199,430	1,301,852	841,563
						New	805,528		51,719	57,241	68,340	43,647	39,232	49,077	50,960	58,904	36,226	21,440	476,786	216,607
						Rehab	1,117,284		30,185	103,846	52,414	37,905	83,072	105,932	108,856	109,425	89,829	92,420	813,884	506,462
						Preventive Maintenance			0	0	0	0	0	0	0	0	0	0	0	0
						Irrig Fac.	0		35,760	20,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	535,760	300,000
						Sust. O&M	669,767		669,767	0	0	0	0	0	0	0	0	0	669,767	0
						Canals (km)	3,830		999	952	166	109	34	12	0	0	0	0	2,272	12
						Drainage	16,428		641	377	398	475	336	303	300	300	300	300	3,729	1,503
						Roads (km)	1,619		474	141	33	10	11	5	0	0	0	0	674	5
						Reforest	31,760		0	0	0	0	0	840	840	840	5,840	5,840	14,200	14,200
						Improvement	0		0	0	0	0	0	0	0	0	0	0	0	0
						Exchange Rate =	P	42											26-Jun-01	26-Jun-01

Footnote: 1. Funding requirements and physical targets for 2001 to 2004 conform to the Medium Term Development Plan dated 6/19/01.
2. Descriptions, costs and physical targets of pipeline projects are based on data derived from feasibility studies (when available) project investigation and concept papers.

REFERENCE DATA VII.2

Financial Projection Data

VII.2.1A Projected ISF Billing (1/5)

(Scenario 1 - AO 17 ISF Rates)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A. Physical Target										
1.0 Ser. Area, Beg. of Year	708,549	738,549	768,549	798,549	828,549	858,549	888,549	918,549	948,549	978,549
1.1 New Area Generation	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
1.2 Total Service Area	738,549	768,549	798,549	828,549	858,549	888,549	918,549	948,549	978,549	1,008,549
a. Wet	77%	77%	77%	77%	77%	77%	77%	77%	77%	77%
b. Dry	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
1.2 Irrigable Area (Program)										
a. Wet	545,583	568,683	591,783	614,883	637,983	661,083	684,183	707,283	730,383	753,483
b. Dry	460,557	480,057	499,557	519,057	538,557	558,057	577,557	597,057	616,557	636,057
2.0 Cropping Intensity										
2.1 % Cropping Intensity										
a. Wet	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
b. Dry	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%
2.2 Planted & Benefitted Area (Has.)										
a. Wet	460,557	480,057	499,557	519,057	538,557	558,057	577,557	597,057	616,557	636,057
b. Dry	432,215	450,515	468,815	487,115	505,415	523,715	542,015	560,315	578,615	596,915
Total	892,772	930,572	968,372	1,006,172	1,043,972	1,081,772	1,119,572	1,157,372	1,195,172	1,232,972
B. Distribution of Benefited Area As to System Type										
1. % to Total Service Area										
a. Diversion	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
b. Reservoir	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
2. Total Benefited Area										
a. Diversion										
a.1 Wet	322,390	336,040	349,690	363,340	376,990	390,640	404,290	417,940	431,590	445,240
b.2 Dry	302,550	315,360	328,170	340,980	353,790	366,600	379,410	392,220	405,030	417,840
Total	624,940	651,400	677,860	704,320	730,780	757,240	783,700	810,160	836,620	863,080
b. Reservoir										
a.1 Wet	138,167	144,017	149,867	155,717	161,567	167,417	173,267	179,117	184,967	190,817
b.2 Dry	129,664	135,154	140,644	146,134	151,624	157,114	162,604	168,094	173,584	179,074

VII.2.1A Projected ISF Billing (2/5)

(Scenario 1 - AO 17 ISF Rates)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total	267,832	279,172	290,512	301,852	313,192	324,532	335,872	347,212	358,552	369,892
C. Distribution As to Landholdings										
Not more than 2 Has.	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Over 2 has but not >5	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
Over 5 has.	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
D. Revenue Base										
1. Diversion System										
a. Wet										
Not more than 2 Has.	225,673	235,228	244,783	254,338	263,893	273,448	283,003	292,558	302,113	311,668
Over 2 has but not >5	77,374	80,650	83,926	87,202	90,478	93,754	97,030	100,306	103,582	106,858
Over 5 has.	19,343	20,162	20,981	21,800	22,619	23,438	24,257	25,076	25,895	26,714
Total	322,390	336,040	349,690	363,340	376,990	390,640	404,290	417,940	431,590	445,240
b. Dry										
Not more than 2 Has.	211,785	220,752	229,719	238,686	247,653	256,620	265,587	274,554	283,521	292,488
Over 2 has but not >5	72,612	75,687	78,761	81,835	84,910	87,984	91,059	94,133	97,207	100,282
Over 5 has.	18,153	18,922	19,690	20,459	21,227	21,996	22,765	23,533	24,302	25,070
Total	302,550	315,360	328,170	340,980	353,790	366,600	379,410	392,220	405,030	417,840
c. Grand Total	624,940	651,400	677,860	704,320	730,780	757,240	783,700	810,160	836,620	863,080
2. Reservoir System										
a. Wet										
Not more than 2 Has.	96,717	100,812	104,907	109,002	113,097	117,192	121,287	125,382	129,477	133,572
Over 2 has but not >5	33,160	34,564	35,968	37,372	38,776	40,180	41,584	42,988	44,392	45,796
Over 5 has.	8,290	8,641	8,992	9,343	9,694	10,045	10,396	10,747	11,098	11,449
Total	138,167	144,017	149,867	155,717	161,567	167,417	173,267	179,117	184,967	190,817
b. Dry										
Not more than 2 Has.	90,765	94,608	98,451	102,294	106,137	109,980	113,823	117,666	121,509	125,352
Over 2 has but not >5	31,119	32,437	33,755	35,072	36,390	37,707	39,025	40,343	41,660	42,978
Over 5 has.	7,780	8,109	8,439	8,768	9,097	9,427	9,756	10,086	10,415	10,744
Total	129,664	135,154	140,644	146,134	151,624	157,114	162,604	168,094	173,584	179,074

VII.2.1A Projected ISF Billing (3/5)

(Scenario 1 - AO 17 ISF Rates)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
c. Grand Total	267,832	279,172	290,512	301,852	313,192	324,532	335,872	347,212	358,552	369,892
E. Irrigation Service Fee (Cavans Per Hectare)										
1. Diversion System										
a. Wet										
Not more than 2 Has.	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Over 2 has but not >5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Over 5 has.	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
b. Dry										
Not more than 2 Has.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Over 2 has but not >5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Over 5 has.	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
2. Reservoir System										
a. Wet										
Not more than 2 Has.	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Over 2 has but not >5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Over 5 has.	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
b. Dry										
Not more than 2 Has.	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Over 2 has but not >5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Over 5 has.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
F. Gov't Support Price (Php)										
Price Per Cavan										
a. Wet	450	450	450	450	450	450	450	450	450	450
b. Dry	500	500	500	500	500	500	500	500	500	500
G. Projected Revenue										
1. Diversion System										
a. Wet (Cavans)										
Not more than 2 Has.	225,673	235,228	244,783	254,338	263,893	273,448	283,003	292,558	302,113	311,668
Over 2 has but not >5	154,747	161,299	167,851	174,403	180,955	187,507	194,059	200,611	207,163	213,715
Over 5 has.	58,030	60,487	62,944	65,401	67,858	70,315	72,772	75,229	77,686	80,143
Total	438,450	457,014	475,578	494,142	512,706	531,270	549,834	568,398	586,962	605,526

VII.2.1A Projected ISF Billing (4/5)

(Scenario 1 - AO 17 ISF Rates)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
b. Dry (Cavans)										
Not more than 2 Has.	317,678	331,128	344,579	358,029	371,480	384,930	398,381	411,831	425,282	438,732
Over 2 has but not >5	217,836	227,060	236,283	245,506	254,729	263,952	273,176	282,399	291,622	300,845
Over 5 has.	81,689	85,147	88,606	92,065	95,523	98,982	102,441	105,900	109,358	112,817
Total	617,203	643,335	669,468	695,600	721,732	747,865	773,997	800,130	826,262	852,394
In Million Php										
a. Wet										
Not more than 2 Has.	102	106	110	114	119	123	127	132	136	140
Over 2 has but not >5	70	73	76	78	81	84	87	90	93	96
Over 5 has.	26	27	28	29	31	32	33	34	35	36
Total	197	206	214	222	231	239	247	256	264	272
b. Dry										
Not more than 2 Has.	159	166	172	179	186	192	199	206	213	219
Over 2 has but not >5	109	114	118	123	127	132	137	141	146	150
Over 5 has.	41	43	44	46	48	49	51	53	55	56
Total	309	322	335	348	361	374	387	400	413	426
Total ISF - Diversion System	506	527	549	570	592	613	634	656	677	699
2. Reservoir System										
a. Wet (Cavans)										
Not more than 2 Has.	145,075	151,218	157,360	163,503	169,645	175,788	181,930	188,073	194,215	200,358
Over 2 has but not >5	82,900	86,410	89,920	93,430	96,940	100,450	103,960	107,470	110,980	114,490
Over 5 has.	33,160	34,564	35,968	37,372	38,776	40,180	41,584	42,988	44,392	45,796
Total	261,136	272,192	283,249	294,305	305,362	316,418	327,475	338,531	349,588	360,644
b. Dry (Cavans)										
Not more than 2 Has.	181,530	189,216	196,902	204,588	212,274	219,960	227,646	235,332	243,018	250,704
Over 2 has but not >5	108,918	113,530	118,141	122,753	127,365	131,976	136,588	141,199	145,811	150,423
Over 5 has.	38,899	40,546	42,193	43,840	45,487	47,134	48,781	50,428	52,075	53,722
Total	329,348	343,292	357,237	371,182	385,126	399,071	413,015	426,960	440,905	454,849
In Million Php										
a. Wet										
Not more than 2 Has.	65	68	71	74	76	79	82	85	87	90
Over 2 has but not >5	37	39	40	42	44	45	47	48	50	52

VII.2.1A Projected ISF Billing (5/5)

(Scenario 1 - AO 17 ISF Rates)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Over 5 has.	15	16	16	17	17	18	19	19	20	21
Total	118	122	127	132	137	142	147	152	157	162
b. Dry										
Not more than 2 Has.	91	95	98	102	106	110	114	118	122	125
Over 2 has but not >5	54	57	59	61	64	66	68	71	73	75
Over 5 has.	19	20	21	22	23	24	24	25	26	27
Total	165	172	179	186	193	200	207	213	220	227
Total ISF - Reservoir	282	294	306	318	330	342	354	366	378	390
H. Total Projected Billable ISF	788	821	855	888	922	955	988	1,022	1,055	1,088
I. Billing Efficiency	95%	95%	95%	95%	100%	100%	100%	100%	100%	100%
J. Gross Billings	749	780	812	844	922	955	988	1,022	1,055	1,088

VII.2.1B Projected ISF Billing (2001 - 2010)

(Scenario 2, 3 and 4 - 1975 ISF Rates)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A. Physical Target											
1.0 Service Area, Beg. of Year	678,549	708,549	738,549	768,549	798,549	828,549	858,549	888,549	918,549	948,549	978,549
1.1 New Area Generation	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
1.2 Total Service Area	708,549	738,549	768,549	798,549	828,549	858,549	888,549	918,549	948,549	978,549	1,008,549
a. Wet	77%	77%	77%	77%	77%	77%	77%	77%	77%	77%	77%
b. Dry	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
1.2 Irrigable Area (Program)											
a. Wet	522,483	545,583	568,683	591,783	614,883	637,983	661,083	684,183	707,283	730,383	753,483
b. Dry	441,057	460,557	480,057	499,557	519,057	538,557	558,057	577,557	597,057	616,557	636,057
2.0 Cropping Intensity											
2.1 % Cropping Intensity											
a. Wet	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%	65%
b. Dry	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%	61%
2.2 Planted & Benefitted Area (Has.)											
a. Wet	441,057	460,557	480,057	499,557	519,057	538,557	558,057	577,557	597,057	616,557	636,057
b. Dry	413,915	432,215	450,515	468,815	487,115	505,415	523,715	542,015	560,315	578,615	596,915
Total	854,972	892,772	930,572	968,372	1,006,172	1,043,972	1,081,772	1,119,572	1,157,372	1,195,172	1,232,972
B. Distribution of Benefited Area As to System Type											
1. % to Total Service Area											
a. Diversion	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
b. Reservoir	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
2. Total Benefited Area											
a. Diversion											
a.1 Wet	308,740	322,390	336,040	349,690	363,340	376,990	390,640	404,290	417,940	431,590	445,240
b.2 Dry	289,740	302,550	315,360	328,170	340,980	353,790	366,600	379,410	392,220	405,030	417,840
Total	598,480	624,940	651,400	677,860	704,320	730,780	757,240	783,700	810,160	836,620	863,080
b. Reservoir											
a.1 Wet	132,317	138,167	144,017	149,867	155,717	161,567	167,417	173,267	179,117	184,967	190,817
b.2 Dry	124,174	129,664	135,154	140,644	146,134	151,624	157,114	162,604	168,094	173,584	179,074
Total	256,492	267,832	279,172	290,512	301,852	313,192	324,532	335,872	347,212	358,552	369,892

VII.2.1B Projected ISF Billing (2001 - 2010)

(Scenario 2, 3 and 4 - 1975 ISF Rates)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
C. Irrigation Service Fee (Cavans Per Hectare)											
1. Diversion System											
a. Wet	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
b. Dry	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
2. Reservoir System											
a. Wet	2.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
b. Dry	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
D. Gov't Support Price (Php)											
Price Per Cavan											
a. Wet	450	450	450	450	450	450	450	450	450	450	450
b. Dry	500	500	500	500	500	500	500	500	500	500	500
E. Projected Revenue											
1. Diversion System											
In Cavans											
a. Wet	617,480	644,780	672,080	699,380	726,680	753,980	781,280	808,580	835,880	863,180	890,480
b. Dry	869,221	907,651	946,081	984,511	1,022,941	1,061,371	1,099,801	1,138,231	1,176,661	1,215,091	1,253,521
Total	1,486,701	1,552,431	1,618,161	1,683,891	1,749,621	1,815,351	1,881,081	1,946,811	2,012,541	2,078,271	2,144,001
In Million Php											
a. Wet	278	290	302	315	327	339	352	364	376	388	401
b. Dry	435	454	473	492	511	531	550	569	588	608	627
Total ISF - Diversion	712	744	775	807	838	870	901	933	964	996	1,027
2. Reservoir System											
In Cavans											
a. Wet	330,793	483,585	504,060	524,535	545,010	565,485	585,960	606,435	626,910	647,385	667,860
b. Dry	434,611	518,658	540,618	562,578	584,538	606,498	628,458	650,418	672,378	694,338	716,298
Total	765,403	1,002,243	1,044,678	1,087,113	1,129,548	1,171,983	1,214,418	1,256,853	1,299,288	1,341,723	1,384,158
In Million Php											
a. Wet	149	218	227	236	245	254	264	273	282	291	301
b. Dry	217	259	270	281	292	303	314	325	336	347	358
Total ISF - Reservoir	366	477	497	517	538	558	578	598	618	638	659
F. Total Billable ISF	1,079	1,221	1,273	1,324	1,376	1,428	1,479	1,531	1,583	1,634	1,686
G. Billing Efficiency	95%	95%	95%	95%	100%	100%	100%	100%	100%	100%	100%
H. Gross Billings	1,025	1,160	1,209	1,258	1,376	1,428	1,479	1,531	1,583	1,634	1,686

VII.2.2A Projected ISF Collection (2001 - 2010)
(Scenario 1 - AO17 ISF Rates; Compulsory Retirement Only))

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A. Back Accounts (BA)										
AR-ISF, Beg.-of year	5,008	5,270	5,541	5,821	6,111	6,434	6,766	7,107	7,456	7,812
Coll. Efficiency	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Collection BA	150	158	166	175	183	193	203	213	224	234
A/R - BA, Year-End	4,858	5,111	5,374	5,646	5,927	6,241	6,563	6,894	7,232	7,578
B. Current Account										
ISF Billings	749	780	812	844	922	955	988	1,022	1,055	1,088
Collection Efficiency	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
ISF Collection	337	351	365	380	415	430	445	460	475	490
A/R - CA, Year-end	412	429	447	464	507	525	544	562	580	599
C. Total ISF Due for Collection	5,757	6,050	6,353	6,665	7,032	7,389	7,755	8,129	8,511	8,901
D. Total ISF Collections	487	509	532	554	598	623	648	673	698	724
E. A/R (CA+BA), Year-end	5,270	5,541	5,821	6,111	6,434	6,766	7,107	7,456	7,812	8,176

VII.2.2B Projected ISF Collection
(Scenario 2 - 1975 ISF Rates, Compulsory Retirement Only)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A. Back Accounts (BA)										
AR-ISF, Beg.-of year	5,008	5,496	5,996	6,508	7,069	7,643	8,227	8,822	9,428	10,044
Coll. Efficiency	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Collection BA	150	165	180	195	212	229	247	265	283	301
A/R - BA, Year-End	4,858	5,496	5,816	6,313	6,857	7,413	7,980	8,558	9,145	9,743
B. Current Account										
ISF Billings	1,160	1,209	1,258	1,376	1,428	1,479	1,531	1,583	1,634	1,686
Collection Efficiency	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
ISF Collection	522	544	566	619	642	666	689	712	736	759
A/R - CA, Year-end	638	665	692	757	785	814	842	871	899	927
C. Total ISF Due for Collection	6,168	6,705	7,254	7,884	8,497	9,122	9,758	10,405	11,063	11,730
D. Total ISF Collections	672	709	746	814	855	895	936	977	1,018	1,060
E. A/R (CA+BA), Year-end	5,496	5,996	6,508	7,069	7,643	8,227	8,822	9,428	10,044	10,670

VII.2.2C Projected ISF Collection
(Scenario 3 and 4 - 1975 ISF Rates)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A. Back Accounts (BA)										
AR-ISF, Beg.-of year	5,008	5,496	5,911	6,244	6,523	6,703	6,783	6,766	6,656	6,462
Coll. Efficiency	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%
Collection BA	150	220	296	375	457	536	610	677	732	775
A/R - BA, Year-End	4,858	5,496	5,615	5,869	6,066	6,167	6,173	6,089	5,924	5,686
B. Current Account										
ISF Billings	1,160	1,209	1,258	1,376	1,428	1,479	1,531	1,583	1,634	1,686
Collection Efficiency	45.0%	47.5%	50.0%	52.5%	55.4%	58.3%	61.3%	64.2%	67.1%	70.0%
ISF Collection	522	574	629	722	791	863	938	1,016	1,097	1,181
A/R - CA, Year-end	638	635	629	654	636	616	593	567	538	506
C. Total ISF Due for Collection	6,168	6,705	7,169	7,620	7,951	8,182	8,314	8,348	8,291	8,148
D. Total ISF Collections	672	794	925	1,097	1,248	1,399	1,548	1,692	1,829	1,956
E. A/R (CA+BA), Year-end	5,496	5,911	6,244	6,523	6,703	6,783	6,766	6,656	6,462	6,192

VII.2.3A Projected Personnel Cost

(Scenario 1 and 2 - Compulsary Retirement Only)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A. No. of Permanent Staff, Beg. Of Year	5,223	5,156	5,106	5,050	4,993	4,861	4,734	4,558	4,415	4,275
Less : Compulsary Retirement	67	50	56	57	132	127	176	143	140	152
Less: Hiring of Replacement	0	0	0	0	0	0	0	0	0	0
Net Retirement During the Year	67	50	56	57	132	127	176	143	140	152
No. of Permanent Staff, End of Year	5,156	5,106	5,050	4,993	4,861	4,734	4,558	4,415	4,275	4,123
Ave. Annual Compensation ('000)	178	178	178	178	178	178	178	178	178	178
Total (In Millions)	918	909	899	889	865	843	811	786	761	734
B. No. of Daily Paid Staff, Beg. Of Year [1/]	834	834	834	834	834	834	834	834	834	834
Less : Retrenchment	0	0	0	0	0	0	0	0	0	0
No. of Daily Paid Staff, Year-end	834	834	834	834	834	834	834	834	834	834
Ave. Annual Compensation ('000)	88	88	88	88	88	88	88	88	88	88
Total (In Millions)	73	73	73	73	73	73	73	73	73	73
C. Total P. Cost @ constant 2000 prices	991	982	972	962	939	916	885	859	834	807
Yearly Salary Increase (%)	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Price Index	1.05	1.10	1.16	1.22	1.28	1.34	1.41	1.48	1.55	1.63
D. Total P. Costs @ current prices	1,041	1,083	1,126	1,170	1,198	1,228	1,245	1,270	1,294	1,315

[1/] Includes 55 temporary and 779 daily-paid employees.
Data from Personnel Dept. as of Dec. 31, 2000.

VII.2.3B Projected Personnel Cost
(Scenario 3 - 1975 ISF Rates; without ERP)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A. No. of Permanent Staff, Beg. Of Year	5,223	5,223	5,223	5,223	5,223	5,223	5,223	5,223	5,223	5,223
Less : Compulsary Retirement	0	0	0	0	0	0	0	0	0	0
Less:New Hire (Replacement)	0	0	0	0	0	0	0	0	0	0
Net Retirement During the Year	0	0	0	0	0	0	0	0	0	0
No. of Permanent Staff, End of Year	5,223	5,223	5,223	5,223	5,223	5,223	5,223	5,223	5,223	5,223
Ave. Annual Compensation ('000)	178	178	178	178	178	178	178	178	178	178
Total (In Millions)	930	930	930	930	930	930	930	930	930	930
B. No. of Daily Paid Staff, Beg. Of Year [1/]	834	834	834	834	834	834	834	834	834	834
Less : Retrenchment	0	0	0	0	0	0	0	0	0	0
No. of Daily Paid Staff, Year-end	834	834	834	834	834	834	834	834	834	834
Ave. Annual Compensation ('000)	88	88	88	88	88	88	88	88	88	88
Total (In Millions)	73	73	73	73	73	73	73	73	73	73
C. Total P. Cost @ constant 2000 prices	1003	1003	1003	1003	1003	1003	1003	1003	1003	1003
Yearly Salary Increase (%)	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Price Index	1.05	1.10	1.16	1.22	1.28	1.34	1.41	1.48	1.55	1.63
D. Total P. Costs @ current prices	1,053	1,106	1,161	1,219	1,280	1,344	1,411	1,482	1,556	1,634

[1/] Includes 55 temporary and 779 daily-paid employees.
Data from Personnel Dept. as of Dec. 31, 2000.

VII.2.3C Projected Personnel Cost
(Scenario 4 - 1975 ISF rates)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A. No. of Permanent Staff, Beg. Of Year	5,223	5,223	5,223	5,223	5,223	4,731	4,240	4,240	4,240	4,240
Less : Compulsary Retirement		0	0	0	492	491	0	0	0	0
Less: New Hires (Replacement)										
Net Retirement During the Year	0	0	0	0	492	491	0	0	0	0
No. of Permanent Staff, End of Year	5,223	5,223	5,223	5,223	4,731	4,240	4,240	4,240	4,240	4,240
Ave. Annual Compensation ('000)	178	178	178	178	178	178	178	178	178	178
Total (In Millions)	930	930	930	930	842	755	755	755	755	755
B. No. of Daily Paid Staff, Beg. Of Year [1/]	834	834	834	834	0	0	0	0	0	0
Less : Retrenchment	0	0	0	834	0	0	0	0	0	0
No. of Daily Paid Staff, Year-end	834	834	834	0	0	0	0	0	0	0
Ave. Annual Compensation ('000)	88	88	88	88	88	88	88	88	88	88
Total (In Millions)	73	73	73	0	0	0	0	0	0	0
C. Total P. Cost @ constant 2000 prices	1003	1003	1003	930	842	755	755	755	755	755
Yearly Salary Increase (%)	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Price Index	1.05	1.10	1.16	1.22	1.28	1.34	1.41	1.48	1.55	1.63
D. Total P. Costs @ current prices	1,053	1,106	1,161	1,130	1,075	1,011	1,062	1,115	1,171	1,229

[1/] Includes 55 temporary and 779 daily-paid employees.
Data from Personnel Dept. as of Dec. 31, 2000.

VII.2.3D Projected Personnel Cost
(Scenario 5 - 1975 ISF rates)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A. No. of Permanent Staff, Beg. Of Year	5,223	5,223	5,223	5,223	5,223	4,979	4,734	4,734	4,734	4,734
Less : Compulsary Retirement		0	0	0	244	245	0	0	0	0
Less: New Hires (Replacement)										
Net Retirement During the Year	0	0	0	0	244	245	0	0	0	0
No. of Permanent Staff, End of Year	5,223	5,223	5,223	5,223	4,979	4,734	4,734	4,734	4,734	4,734
Ave. Annual Compensation ('000)	178	178	178	178	178	178	178	178	178	178
Total (In Millions)	930	930	930	930	886	843	843	843	843	843
B. No. of Daily Paid Staff, Beg. Of Year [1/]	834	834	834	834	0	0	0	0	0	0
Less : Retrenchment	0	0	0	834	0	0	0	0	0	0
No. of Daily Paid Staff, Year-end	834	834	834	0	0	0	0	0	0	0
Ave. Annual Compensation ('000)	88	88	88	88	88	88	88	88	88	88
Total (In Millions)	73	73	73	0	0	0	0	0	0	0
C. Total P. Cost @ constant 2000 prices	1003	1003	1003	930	886	843	843	843	843	843
Yearly Salary Increase (%)	1.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Price Index	1.05	1.10	1.16	1.22	1.28	1.34	1.41	1.48	1.55	1.63
D. Total P. Costs @ current prices	1,053	1,106	1,161	1,130	1,131	1,129	1,186	1,245	1,307	1,373

[1/] Includes 55 temporary and 779 daily-paid employees.
Data from Personnel Dept. as of Dec. 31, 2000.

VII.2.4A Projected Personnel Reduction
(Scenario 1 and 2 - Compulsory Retirement Only)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1. Compulsary Retirement										
No. of Staff	67	50	56	57	132	127	176	143	140	152
Ave. Annual Pay Per Staff ('000)	177	177	177	177	177	177	177	177	177	177
Total Annually (In Millions)	12	9	10	10	23	22	31	25	25	27
2. Less: New Hire (Replacement)										
No. of Staff										
Ave. Annual Pay Per Staff ('000)	177	177	177	177	177	177	177	177	177	177
Total Annually (In Millions)	0	0	0	0	0	0	0	0	0	0
3. Daily Paid Staff										
No. of Staff										
Ave. Annual Pay Per Staff ('000)	88	0	0	0	0					
Total Annually (In Millions)	0	0	0	0	0	0	0	0	0	0
Summary:										
Reduction in the No. of Staff	67	50	56	57	132	127	176	143	140	152
Total Cost Reduced (In Millions)	12	9	10	10	23	22	31	25	25	27
Cumulatrive Reduction (In Millions)	12	21	31	41	64	87	118	143	168	195

Assumptions on Personnel Services	Base	Social Costs	Total Pay
Ave. Annual Compensation - P Staff (In Thousands)	127	1.40	178
Ave. Annual Compensation - Daily-Paid (In Thousands)	88	1.00	88

VII.2.4B Projected Personnel Reduction
(Scenario 3 - 1975 ISF Rates; without ERP)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1. Compulsary Retirement										
No. of Staff										
Ave. Annual Pay Per Staff ('000)	177	177	177	177	177	177	177	177	177	177
Total Annually (In Millions)	0	0	0	0	0	0	0	0	0	0
2. Less: New Hiring (Replacement)										
No. of Staff										
Ave. Annual Pay Per Staff ('000)	178	178	178	178	178	178	178	178	178	178
Total Annually (In Millions)	0	0	0	0	0	0	0	0	0	0
3. Daily Paid Staff										
No. of Staff										
Ave. Annual Pay Per Staff ('000)	88	88	88	88	88	88	88	88	88	88
Total Annually (In Millions)	0	0	0	0	0	0	0	0	0	0
Summary:										
Reduction in the No. of Staff	0	0	0	0	0	0	0	0	0	0
Total Cost Reduced (In Millions)	0	0	0	0	0	0	0	0	0	0
Cumulatrive Reduction (In Millions)	0	0	0	0	0	0	0	0	0	0

Assumptions on Personnel Services	Base	Social Costs	Total Pay
Ave. Annual Compensation - P Staff (In Thousands)	127	1.40	178
Ave. Annual Compensation - Daily-Paid (In Thousands)	88	1.00	88

VII.2.4C Projected Personnel Reduction
(Scenario 4 - 1975 ISF Rates, with ERP)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1. Compulsary Retirement										
No. of Staff			0	0	492	491				
Ave. Annual Pay Per Staff ('000)	177	177	177	177	177	177	177	177	177	177
Total Annually (In Millions)	0	0	0	0	87	87	0	0	0	0
2. Less: New Hiring (Replacement)										
No. of Staff										
Ave. Annual Pay Per Staff ('000)	178	178	178	178	178	178	178	178	178	178
Total Annually (In Millions)	0	0	0	0	0	0	0	0	0	0
3. Daily Paid Staff										
No. of Staff	0	0	0	834	0					
Ave. Annual Pay Per Staff ('000)	88	88	88	88	88					
Total Annually (In Millions)	0	0	0	73	0	0	0	0	0	0
Summary:										
Reduction in the No. of Staff	0	0	0	834	492	491	0	0	0	0
Total Cost Reduced (In Millions)	0	0	0	73	87	87	0	0	0	0
Cumulatrive Reduction (In Millions)	0	0	0	73	161	247	247	247	247	247

Assumptions on Personnel Services	Base	Social Costs	Total Pay
Ave. Annual Compensation - P Staff (In Thousands)	127	1.40	178
Ave. Annual Compensation - Daily-Paid (In Thousands)	88	1.00	88

VII.2.4D Projected Personnel Reduction
(Scenario 5 - 1975 ISF Rates, with ERP)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1. Compulsary Retirement										
No. of Staff			0	0	244	245				
Ave. Annual Pay Per Staff ('000)	177	177	177	177	177	177	177	177	177	177
Total Annually (In Millions)	0	0	0	0	43	43	0	0	0	0
2. Less: New Hiring (Replacement)										
No. of Staff										
Ave. Annual Pay Per Staff ('000)	178	178	178	178	178	178	178	178	178	178
Total Annually (In Millions)	0	0	0	0	0	0	0	0	0	0
3. Daily Paid Staff										
No. of Staff	0	0	0	834	0					
Ave. Annual Pay Per Staff ('000)	88	88	88	88	88					
Total Annually (In Millions)	0	0	0	73	0	0	0	0	0	0
Summary:										
Reduction in the No. of Staff	0	0	0	834	244	245	0	0	0	0
Total Cost Reduced (In Millions)	0	0	0	73	43	43	0	0	0	0
Cumulatrive Reduction (In Millions)	0	0	0	73	117	160	160	160	160	160

Assumptions on Personnel Services	Base	Social Costs	Total Pay
Ave. Annual Compensation - P Staff (In Thousands)	127	1.40	178
Ave. Annual Compensation - Daily-Paid (In Thousands)	88	1.00	88

VII.2.5A Projected Management Fee

(Scenario 1 and 2 - Compulsary Retirement Only)

I. On-going Projects (Peso Component)

		Projected Disbursement Schedule									
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1	Malitubog-Maridagao IP	58,610	529,657								
2	Kabulnan Irr. & Dev. Proj.	25,000									
3	Pampanga Delta	157,925									
4	Lower Agusan	75,488	369,789								
5	ISIP II	55,204	403,579								
6	Casecnan	155,048	200,000	42,244	83,003						
7	Tarlac Groundwater	40,000	123,700								
8	WRDP	50,993	35,930								
9	Southern Phils. ISP	75,732	272,408	395,485	529,699	200,000	191,908				
10	Bohol Irr. Project	50,000	100,000	213,000	100,000	245,000					
11	San Roque MIP		25,000	300,000	300,000	744,360	780,000	700,000	504,940		
12	Balog Balog ISIP	100,000	600,000	600,000	600,000	2,500,000	2,500,000	2,350,000	1,600,000		
13	Apayao Abulog	200,000	103,222								
14	Adalam Irr. Project	175,000	315,000	264,008							
15	Itbayat Int. Irr. Project	17,000	24,907								
16	Catubig Irr.Project	45,000	45,000	44,096							
17	Dolores Irr Project	80,000	100,000	100,000	101,949						
18	Basey Irr. Project		120,000	120,000	130,000	130,000	118,314				
19	Bulunawan Irr Project	100,000	100,000	55,752							
20	Aulo Irr. Project	30,000	100,000	103,961							
21	Grain Sector		178,786	185,150	185,150	178,148					
22	Small Reservoir Irr Project	78,000	300,000	300,000	300,000	1,000,000	1,371,912	1,402,589	1,300,000	700,000	
23	Repair/Rehab-Groundwater	50,000	200,000	200,000	200,000	657,347	655,422	665,766	439,940	440,455	
24	. Maint. Of NIS & CIS	100,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
25	Repair/Rehab - Access Rd.	95,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
26	Repair/Rehab - Drainage.	90,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
27	FS - Proposed Projects	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
28	Agri-Institutional	30,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
	Total	2,034,000	4,856,978	3,533,696	3,139,801	6,264,855	6,227,556	5,728,355	4,454,880	1,750,455	610,000

II. Agrarian Reform Program										
	Projected Disbursement Schedule									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1. CARP - Cost Component	213,000	1,810,000	3,622,000	1,810,000						
2. Agri Infra Support	593,000	961,000	824,000	241,000						
3. Agri Reform Comm. DP	377,000	287,000								
Mindanao Sett. Area Dev.	57,000	192,000	353,000	347,000						
Total	1,240,000	3,250,000	4,799,000	2,398,000	0	0	0	0	0	0
III. Summary										
	Projected Disbursement Schedule									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
On-Going Projects	2,034,000	4,856,978	3,533,696	3,139,801	6,264,855	6,227,556	5,728,355	4,454,880	1,750,455	610,000
Agrarian Reform Projects	1,240,000	3,250,000	4,799,000	2,398,000	0	0	0	0	0	0
Pipeline projects		433,000	738,637	1,210,069	3,051,627	3,530,136	3,835,602	4,317,210	4,537,630	6,275,050
Total	3,274,000	8,539,978	9,071,333	6,747,870	9,316,482	9,757,692	9,563,957	8,772,090	6,288,085	6,885,050
% Actual Disbursement to Schedule	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Projected Actual Releases	2,291,800	5,977,985	6,349,933	4,723,509	6,521,537	6,830,384	6,694,770	6,140,463	4,401,660	4,819,535
Mgt. Cost @ 5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Projected Mgt. Fee (In Million Php)	164	299	317	236	326	342	335	307	220	241

VII.2.5B Projected Management Fees
(Scenario 3 and 4 - 1975 ISF Rates)

I. On-going Projects (Peso Component)

Projected Disbursement Schedule

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
I. On-Going Projects										
1 Malitubog-Maridagao IP	58,610	529,657								
2 Kabulnan Irr. & Dev. Proj.	25,000									
3 Pampanga Delta	157,925									
4 Lower Agusan	75,488	369,789								
5 ISIP II	55,204	403,579								
6 Casecnan	155,048	200,000	42,244	83,003						
7 Tarlac Groundwater	40,000	123,700								
8 WRDP	50,993	35,930								
9 Southern Phils. ISP	75,732	272,408	395,485	529,699	200,000	191,908				
10 Bohol Irr. Project	50,000	100,000	213,000	100,000	245,000					
11 San Roque MIP		25,000	300,000	300,000	744,360	780,000	700,000	504,940		
12 Balog Balog ISIP	100,000	600,000	600,000	600,000	2,500,000	2,500,000	2,350,000	1,600,000		
13 Apayao Abulog	200,000	103,222								
14 Adalam Irr. Project	175,000	315,000	264,008							
15 Itbayat Int. Irr. Project	17,000	24,907								
16 Catubig Irr.Project	45,000	45,000	44,096							
17 Dolores Irr Project	80,000	100,000	100,000	101,949						
18 Basey Irr. Project		120,000	120,000	130,000	130,000	118,314				
19 Bulunawan Irr Project	100,000	100,000	55,752							
20 Aulo Irr. Project	30,000	100,000	103,961							
21 Grain Sector		178,786	185,150	185,150	178,148					
22 Small Reservoir Irr Project	78,000	300,000	300,000	300,000	1,000,000	1,371,912	1,402,589	1,300,000	700,000	
23 Repair/Rehab-Groundwater	50,000	200,000	200,000	200,000	657,347	655,422	665,766	439,940	440,455	
24 . Maint. Of NIS & CIS	100,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
25 Repair/Rehab - Access Rd.	95,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
26 Repair/Rehab - Drainage.	90,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000
27 FS - Proposed Projects	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
28 Agri-Institutional	30,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Total	2,034,000	4,856,978	3,533,696	3,139,801	6,264,855	6,227,556	5,728,355	4,454,880	1,750,455	610,000

II. Agrarian Reform Program

	Projected Disbursement Schedule									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
1. CARP - Cost Component	213,000	1,810,000	3,622,000	1,810,000						
2. Agri Infra Support	593,000	961,000	824,000	241,000						
3. Agri Reform Comm. DP	377,000	287,000								
Mindanao Sett. Area Dev.	57,000	192,000	353,000	347,000						
Total	1,240,000	3,250,000	4,799,000	2,398,000	0	0	0	0	0	0

III. Summary

	Projected Disbursement Schedule									
On-Going Projects	2,034,000	4,856,978	3,533,696	3,139,801	6,264,855	6,227,556	5,728,355	4,454,880	1,750,455	610,000
Agrarian Reform Projects	1,240,000	3,250,000	4,799,000	2,398,000	0	0	0	0	0	0
Pipeline projects		433,000	738,637	1,210,069	3,051,627	3,530,136	3,835,602	4,317,210	4,537,630	6,275,050
Total	3,274,000	8,539,978	9,071,333	6,747,870	9,316,482	9,757,692	9,563,957	8,772,090	6,288,085	6,885,050
% Actual Disbursement to Schedule	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Projected Actual Releases	2,291,800	5,977,985	6,349,933	4,723,509	6,521,537	6,830,384	6,694,770	6,140,463	4,401,660	4,819,535
Mgt. Cost @ 5%	5%	5%	7%	7%	7%	7%	7%	7%	7%	7%
Projected Mgt. Fee (In Million Php)	115	299	444	331	457	478	469	430	308	337

VII.2.6 National Irrigation Administration

Projected CIS Amortization Collection

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A/R-CIS, Beg. Balance		340	242	184	149	128	115	108	103	101	99
Add: Billing		64	64	64	64	64	64	64	64	64	64
Total Due For Collection		404	307	248	213	192	180	172	168	165	163
Less: Collection											
Back Account (old)	40%	136	97	74	60	51	46	43	41	40	40
Current Account	40%	26	26	26	26	26	26	26	26	26	26
Total Collection		162	123	99	85	77	72	69	67	66	65
A/R-CIS, End Balance		242	184	149	128	115	108	103	101	99	98

Source: JICA Study Team

REFERENCE DATA VII.3

Personnel Data (Functions of NIA's Offices)

VII.3.1 Main Functions of NIA's Central Office (1/6)

Organizational Unit	Main Functions
A. Corporate Management Sector	
1. Board of Directors	- Formulate and adopt policies for the management and operation of the NIA
	- Recommend to the President of the Philippines the appointment of a Deputy Administrator and number of Assistant Administrators
	- Approve, subject to final action of the President, the annual and/or supplemental budget of the NIA
2. Office of the Administrator	- Execute and implement the policies, orders and resolutions approved by the NIA Board, in accordance with the provisions of RA 3601 as amended by PD No.552.
	- As the Chief Executive of the NIA, oversee, direct, and supervise its various operations
	' Provide legal assistance to the Administrator and the Board of Directors
	' Responsible for the overall security of the Agency
3. Office of the Deputy Administrator	- Assist the Administrator in planning, organizing and directing the activities of the Agency
	- Act in place of the Administrator in the latter's absence
4. Corporate Planning Group	- Provide advice and recommendations in the determination of long-term corporate objectives based on national development policies
(1) Corporate Planning Staff	- Undertake policy studies and formulation based on corporate objectives and functions
(2) Programming Division	' Formulate/develop criteria and guidelines in the preparation of the NIA Infrastructure Program in relation to overall objectives
1) Programming and Coordinating Section *2) Programs Evaluat. and Reporting Section*	' Prepare and periodically update the consolidated annual, short, medium and long range irrigation development program of the NIA based on national goals and objectives
	' Prepare periodic and annual program reports for management guidance and as may be required by higher authorities and other government agencies
	' Prepare inventory of all existing systems and possible projects, including its periodic
(3) Management Information System Division	' Develop and maintain an integrated management information system for the NIA
1) Electronic Data Processing (EDP) Section	' Consolidate and monitor plans, programs and activities of the NIA
2) Information Management Section	' Analyze data gathered on accomplishment versus plans and programs
	' Compile, collate, update, and disseminate statistical data relevant to the NIA plans and
	- Provide guidelines in the preparation of NIA's irrigation development plans and programs in coordination with other government agencies and NIA line officials
	- Consolidate and integrate departmental and regional office plans in accordance with the total corporate objectives
	- Evaluate information on corporate performance against targets
5. Public Affairs and Information Staff (PAIS)	- Develop and administer a comprehensive communications program and implement strategies for the dissemination of information concerning NIA through various media
	. Plan, prepare and produce various multi-media materials such as publications, audio-visuals, print and broadcast materials to support the communications program of the
	. Conceptualize and develop a comprehensive communications plan for the Agency
B. Project Development and Implementation (PDI) Sector	
1. Office of the Assistant Administrator	- Assist the Administrator in planning, organizing, directing and controlling the project development, design and specifications and construction management activities of the NIA
	- Review plans, programs and proposals of departments supervised for adherence to policies and standards; evaluate their performance against targets
2. Project Development Department (PDD)	- Formulate and develop short and long-range plans, programs and proposals for development of feasible irrigation and related water resources projects
	- Identify and submit to appropriate authorities aggregate program and funding requirements of projects for investigation, feasibility studies and implementation
	- Undertake engineering, agricultural and economic investigations and studies for multi-purpose water resources development projects and other irrigation projects proposed for foreign financing to determine their technical, economic, financial, social and environmental feasibility
	- Prepare loan proposals, terms of reference and other documents necessary for obtaining financial and technical assistance in connection with project preparation and
(1) Project Investigation Division	' Formulate guidelines and standards in the conduct of reconnaissance grade survey, investigation of proposed irrigation and water resources projects, detailed geologic survey and farm project drainage investigation work
1) Project Identification Section *2) Surveys and Mapping Section*	' Prepare aggregate program proposals for general investigation covering national, communal, pump and other water resources projects
3) Geology Section *4) Drainage Section*	' Undertake the investigation, collection, integration and evaluation of planning data to determine the technical feasibility of projects identified for foreign financing
(2) Water Resources Utilization Division	' Plan and coordinate the establishment of hydrometeorological and hydrogeological stations/ networks
1) Hydrography Section *2) Surface Water Section* *3) Groundwater Section*	' Compile and consolidate all available data on water resources; determine ground and surface water resources potential as required for irrigation project planning and recommend schemes for their optimum utilization

VII.3.1 Main Functions of NIA's Central Office (2/6)

Organizational Unit	Main Functions
	' Prepare guidelines, procedures and programs for the design, construction and operation of groundwater wells
(3) Land Resource Utilization Division	' Assess land resources and analyze agricultural and economic parameters
1) Land Classification Section	' Consolidate and evaluate results of land classification survey conducted by the regional
2) Agricultural Land Use Section *3) Economic Section*	' Undertake economic and financial feasibility studies
(4) Plan Formulation Division	' Prepare project plans for both single-purpose and multi-purpose irrigation and water resources development projects to be proposed for foreign financing
1) Dams and Reservoirs Section *2) Irrigation Works Section* *3) Feasibility Records Section* *4) Environmental Studies Section* *5) Drafting Section*	' Prepare loan proposals for project financing and technical assistance by foreign lending institutions and attend to all activities pertinent thereto
3. Design & Specifications Department (DSD)	- Develop design criteria; prepare detailed specifications for civil works, construction materials and supplies, water control gates and other metal works used in irrigation projects
	- Prepare preliminary and/or detailed final designs and estimates of facilities and structures of proposed irrigation projects for foreign financing; review plans, drawings and specifications
	- Attend to all activities pertaining to the pre-qualification of bidders and analysis of bids for recommendation/ submittal to domestic and international bidding committees
	- Undertake the drafting of detailed working drawings of irrigation/ drainage, architectural and mechanical/ electrical structures designed at the Central Office
(1) Civil Works Design Division	' Formulate and develop design criteria, guidelines and procedures for dissemination to field offices
1) Design Research Section *2) Civil Works Design Section*	' Undertake complete design of dams and reservoirs, major hydraulic structures and others, and prepare their quantity estimates
3) Mechanical-Electrical Design Section	' Review final irrigation/ drainage networks or layout submitted by field offices
	' Coordinate with field offices in developing their requisite irrigation and drainage design capabilities
(2) Architecture and Drafting Division	' Develop drafting standards for agency-wide use
1) Architectural Section *2) Civil Works Drafting Section*	' Coordinate and undertake the preparation of working drawings of civil works/mechanical and electrical works designed in the Central Office
3) Mechanical-Electrical Drafting Section *4) Civil Works Drafting Section*	' Coordinate and undertake the design and preparation of plans for building projects or project facilities
5) Mechanical-Electrical Drafting Section	' Review and/or modify working drawings/ architectural plans submitted by field offices
(3) Specifications Division	' Prepare and develop technical specifications for irrigation/ drainage works for dissemination to field offices
1) Specifications Section *2) Prequalification and Evaluation section*	' Prepare detailed technical specifications for civil works, construction materials, supplies and services for irrigation projects proposed for foreign financing
3) Equipment Management Department	' Attend to all activities pertaining to the pre-qualification of bidders and analysis of bids for recommendation/ submittal to domestic or international bidding committees
4. Construction Management Department (CMD)	- Undertake all pre-implementation and other complimentary activities including planning and scheduling of foreign-assisted projects approved and programmed for construction
	- Review proposed construction schedules and programs of work, job order systems, cost estimates and procurement schedules of projects ready for implementation or which are presently under construction
	- Formulate working policies, standards, materials testing and construction control techniques for implementation in the field offices
	- Monitor and evaluate all monthly progress reports and status of construction activities undertaken by field offices; prepare periodic and consolidated reports on the progress of construction of all irrigation projects
(1) Construction Planning and Scheduling Division	' Prepare master plan for implementation of national irrigation and related water resources projects
1) Implementation Planning Section	' Formulate plans for the implementation of foreign-assisted projects
2) Programs and Funds Management Section *3) Estimates Section*	' Review proposed programs of work and construction schedules for force accounts work in national irrigation projects submitted by field offices
	' Review/ update the overall project cost estimates submitted by field offices for national projects
(2) Contract Administration Division	' Review/ evaluate construction schedules, contractors' claims, statistical and progress reports submitted by contractors/ field offices
1) Contract Management Section *2) Contract Adjustment and Claims Section*	' Formulate guidelines in the processing of contractor's claims to facilitate payment and monitor same to field offices
	' Coordinate the delivery of NIA furnished construction logistics contracts
(3) Project Monitoring and Evaluation Division	
1) Project Evaluation Section	' Continuously improve project monitoring system
2) Monitoring and Reports Section	' Prepare periodic progress reports for all national projects
3) Materials Testing and Control Group	

VII.3.1 Main Functions of NIA's Central Office (3/6)

Organizational Unit	Main Functions
5. Special Project Staff	- Maintain a pool of project managers from which to draw future project managers who shall, for the meantime that they are without special projects, develop schemes and various approaches to improve the management and implementation of special projects
	- Undertake the final phases of construction of a project to expedite completion and turnover of the system to operation sector and shorten transition period
	- Supervise the transition completed of major projects from construction to operation
	- Lead a task force to expedite prosecution of project or bring the project within schedule
	- Responsible for organizing resources needed to set the machinery moving for a major project identified for prosecution
C. Systems Operation and Equipment Management (SOEM) Sector	
1. Office of the Assistant Administrator	- Assist the Administrator in planning, organizing, directing and controlling all activities pertinent to the management of irrigation systems to ensure proper operation maintenance, repair and improvement
	- Review plans, programs and proposals regarding the implementation of the agricultural phase of a project; review strategies, plan and programs for the formation and development of irrigators' associations in national and communal systems/ projects
	- Review plans and programs for assistance to farmers to enable irrigators' associations to take over management of systems/parts of systems
	- Monitor performance of dams and major structures of an irrigation system to ensure efficiency of said structures
	- Supervise the final phases or completion of major national projects to expedite turnover and shorten transition period from project to system
2. Systems Management Department (SMD)	- Provide assistance and advice on the operation, maintenance, repair and improvement of irrigation systems
	- Review annual plans and programs submitted by field offices on the management of irrigation systems
	- Prepare consolidated annual program including financial requirements for operation, maintenance, repair and rehabilitation of systems
	- Review plans and programs on training of irrigation system personnel
	- Develop plans for the conduct of irrigation research to maintain irrigation structures and facilities, improve management of systems and increase irrigation area
(1) Operation and Maintenance Division	' Prescribe guidelines, standards and procedures for the proper operation and maintenance of irrigation systems; review and evaluate their implementation
1) O&M Section A	' Review annual plans and programs of target area for irrigation, drainage, and level production
2) O&M Section B *3) Training Section*	' Prepare comprehensive annual report per system on the status of water management as well as the efficiency of the physical structures in water utilization
	' Evaluate crop production reports and review recommendation for exemption from payment of irrigation fees
	' Develop policies and guidelines for the intensive training of &M personnel
(2) Rehabilitation Division	' Formulate standards, guidelines and procedures for the repair and improvement of damaged existing structures and facilities in all national irrigation systems
1) Rehabilitation Section A *2) Rehabilitation Section B*	' Review and evaluate plans, programs and financial requirements submitted by field offices for the repair and improvement of structures and facilities
	' Review and consolidate statistics on repair and improvement work for the preparation of periodic reports and overall plans and programs
(3) Research and Development Division	' Develop plans for the conduct of irrigation research for the improvement of service, proper operation and maintenance of irrigation structures and facilities
1) Research Planning & Evaluation Section	' Exercise functional supervision over research stations/ laboratories in the field offices
2) Research Outputs Application Section	' Evaluate, package and disseminate approved research findings/ results and related developments for utilization in irrigation systems
3. Institutional Development Department (IDD)	- Formulate policies, strategies to prepare irrigator's for their eventual takeover and management of irrigation systems
	- Develop plans and programs for rendering assistance to irrigators
	- Supervise and coordinate activities of all regional water management training centers/ units
	- Monitor and evaluate the implementation and effectiveness of NIA's assistance program
(1) Irrigators' Organization and Training Division	' Formulate strategies and develop guidelines in the organization of irrigators' association and their consequent takeover of irrigation systems
	' Review plans submitted by field offices for the organization of irrigators and revitalization of organized associations
	' Provide technical assistance in the conduct of training programs for irrigators and operation and maintenance personnel and evaluate the effectiveness of such training program
(2) Irrigators' Assistance Division	' Develop plans and programs to assist irrigators attain high production level
	' Review plans and programs prepared by field offices and monitor and evaluate the propriety, adequacy and effectiveness of their assistance to farmer irrigators
	' Collect information on proven and accepted methods of increased farm productivity for dissemination to field offices

VII.3.1 Main Functions of NIA's Central Office (4/6)

Organizational Unit	Main Functions
4. Equipment Management Department (EMD)	- Plan and administer a comprehensive Agency program for the acquisition, deployment, maintenance and repair of construction equipment, irrigation pumps, drilling rigs, mechanical-electrical plants, transport and communications equipment
	- Formulate, update and disseminate policies, guidelines and procedures on equipment management; monitor and evaluate all field activities
	- Prepare technical specifications and cost estimates of construction and shop equipment to be acquired by the Agency
	- Undertake field inspection to evaluate equipment and pumps recommended for disposal, field shop facilities, operations and maintenance activities, newly acquired equipment, spare parts and tools; undertake repair of equipment brought to Central Office
	- Prepare the plans and designs and undertake the installation, repair, operation and maintenance of well drilling equipment, mechanical plants and structure, electrical plants and communication equipment
(1) Equipment Planning & Specifications Division	' Plan and program the acquisition and distribution of equipment to projects and systems; prepare the annual financial requirement to support the equipment management program
1) Planning and Programming Section *2) Specifications Section*	' Formulate rules and regulations governing the lease of equipment and review periodically the existing rental rate structure of all equipment and update same when necessary
3) Utilization Evaluation and Statistics Section	' Prepare technical specifications and estimates for the acquisition of all equipment
	' Maintain and consolidate technical documents, manuals, references and materials
(2) Equipment Insp. and Repair Logistics Division	' Conduct field inspection to check on operation and maintenance activities, review equipment recommended for disposal, determine adequacy of field shop facilities and so on
1) Equipment Inspection Section *2) Field Shop Inspection Section*	' Undertake technical inspection of all equipment, machineries, spare parts and tools delivered to Central Office
3) Equipment Tool & Repair Section *4) Repair Programming & Evaluation Section*	' Prepare guidelines and standards, informational and instruction materials on proper operation and maintenance of equipment and vehicles
	' Review , evaluate and program quarterly repair work by Region
	' Maintain adequate supply of fast-moving spare parts, control releases thereof and maintain running inventory of parts available in stock
	' Undertake the operation of the Central Office Equipment Pool and repair shop
(3) Special Equipment Operation Division	' Prepare guidelines and standards in The o/M of well-drilling equipment, mechanical plants and structures, electrical plants and communication equipment
1) Mechanical Plants and Structures Section *2) Electrical and Communication Section*	' Prepare the plans and specifications for bid requirement for mechanical plant and structures running plants, communication system and equipment, etc.
3) Groundwater Equipment Planning and Logistics Section	' Supervise the operation and maintenance of drilling equipment and provide mechanical support for drilling operation as well as in the repair of drilling rigs and allied equipment
4) Field Drilling Operation Section	' Supervise the installation of mechanical plant and structure, pumping plants, electrical plants and communication system; monitor and evaluate operation and provide its technical
5. Special Project Staff	- Maintain a pool of project managers from which to draw future project managers who shall, for the meantime that they are without special projects, develop schemes and various approaches to improve the management and implementation of special projects
	- Undertake the final phases of construction of a project to expedite completion and turnover of the system to operation sector and shorten transition period
	- Supervise the transition completed of major projects from construction to operation
	- Lead a task force to expedite prosecution of project or bring the project within schedule
	- Responsible for organizing resources needed to set the machinery moving for a major project identified for prosecution
D. Administrative Services Sector	
1. Office of the Assistant Administrator	- Advise and assist the Administrator in planning, organizing, directing and controlling the administrative services of the corporation
	- Review plans, programs and proposals of department supervised for adherence to policies and standards; evaluate their performance against targets
2. Personnel & Records Management Dept.	- Plan, develop and implement short and long-range personnel management and development
	- Develop and administer plans and programs on personnel recruitment, motivation, utilization, and performance appraisal; implement the duly approved NIA position classification and pay plans; and administer employee benefits
	- Plan, develop and integrate a comprehensive training and development program for NIA personnel
	- Administer the central records system of the Agency
(1) Personnel Division	' Plan and develop personnel management programs and policies
1) Recruitment and Appointment Section	' Implement approved programs on recruitment, selection and placement of personnel
2) Employee Welfare Section *3) Salary Administration and Standards Section*	' Implement employee benefits and welfare service program; process applications and claims covered by the program
	' Maintain liaison with the Civil Service Commission, DBM, GSIS on personnel matters
(2) Records Management Division	' Formulate, recommend and implement policies and guidelines for a system-wide records
1) Receiving and Mailing Section	' Receive and release correspondence, documents, air cargoes, checks, etc.
2) Mailing and Courier Section	' Develop and maintain a uniform filing system for the Agency
3) Maintenance and Disposal Section	' Develop/ adopt measures to improve records retrieval
4) Program Design and Evaluation Section	' Maintain a records disposition program in accordance with prescribed rules and regulations
5) Training Administration Section *6) Support Services Section*	' Plan and undertake studies for improvement of records management

VII.3.1 Main Functions of NIA's Central Office (5/6)

Organizational Unit	Main Functions
3. Legal Department (LD)	- Assist management in the development/ formulation of policies and regulations pertaining to matters affecting the NIA; provide legal services for the protection of corporate rights, interest and property
	- Prepare/ review contracts and legal instruments
	- Conduct administrative investigations; assist the Solicitor General in prosecuting cases where the NIA is a party
(1) Litigation Division	' Conduct administrative investigations or review administrative charges against employees of the NIA
1) Judicial Cases Section	' Assist in promulgating rules governing activities of the NIA
2) Administrative Cases Section	' Assist the Solicitor-General in court litigation where the NIA is involved
(2) Contracts Division	' Interpret laws and rules affecting the operations of the NIA
1) Documentation Section *2) Research Section*	' Prepare contracts and instruments beyond the authority of the field offices; interpret provisions of contracts covering works performed for the NIA by private entities
	' Prepare comments and proposed legislations concerning NIA
4. Procurement & Physical Resources Dept. (PPRD)	- Assist management in the development/ formulation of policies and regulations pertaining to procurement, property and management of physical resources of the Agency
	- Undertake the procurement of office equipment, supplies and materials; and the procurement of construction materials, supplies, equipment, spare parts and contract services when the same are not available in the field
	- Attend to all matters pertaining to importation requirements including customs clearance for the procurement of imported supplies, materials and equipment
	- Develop plans and programs for the proper control, utilization and safekeeping of all NIA property, excluding construction equipment
	- Plan and implement a program of building and facilities maintenance, repair and improvement
(1) Procurement Division	' Prepare consolidated annual procurement program; simplify procedures on the procurement of goods and services
1) Purchasing Section *2) Importation and Trade Section*	' In collaboration with the Committee on bids and Awards, undertake the procurement of common construction materials, supplies, equipment, spare parts and contract services
3) Monitoring and Service Section	' Attend to all matters pertaining to importation requirements including opening of LCs; coordinate with Controllership Department in the preparation of withdrawal applications for supplies contracts for submission to lending institutions
	' Prepare and issue motions and/or invitations to bids; schedule bids for the procurement of construction materials, equipment and supplies
(2) Property Division	' Implement approved policies, rules and regulations and procedures on property and inventory management
1) Inventory and Disposal Section *2) Warehousing and Shipping Section*	' Direct and/or coordinate receipt, movement, storage, issuance, disposition and control of supplies, materials, equipment and spare parts in the Central Office
3) Customs and Forwarding Section	' Maintain prescribed records of all NIA properties and employees having accountabilities
4) Motorpool Section *5) Security Section*	' Review periodic status reports on inventory of office equipment, materials and supplies of field offices, make spot check, if necessary, and recommend transfer, reallocation or disposal of non-moving items
	' Determine adequacy and arrange for the insurance of NIA properties, bonding of accountable officers and means of minimizing risks
(3) Building and Facilities Maintenance Division	' Plan and implement program of building and facilities maintenance, repair and improvement
1) Civil Works Section	' Prepare manuals for operation and maintenance of buildings and facilities
2) Electrical and Communication Section *3) Mechanical Works Section*	' Undertake the installation, maintenance, repair, renovation and beautification of compound/facilities of the NIA Central Office
	' Formulate, recommend and enforce rules and regulations regarding the use of building facilities; make periodic reports to management on fees and rentals collected from use of such facilities
(4) Civil Security Affairs Division	' Responsible for the overall security of the Agency
E. Finance and Management Sector	
1. Office of the Assistant Administrator	- Assist the Administrator in planning, organizing, directing and controlling the financial and management activities of the Agency to achieve optimum utilization of its resources and increase corporate income
	- Review plans, programs and proposals of departments supervised for adherence to policies and standards; evaluate their performance against targets
	- Exercise functional supervision over field offices in matters pertaining to his areas of concern
2. Controllership Department (CD)	- Direct and/or oversee monthly assessment of financial operations of the NIA to effect better financial management
	- Direct the processing and recording of all financial transactions and the preparation and analysis of individual and consolidated financial statements
	- Institute improvements in the accounting system and in financial controls consistent with the needs of management and administrative, accounting and auditing laws, rules and regulations
	- Establish and maintain a cost accounting system

VII.3.1 Main Functions of NIA's Central Office (6/6)

Organizational Unit	Main Functions
(1) General Accounting Division	' Maintain Central Office Books of Accounts including basic and subsidiary accounting records to reflect accurate and current financial information required by NIA management and by existing auditing rules and regulations
1) Bookkeeping Section	' Process vouchers and payrolls and prepare bills for CO receivables
2) Disbursement Processing Section *3) Billing and Miscellaneous Section* *4) analysis and Reports Section*	' Prepare and submit financial statements and other accounting reports to management and other agencies authorized to receive such reports
(2) Budget Division	' Prepare the overall budget in support of the operations, plans and programs of the Agency
	' Issue and control sub-allotment advices and cash disbursement ceilings by responsibility
	' Prepare physical report of operations of current operating expenditures and other budgetary reports for management information
	' Develop and improve budgetary methods and procedures
(3) Foreign Loan Accounting Division	' Maintain and accurate and current record of financial transactions in each foreign-assisted project
	' Prepare application for withdrawal of loan availments from the different lending institutions
1) Cost Accounting Section *2) Foreign Loan Accounting Section*	' Maintain an updated record of loan availments for each foreign-assisted project, control loan utilization by category as prescribed by the loan agreement and prepare revision of loan reallocation if necessary; prepare financial reports relative to loan utilization of each foreign-assisted project
3. Management Services Department (MSD)	- Provide top management with advice on the maximum utilization of resources
	- Prepare the Agency's physical and financial program for irrigation development based on approved plans
	- Develop plans and programs relative to improvement of the administrative organization; undertake regular management surveys; review existing methods, procedures and systems and make recommendations for improvement
	- Develop an integrated management information system to meet the information requirement of the NIA
	- Undertake management audits to evaluate adequacy of internal controls and to institute safeguards for the Agency's assets
(1) Organization and Methods Division	' Develop staffing standards and manpower requirements
1) Methods & Procedures Section *2) Organization and Standards Section*	' Conduct periodic systems and procedures audit of field offices to identify deviation from standard operating procedure
	' Review/ edit memorandum circulars & office orders prepared by the different organizational units to ensure consistency of content with existing policies, rules &
	' Undertake the preparation and updating of organization and systems and procedures manuals
	Develop, recommend for implementation and monitor the Agency cost reduction program on a continuing basis
(2) Management Audit Division	' Review internal control systems for safeguarding money and property to ascertain weaknesses and deficiencies requiring correction
1) CO Audit and Special Audit Section	' Conduct fiscal and/or property audits as necessary
2) Field Audit Section	' Check and monitor compliance with memorandum circulars
4. Treasury Department (TD)	- Develop plans and programs for a more effective and efficient management of NIA funds; formulate schemes or proposals to generate more income
	- Undertake the payment of obligations and the receipt of collections in the Central Office
	- Undertake studies to improve the strategies of revenue collections including simplification of existing procedures on billing and collections
	- Analyze collection efficiency of each system and develop a system of incentive bonus for outstanding collection performance
(1) Revenue Generation Services Division	' Study and recommend ways and means to improve and develop procedures and strategies for income generation and efficiency of collection from all sources
1) Collection Services Section	' Undertake investment of NIA funds and maintain and safeguard investment records
2) Investment and Real Properties Serv. Section	' Monitor billing and collection activities; prepare periodic reports on the collection of irrigation fees and other income
	' Consolidate and evaluate collection efficiency reports from field offices and develop a system of incentive bonus for outstanding collection performance
(2) Cash Division	' Handle the payment of all accounts payable and the collection and deposit of funds at the Central Office
	' Prepare disbursement, collection and related reports for submission to Controllership Department and agencies authorized to receive such reports
	' Maintain records of disbursements and collections together with supporting papers
	' Undertake the procurement and distribution of TCAA checks for Central Office use and Official Receipts for use of the Central and Field Offices

Source: Statement of Functions, SMD-NIA

VII.3.2 Main Functions of NIA's Field Offices (1/3)

Organizational Unit	Main Functions
A. Regional Irrigation Office (RIO)	
0. General	- Implement plans, policies, rules, regulations and programs for the region
	- Formulate and develop short and long-range plans, programs and proposals for development of feasible irrigation and related water resources projects within the regions; and direct the investigation and collection of technical, economic and other data
	- Supervise field operations of the Provincial Irrigation Offices and the construction of foreign-assisted projects and/or rehabilitation and improvement of irrigation systems the coverage of which are confined within the regions
	- Evaluate construction works by contract or force account and prepare reports of accomplishment by project
	- Direct and coordinate the operation and maintenance activities as well as the installation/ pull out of irrigation pumps; monitor and evaluate operation and maintenance of communal irrigation systems and irrigation pumps
	- Review plans and designs of communal irrigation projects; prepare preliminary designs and specifications of locally funded projects approved for construction in the region
	- Direct and coordinate research on improvement of irrigation service; the organization and development of irrigation service; the organization and development of irrigators' associations and the training of irrigators in areas served by all the irrigation systems
	- Direct and coordinate the utilization, movement, preventive maintenance and repair of all equipment
	- Direct and coordinate the administrative activities of the region, including the provision of necessary services relative to legal matters, training, information, procurement and property and other related activities
	- Direct and coordinate all activities pertaining to financial transactions, maintenance and control and payment of obligations in the region
	- Coordinate with other national and local government officials engaged in food production and community development and improvement
	- Submit periodic reports on activities of the region as required
1. Engineering Division *1) Planning & Investigation Section* *2) Design and Specifications Section* *3) Construction Management Section*	- Direct the conduct of intensive reconnaissance and feasibility investigation of possible areas for irrigation within the region to develop a pipeline of irrigation projects
	- Conduct hydrologic studies to determine potential surface and groundwater supplies; maintain a continuing inventory of land and water resources and determine the available dependable water supply of each water source in the different river basins and natural bodies of water in the region
	- Prepare maps of the different river basins and sub-basins in the region, indicate extent of surface water utilization and withdrawals of the groundwater resources due to existing wells
	- Undertake reconnaissance investigation to determine feasibility of all proposed national, communal and pump irrigation projects including groundwater irrigation project and prepare reconnaissance report
	- Undertake feasibility investigation to determine the technical, economic and financial feasibility of communal gravity and surface water pump projects and prepare the corresponding feasibility investigation report
	- Develop short and long-range plans, programs and proposals for development of feasible irrigation and related water resources projects; direct the investigation and collection of technical, economic and other data as directed by the Central Office
	- Prepare final plans, designs and specifications for communal irrigation projects and all national projects within the capability of the region
	- Undertake pre-construction planning and scheduling of projects approved for construction
	- Prescribe requirements for construction, including procurement of supplies & materials
	- Consolidate and prepare periodic reports on investigation and survey and construction activities in the region
	- Prepare bid documents relative to contract works
2. Operations Division *1) Systems Management Section* *2) Research and Development Section*	- Provide assistance and advice on the operation, maintenance, repair and improvement of irrigation systems in the region
	- Develop plans and programs to increase crop production, close the gap between irrigated and service area and increase cropping intensity by implementing proper water management in the region
	- Review plans, estimates and programs of work for operation, maintenance, repair and improvement of irrigation systems
	- Monitor reports and conduct ocular inspection of irrigation systems to evaluate actual condition and initiate measures to improve operation and maintenance
	- Prepare annual financial requirements for the operation and maintenance, repair and improvement of irrigation systems
	- Undertake research on irrigation and drainage methods, effective rainfall, irrigation systems efficiency, water losses, irrigated land use and other aspects of water management and technology for the improvement of operation and maintenance of systems
	- Implement at the regional level the NIA's program of assistance to irrigation end users; undertake training of end users, ditchtenders and gatekeepers of national systems

Source: Statement of Functions, Nov. 1984, NIA and Information from MSD, NIA

VII.3.2 Main Functions of NIA's Field Offices (2/3)

Organizational Unit	Main Functions
3. Institutional Development Division	- Supervise and participate in the organization, strengthening and development of irrigators' associations in the national irrigation systems in the region
1) Agricultural Coordination Section *2) Irrigators Assistance Section*	- In coordination with appropriate regional personnel conduct training of farmers, ditchtenders and gatekeepers on water management and operation and maintenance of systems, participate in the training of water management technicians and watermasters
	- Organize dialogues geared to promote closer relationship between the FIG/FIA leaders/ members and operation and maintenance personnel to attain efficient water distribution
	- Conduct studies on behavioral patterns and cultures of farmers; problems and influencing factors for the attainment of functionality of farmers irrigators group/ association and adapt findings to local FIGs
4. Equipment Management Division	- Undertake the management of all construction equipment and vehicles assigned to the region, including all those assigned to projects in the region
1) Control & Evaluation Section *2) Maintenance and Repair Section*	- Prepare plans and programs for the maximum utilization, assignment, transfer and movement of construction equipment and motor vehicles; provide equipment support to units and projects in the region
	- Control and evaluate the performance and utilization of construction equipment; arrange for the procurement of all spare parts, fuel, tools, manuals and other materials needed for the operation, repair and overhauling of equipment and motor vehicles: provide and support transportation requirement of the region: prepare reports on equipment management and submit same to higher authorities
	- Direct and supervise the inspection, maintenance and deadlining of equipment being used in the field; ensure that equipment in projects, systems and provincial offices are properly utilized and serviced; perform repair work on equipment in use; take charge of keeping equipment operate and in good condition at all times; repair/ maintain irrigation pumps in field offices with no mechanics
	- Repair all broken down equipment assigned to the region; manufacture spare parts within the capability of the region; provide electrical and welding services; paint motor vehicles, automotive and construction; service all equipment in the region
5. Administrative Division	- Provide administrative services for the region such as personnel development, procurement, legal, security, custodial, janitorial, medical and central services
1) Personnel Dev. and General Services Section *2) Property and Procurement Section* *3) Legal Section*	- Process various personnel transactions such as application for leave, retirement, appointment, bond, claims for employee benefits, and the like; prepare certification on employment and other related activities; prepare appointments, and maintain personnel
4) Medical and Dental Unit	- Implement Civil Service Rules and Regulations and recommend disciplinary action for violation thereof
	- Assist various units in the region in identifying training needs of their personnel and in designing the appropriate training programs; arrange for and coordinate the holding of seminars, workshops and other relevant aids to manpower development
	- Maintain liaison on administrative and personnel matters with CSC, GSIS, NISA, PBL,
	- Canvass prices and undertake the procurement of equipment, materials and supplies available locally at the regional/ project sites and within the authority of the region; undertake their storage, issuance and control
	- Provide communications, janitorial, security, clerical, records management and other general supportive services
	- Provide personnel with medical and dental services
	- Prepare consolidated periodic reports on administrative activities
6. Finance & Management Division	- Undertake all the activities pertaining to financial transactions; management and control; and payment of obligations in the region
1) Management and Budget Section *2) Accounting Section* *3) Cash Section*	- Undertake studies on the administrative organization of the region, is existing work methods and procedures and recommend improvements in order to achieve optimum utilization of resources and to increase corporate income
	- Process and record all financial transactions; prepare monthly trial balance and other periodic reports for submission to Central Office and other agencies
	- Undertake the payment of all obligations and custody of collection in the region and prepare disbursement, collection and related reports

Source: Statement of Functions, Nov. 1984, NIA and Information from MSD, NIA

VII.3.2 Main Functions of NIA's Field Offices (3/3)

Organizational Unit	Main Functions
B. Provincial Irrigation Office (PIO)	
	- Prepare inventory of existing and proposed national, communal and pump projects including groundwater pump projects
	- Undertake the investigation and survey of feasible water supply; maintain updated record of characteristics and behavior of water resources in the province; conduct field verification of applications for the purchase of irrigation pump sets
	- Undertake the construction, rehabilitation and improvements, installation and/or repair of communal gravity and pump irrigation projects andor systems
	- Provide technical assistance in the organization of farmers association management of communal systems as well as assistance to pump recipients for the installation, operation and maintenance of pump irrigation systems
	- Direct and supervise the pull-out, transfer and/or repossession of pump when ordered and directed by higher authorities
	- Develop/ implement strategies, guidelines and instructions to improve the collection of management fees, if any, pump amortization and repayment of construction cost of communal irrigation systems
	- Supervise the operation and maintenance of particular small irrigation systems when so designated
C. Irrigation System Office (ISO)	
	- Undertake the operation and maintenance of an irrigation system or group of systems
	- Implement guidelines and instruction, improve water management and water distribution
	- In consultation with farmers and in coordination with appropriate region personnel and other agencies prepare and administer the cropping pattern of the system
	- Prepare and implement the agricultural development program of the system
	- Undertake the organization of farmer irrigators' groups (FIGs); responsible for the growth and functionality
	- Collect irrigation fees; implement tie-up with NFA
	- Maintain pertinent records and submit required reports
	- Coordinate with other agencies engaged in food production
D. Locally-Funded Irrigation Project	
	- Undertake the actual construction of national irrigation projects funded from local sources in accordance with the approved plans, programs and schedules
	- Undertake pre-construction activities in preparation for the construction of the projects, including acquisition of right-of-way, survey, design, estimating, engagement of contractual services, etc.
	- Undertake the proper utilization, movement, maintenance and repair of equipment
	- Provide the project with administrative, financial and other services
	- Prepare periodic report of accomplishment
E. Foreign-Assisted Irrigation Project	
	- Undertake the construction of foreign-assisted irrigation projects in accordance with terms of agreement and within the approved plans, programs and schedules
	- Undertake pre-construction activities in preparation for actual construction of the project, including acquisition of right of way, survey, designs, estimating, engagement of contractual services, etc.
	- Undertake the proper utilization, movement, maintenance and repair of equipment
	- Undertake the effective coordination and prosecution of the agricultural development program of the project
	- Provide the project with administrative, financial and other related services
	- Prepare periodic reports of accomplishment as required by Management and lending institutions

Source: Statement of Functions, Nov. 1984, NIA and Information from MSD, NIA

REFERENCE DATA VII.4

Legislations Related to NIA Management

VII.4.1 Major Laws and Issuances Relating to NIA

	Major Laws and Issuances relating to NIA	Date of Issuance
1.	**Republic Act No.3601 (NIA Charter)**	June 22, 1963
	An ***Act creating NIA*** (from the irrigation division of the Bureau of Public Works) with an *initial capitalization of PHP300 million* w/ the following powers and objectives: 1) to investigate, study, improve, construct and administer all national irrigation systems; 2) to investigate all available and possible water resources for the purpose of utilizing the necessary projects; 3) to collect from the users of each irrigation system constructed by it such fees as may be necessary to finance the continuous operation of the system; and 4) to do all such other things and to transact al such businesses as are directly or indirectly necessary to the attainment of the above objectives. <u>Governing Body & Management</u> - The powers and functions of the NIA shall be exercised by a Board of Directors. - The Management of the NIA shall be vested in the Irrigation Administrator.	
2.	**Presidential Decree No.552** (Amended RA 3601)	September 11, 1974
	PD No.552 amended certain Sections of RA 3601 (NIA Charter). The amendments are as follows: 1) Powers and objectives: - to supervise the operation, maintenance and repair, or otherwise, ***administer temporarily all communal and pump irrigation systems*** constructed, improved and/or repairs wholly or partially with government funds. - to ***charge and collect*** from the beneficiaries of the water ***such fees or administration charges*** *as may be necessary* ***to cover the cost of operation, maintenance and insurance,*** **and** ***recover the cost of construction*** *within a reasonable period of time*. - to recover funds or portions hereof expended for the construction and/or rehabilitation of communal irrigation systems. 2) Increased the *capitalization of NIA to PHP2 billion.* 3) Authorized NIA to contract loans with foreign governments or financial institutions	
3.	**Presidential Decree No.1702** (Amendment of RA 3601)	July 18, 1980
	PD No.1702 amended Section 3 (working capital) of RA 3601 (NIA Charter), as amended by PD No.552. The amendments are as follows: 1) Set the authorized *capitalization of NIA to PHP10 billion.* 2) All amounts collected by NIA: ***irrigation service fees, engineering administration charges*** on projects, equipment rentals, sale of unserviceable equipment, all other incomes are also added to its operating capital. 3) NIA is authorized to ***impose 5% of the total cost of projects*** undertaken by it as an administration and engineering overhead charge. 4) NIA does not receive any government appropriation for operation and maintenance of irrigation systems.	

	Major Laws and Issuances relating to NIA	Date of Issuance
4.	**Memorandum Order No.38** (Further Amendment)	September 15, 1986
	MO No.38 further amended certain Sections of RA 3601 (NIA Charter). The amendments are as follows: 1) Section 5. Powers and Duties of the Board of Directors: to recommend to the President of the Philippines the *appointment of a Deputy Administrator* and such number of Assistant Administrators from a list of names submitted by the Administrator; to fix the compensation of the Administrator and his Deputy and Assistants; to recommended the suspension and/or removal of the said officials for cause. 2) Section 7. Managing Head: The management of the NIA shall be vested in and Irrigation Administrator; provided that the Deputy Administrator shall act for and in place of Administrator in the latter's absence.	
5.	**Republic Act No.6978**	January 24, 1991
	An Act to promote rural development by providing for an accelerated program within a ten-year period for the construction of irrigation projects. 1) The NIA shall undertake a ***ten-year program for the construction of irrigation projects*** **in the remaining *1,500,000 ha*** *of irrigated but irrigable lands*. 2) The program shall give priority to areas with social and economic problem. 3) Priority shall be given to the construction of communal irrigation projects (at least 50% of the funds). 4) The ***beneficiaries*** of ***communal irrigation projects*** shall pay ***50% of the project cost without interest for a period of 50 years***.	
6.	**Executive Order No.22**	September 14, 1992
	EO No.22 transferred the NIA from the Department of Public Works and Highways (DPWH) to the Office of the President.	
7.	**Administrative Order No.17**	October 14, 1992
	AO No.17 attached the NIA to the Department of Agriculture (DA).	
8.	**Republic Act No.8435 (known as "AFMA")**	December 22, 1997
	An Act prescribing urgent related measures to modernize the agriculture and fisheries sectors of the country in order to enhance their profitability, and prepare said sectors for the challenges of globalization through and adequate focused and rational delivery of necessary support services, appropriating funds therefor and for other purposes. The following are the provisions of AFMA affecting operation and maintenance of the national irrigation systems (NISs). 1) Preparation of bill to amend NIA Charter *expanding the membership of the NIA Board* of Directors; 2) Setting program for rehabilitation of existing systems whose sources can supply the dry season irrigation requirements of a minimum level; 3) Conduct of R&D activities to improve the management, effectivity & efficiency of irrigation systems; 4) ***Turnover of secondary canals and on-farm structures of NIS*** *to Irrigators' Associations (IAs)*; 5) Preparation of a capability building program for IAs and/or LGUs; and 6) ***Review of irrigation service fee (ISF) rates***.	

	Major Laws and Issuances relating to NIA	Date of Issuance
9.	**Administrative Order No.17**	August 17, 1998
	AO No.17 adopted a "***socialized irrigation service fee***", communal irrigation systems (CIS) amortization rates, and other urgent interim measures to cushion the effects of El Nino and the Asian currency crisis in the agricultural sector, particularly to benefit irrigation farmer-beneficiaries.	
10.	**Executive Order No. 162**	October 16, 1999
	EO No.162, entitled "Reorienting the Functions and Operations of the DA"	
	1) The structure and organizations of the DA, its offices, bureaus, attached agencies and corporations (including NIA) shall be re-organized along functional lines and consistent with the principles, goals and objectives of the AFMA. 2) Based on the functional reorientation and operational redirection, the DA shall prepare an "***Agricultural Bureaucracy Restructuring Plan (ABRP)***"	
11.	**Executive Order N.165**	October 10, 1999
	EO No.165 directs the formulation of an ***institutional strengthening and streamlining program*** for the Executive Branch.	
	1) A Presidential Committee on effective Governance (PCEG) is created to be composed of the Executive Secretary as Chair, the Secretary of BM as Co-Chair, with the Director-General of the NIDA, Chairman of the CSC, Secretary of Finance, and Head of the Presidential Management Staff, as members, to oversee and coordinate the institutional reforms in the bureaucracy. 2) The PCEG shall be assisted by sub-committees, which shall be responsible for the study of certain areas like service delivery, organizational development and staffing, financial management, personnel and change management, and information technology.	
12.	**Executive Order No.197**	January 13, 2000
	EO No.197 directed all government agencies and government-owned of controlled corporations (GOCC) to ***increase their fees and charges by not less than 20%***. 1) The heads of departments shall be responsible for the implementation of this EO by the bureaus, offices, units, and agencies, including GOCC, within their respective jurisdictions. 2) The Department of Finance and the DBM shall jointly promulgate the rules and regulations to implement this EO and monitor compliance by agencies. 3) All executive issuances or parts thereof which are inconsistent with any of the provisions of this EO are hereby repealed or modified accordingly.	
13.	**Executive Order No.218**	March 15, 2000
	EO No.218 provided further guidelines for the adjustment of the rates of fees and charges. 1) In view of the urgent need to improve the financial positions and at least recover costs, the Government intends to reactivate the Task Force on the Revision of Fees and Charges under the EO No.218.	
14.	**Administrative Order No.20**	May 15, 2000
	AO No.20, entitled "Establishing the Functional Coordination and Management Structure of the Department of Agriculture". 1) In partial implementation of EO No.162 (1999), the Department of Agriculture shall be organized according to the attached Chart 1: Functional Coordination and Management Structure of the DA; and Chart 2: Functional Coordination and Management Structure of the DA Regional Offices.	

	Major Laws and Issuances relating to NIA	Date of Issuance
15.	**Administrative Order No.24**	June 26, 2000
	AO No.24 provided amendments and guidelines to the implementation of DA AO No.20 to properly establish the functional coordination of the DA and of its DA Regional Office. 1) Under AO No.24, the Administrator of NIA shall report to the Undersecretary of Extension, LGU Support and Infrastructure (DA), and the NIA-Regional Offices are required to report the Regional Technical Director in charge of Infrastructure and Provincial Operations.	
16.	**Administrative Order No.40**	October 4, 2000
	AO No.40 made clarifications on the previous AOs No.20 ad 24, Series of 2000 to underscore the clearly coordinative nature of the relationship between the Regional Directors of the DA Proper and the Regional Directors/ Assistant Regional Directors of the various Bureaus, Agencies and Corporations attached to the DA. 1) The DA-Regional Executive Directors (REDs) and DA-Regional Technical Directors (RTDs) have neither supervisory nor line authority over their counterparts – heads or representatives of other DA Bureaus, Attached Agencies and Corporations (AACs) and Foreign-Assisted Projects (FAPs) – in the region.	

	Major Issuances relating to NIA's Delegated Authority	Date of Issuance
1.	**Memorandum Circular No.15, s. of 1998**	April 21, 1998
	MO No.15 issued by the Administrator provided the delegation of authority over technical and non-technical matters to be observed by NIA. 1) This MC enumerates delegated authorities to sign/ approve official papers, documents and contracts designed to improve the operations of the NIA. 2) It specifies the required position of a recommending and approving official for specific type of document (technical and non-technical).	
2.	**Memorandum Circular No.19, s. of 1999**	June 28, 1999
	MO No.19 amended the following provisions of the MC No.15 issued April 1998. 1) Certain provisions pursuant to the NIA Board Resolution No.6886-99 dated June 14, 1999, especially those pertaining to change in delegated authorities on the payment of right of way (ROW) and damages.	
3.	**General Memorandum Circular No.1, s. of 2000**	August 28, 2000
	GMO No.1 issued by the Secretary of Agriculture revised the rules on delegation of authority. 1) The rules hall be observed and adopted by the DA including all bureaus, regional offices, attached agencies and corporations. 2) The GMO covers delegation of authority concerning administrative matters (personnel) and financial matters. 3) Administrative matters include : signing authorities of officials on personnel appointment designation, application for leave of absence, approval of travel, order, transfer/reassigned, approval for permission to render overtime services, grant of permission to teach/exercise profession/study/engage in business, issuance of orders, memoranda, circulars, letter and related communications. 4) Financial matters include signing authorities of officials on requisitions and issue voucher for supplies/materials/office equipment, purchase and work order contracts, negotiated contracts, disbursement vouchers, fund transfer and signing and counter-signing of checks. The Order specifies positions being given authorities to recommend and approve above mentioned financial documents based on range of amount involved.	
4.	**General Memorandum Circular No.2, s. of 2000**	October 4, 2000
	GMO No.2 issued by the Secretary of Agriculture amended some provisions of GMO No.1 s. of 2000 pertaining to positions with SG-24 below. 1) New provision stated that all appointments with salary below grade 24 shall be approved by the respective heads of bureau, region attached agencies and corporations.	

VII.4.2 List of Legal Documents Related to the Irrigation Service Fee (ISF) Collection

	Memorandum Circulars Related to ISF Collection	Date of Issuance
1.	Memorandum Circular No.101, Series 1980 (NIA)	1980
	Revised incentive bonus plan for irrigation service fee collection	
2.	Memorandum Circular No. 8, Series 1981 (NIA)	March 19, 1981
	Amending revised incentive bonus plan for irrigation service fee collection	
3.	Memorandum Circular No.21, Series 1981 (NIA)	June 8, 1981
	Confirmation of statement of accounts	
4.	Memorandum Circular No. 5, Series 1988 (NIA)	1988
	Incentive policy for irrigation service fee (ISF) back accounts	
5.	Memorandum Circular No.44, Series 1990	July 9, 1990
	Delegation of authority on payments of back accounts	
6.	Memorandum Circular No.71, Series 1991	October 14, 1991
	General guidelines and procedures for utilization of the parcellary maps	
7.	Memorandum Circular No.11, Series 1992	February 10, 1992
	Extension for another 3-years of incentive policy for irrigation service (ISF) back accounts	
8.	Memorandum Circular No.30, Series 1992	April 30, 1992
	Revised viability incentive grant guidelines and criteria	
9.	Memorandum Circular No.15, Series 1993	March 30, 1993
	Implementation of the confirmation of statement of account (MC No.21, s. 1981)	
10.	Memorandum Circular No.2, Series 1995	January 13, 1995
	Final three-year extension of incentive policy on irrigation service fee (ISF) back accounts	
11.	Memorandum Circular No.6, Series 1995	February 24, 1995
	VIG Distribution and treatment of income in evaluating financial viability	
12.	Memorandum Circular No.38, Series 1997	October 15, 1997
	Collection and utilization of irrigation service fee back accounts	
13.	Administrative Order No.17	October 15, 1997
	Adoption of a socialized irrigation service fee, communal irrigation systems (CIS) amortization rates, and other urgent interim measures to cushion the effects of El Nino and the Asian currency crisis in the agricultural sector, particularly to benefit irrigation farmer beneficiaries.	
14.	Memorandum Circular No.49, Series 1998	1998
	Implementing guidelines pursuant to Administrative Order No.17.	

Source: Data from the legal files, NIA.

REFERENCE DATA VII.5

Status of Implementation of the AFMA of 1997

VII.5 STATUS OF IMPLEMENTATION OF THE AFMA OF 1997

The present Administration supports the implementation of the Agriculture and Fisheries Modernization Act (AFMA). In CY 2001, PHP20 billion were earmarked for the different components. Some PHP6.96 billion, including carry over funds from previous years, were appropriated for irrigation. Of these, some PHP1.343 billion will be for communal irrigation development. This is bigger than previous years' allocation, although still short to sustain the requirements of the ongoing foreign-assisted projects.

The implementing rules and regulations (IRR) of AFMA was approved in 1998. This was reviewed and updated in the fourth quarter of 2000, to make it relevant to the recent developments in the agricultural sector. However, the revised IRR has not been officially issued.

Since the enactment of the law in December 1997, the following have been accomplished or currently being implemented under the irrigation component:

(1) Review of the irrigation service rates

1) NIA completed an in-house study on the appropriate/reasonable levels of irrigation service rates (ISF) in August 1998. The study was overtaken by the issuance of Administrative Order No. 17 on 31 August 1998, setting socialized rates. In July 2001, the NIA Board of Directors approved the restoration of the 1975 ISF rates.

2) The Asian Development Bank-assisted Review of Cost Recovery Mechanisms for NIS (2000) also recommended rates to cover full operation and maintenance cost.

3) NIA is implementing a volumetric pricing of ISF on a pilot-basis for ISF collection in three national irrigation systems (NIA).

(2) Effective immediately, the implementation of all irrigation-related projects undertaken by the Bureau of Soils and Water Management/DA will be transferred to NIA.

(3) Capability building for local government units (LGU) and transfer of communal irrigation development to LGUs is currently being addressed.

1) The turnover of the implementation of communal irrigation development to LGUs is being pursued by NIA in collaboration with the Department of Interior and Local Government and the different leagues of LGUs.

2) Under the Balikatan Sagip Patubig Program (BSPP), technology transfer is effected as LGUs participate and share in the cost of construction/rehabilitation of communal irrigation projects/systems. LGUs mobilize resources and acquire technical skills in undertaking the projects. The program was launched in 1999 and still included in NIA's 2002 program.

(4) The turnover of secondary canals and on-farm structures of NIS to Irrigators Associations (IA) is an on-going program and will be vigorously pursued under the Irrigation Management Transfer (IMT) program.

(5) The capability building program for IAs is a continuing program, complementary to IMT.

(6) The guidelines on simplified public bidding was approved by the NIA Board of Directors (BOD) on 27 September 1999. However, the bidding process prescribed in the latest amendments of the IRR of PD 1594 (2000) is now followed in irrigation projects. There is an immediate plan to further simplify the process as provided for under PD 1594.

(7) NIA's priority projects, including rehabilitation programs for irrigation systems, are listed in the Medium Term Irrigation Development Program. Rehabilitation program for communal irrigation systems is undertaken under the BSPP.

(8) The criteria for the selection and prioritization of irrigation projects are for review and finalization. AFMA focuses on Strategic Agriculture and Fishery Development Zones for infrastructure development.

(9) NIA's research and development (R&D) activities to improve the management, effectivity and efficiency of irrigation systems are limited, subject to the availability of funds. For CY 2002, R&D activities will need PHP24 million. AFMA provides for the strengthening of NIA's Irrigation Engineering Center.

(10) Bills proposing additional members in the NIA BOD were deliberated in both the House and Senate during the 11th Congress. Bills on the ISF condonation were likewise deliberated at the House Committee on Agriculture, Food and Fisheries. A revised version of the Bill is currently being prepared and to be filed in the 12th Congress. This will consider other provisions to give flexibility to NIA as a corporation and respond effectively to current challenges.

(11) The DA Planning Service chairs the Task Force organized by DA to formulate plans/programs to promote the development of minor irrigation schemes.

Note: This paper was prepared by the Corporate Planning Staff – NIA
(Data as of 4 September 2001).