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Ministry of Irrigation
Department of Irrigation
Irrigation and Water Resources Management Project (IWRMP)
Jawalakhel, Lalitpur



TRIMESTER PROGRESS REPORT
(January-April 2010)

TA CONSULTANT FOR COMPONENT 'B'
Irrigation Management Transfer
Submitted to: Office of Project Director, IWRMP

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and
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in association with



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ABBREVIATIONS

AMIS	-	Agency Managed Irrigation System
DCC	-	District Co-ordination Committee
DDG	-	Deputy Director General
DIO	-	District Irrigation Office
DOI	-	Department of Irrigation
DTT	-	District Technical Team
ESI	-	Essential Structural Improvement
FAO	-	Food and Agriculture Organization
IDD	-	Irrigation Development Division
IMT	-	Irrigation Management Transfer
J/V	-	Joint Venture
KIS	-	Kankai Irrigation System
MIP	-	
MIS	-	Mahakali Irrigation System
NGO	-	Non Governmental Organization
NIS	-	Narayani Irrigation System
O & M	-	Operation and Maintenance
OPD	-	Office of Project Director
SCC	-	System Co-ordination Committee
SDE	-	Senior Divisional Engineer
SMIS	-	Sunsari Morang Irrigation System
SMU	-	System Management Unit
TA	-	Technical Assistant
WB	-	World Bank
WUAs	-	Water Users Association
WUCC	-	Water Users Co-ordination Committee

Contents

EXECUTIVE SUMMARY	1
1. Introduction.....	3
2. Project Objectives	3
3. Project Activity and Progress.....	3
3.1. Kankai Irrigation System (KIS)	3
3.2. Sunsari Morang Irrigation System (SMIS)	4
3.3. Narayani Irrigation Systems (NIS) (Block 2 & 8)	4
3.4. Mahakali Irrigation System (MIS) (Stage: I & II)	5
4. Activities and Progress of Technical Assistant (TA) Team.....	5
4.1. TA Team Activities in Kathmandu	5
4.2. TA Team Field Visits and Supports.....	8
4.2.1. Kankai Irrigation System	9
4.2.2. Sunsari Morang Irrigation System (SMIS)	11
4.2.3. Narayani Irrigation System(NIS)	14
4.2.4. Mahakali Irrigation System(MIS)	15
5. Key Issues and Recommendation	16
6. TA Field Office Establishment	16
7. Next Trimester Activities of TA	17
8. Annexes.....	17

EXECUTIVE SUMMARY

The Irrigation and Water Resource Management Project (IWRMP) Component-B: Irrigation Management Transfer (IMT) is financed by World Bank (WB), Government of Nepal (GON) and Water User Associations (WUAs) and is being executed by Department of Irrigation (DOI). Four irrigation systems are to be transferred to Water Users' Associations (WUAs), under this Project. These are, the Kankai, Sunsari Morang, Narayani, and Mahakali Irrigation Systems (KIS, SMIS, NIS, MIS respectively) All of them lie in the southern plains of Nepal or the Terai. The project intends to bring about improvements in irrigation service performance and service delivery through Essential Structure Improvement (ESI), and capacity development of WUA. A formal agreement is to be signed between the different WUAs and the DOI for transfer of management.

Several preparatory activities have been completed since the start of the Project on March 2008. A Contract for Technical Assistance (TA), was signed on December 28, 2010 with SHELADIA Associates, Inc. USA and Multi Disciplinary Consultants (P.) Ltd., Nepal (J/V). Four local specialist TA Team including Deputy Team Leader joined the project since January 2010.

IMT cannot be achieved without rigorous preparatory work. It is not a mechanical process. It entails social, political, technological, legal and economic challenges to be addressed. It is a process based programme. The whole affair does require guidelines to streamline the process. Different hurdles and glitches may be encountered in the process as it involves extensive interaction with the society around the irrigation schemes, and the WUAs in particular. Therefore, the progress made by System Management Units (SMUs), of the individual irrigation systems in each project is a natural slow moving process.

The progress achieved during this reporting period in each of the individual schemes is noted below:

A. Kankai Irrigation System

- An agreement had been signed between the WUA & the DOI, to execute the provisions committed in the agreement document. ESI estimate is in the process of approval
- WUA capacity development plan has been submitted to Office of the Project Director (OPD) for estimates on the budget required.

B. Narayani Irrigation System

- The third consultation in the "Consultation Process" has been completed and documented. Identification and prioritization for ESI is nearly complete. The project is at the threshold of entering into agreement with WUA and DOI.

C. Sunsari Morang Irrigation System

- The WUA election is complete and committees up to Water Course level have been established.
- The second level consultation is ongoing, and will be completed by May 6, 2010
- The date for signing of the Agreement has been fixed by the WUA & SMU for the third week of June, 2010.

D. Mahakali Irrigation System

- The first and second consultation is complete in Stage-I system
- The WUA constitution has been amended
- Improved draft agreement has been prepared and sent to the WUA and project for discussion
- Preparation for third consultation is ongoing
- The date for signing the Agreement date will be finalized after the third consultation

During January – April 2010, the TA focused on completing all preparatory tasks, that need to be accomplished before signing the agreement in sites KIS, SMIS, NIS and MIS. In connection to this, an Inception Report was prepared, that detailed the approach and schedule for the TA. This was discussed in the Inception Report

Dissemination workshop held on March 3, 2010. The report was submitted to the OPD on March 7, 2010, after having incorporated all the comments and suggestions given during that workshop.

Since deployment, the TA Team members started visiting Project sites, and have been providing advice and process support to SMU and its members. J.R.Sharma, the Water Management Engineer assisted the concerned water management engineer of the Project on preparation of parcellary maps and in the development of a Water Management Plan. The Hydraulic Engineer, S.N. Prasad, assisted in the hydraulic design of the structures. Irrigation Engineer A. Jha assisted in the identification, planning and prioritization of ESI. Assistance in WUA institution and capacity building exercises were carried out by P.K. Sharma, who assisted Project Association Organizers & Sociologist. The basic strategy for mobilization of the TA Team members is based on the following three criteria: on the basis of the TA work schedule, movement as and when needed by SMU, and when a step in the IMT process is delayed or stopped.

Assistance to SMU of KIS:

During this period, the TA assisted the SMU of KIS in improving the design of ESI and cost reduction, designed training contents for quality control, suggested amendments for agreement documents, assisted SMU, KIS in developing three years program schedule, prepared draft agreement for MIS staging at home office in Kathmandu.

Similarly, the TA Team assisted SMU of each irrigation system by visiting Project sites as requested by the SMU. In KIS, the TA Team assessed the overall status of the system, and reported to OPD, oriented SMU on new roles and responsibilities, gave orientation on preparation of parcellary maps, and water management data collection, capacity development, training prioritization with SMU & WUA, and identification of capacity of the SAHARA a non government organization working in social mobilization works in Jhapa District of Nepal.

Assistance to SMU of SMIS:

In SMIS, TA Team assisted the SMU and WUA in 'benchmarking' the existing situation. This was reported to the PD. The Team also worked on motivating old WUCC members for conducting elections and in orienting new members of WUCC on IMT. In addition they reviewed consultation process and suggested new strategy to SMU & WUCC, assisted WUCC in understanding provision of agreement, and assisted SMU and WUA in ESI identification, prioritization in the consultation process.

Assistance to SMU of NIS:

In NIS, TA Team assessed the overall progress to date, and reported to the PD, IWRMP. They assessed the legal status of the WUA, oriented SMU engineers for ESI process and the overall approach for IMT.

Assistance to SMU of MIS:

In MIS, the TA Team assessed the overall progress of IMT progress and briefed the PD, IWRMP on the status. They also oriented SMU on ESI and water measurement plan and process, assisted SMU in second consultation, assisted in designing new structure of WUA and constitution amendment.

IMT is not a simple process, as it involves several interpersonal and organizational dynamics to run the project. The whole process needs to be constantly monitored. Further, those involved in the Project people need to be constantly informed. In this context, the following critical recommendations are suggested for immediate action::

1. Frequent field visit to NIS & SMIS from OPD to motivate SMU and WUA.
2. In MIS, the critical issues hindering further advance of project needs to be explored and communicated to office chief, SMU and WUA.
3. In NIS, a face-to-face dialogue between IMT authority and WUA needs to be initiated in order to move the process forward
4. The monitoring unit of IMT needs to be mobilized, as the project has reached a stage where monitoring activities need to be initiated

It is advised that decisions, advice and guidance be given to WUA and project personnel in a unified way, as there are complaints of dissatisfaction of the WUA and SMU on different points of views expressed by the project personnel. This is critical in order to impart IMT in a unified manner.

**Irrigation and Water Resource Management Project, IWRMP
Component B: Irrigation Management Transfer
Trimester Progress Report**

1. Introduction

Name of the Project: Irrigation and Water Resource Management Project

Project Duration : March 31, 2008- June30, 2013

Project Scopes : Kankai, Sunsari Morang, Narayani and Mahakali Irrigation Systems

Project Id : P099296

Funding Agency : World Bank (WB)

Implementing Agency : Department Of Irrigation (DOI)

Reporting Period : January –April, 2010

Reported By : TA Team, IMT

2. Project Objectives

The specific objective of this particular IMT component is designed to improve service performance and service delivery, in Kankai (KIS), Sunsari Morang (SMIS), Narayani (NIS), and Mahakali Irrigation Systems (MIS), where management transfer to WUAs will be completed and consolidated. It comprises:

- (a) Completion/consolidation of Management Transfer Plan including streamlining and strengthening of WUAs,
- (b) Essential structural improvements,
- (c) Repair or procurement of buildings, transportation, communication, maintenance and information technology equipment and
- (d) Capacity building of WUAs and DOI.

The expected outputs are: (a) efficient and equitable service delivery by financially and institutionally sustainable WUAs; (b) improved physical performance of the selected irrigation schemes; activities to be financed under this component include (a) completion/consolidation of Management Transfer Plans (MTP); (b) Essential Structural Improvements (ESI); (c) Repair/upgrading of buildings, information systems and transportation, and maintenance equipment; and (d) capacity building of WUAs and DOI.

3. Project Activity and Progress

3.1. Kankai Irrigation System (KIS)

- Kankai, the overall the following project activities have been completed: Establishment of different committees with adequate personnel as per Project Implementation Manual (PIM). These include: System Management Unit (SMU), Scheme Coordination Committee (SCC), District Technical Committee (DTT) and District Coordination Committee (DCC) has been established Frequent meetings are held in these committees.
- Re-orientation sessions were arranged by the Irrigation Division Chief on IMT, on conducting meetings and discussions on the new roles and responsibilities in the presence of the consultants.
- DOI and WUAs have signed an agreement to on December 7, 2010 to execute ESI and WUA capacity development works. The following consultation processes as mentioned in PIM have been completed satisfactorily:
 - First consultations with Main Water Users Committee, the second with branch committee members, and tertiary representatives, and the third consultation in the presence of General Assembly members
 - Preparation of Asset Inventory

- Rapid Appraisal of the system
- Identification and prioritization of ESI works
- Approval by the World Bank on the estimation and design of ESI submitted
- 14-types of training to WUA have been selected ,annexed to agreement document.
- A Resource Mobilization Training to WUA by IDDO.
- Establishing of WUA branch offices, with signboard and office furniture from the first installment of of Rs. 200,000 given to them. Some branch committees have engaged secretaries also. A portion of the second installment was also received by the WUA.
- One motorcycle handed over to WUA.
- Four WUA offices branch established.
- Distribution of membership to WUA is almost complete
- Preparation of parcellary map in 1500 ha is near completion and checked by the n water management engineer of TA.
- Three years of work schedule for Kankai prepared and given to WB

3.2. Sunsari Morang Irrigation System (SMIS)

In SMIS, some efforts on first and second consultations have been made through the local NGO SAHARA. . The first consultation was also completed by OPD. SAHARA had recently started second consultations extending up to 13 branch committee members and farmers . The ongoing election of WUA then disturbed the SAHARA's r attempt. It could not convey the messages on IMT to the water users. aAfter WUA elections, a meeting was held in DUBI office quarters with the newly elected Water User Coordination Committee (WUCC) of Sitagunj to further review the consultation process. The meeting concluded that the second consultation should be extended up to the water course (Toli) members .The total number of Toli is 274, and there are 7 members in one toli; thus, the total number of members comes to 1918 to be consulted in groups.The project information campaign would then be carried on by a group consisting of Chairperson of the Branch canals, Project staff and Consultants.

The progress on so far is as follows:

- Establishment of SMU, SCC, DTT & DCC.
- Completion of WUCC elections with the establishment of all tiers of WUA committees (up to Water Course level)
- Completion of IMT orientation program to SMU & SCC members.
- Completion of Inventory collection and Rapid appraisal. Review Works Ongoing.
- Completion of Membership listing and then membership distribution work
- ESI assessment and prioritization works are being carried out
- Second Consultation and information dissemination work is underway, and the third consultation is planned to be complete by June 9, 2010. The Agreement date is planned for the 3rd week of June, 2010.

3.3 Narayani Irrigation Systems (NIS) (Block 2 & 8)

The OPD has targeted Sub-components Blocks 2 and 8 have been for first intervention package of IMT in NIS. The following activities have been completed in these two blocks:

- Establishment of SMU & DCC and formation of SCC and DTT
- First consultation at block level
- Inventory preparation and rapid appraisal
- Membership listing and distribution
- The second and the third consultations, by employing consultants by the OPD (as per the document shown by the NIS staff)
- The Project is

3.4 Mahakali Irrigation System (MIS) (Stage: I & II)

The state of activities for the preparatory phase in Stage-I sub-component of MIS. are as follows:

- Establishment SMU, SCC, DTT & DCC.
- First consultation with the members of co-ordination committee is complete.
- Second consultation with Block Committees (A-E) including TC chairman is complete.
- Third consultation is being initiated
- Asset inventory and rapid appraisal is complete
- Activities of water user membership enrolment is going on
- ESI walk through was completed, and preparation of design and estimate is underway.
- WUA has made amendments to the Constitution.
- The project is at the stage for Agreement with WUA



4. Activities and Progress of Technical Assistant (TA) Team

4.1 TA Team Activities in Kathmandu

4.1.1 Submission of the Inception Report

The TA Team initiated meetings and consultations with the Project staff of IWRMP, including the Project Director, in connection with the preparation of the Inception Report, and thus mobilization of the team. including the Project Director. During that period, the TA Tea, visited all the Project sites, so as to assess the current status of the Project. The Inception Workshop was held on March 3, 2010 in the DOI building in Kathmandu. The Office of the Project Director (OPD) and the SHELADIA-MULTI JV jointly organized it. Forty participants attended. These included Mr. Madhusudan Paudel, the Director General of DOI, MrAnil Pokharel Deputy Director General, Mr. Kamal Regmi, Director, Eastern Regional Directorate Office, Mr. Niranjana Dev Pandey, Project Director of IWRMP; Mr. Bashu Dev Lohane, Senior Divisional Engineer, IMT; Dr. Prachanda Pradhan, World Bank; Mr. Achyut Man Singh, from FAO; SMU representatives from project site office, WUA

Chairpersons and members from project WUAs. Also in attendance were the TA Team Leader and Deputy Team Leader of the IWRMP Component A. Comments and suggestions were given during the workshop, for the Inception Plan. Suggestions and comments that were specific and related, were then incorporated in the final Inception Report. to Inception Report were incorporated in the final report. After incorporation of these comments and suggestions from various stakeholders, the final report was submitted to Project Director on March 15, 2010.

4.1.2 Assistance to Bring About an Improvement in Designs and Reduce Costs of Essential Structures in Kankai Irrigation Project.

The Hydraulic Engineer (HE), Satya Narain Prasad Hydraulic Engineer and the Irrigation Engineer (IE), Adhikant Jha, assisted, the Chief of Irrigation Development Division (IDD), Mitra Baral and his engineers in Jhapa, in the improvement of the hydraulic and structural parameters of Essential Structures, that had been identified and prioritized by collectively by the Project staff and the WUAs. After review, the documents were sent to DOI and the WB for approval. The IDD Chief gave the following suggestions for Essential Structures Improvement:

a. Drawings and designs

- These are small structures, that need need minor renovations or modifications
- The aqueduct G.L. to be changed to B.L. of canal.
- Show levels at different parts of the structures, including the full supply level of the canal/structure.
- Reinforcement details to be drawn.
- Draw canal cross-section/plan in the upstream and downstream of the structures
- Basic design parameters of outlet and position of outlet to be tabulated.
- Drain culvert joints to be rectified.
- At least, top half depth of filling on the pipe culvert to be changed with coarse materials, preferably river bed materials.
- Uniformity to be maintained in the drawings e.g. NP2/NP3 or R.C.C. in drawings cost estimates.
- Wherever collars are required, they should be clearly mentioned.
- Unit system should be checked properly.
- Pipe diameter for outlets should be based on the area to be irrigated; similarly its placement with respect to the full supply level must be strictly monitored during the construction period.
- Need to decide on the river structure foundation based on scour requirements.

b. Cost estimates

- Proper unit of the items to be maintained in the costing page of the estimate.
- Similarity should be maintained in the drawings as well as in cost estimate.
- Item details of cost estimate should be elaborated.

c. Miscellaneous

From water management point of view, the IDD personnel reported that no additional structures were required to regulate the supply of irrigation water. This is because the users are used to regulating the flows in the existing irrigation system.

4.1.3 Finalization of the Contents of the Material for WUA training for Quality Control and Supervision Technique of ESI in Kankai.

The IE listed the topics, and designed the training on quality control and supervision techniques of ESI, to be used to train WUA and Construction Committee members in Kankai and other projects. In this process he also referred to the training manuals that had already been published by the Irrigation Management Division (IMD)/DOI.

The topics and contents of this training guideline are as follows: :

Day 1: Construction Management and Quality Control

- Introduction: what is construction, management, quality and control?
- Importance of management & quality control in construction.
- Role of WUA in construction management and quality control
- Planning the implementation process.
- What are the results in the absence of an effective management and quality control procedure?

Day 2 : Planning a Construction Project

- Needs assessment/identification Costs involved in the construction work and benefits from that work.
- Comparison of costs with respect to the benefits.
- Factors affecting durability of the construction work.

Day 3 : Initial Preparation of Construction work

- Design and drawings of the construction work
- Agreement
- Work description
- Work plan schedule
- Specifications
- Construction management planning

Day 4 : Practical Session: Construction Management Schedule Preparation

4.1.4. Review and Improvement of Management Transfer Agreement Document, Kankai

The TA Team studied and reviewed the agreement document used in Kankai by DOI so as to suggest modifications where they thought was deemed. Ambiguity in phrasing was removed and then the document submitted to the Project Director, for use in other irrigation systems. Key improvements suggested by the TA team are as below:

Amendments suggested for the Management Transfer Agreement (MTA)

Clause 4.4 : All head regulators in the main canal to be operated and maintained by DOI; and and water will be released to each branch canal according to the gauge-mark fixed earlier.

Clause 5.1 : After signing of the agreement, the following appendices will be converted into a work plan. The budget will be arranged on the basis of the work plan, and the program thus executed accordingly.

- a. Asset management plan (appendices 1-4)
- b. Other appendices relating to plans (appendices 5-12)
- c. Miscellaneous appendices (appendices 13-18)

Clause 8.6 : The concerned branch committee /WUA will be responsible for the operation, from points below the head regulators in the branch canal, as well as for equitable water distribution to all the water users.

Clause 10.8 : It is the responsibility of DOI to complete the tasks as assigned in the attached appendices.

Clause 11.1 : If the WUA works do not meet overall objectives of the WUA like (add) irrigation service collection.....

Clause 14.1 :.....land shown (parcellary map) in the command area.....

Clause 20.6 : The authorized letter given to the chairperson for signing on Management Transfer Agreement is attached herewith.

4.1.5. Three Years Training Program in Kankai

Piyush Sharma, the Institution Development Specialist (IDS) prepared a draft version for the WUA training for capacity development of in Kankai. The draft program was discussed with Bashu Dev Lohanee, the Senior Divisional Engineer of IWRMP, and Chetman Budhthapa, Sociologists, DOI Then it was sent to Kankai Irrigation Project for detail estimate and planning.

The key topics identified by the IDS after discussions with the WUA and Project staff, also as mentioned in the agreement document of Kankai are listed under section 4.2.1.c .

4.1.6. Preparation of draft Management Transfer Agreement Document of Mahakali.

TA team jointly assisted the Project Institution Development Sociologist in the process of improving and completing the agreement document to be used for Mahakali Irrigation System. Phase-I transfer. The following appendices as suggested in Project Implementation Manual (PIM) were incorporated, thus completing the of the Agreement Document. The new addition of the appendix to the Kankai agreement, in the form of a Vision Plan is to be converted into an Action Plan later in the stage, after the signing of the Agreement has taken place. The features of this are as listed below:

Appendices Added

- Parcellary map preparation plan.
- ESI implementation plan.
- Canal operation, maintenance and distribution plan (including water measurement plan)
- ISF collection Administrative plan of WUA.
- Proposed financial plan.
- Proposed resource management plan of WUA.
- Institution and human resource development plan of WUA.
- Agriculture development plan.

Development Draft Work Schedule for IMT

At the request of the Project Director, the TA team prepared a draft work schedule for IMT Project to be complete by June 2013. This document was discussed with World Bank Mission by the Project authorities. The sample schedule is attached in the annex-2

4.1.7. Collection of Training Materials

The TA specialists are assisting the SMU in preparing training materials. In this process they collected different types of training manuals that have been developed by the Irrigation Management Division of DOI on WUA development manuals, O & M plan, O & M manuals, construction management training manuals etc. They plan to work out a new manual that also builds upon the concepts developed and experiences gathered through the years.

4.2 TA Team Field Visits and Supports

The mobilization of the TA specialists to each of the four project sites, are done as and when demanded by SMU chief as the project progress steps ahead, as well as based on the work schedule prepared by TA Team. The Irrigation and Hydraulic Engineers from the TA team work in assisting the Project Engineers assigned for work on ESI. The Water Management Engineers, who work under the Project are being assisted by TA team Water Management Engineer, while the TA Institutional Development Specialist works in supporting the Project

Association Organizers (AO) & Sociologists. The TA team members have thus visited the four irrigation systems and have provided assistance to the Project personnel in various ways, highlighted below.

4.2.1. Kankai Irrigation System

a. Review of overall progress status of Kankai

Rishi Ram Sharma Neupane, the Deputy Team Leader (DTL) alongwith the WME, Jaya Ram Sharma, on February 2, 2010 reviewed the overall progress in a meeting with others involved in the process of IMT. Those present included the Chief IDD, Mitra Baral, the SDE, S.K.Jha, and other engineers P. Bantawa, B. Bishwakarma, Hausalal Yadab, Tilak Ram Prasai, the Association Organizer G. Paudel and T. Dhungel, Chairman, of the WUA, Satam Shing, Secretary of WUA; The review was made on:

- Status and functioning of System Management Unit (SMU)
- Detail process adopted in 3 levels of user consultations and information dissemination.
- Types of committees formed – SMU, System Coordination Committee (SCC), District Technical Team (DTT) and District Coordination Committee (DCC) and their functioning.
- Review of WUA status and the institutional development plan and process.

These findings were used to develop the Inception Report and three years plan for Kankai. The TA Team also assisted the SMU for the following:

- Clarification of the roles and responsibility of SCC
- Preparation procedures for parcellary maps
- IDD chief and chairperson of WUA were assisted in prioritizing branch numbers o. SO, S-1, S-2 and S-13 as demonstration branches, selected as the first lots for construction, parcellary map preparation & WUA development
- Setting up the target for parcellary map preparation, which was to complete 1500 ha in 2.5 months period by employing 2 Amins (land surveyors) and 3 assistants for 75 days.

The WME presented the required technical specifications for parcellary map preparation to Amins

b. Orientation to Water Management Engineer in Preparation of Water Management Tasks

The WME of Kankai, P. Bantawa, was briefed on issues on equitable and timely distribution of available water from the source to the field level. The nature of different losses and consumptive use was also explained. Information / data required to prepare the water management plan was drawn and explained in detail. These are as follows:

- **Layout map of the Canal**
- **Canal command areas-secondary wise**
- **Inventory of control structures in the Main, Secondary and Tertiary canals and head works**
- **Gauge readings.**
- **Design discharges of HRs (MC, SC & TCs).**
- **Efficiencies adopted during design.**
- **Hydro meteorological data.**
- **Existing / design cropping pattern**
- **Crop calendar**
- **Record of percolation losses**

To carry out the discharge and other related field measurements the following instruments were assessed to be minimum.

➤	Current meter	1 no.
➤	Cut throat flumes	3 nos. (4", 6" & 12" throat)
➤	Ring infiltrometer	3 nos.
➤	Spirit levels	2 nos.
➤	3 Kg. hammer	1 no.

➤	3” x 4” wooden log	2 nos.
➤	Spade	1 no.
➤	Steel scale for flumes	6 nos.
➤	Steel scale for infiltrimeters	3 nos.
➤	Fiber tape (50 m)	2 nos.

c. Training Prioritization with SMU and WUA

On March 8-9, P.K. Sharma TA Sociologist assisted the SMU staff to prepare the annual action plan for capacity and institutional development for WUAs and Training of Trainers. The training is meant for the staff of KIS, the local NGO and WUA members. A strategy for conducting capacity building trainings, 10 trainers are to be trained first so that they later train others at the field level. Those participating in the trainer’s training are 4 participants from KIS, 4 from WUA and 2 from Sahara (NGO).

The SMU and the TA team then, participated in WUA central committee meeting at the Sahakari building of Panchgachhi of Jhapa district. A discussion was held on the capacity building strategy and process with the WUA, including the yearly action plan proposed by SMU members. The WUA members prioritized the training subject matters prepared by SMU members and gave concurrence to execute it. The followings are the List of prioritized trainings:

- Action plan preparation
- Construction management and quality control
- Administration and office management
- Basic account and record keeping
- Leadership development of WUA
- Canal system operation and maintenance plan.
- Water measurement and scaling
- Agriculture production and management
- ISF collection and management
- Gender awareness and women’s participation in irrigation
- Basic computer training (to be managed by SMU)

All the above listed are to be conducted by trained local trainers and local NGO.

d. Visit to SAHARA, NGO at Birtamode.

In the presence of the members from Yogya Bhattarai, facilitator deputed from SAHARA for Sitagunj, Sunsari Morang Irrigation System; Ramahi Bhattarai, Team Leader, SAHARA - NGO and Durga Khanal, facilitator from, a review was made of the previous activities undertaken.

- Consultation process applied in Sitagunj.
- The overall status of WUA election in Sitagunj initial process of IMT
- Overall process applied for Kankai WUA consultation.
- Constraints and problems faced during IMT implementation in Sunsari Morang and Kankai.

An assesment was made to determine SAHARA’s capacity for undertaking activities for IMT.

- SAHARA could be given the responsibility for socio-economic studies
- The NGO showed an interest in being involved in the consultation process in SMIS, with an additional budget.
- SAHARA can be used for Leadership Development training and cooperative development in WUA
- In conclusion the staff from SAHARA stated that the Project had completed the first consultation only with the central Water Users Coordination Committee (WUCC). In the second consultation, 13 Sub Branch Committees, including some farmers had been covered. It was still incomplete as the outlet or water course groups have not yet been covered in Sitagunj. The WUCC was in the election process.

a. Main Issues and Recommendation

- Most of the staff of IDD did not have clear understanding of the concepts and process of IMT, as they had recently joined the project. It is recommended that a one day days refresher orientation program on IMT objectives and process is required for the staff and WUA main committee members, after every 4 months.
- Action plan development on WUA institutional and DOI capacity development needs to be developed in such a way that it helps control unsystematic dget flow on traditional training methods.
- Co-ordination meetings are primarily ice breakers for action planning for every type of program that lagging in Kankai. It is therefore suggested that roles and responsibilities of each and every member be defined and clarified, and a joint action plann developed.
- Some activities like parcellary map preparation connected to stage 2 processes have not started. This has to be initiated immediately, so as to support the first Irrigation Service Fee collection
- Programs and activities connected to package D (Integrated Crop and Water management) is not known to the staff and IDD. A strategy action plan and work schedule needs to be developed very soon.
- The District Irrigation Office, Jhapa team has been working seriously to come-up with the final estimates of Kankai IMT work. The TA field visit added more energy & inspiration to them. The estimate s expected to be submitted very soon. . The Central office project staff should visit site offices to motivate field staff regularly.
- The component on WUA strengthening needs additional support with respect to trainings / orientations and logistics for which a budgetary constraint was envisaged. If possible additional budget should be reallocated in order to continue with the agreed activities.
- There are no means at the project office to initiate water measurement exercises at the sites. It is suggested that there be arrangements to provide water measuring instruments on priority basis.
- The works on parcellary map preparation, could be expedited through disbursement of additional budget and manpower for this activity.

4.2.2. Sunsari Morang Irrigation System (SMIS)

a. Assessment of the situation

Hydraulic Engineer from the TA Team, Satya Narain Prasad, r visited SMIS on February 1-10, 2010 to assess the present status of the progress of IMT in SMIS. The SMU, SCC and DTT had already been set up in SMIS. In terms of activities, the asset inventory preparation, Rapid appraisal and WUA membership listing had already been completed. In terms of the progress on consultation activities, the WUAs presented the following issues:

- First consultation was complete. The objectives of IMT and draft agreement were provided to the WUCC and the objectives of IMT discussed in the meetings. Although e higher levels of WUA were fully aware of the IMT program, the lower tier WUAs and farmers were not very clear about IMT program. There is a need to continuously set programs that make them aware of the process, in order to implement the program effectively.
- Consultations with WUAs and farmers have to be a a continuous process, that should follow a w bottom up approach, ie from farmers to WUCC.
- The Consultants were successful in advising and motivating the WUA members to complete the election process quickly, so that the IMT programs could start implementation.

b. Assisting the SMU in Preparation of the Schedule for First Phase Activities.

The TA Team Sociologist, P Sharma visited SMIS on March 10-13, 2010 and assisted the SMU to prepare their action plan up to the third consultation. The action plan is as given below:

- Completion of WUA Inventory 3rd week of April, 2010
- Orientation training on IMTP to the new elected WUA members and General Assembly members of Sitagunj Branch- 4th week of March, 2010
- Conduction of second consultation jointly with Sahara-Nepal-4th week of April, 2010

- Exposure tour at Kankai Irrigation Systems to the Main Committee WUA members
4th week of April, 2010
- Update of Asset Management plan 4th week of April, 2010
- Update of Asset Inventory and Rapid Appraisal- 2nd week of May, 2010.
- Completion of ESI Inventory 3rd week of May, 2010
- Conduction of third consultation 4th week of May, 2010
- Conduction of IMT agreement 2nd week of June, 2010
- Due to delayed election process of the WUAs, the SMU could not implement the schedule in time.

c. Assistance to SMU and WUA in Preparing Schedule for Completion of Preparatory Activities in SMIS after new elections of the WUA

The newly elected WUCC members of Sitagunj invited SMU members of SMIS and TA Team to orient them about IMTP and to review the old process of consultation, and develop a new schedule for the completion of all the tasks leading to the signing of the Agreement. During April 20-24 the DTL, the WME, IE and Sociologist of the TA Team, attended the meeting at Dubi field office of SMIS, and joined the orientation training and performed their field tasks. All the engineers from SMIS, the Sociologist, Association Organizers, including Chetman Budhthapa from OPD participated in the events.



At the request of the WUA, the DTL briefed the group on the objectives of IMT and its internal mechanism of starting different activities. 12 WUA members out of the total 13, including chairman and executives attended the discussion meeting. In the course of discussions, the WUA showed an interest to prepare a schedule plan for completing the preparatory tasks up to Agreement. The group finalized the following action schedule-

- Review of first consultation and other consultation processes already conducted in SMIS – April 21, 2010.
- Group formation, orientation and action plan preparation – April, 22, 2010 at Aurabandi.
- Completion of 2nd consultations reaching outlet level members – starting from April 25-May 5, 2010.
- Completion of ESI works, starting from April 20-May 23, 2010.
- Completion of preparation Agreement Document – June 3, 2010.
- Third consultation on June 9, 2010.
- Agreement signing on 3rd week of June, 2010.

The Chairman of Sitagunj closed the meeting expressing commitment to the process.

d. Assistance to SMU in the Implementation Approach for Second Consultation

On the second day, Kausal Kishore Jha, SDE, and his SMU group members were briefed on the interest and commitment of the users, and were advised to proceed with the preparatory works. Mr. Jha, instructed his staff to commence the works as per the schedule prepared by the WUA and his staff. The same day, the TA Team advised Benu Paudel, Project Sociologist, Association Organizers and WUA members on the following topics –



- Preparation of agreement documents for discussion.
- Preparation of schedule for 2nd consultation.
- Approach of agenda presentation and collection of suggestions from WUA members.
- Approach of analysis of feedback and suggestions.
- Key topics of agenda for discussion.

e. Orientation to 13 members of WUA and Action Plan Preparation for Second Consultation

As proposed by WUA, an orientation training was held at the Aurabandi field quarters, in the presence of all the WUA members of WUCC. Also present were, all TA members, Project Sociologist and the DOI Sociologist. The participants were given information on IMT – its objectives, process, rationale and outcomes. After the orientation, the WUA and Project Sociologist prepared an action plan for 2nd consultation with the assistance of

TA Team. The NGO Sahara also took part in the orientation training. The consultation program and ESI identification activities are currently being carried out. .

f. Issues and recommendations

- The WUA expects an assured and ample supply of irrigation water. The main canal has to be brought up to its desired capacity.
- Any form of alternative water resources available within the command area has to be tapped so as to augment the flow of the canal system during the lean period. It is the potential opportunity for the government.
- There is a need to formulate as well as implement strict rules and regulations with respect to irrigation service fee collection and to deal with matters related to regular operation and maintenance of the system .
- Mobilization of the local government and irrigation authorities is needed to control the illegal encroachment in the right of the way of the canal system.

4.2.3. Narayani Irrigation System(NIS)

a. Assessment of Status of Progress of IMT

During February 1-8, 2010 A.Jha , Irrigation Engineer visited NIS and assessed the present status of the progress of IMT. He observed that all SMU, SCC, DTT and DSCs were formed as per the instruction from the Office of the Project Director. The main reasons for slow progress of IMT implementation, as reported by the Team consultant are as follows:

- The Chief of the project had recently been transferred to another project.
- The new chief had not joined the office.
- The SDE did not have the authority over entire financial and administrative matters

b. Verification of the WUA tenure in NIS

During March 22-28, The Water Management Engineer and Hydraulic Engineer visited Narayani Irrigation System to verify the progress of the consultation process, and to assist process of initiation of parcellary map preparation, and collection of water management information. The OPD had appointed two firms for the job: Information Dissemination Initiative (IDI) Pvt. Ltd., Bhotebahal, Kathmandu, Tel: 4251251 and Engineering & Power Harnessing (EPH) Pvt. Ltd., Sano Gaucharan, Kathmandu, Tel: 4415825. These firms had both conducted the consultation process in blocks 2 and 8 respectively. During the process both of them had altogether held 9 meetings in each of these blocks. This was from the period May 2009 June 2009. The agenda included were IWRMP; sample IMTA; sample WUA constitution; problems faced by WUA; peoples participation, ISF fixation and collection; expected support in the system and commitment from the Government side. The decisions of the discussions were all recorded and signed by all the participants. The record of the list of participants was also maintained. The minutes revealed that the users were positive towards IWRMP and the process of IMTA could proceed, preceded based on the consultation process.

According to this report, the first election was held on 2061.04.11 in block # 2. The three year tenure had been extended through general assembly thrice for one year each. Similarly, the first election in block # 8 was held on 2062.04.10 and the three year tenure was extended for 3 more years through the general assembly. . There is a provision in the constitution for a time extension of a maximum of one year. It does not however, mention explicitly for how many times the extension would be valid.

The previous chairperson for Block # 2 had been dismissed through non-confidence voting, and a new chair person had been nominated by the General Assembly. The co-chair person had, in appellant court claimed that he should automatically get the post of chairperson under such circumstances. The appellant court had issued a stay order on 2065.02.05. After the hearing they cancelled the stay order on 2065.02.20 on grounds that the decision of the General Assembly would apply. The case is now under consideration in higher court.

During April 9-13, 2010. the TA Team IE at the request of the Project Manager, visited NIS in order to assist engineers to orient on ESI identification and prioritization process to be adopted by engineers and WUAs. During his stay he oriented the engineers and WUA members on ESI processes and proceeded to SMIS to initiate the same tasks.

Issues and recommendations

- Narayani Irrigation Scheme is not lagging behind, as is the impression at the centre. Water users are cooperative and willing to participate in IWRMP
- The frequent transfer of the office bearers, particularly the mass transfer during the working season has hampered the progress of work in almost all the candidate schemes of IWRMP.
- Timely visits from the staff of the OPD, and their inputs would boost up the progress, and this scheme also can move parallel to other schemes. It is recommended that staff of the OPD office visit the project to motivate the staff
- The extension WUA tenure is done by General Assembly whose decision has been accepted by the appellat court and is under consideration in higher court. New election would take place as soon as the political situation of the country improves.
- New Division Chief has resumed office and the short comings would ultimately be sorted out. In order to do this, he has to be oriented of the office process by OPD.
- The WUAs are disappointed with more talk and less action. This can be resolved through dialogues and work progress.

4.2.4. Mahakali Irrigation System(MIS)

a. Assistance to SMU in ESI and Water Management Program Orientation

Three members of the TA Team Water Management Engineer (WME) J.R.Sharma, Hydraulic Engineer(HE), S.N Prasad and Irrigation Engineer (IE)A. Jha visited MIS with a view to:

- Assist SMU/WUA in realizing the fact that participatory approach is to be followed for rehabilitation works.
- Assist SMU/WUA in preparing plan and process for Participatory Identification of ESI works.
- Assist SMU in understanding the prioritization of proposed ESI works.
- Assist the concerned staff in SMU c in preparation of data base for water management plan

- In this connection, the team met and held discussions with the Project and made the following conclusions: Further needs for and the location of Flow measurement stations were discussed.
- It was known that flow measurement is taken regularly at border weir (main Canal).
- Recording is done and the record of discharge supplied to Nepal from India is maintained.
- At almost all places, the measuring devices were found to be installed in system measurements had not been taken.
- ESI survey and walk through was complete.
- Discussion with WUA chairman Shri Khageshwar Pande revealed that WUA is willing to take over the management transfer.

b. Assistance to SMU in Conducting Second Consultation

During February 1-8, TA Sociologist P.Sharma, visited MIS with a view to assess the establishment of all the committees as per the Project Appraisal Document,WB. It was observed that all committees such as SMU, SCC, DTT, DSC existed and the first consultation was already underway. Mean time P. Sharma, joined the ongoing first consultation and assisted in interpreting the provisions of the Agreement.

During February 17 -22 P Sharma, assisted the SMU staff in second level consultations in the field at blocks A ,B, C, D, and E. The following were conveyed as part of consultations:

- Information dissemination to the all the blocks and tertiary level chairman, members and beneficiary farmers.
- Venue of the second consultation meeting at each block was preplanned and the blocks informed.
- Interaction and discussions with participants about the issues in each block, and whether the objectives of the IMT program of IWRMP could satisfactorily be carried out.

c. Assistance to SMU and WUAs in Constitution Amendment and New organizational Design for WUAs

During March 23- 29, R.R.S.Neupane, DTL and P. Sharma, IDS visited MIS at the request of Division Chief, MIS for helping the Project and WUA in designing the new structure for separate registration of Stage-I and Stage-II WUAs, along with the necessary amendment of the WUA Constitution. The specific objectives of the visit were :

- To assist the SMU and WUA in Constitution amendment.
- To review the progress of ESI survey, design, estimate and listing of WUA members.
- To participate in the General Assembly meeting organized by WUA Central Coordination committee in Mahindranagar, Kanchanpur.

With joint efforts of the WUA and SMU members, the following changes in WUA organization and constitution were agreed by the WUA members:

- Formation of new separate WUA organizations, at branch and regional level of first and second Stages of Mahakali Irrigation Systems separate with full autonomy for separate registration and implementation agreement.
- Formation of one new advisory or coordination committee at top level of WUA organization to coordinate and monitor the WUA for two phases and Mahakali Irrigation System but with no executive authority exercise over two regional entity of WUA.
- Provision of authority and power to the regional WUA of each Stage separately.
- The TA Team members also participated in 17th General Assembly meeting called by WUA central coordination committee of MIS at the meeting hall of Udyog Banijya Sangh in Mahindranagar. WUA submitted the new amended Constitution to General Assembly members for approval.

5. Key Issues and Recommendation

IMT is a process based and complicated endeavor, as it involves several human and organizational dynamics to implement. . It should therefore be constantly monitored and all those involved in the process need to be should be well informed of all the activities to be undertaken on time. Therefore, the following critical recommendations are suggested for immediate actions:

- Frequent field visit to NIS & SMIS from OPD to motivate SMU & WUA.
- In MIS the critical facts (if any) that have been hindering further implementation of Project activities needs to be explored and communicated to the Project Director, SMU & WUA.
- The critical requirements of WUA in NIS should be explored, and there should be several faced to face dialogues between IMT authority & WUA to open up the process for IMT implementation.
- It is suggested that the monitoring activities in IMT get mobilized immediately, so that appropriate control can be exercised.

There is ambiguity amongst WUAs and SMU regarding several issues and personnel views in the project. Taking a unified approach from concerned Project actors of IMT would further help facilitate the process to move smoothly.

6. TA Field Office Establishment

The TA offices for ll four Projects sites have been established in the office complex of DOI offices Two Assistant Managers, Two Computer Operators and two office runners have been appointed.

7. Next Trimester Activities of TA

TA Team activity focuses in assisting SMU during the upcoming months of May to August, 2010 will be as per the work schedule of TA Team. However, TA will also mobilize from unallocated man months as and when demanded by the different SMUs in the same time period.

Irrigation Systems	Planned Activities (agreement signed in SMIS,NIS,MIS by July 2010)
Kankai IS	Provide assistance and advise to develop water management plan and flow measurement, effective plan and method of quality control, manual and training, capacity development of WUA, preparation of institution development plan, and a M and E unit for M and E activities.
Sunsari Morang IS	Provide assistance and advise the SMU in ESI prioritization, design and estimates, in third consultation and agreement document preparation and signing, action plan development for ESI execution , preparation of flow measurements and water management plans, preparation of institution and capacity development plan
Narayani IS	Provide assistance and advise in finalizing consultation process and agreement, support the SMU in ESI prioritization, design and estimates, action plan development for ESI execution, preparation of flow measurement and water management plan, preparing institution and WUA capacity development plan assisting
Mahakali (Stage-i) IS	Provide assistance and advise in finalizing consultation process and agreement, support SMU in ESI prioritization, design and estimates, action plan development for ESI execution, preparation of flow measurements and water management plan, preparing institution and WUA capacity development plan

8. Annexes

Annex-1: Three years work Schedule for KIS

Annex-2: Action Plan for Second Consultation in SMIS