

Aide mémoire - capitalisation mission

Mission in Cambodia from the 15th to the 27th of October 2011 – Christophe Rigourd

Introduction

A mission to initiate the capitalisation process of the Cambodia component of ASIrri was conducted by IRAM (Christophe Rigourd) from the 15^{th} to the 27^{th} of October. Nine days were spent with the Irrigation service center (ISC) in Kampong Thom (from the 17^{th} to the 21^{st} and from the 24^{th} to the 27^{th} of October), the rest of the time being spent in Phnom Penh.

The mission had the following objectives :

- Assist the ISC team in elaborating the CDRom (English version) of the ASIrri project / Cambodia component;
- Assist the ISC team in drafting some methodological manuals.

Several ISC staff and the GRET technical assistant were involved during the mission.

The following results have been achieved:

- <u>CDRom</u>: 2 members of the ISC team and the GRET TA have been trained on using the USB capitalisation tool and an early first draft of CDRom is available in English. Some work remains necessary to finalise this CDRom. The team will also later on elaborate a Khmer version to serve as an ISC website / presentation (rather than an ASIrri presentation).
- <u>Methodological manuals</u>: The topics of methodological manuals were reviewed: 2 introductory manuals (not foreseen initially) and 8 services manuals have been listed. Several brainstorming sessions were facilitated (zop method) to identify the content of these manuals. The GRET technical assistant drafted the two introductory manuals based on the ISC brainstorming.

Activities during the mission

CDRom for the Cambodian component

One of the capitalisation products of the ASIrri project is a CDRom. At this stage each component is to produce its own CDRom following more or less a standard structure. A fourth one will be produced eventually to serve as a general presentation of the project and to give some transversal analysis. The four elements will then be compiled into one master CDRom. The master CDRom will then be available online and as a hard version.

The CDRom is primarily aimed at organising all the literature produced by the project and at presenting it in a friendly way. Though the final version will most probably be available online it will not be aimed at being a "living website".

The same applies to the Cambodia component CDRom (English version): it is not aimed at being the website of the ISC, but rather at capturing and organising all the literature of the component. Later on the ISC team will elaborate a Khmer version which will differ from the English version and which could possibly serve as the ISC website (at least for the beginning). The ISC will then have to arrange for hosting the website.

Most of the documents produced by the ISC are in Khmer: tools to provide services to FWUCs, diagnosis, reports... Only few of them are actually available in English: mostly powerpoint presentations and activity reports. The English version of the CDRom will therefore be much lighter than the Khmer version.

During the mission the following activities were conducted to assist the team in elaborating an early first draft of the English CDRom:

- Presentation of the CDRom tool to the whole ISC team at the beginning of the mission using the example of Mali. The Mali component CDRom was handed over to the ISC. Although written in French it can easily be automatically translated into English if working online (though not perfect the Google Chrome automatic translation is good enough).
- Identification of the main pages of the CDRom (4 people from ISC). Minor changes have been made from the Mali example. Eventually about 80% of the rubrics are identical hence facilitating the compilation of the websites and exchanges of experiences between the teams¹.
- Training of two ISC staff on the USB tool to create the CDRom. <u>Reminder:</u> The USB tool is copyright protected (IRAM) and is not to be used outside ASIrri project without IRAM's approval.
- The user manual was translated into English. It is available on the root of the USB key in both French and English versions.
- First drafting of the pages by ISC (2 people from ISC) in English:

¹ The Cambodia component CDRom has been sent to Mali, and both CDRoms will also be handed over to the team in Haiti By Philippe Deygout during his forthcoming mission.

- Drafting of the text (first draft by somebody, then revision by the other one, then collective reading / improvement of the content);
- o Identification of documents to be downloaded;
- o Identification of photos (in the core text and as photo galleries).
- The early first draft was presented to all ISC staff and to the GRET TA at the end of the mission.

See an example of a page below:



The table below presents the arborescence of the CDRom, the status of each rubric at the end of the mission and the main activities to be conducted in order to finalise the English version.

Arborescence	Status at the end of the mission	What remains to be done	
Welcome page	First draft well advanced	Final proof reading only	
Asirri Project	Not started	Can be copied from the future master CDRom	
Scope of work	First draft well advanced	Final proof reading only	
Initial diagnosis /Problems	First draft well advanced	Need to better contextualise	
Approach and methodology of ASIrri project and of the ISC	First draft well advanced	Need to articulate the core text with the 2 introductory manuals (check coherence)	
Types of ISC Services	First draft	Need some improvements on the core text and to add the manuals	
FarmerWaterUserCommunity (FWUC)	Not started	To write in full	
Farmer and Water Net (FWN)	First draft well advanced	Final proof reading only	
Main achievements of Asirri	First draft	Need to update the results. So far they are presented according to the logframe (expected results) but this section could be improved after the final evaluation of the project	
Ways forward	First draft	This section could be improved after the final evaluation of the project	
Virtual library	Not started	Need to compile other documents (non ASIrri) that can serve as references	
Photo Gallery	First draft	The ISC team has probably more than a thousand photos: a selection of the best pictures is a must.	

In general what needs to be done to finalise the English CDRom is:

- Revision of the core texts and of the read more sections;
- Identification of additional documents to be downloaded (these being scattered on several computers);
- Identification of additional photos (the ISC has plenty of them but scattered on several computers).

The Khmer version will be produced simultaneously: this version will contain much more documents than the English version and could possibly serve as a temporary ISC website.

The elaboration of the CDRom is an iterative process. It will also be improved when progress are achieved with the manuals.

Methodological manuals

Identification of the manuals

Initially only service manuals were foreseen. It was found necessary during the mission to elaborate two introductory manuals to explain the specificities of the ISC approach. These two introductory manuals will definitely help transversal analyses between the ISC (Cambodia) and the CPS (Mali). The manuals are listed below.

Introductory manuals:

- Manual 1: Overall FWUC support approach by the ISC
- Manual 2: ISC Service cycle management

Services manual:

- Manual 3: FWUC establishment
- Manual 4: FWUC election. Initially the election process was dealt under the FWUC establishment. Yet being an important process it was felt necessary to have a specific manual dealing with this aspect.
- Manual 5: FWUC general management (after creation)
- Manual 6: Financial management
- Manual 7: ISF definition, calculation and collection. Initially the ISF was dealt under financial management. Yet being an important aspect and the financial management manual covering already many aspects it was felt necessary to have a specific manual dealing with this aspect.
- Manual 8: Creating database & data collection
- Manual 9: Water management. It is not sure at this stage whether this manual will be drafted during ASIrri. It may be elaborated only at a later stage (depending on staff availability).
- Manual 10: Irrigation scheme maintenance. It is not sure at this stage whether this manual will be drafted during ASIrri. It may be elaborated only at a later stage (depending on staff availability).

Several brainstorming sessions were facilitated using a zop approach to list the key aspects to be dealt under each manual and to organise them logically (service process).

We can assume that the most important aspects are now identified, yet minor aspects may still be added.

The following table gives the intended manuals in Mali and Cambodia in a vis-à-vis:

	Manuals in Mali	Manuals in Cambodia		
General approach	Manual 1 : General methodology to provide services to OERT by the CPS	Manual 1: Overall FWUC support approach by the ISC		
		Manual 2: ISC Service cycle management		
ap]	Manual 2 : Partnership	Not dealt specifically by a manual, but appears throughout manual n°1		
Diagnosis, inception, phase, assessment, evaluation	Manual 3 : Initial diagnosis of the area of intervention	Manual 3 FWUC establishment (Chapt 1 / Step 1)		
	Manual 4 : Hydraulic diagnosis of the OERT and planning maintenance	Manual 8: Creating database & data collection Also quickly dealt under Manual 3 FWUC establishment (Chapt 1 / Step 1)		
	Manual 5: Agro-socio-economic diagnosis of the OERT	Manual 8: Creating database & data collection		
		Also quickly dealt under Manual 3 FWUC establishment (Chapt 1 / Step 1)		
	Manual 6 : Typologie of OERT	It is not dealt under a separate manual but is tackled through several manuals (1 and 2 mostly)		
	Manual 10: Monitoring and evaluation of services and of OERT, by CPS and OERT	Partly covered under manual 2: ISC service management.		
Technical services (hydraulic, agriculture)	Manual 7: Training on maintenance (basics only)	Manual 10: Irrigation scheme maintenance (probably not available during ASIrri)		
	Manual 8: Training on water management (basics only)	Manual 10: Irrigation scheme maintenance (probably not available during ASIrri).		
	Manual 9: Mediation and agricultural planning	Was initially covered under manual 3 FWUC establishment (Chapt 6 / Step 17) but had been eventually taken (may be dealt under a separate manual at a later stage)		
	Not dealt with	Manual 4: FWUC election.		
Management	Not dealt with. Is supposed to be already known by CPS staff.	Manual 5 FWUC general management after creation		
	Not dealt with: It does exist for farmers organisations (usual members of CPS) but has not been specifically designed for OERT	Manual 6 Financial management		
M	Not dealt with at this stage. Probably missing and should be developed if the pilot of introducing an ISF managed by the OERT is successful (is currently being tested)	Manual 7: ISF definition		

Manuals content

In the first manual developed by CEDAC each chapter / step is structured along the same standard format. Although the proposed format is good it may still be improved. It is proposed the following section should be covered in each manual:

- <u>Objectives:</u> listing the objectives of the manuals / chapters / steps.
- <u>Summary sketches:</u> A one page sketch should be added in each manual to indicate how the manuals relate with the others, how the service relates with the other services. Because several services are actually made of many steps, these steps should also be summarised in a one page sketch to serve as an introduction. For instance creating a data base involve many steps and sub-steps.
- <u>Activities:</u> Description of the steps / activities. The main elements identified through the brainstorming sessions are described in annexes for manuals 1, 2, 3, 5, 6, 7 and 8.
- <u>Principles:</u> The manuals are elaborated to serve as reference for the ISC staff (for future training for instance) but also to facilitate the replication of the approach in other regions, hence to facilitate the opening of other ISC in other regions. To ensure new ISCs adapt to local contexts it is important to stress key principles of the activities, and not only to explain activities. Understanding the principles is indeed often more important than just understanding the activity.
- <u>Examples</u>: Presenting concrete examples in boxes.
- <u>Possible risks</u>: Indicating possible risks, possible limits or points of attention.
- <u>How is the ISC involved / who is involved:</u> The current CEDAC manual often deals with the ISC as a whole ("the ISC will facilitate"). It would be useful to indicate which specific skills are actually necessary for each service, or each step. Furthermore it would be necessary to better explain how the ISC staff is actually involved in each activity. For instance the manual on FWUC general management should give guidelines on FWUC management fot the FWUC itself, but also to the ISC staff.

An example of a zop session output is given in the photo below:



	Status at the end of the mission		
	First brainstorming over content (group of 4 3-4 ISC staff)	Fine tuning of content (Sophak and Christophe)	First drafting
Manual 1: Overall FWUC support approach	~	~	English version from Antoine
Manual 2: Service cycle management	~	~	English version from Antoine
Manual 3: FWUG establishment	~	~	Khmer version from CEDAC
Manual 4: FWUC election	~		Khmer version from CEDAC
Manual 5: FWUC general management (after creation)	~	~	
Manual 6: Financial management	~		
Manual 7: ISF definition, calculation and collection	~		
Manual8:Creatingdatabase & data collection	~		
Manual 9: Water management Manual 10: Irrigation scheme maintenance			

Status of the manuals at the end of the mission and what needs to be done

The following still needs to be done:

- Agree whether 8 or 10 manuals will be finalised, before the end of the project. Most probably manuals 9 and 10 will only be prepared after the project, but this still needs to be confirmed.
- Decide on which manual will be externalised (another contract with CEDAC?) and which one shall be prepared by the ISC team.
- Gather already existing manuals (from Prey Nup and Stung Chinit projects for instance) that can be used in combination with present work to elaborate the drafts. Gather existing documents from ASIrri to copy/past them into the manuals. It is not necessary to rewrite everything from scratch: capitalising is also about valorising what already exists!
- Fine tune content of each manual.
- Elaborate draft in English or Khmer.

<u>Reminder</u>: 7.100 euros will be transferred from the transversal component to each local component of the project to provide additional funding for capitalisation work at local level.

This additional budget will be used to pay salaries of ISC staff involved in the capitalisation work in early 2012 (at least in January).

Additional information

The final evaluation of the ASIrri project will be conducted in January-February. The project will be evaluated by an external consultant (selection is currently being done through a tender process). The terms of references have been transmitted to each component for inputs. Most probably the consultant will spend about 10 days in Cambodia in January. The ISC team will need to be available during that mission.

Ideally the capitalisation work should be well advanced when the evaluation will start. A copy of the CDRom (even if not finalised) should be sent to France end of December to be handed over to the consultant to start his evaluation work.

The final ASIrri workshop will be organised in France in March. A whole week of events is planned: internal workshop (2 days), external seminar (1 day), field visits (1 to 2 days). See the notes communicated to each component of the project. Each team will have to present its work. The exact dates still need to be agreed upon.

Final submission of all documents in March/April to be compiled by the transversal component.

Annexe 1: Content of manual 1: Overall FWUC support approach

Chapter 1 : What is ISC?

- General presentation of the ISC:
 - o Vision
 - o Mission
 - o Objectives
 - o Values
 - Governance: stress the diversity of composition of members of ISC board and that farmers will play role in the management board
 - Economic model: stress the economic mix and indicate the gap between theory and practice
- See statute and by laws of the ISC for more details
- Principles of ISC in supporting the FWUC
- Farmer and water net
- Way forward

Chapter 2: Service delivery for FWUC reinforcement

- Service cycle: cf. contract process PPT
- Domain of services: 9 types of services
- Adaptation of service to FWUC: making the link with the evaluation arrow

Chapter 3 How is ISC mobilizing resources?

Human resources :

- Team organizational chart
- Category of services / Staff positions in service interaction: highlighting the different types of staff positioning while delivering services (ie, training, coaching, elaboration of tools...).

ISC customers' relationship / finanlcial resources :

- Service paiement by FWUCs
- General subsidy from specific projects or donors (ie ASIrri ou EU Food Facility)
- Contract with specific project (ie JAC)

Links with partners

Annexe 2 : Content of manual 2: Service cycle management

Chapter 1: Potential customer assessment

- Quick assessment
- Scheme typology -How to define the water service ?
- Scheme selection criteria
- Detailed diagnosis
- FWUC management evaluation (Arrow)

Chapter 2: Contract management

- Service proposal and negotiation
- Contract model
- Timesheet follow up
- Datasheet
- Evaluation of service by customers
- Invoices

Chapter 3: FWUC monitoring and evaluation

- FWUC management evaluation (Arrow)
- FWUC category (related to their existing management)
- Agriculture follow up (nb: this section may need to be dealt separately)

Annexe 3 : Content of manual 3: FWUC establishment

Chapter 1 Working group mobilization

- Activity: Set up a working group
- Activity: Planning of the working group

Chapter 2 FWUC/G membership mobilization

- Activity: Awareness village meeting
- Activity: FWUC member registrations (support) / Sum up result of member registration / List of FWUG/C member preparations / Membership card preparation

Chapter 3 Recommend FWUG/C's scope and institutional model

- Activity: meeting(s) of the working group to reflect over the scope of the FWUC
- Activity : study tour of the working group to get exposed to different situations
- Activity: Drafting statute and by-law (nb: the revision of status and by-laws will be a continuous process base on FWUC experience)

Chapter 4: Way forward for the FWUC

- Activity: First FWUC representatives meeting
- Activity: Field visit or Study tour
- Activity: Organizing FWUG/C 1st general assembly (including validating statutes and by laws)
- Activity: Official registration of the FWUC with the legal authority

Annexe 4: Content of manual 5: FWUC General Management

Chapter 1 Governance

Draw two summary sketches / tables:

- Organizational chart of the FWUC (governing bodies GA, Board...)
- Table to clearly indicate the sharing of responsibilities: levels of consultation, information, decision, implementation, monitoring / control.

General Assembly

- General information on the roles of a general assembly for a farmers' organisation
- What is specific with a FWUC (from the standard statutes of circular n^o 1): decision by members but affecting all users, how irrigation units are being taken into account during the general assembly
- Example of possible agenda items for a GA
- Process to organize a general assembly
- **Give examples** of possible roles of ISC regarding the organization of a general assembly for FWUCs at different management levels: ISC may facilitate GA for levels 0 and 1, but may only be observer or a resource person for more advanced levels

FWUC committee /management board

- General information for a farmers' organisation (president, secretary....)
- What is specific with a FWUC (from the standard statutes of circular n^o 1): specific responsibilities of members: irrigation unit, operation and maintenance, ISF collection, ...
- Example of possible agenda items
- Process to organize a FWUC Committee meeting
- **Give examples** of possible roles of ISC regarding the organization of FWUC committee for FWUCs at different management levels: ISC may facilitate the committee for levels 0 and 1, but may only be observer or a resource person for more advanced levels

Village representative meeting/ canal meeting

- Indicate the need for consultation at lower levels (either be canal levels, village levels...)
- Indicate that each FWUC has to find its best way to get organized at these lower levels; ISC can assist in this reflection (see manual 3)
- Frequency of meeting, chair the meeting, facilitate meeting, writing minute
- How to organize this meeting (sending invitation, making agenda, fixed meeting date)

Activity: Village meeting / canal

Sharing role and responsibility between stakeholders

Table crossing stakeholders and responsibilities:

- Main stakeholders to be listed in the table: General Assemble, FWUC committee, basic members, villages / communes, other users, MOWRAM/PODRWAM, ... (to be continued)
- Main responsibilities to be listed in the table: deciding on water sharing rule, ISF price, ISF collection, conflict resolution, estimates of maintenance costs, maintenance implementation and control, enforcement of rules and regulations, planning/budgeting/reporting, ... (to be continued)

FWUC monitoring, evaluation and control

Possible procedures / processes: the selection of tool will depend on the FWUC management level.

- Regarding financial aspects
 - Internal financial audit is possible (case of Prey Nup)
 - External financial audit by ISC
 - Control of accounting system and financial procedures by ISC
- Regarding general FWUC management
 - Control by MOWRAM (in theory, but in practice is very rare)
 - Normal general assembly channel
 - Arrow FWUC management mostly and to a lesser extend evaluation of services delivered by the FWUC to its members (O and M for instance)
- Regarding services
 - Do rules exist? Are there followed?
 - Checking activities done against activity plans
 - o Frequency, checklist,
 - Monitor the services

Chapter 2 Planning, budgeting and reporting

Activity: Activity planning

- Guideline to elaborate an activity plan: propose a format / table of content from an existing report
- Process to follow:
 - Example of Stung Chinit,
 - Main steps / principles: preparation by ISC, consulting members / villages, synthesis of various positions, decision making, drafting plan

Activity: Budget planning

- Budget planning is directly coming from the activity planning → list main activities (from the activity planning) and then the corresponding expenses
- Guidelines to elaborate a budget: propose a format / excel sheet from an existing budget
- Process to follow:
 - Example of Sdao kong,
 - o Example of Prey Nup and Pramh Kumpheak in annexes
 - o Main steps / principles

Activity: Reporting

Guidelines to elaborate an activity report: propose a format / table of content from an existing report

Chapter 3 Operational responsibility

- Listing the main tasks that need to be done.
- Can these tasks be done by FWUC committee or not?
- If not, what are the possible solutions to investigate?
 - Training /coaching for improvement skill of elected people or staffs: in the case of infant FWUCs for instance;
 - Access to external skill: for instance when the ISC does the accounting of infant FWUCs
 - Internalize completely the function: for instance case of director and accountant position in Stung Chinit
- Stress that depending on the level of development of the FWUC different solutions may be necessary.

Chapter 4: Administration

Activity: Organization of meeting (Making agenda, send invitation, taking minute)

Activity: Mailing, stamping, filing, Decision taken recording

Activity: staff contract, other contract,

Basic administrative skills training and coaching

Chapter 5: External relationship

List of possible stakeholder /	Rational for	Tools/Method
	Relationship/Partner	
PDOWRAM/ MOWRAM		
Local authority: village, commune,		
district, province		
Other FWUC and FWN		
Technical assistance: ex. GRET,		
CEDAC, ISC, etc		
Donors		

Tool and method:

- Coordination meeting
- Reporting
- MoU: for instance Prey Nup signed MoU,
- LoA: for instance Stung Chinit signed LoA about sharing O&M responsibility between FWUC and PDoWRAM/MOWRAM
- Stung Chinit North signed contract with communes to implement ISF collection
- All contract of ISC

Annexe 5: Content of manual 6: FWUC Financial Management

Chapter 1: sharing of responsibilities

- Director
- Accountant
- Treasurer

Chapter 2: bank and cash management procedures

- Bank account
- Safe
- Cash box

Chapter 3: Annual procedures/ Planning Accounting and Reporting procedures

- Budget: prepare expenditure plan, approval expenditure plan, follow up income and expenditures, reallocation between lines during a year, income sources
- Filling system
- Accounting system: done by the FWUC or done by ISC
- Financial report

Chapter 4: audits and control

- External financial audit
- Internal control

Chapter 5: "Day to day" procedures / purchase procedures

- Depending on amount: tender or not
- Quotation
- Advance request form
- Approval system
- Procedure to withdraw money from safe / approval to withdraw money
- Payment: cash, check, bank transfer
- Expenditure invoice, checking control (invoice / accounting)
- Expenditure reimbursement: cash advance settlement, reimbursement from safe box, returning money to safe box
- Book keeping cash box
- Passbook updating

Annexe 6 : Content of manual 7: ISF definition, calculation and collection

Chapter 1: Defining ISF

- Official definition / official way of calculating it
- Levels of ISF price per category
- Define who pays: owner or renter
- Two alternatives to calculate ISF: Budget / ha Vs capacity of farmers to pay
- According to season, according to crop
- Level of expected ISF collection

Chapter 2: Process and rules

- Meeting to validate ISF price / categories, discuss the ISF to collect / user, ISF price calculation, ISF validation / approval
- Fixe time to collect ISF
- Meeting to inform about price, time, fine in case of non-payment, duration of collection
- Monitor and control ISF collection: follow up the paiement and debts of members, register in ISF follow up system, record transfer collector to the bank, check deposit receipt in bank account
- Meeting to present total ISF collected
- Collect information on irrigation service
- Exemption cases
- Meeting with members who did not pay, check the yields
- Conflict resolution in relation with non payment of ISF, invite members who did not pay to discuss with communes / districts, problem solving, define principles for conflict resolution, define several levels of sanctions

Chapter 3: Tools for ISF collection

- Data base, updating data base
- List of members, list of users, update list of users
- Map, training on how to see plots on the map
- Print invoice, deliver invoice, commune stamp on invoice
- Using the ISF receipt, announcement letter by district
- Record ISF pay table
- Follow up sheet

Chapter 4: Specific tasks of the ISF collector

- Define ISF collector
- Contract arrangement
- Fix allowances for ISF collector, record working days and amount for ISF collector, pay allowances to collector
- Follow the ISF transfer from ISF collector to accountant
- Limit the cash amount to hold in hand to go to the bank
- Deposit ISF in bank account
- Transfer bank voucher to accountant

Chapter 5: Collaboration with stakeholders

- ISF collectors
- Collaborate with local authorities

Annexe 7 : Content of manual 8: FWUC Database creation

Chapter 1: Why elaborating a data base

- Purpose of data base
- Advantages of data base
- Organising meeting with farmers to explain the purpose of drawing maps
- Meeting with farmers to explain the purpose of doing a data base

Chapter 2: Links with other activities

- From manual 2: detail assessment
- From manual 3: list of farmers, list of members
- From manual 4: election to verify the list
- From manual 7: Updating the lists

Chapter 3: collaborations

• Collaborate with local authorities to draw the maps

Chapter 4: tools

Sketch maps / participatory map

Additional tools / equipment

- Air photo
- GPS

Digital maps / raster map

- Hydraulic system: Command area, potential area, irrigated area, irrigation unit map, land elevation map (low, normal, high), need for different types of irrigation (gravity, gravity + pumping, pumping)
- Village commune boundary map
- Rice plot mat

→ output for assisting analysis / decision making

- List for election
- List for fee collection
- Cropping calendar map, cropping season map, cropping pattern map, irrigation calendar map
- Canal / drain / infrastructure status map
- Exemption cases map
- ISF collection result map
- Membership map

Chapter 5: Process

• Use information from detailed assessment

Step 1: list creation

- Appointment with village chief, village representative, elders
- Collect data from village chief (names...)
- Identify village boundary
- Support on the list of collection of membership fee in the village
- Collect information in village
- Create member / owner code
- Register name of members in computer
- Register data from village in computer
- Data tabulation: name, code, village, estimated surface
- Sum up and check list of farmers
- Sum up and check the list of farmers in village with the list of members
- Check farmers list with village chiefs and village representatives

Step 2: drawing maps of irrigation scheme

Step 2A: sketch map

- Draw participatory sketch map with village chiefs and villagers
- Drawing boundaries of villages
- Meeting to draw the plot on sketch map with farmers, village chiefs, elders
- Draw sketch of rice plots of each villages
- Detail rice plots in each village
- Refer to air photo for rice plots
- Verify number of plots with fields

Step 2B: GPS / computer maps

- Register info (name husband and wife, number of plots, surface) in data base system
- Way points collection with village chiefs, village representatives, farmers
- Transfer GPS points to arc map
- Draw map in arc map
- Draw irrigated area map
- Calculate surface of plots in computer

Step 2C: making the link between the lists and the maps

- Link data sheet and arc map
- Display information of rice plot after validation

Step 3: analysis, using the maps, the tools

- Reflection on different sketches and field results
- Print out farmers lists and maps

Step 4: handover to FWUC

- Plot information for validation by owners
- Plot information for validation by local authorities
- Hand over list and maps to FWUC

Step 5: updating data base

- Update rice plot map
- Update list of owners

Chapter 6: points of attentions / possibles limites

- Important to involve local authorities when touching plot boundaries
- Always cross check the information