The Final Workshop on Adaptive Learning
30-31 May 2005, Phnom Penh, Cambodia.

Contents

Background

Over the last 6 years there have been two projects managed by MRAG Ltd of London: 'Adaptive Learning Approaches to Fisheries Enhancement' and 'Uptake of Adaptive Learning', both funded by the UK Department for International Development (DfID) as part of their Fisheries Management Science Programme (FMSP). One output from these was a set of guidelines entitled "Adaptive learning: a practical framework for the implementation of adaptive co-management - lessons from selected experiences in South and Southeast Asia." (Garaway, C.J. and Arthur, R.I. 2004.)

These guidelines arose from a perceived need to synthesise, in an accessible manner, the experiences gained from trying to implement adaptive co-management approaches to fisheries management in Lao PDR, Vietnam, Thailand, Cambodia and West Bengal in India. Starting in 1999, the Adaptive Learning projects have developed, tested and evaluated the approach in a range of resource systems and some of the lessons learnt are described in this short publication.

Purpose

1. Raise awareness of the adaptive learning approach
2. Introduce the Adaptive learning guidelines
3. Share experiences

Agenda

The workshop was based around the three stages of the adaptive learning process: preparing to learn, learning and evaluation. Presentations on each of these stages will be followed in each case by group work:

Day 1 (30 May 2005)

Morning Session
Start 8:30 to 12:00

Introduction: Objectives, who we all are, timetable

Introduction to Adaptive Learning: Robert Arthur explains the process and the structure of the three sessions

Preparing to learn: presentation by Caroline Garaway, to highlight experiences and lessons learned from implementing adaptive learning in southern Lao PDR
Group work based on four questions

Afternoon Session
Start 13:30 to 16:30

Learning: Presentation by Robert Arthur, describing experiences and lessons learned from implementing adaptive learning in West Bengal, India
Focused discussion involving all participants around issues raised

Day 2 (31 May 2005)

Morning Session
Start 8:30 to 12:00

Recap and introduction to today

Evaluation of learning: Presentation by Wolf Hartmann, describing experiences and lessons learned from implementing adaptive learning in Mekong Basin.
Focused discussion involving all participants around issues raised

Workshop wrap up and evaluation

Group work following Session One
The exercise given was:
The individual groups discuss a principle in the light of your own experiences and decide if the principle should be changed (if so, please present a modified principle) or dropped.

The plenary group then discuss this decision.

Principle 1: The process should be asset based, building on strengths rather than identifying gaps and weaknesses.

Question: Adaptive co-management requires that different stakeholder groups (villagers, researchers, extension workers etc) assume new roles and responsibilities. What sort of roles and responsibilities might they take and what sort of barriers might prevent them from doing so? Illustrate with examples from your experience.

Principle 2: Learning must be both demand-led and appropriate, answering questions that are interesting and relevant to stakeholders' needs.

Question: This principle sounds good in theory but what sort of compromises might have to be made when agreeing what to learn about? What might be the implications of this give and take? Do we need to change this principle? Illustrate with examples from your experience

Principle 3: Information needs to be generated and shared in an appropriate and timely fashion. This must occur both within and between stakeholder groups and information must flow in all directions.

Question: Is it possible to communicate with all stakeholders in a timely and appropriate fashion? In your own experience, how realistic is this? Do we need to change this principle? Provide some good and bad examples

Principle 4: Natural resource systems are human/environment systems. To understand them, requires an understanding of the resources, the people who use them and the systems of management and control affecting the interaction between the two.

Question: The principle suggests social scientists and natural scientists, researchers and extension workers all need to work together if we are to get the necessary perspectives. In reality can we get them to work together effectively? What are your experiences, both positive and negative? Are there any good models?

Principle 5: Experimentation leads to greater learning & learning is an objective of management not just a useful by-product. Realistic and pragmatic assessment of what is achievable is key.

Question: In adaptive learning, experimentation is part of the learning strategy. What factors do we need to think about when planning management experiments with villagers?

There were only enough participants to form four groups of four, so the 4th Q and principle were omitted.

Outcomes:
Q1/P1

3 groups of stakeholders	Roles & responsibilities	Constraints
Villagers	Planning, implementing and evaluating activities	Limited budget Lack of technical knowledge Limited ability to access information
Extensionists (DoF)	Stocking, control Provide technical support	Time and budget limited
Local administration (TAO)	Support budget and information	No experience of NRM Limited budget Concerned more over votes

Large group says keep the principle as it stands

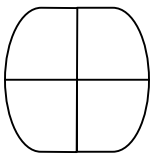
Q2/P2

Each stakeholder has different interests:
Provincial government, district extensionists, researcher/facilitator, local administration, villagers
Use participatory meetings to find common interests
Then try to set roles and responsibilities for each stakeholder
Large group says keep the principle as it stands

Q3/P3

This is a good principle to aim for.
Limited by distance, other job priorities, financial/communication limitations
Participation in formal group meetings

- important but not yet satisfactory
- needs encouragement, how to ensure sustainability
- division into smaller groups OK but still needs encouragement between groups
- feedback to/communication by executive



Using farmer expertise – fear of blame for failure, if the person receiving advice then has a failure experience
Asking people about how to improve, what do farmers think?

Aim for the principle; don't be discouraged if you don't achieve 100%
Large group says keep the principle as it stands

Q4/P5

Experimentation
Needs:

- good basic information
- need to explain well our purpose

- enough water bodies to compare (or pilot area)
- negotiation and make agreement
- people may be afraid of failure and not like to change

On the principle, we propose:
Add: Accept that an experiment may not be possible
In the large group discussion, this was further amended to:
Accept that an active experiment may not be possible

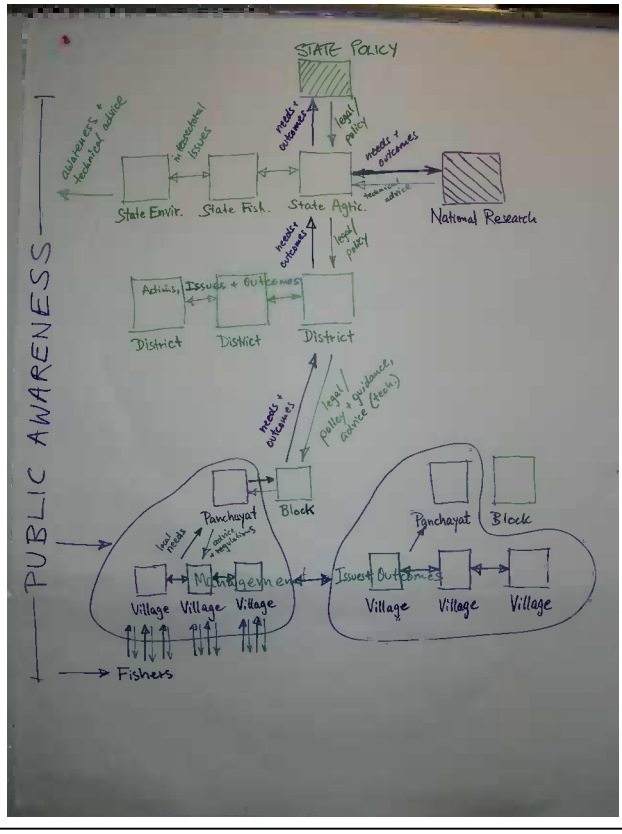
Group work following Session Two
The exercise was:
Information sharing within and between stakeholder groups is an important part of adaptive co-management. One way to improve the sharing of information is to develop a learning network.
In your group, design and plan a learning network for a fisheries co-management project. It will help you if you can answer these questions:

Who should be involved?
Who should be communicating with each other?
What types of information should they be sharing?
What methods of communication would be best for sharing this information?
What difficulties might there be in putting this plan into action?

We will then compare the plans and try to draw out the key points and possibly produce a 'model' plan.

Four groups produced outputs, having been grouped by country (India, Lao PDR, Thailand and Vietnam. The one Cambodian present at this time joined Robert and Mark in the India group)

Outcomes:
India group

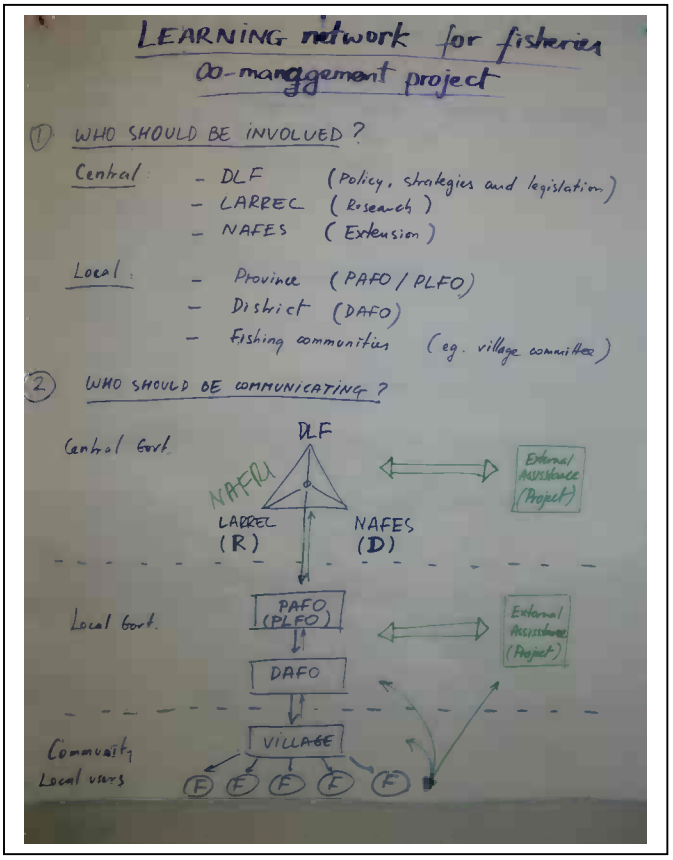


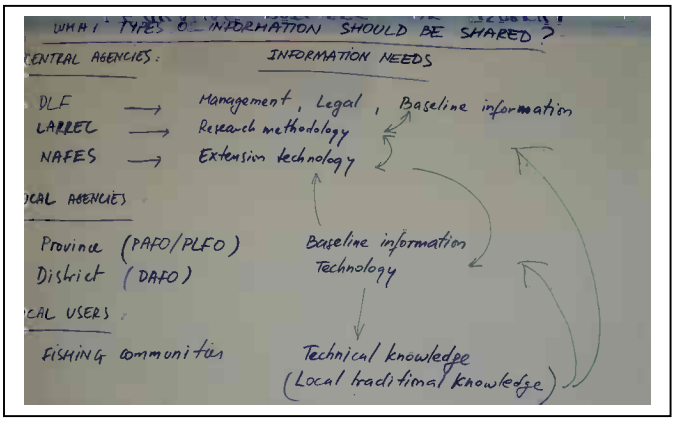
Methods:
Electronic (telephone, email)
Workshop
Meetings (group, 1 to 1)
Written communications
Written materials
PA (press, TV, radio)

Have to change types and availability of information

Difficulties:
Sectoral insularity
Access (info) (people)
Finances
Time
Vested interests

Lao PDR group

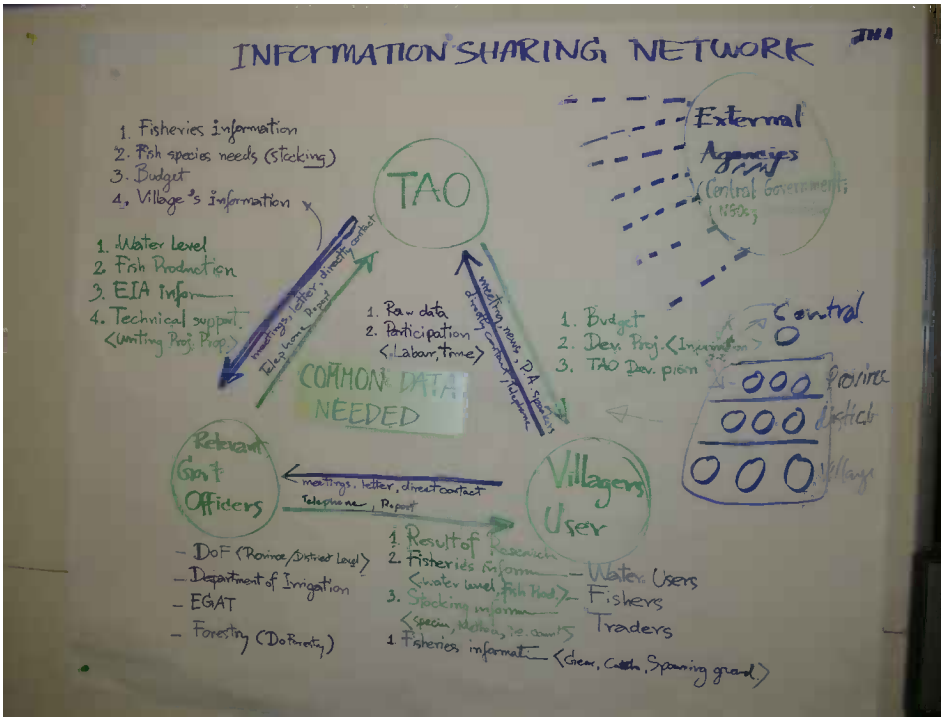




Methods of communication for sharing:
Workshop, meeting, seminar, training
Extension materials (manuals, leaflets, posters etc)
Mass media (TV, radio, newspaper)
Exchange visits

What difficulties in putting plan into action?
Human resources (limited staff and capacity)
Coordination mechanism
No clear roles and responsibilities (legislation)
Data collection and information sharing methods not systematic
Monitoring and evaluation system needs to be improved

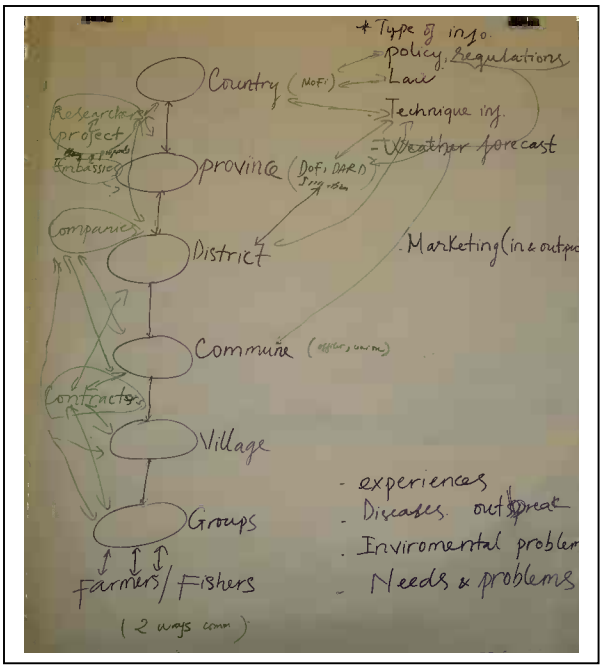
Thailand group



Problems:

1. No budget to collect data
2. Lack of fisheries co-management experiences
3. No participation on data collection and sharing
4. Each organisation works separately
5. TAO does not have data specialist
6. Most information kept in central government, less used in local
7. Conflict between fishers and government officers (e.g. over patrolling/enforcement)

Vietnam group



Methods:

- Training
- Field trip
- (Study tours)
- Meeting
- Workshop
- Discussion in field
- Loudspeaker
- TV, radio, newspaper
- Posters
- Documents and books
- Telephone
- Conversations

Difficulties:

- No clear methods
- Uncontrollable situation
- Cooperation difficult
- Poverty
- Conflicts
- Difficulties in understanding each other
- Getting information on time
- Government problems
    - Conservatism
    - Too much work
    - Need to follow top-down plans

(But none of these problems are unsolvable)

Common themes from the four groups

Recognition that different stakeholders need different methods
Problems in achieving effective communication in a learning network had factors in common
Every group stressed the importance of two way flow – but how can we make that happen?
Seemed to be an absence of ways to engage the more senior levels

Group work following session 3

Focus on the principles of Evaluation of learning, as explained in the adaptive learning guidelines:

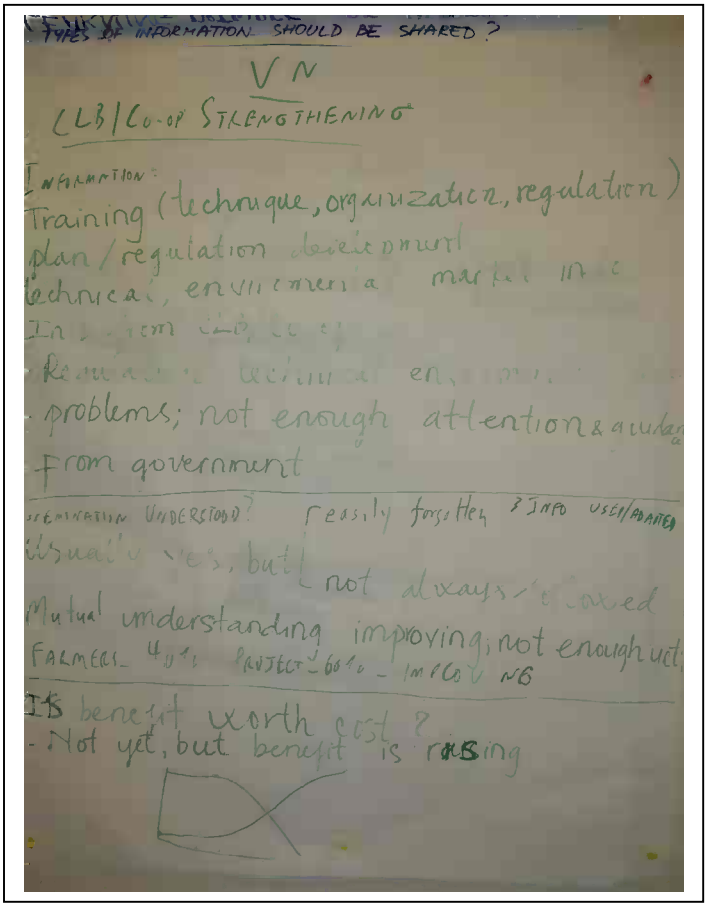
- Evaluate learning throughout, not just at the end
- Evaluate process as well as outcomes
- Evaluate what can be learned from failure as well as from success

How can we put the principles into practice?

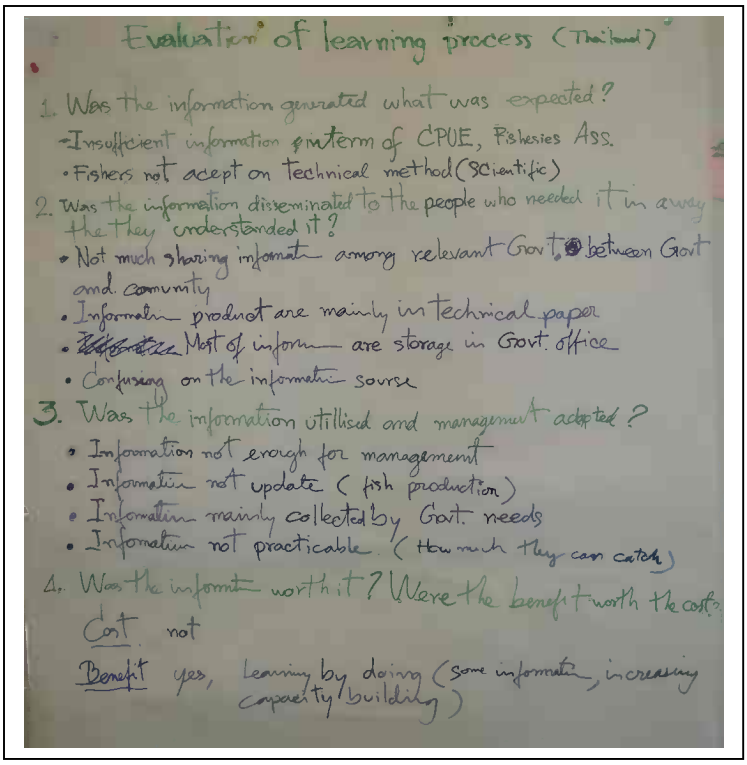
In this session the groups were again country-based.

Outcomes

Vietnam



Thailand



Evaluation of learning process (Thailand)

1. Was the information generated what was expected?
- Insufficient information in term of CPUE, Fisheries Ass.
- Fishers not acept on technical method (Scientific)

2. Was the information disseminated to the people who needed it in away the they understanded it?
- Not much sharing informatn among relevant Govt & between Govt and comunity
- Informatn product are mainly in technical paper
- Most of inform are storage in Govt. office
- Confusing on the informatn source

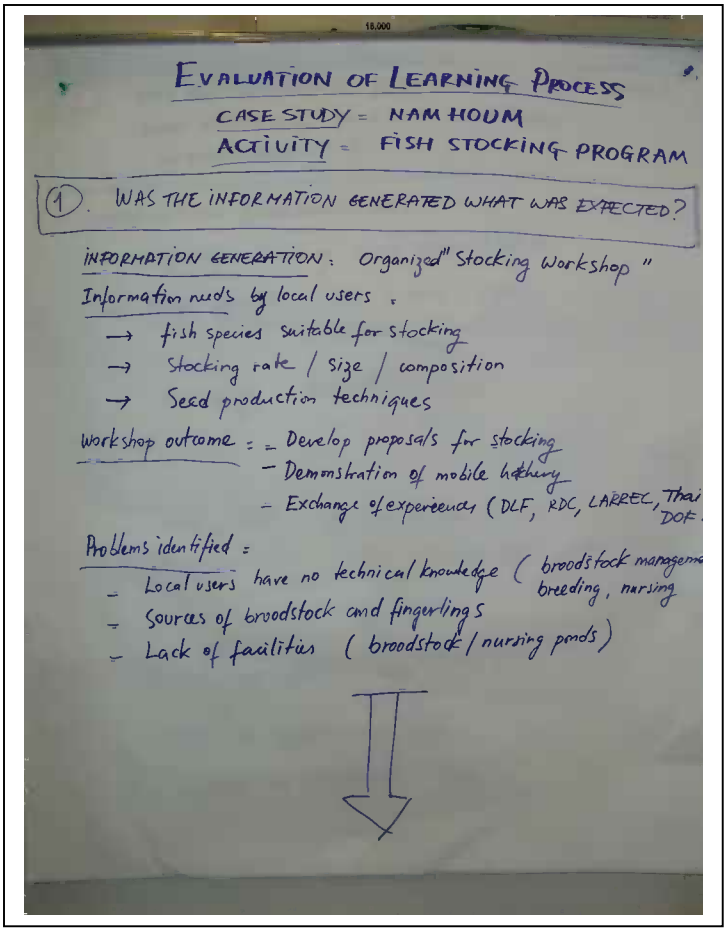
3. Was the information utilised and management adapted?
- Information not enough for management
- Informatn not update (fish production)
- Informatn mainly collected by Govt. needs
- Informatn not practicable (How much they can catch)

4. Was the informatn worth it? Were the benefit worth the cost?

Cost not

Benefit yes, Learning by doing (some informatn, increasing capacity building)

Lao PDR



EVALUATION OF LEARNING PROCESS

CASE STUDY = NAM HOUM

ACTIVITY = FISH STOCKING PROGRAM

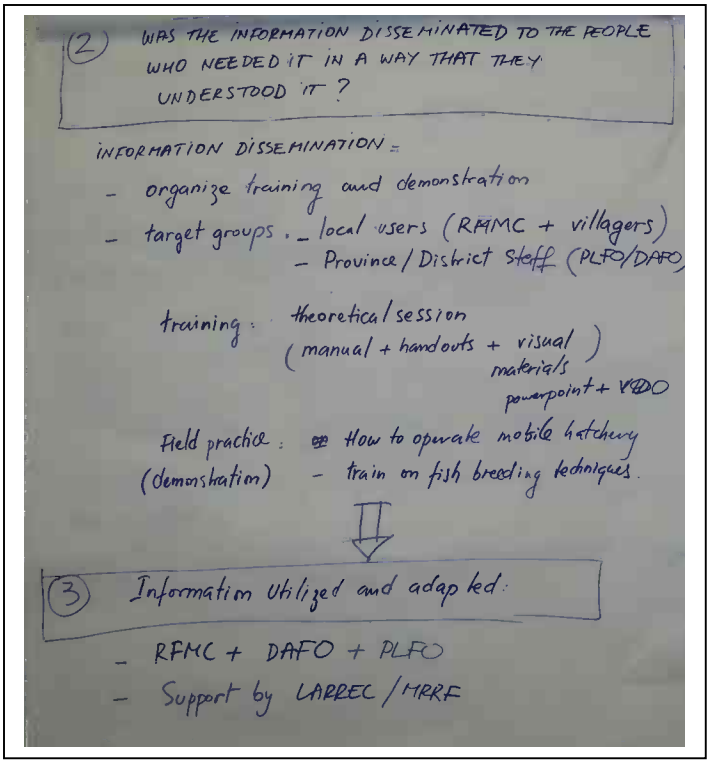
(1) WAS THE INFORMATION GENERATED WHAT WAS EXPECTED?

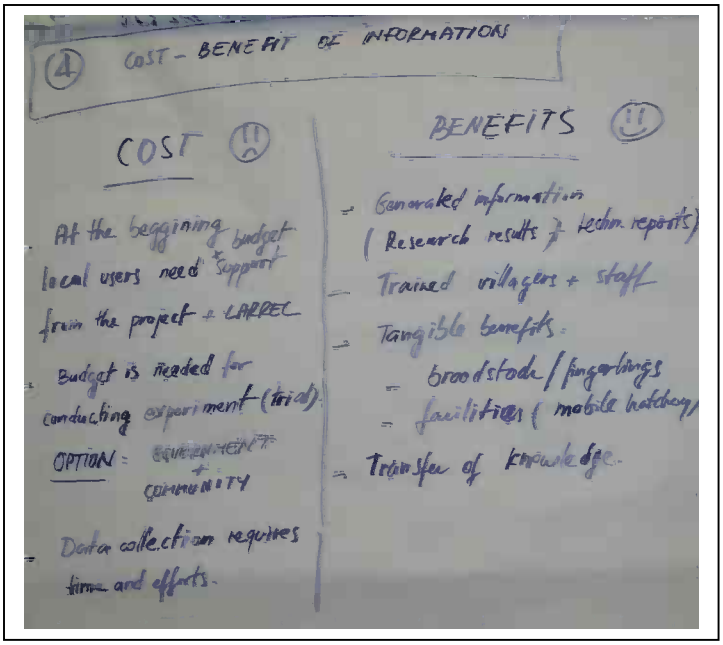
INFORMATION GENERATION: Organized "Stocking Workshop"

Information needs by local users:
→ fish species suitable for stocking
→ Stocking rate / size / composition
→ Seed production techniques

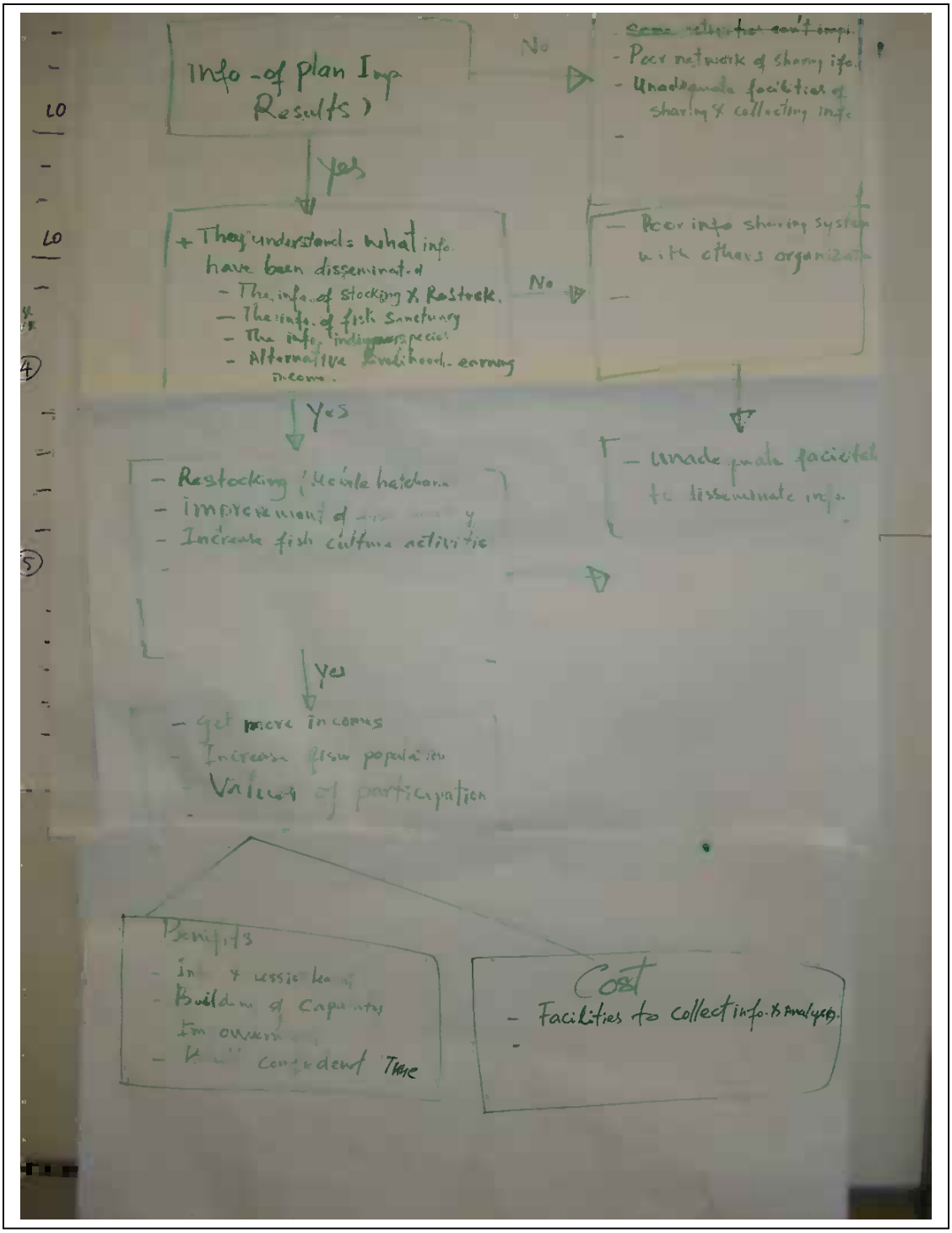
Workshop outcome:
- Develop proposals for stocking
- Demonstration of mobile hatchery
- Exchange of experience (DLF, RDC, LARREC, Thai DOF

Problems identified:
- Local users have no technical knowledge (broodstock management breeding, nursing
- Sources of broodstock and fingerlings
- Lack of facilities (broodstock / nursing ponds)


(2) WAS THE INFORMATION DISSEMINATED TO THE PEOPLE WHO NEEDED IT IN A WAY THAT THEY UNDERSTOOD IT ?
INFORMATION DISSEMINATION =
- organize training and demonstration
- target groups . - local users (RFMC + villagers)
- Province / District Steff (PLFO/DAFO)
training : theoretical session
(manual + handouts + visual materials
powerpoint + VIDEO
Field practice : How to operate mobile hatchery
(demonstration) - train on fish breeding techniques.
(3) Information Utilized and adapted :
- RFMC + DAFO + PLFO
- Support by LARREC / MRRF


(4) COST - BENEFIT OF INFORMATIONS
COST
BENEFITS
At the beggining budget
local users need support
from the project + LARREC
Budget is needed for
conducting experiment (trial)
OPTION : GOVERNMENT + COMMUNITY
Data collection requires
time and efforts.
Generated information
(Research results + techn. reports)
Trained villagers + staff
Tangible benefits :
broodstock / fingerlings
facilities (mobile hatchery)
Transfer of knowledge.

India


Info - of plan Imp Results
No
- Poor network of sharing info.
- Unadequate facilities of sharing & collecting info
Yes
+ They understands what info. have been disseminated
- The info. of stocking & Restock.
- The info. of fish sanctuary
- The info. indigenous species
- Alternative livelihood - earning income.
No
- Poor info sharing system with others organizat
Yes
- Restocking (Mobile hatchery
- Improvement of
- Increase fish culture activities
- Unadequate facilities to disseminate info.
Yes
- get more incomes
- Increase fish population
- Values of participation
Benifits
- in
- Building of Capacities
- confident
Cost
- Facilities to collect info. & analyses.

Evaluation of the Workshop

A simple form was used to get individual feedback on the workshop.
A recap on the objectives under review:
1.Raise awareness of the adaptive learning approach
2.Adaptive learning guidelines
3.Share experiences
The results were as follows:

Review and evaluation – please score 0 = very poor, 5 = very good (actual number of responses in the body of the table)						
	0	1	2	3	4	5
Did you understand the objectives of the meeting?				2	9	3
Were the objectives achieved?			0.5	6.5	6	1
Do you feel you learnt something?				5	8	1
Did you feel that what you learnt will be relevant in your work?				4	8	2

Further comments were also asked for and a few were received:
Not a clear distinction between the learning approach and management
The manual needs a glossary
The guidelines and approach should be shared more widely
Time too short
Could have had field visit
Sharing guidelines could have been done earlier and they could have been used more in the workshop
Participants were more practitioners than policy makers, so perhaps could have adapted the workshop to accommodate this
Good to have workshop with MRC and other organisations

Annex One: Participants list

Name	Organisation	Email
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Adaptive learning: putting principles into practice.

Photo source: CIFRI

Why adaptive learning?

- Small-scale fisheries are both complex and constantly changing.
- Often management decisions have to be made without knowing what the result might be.
- Fisher groups can and do design and adapt rules to fit with local needs and circumstances.
- Extension agencies and researchers are well placed support fishers in better understanding their fishery and in decision-making.

What is adaptive learning ?

- *Structured management process with 'learning as an objective of doing'.*

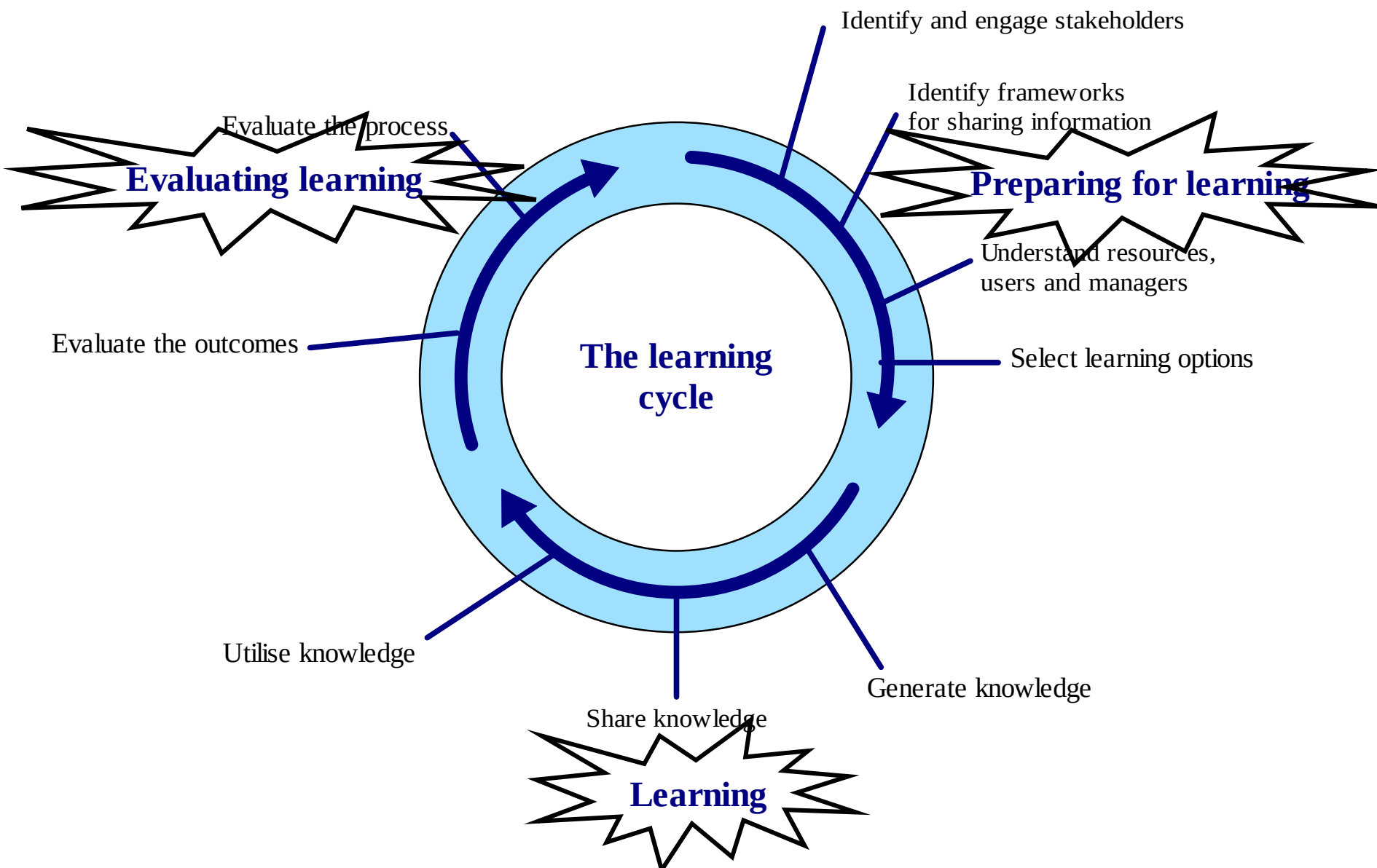
Programmed approach	Adaptive learning
Research then manage.	Research as you manage.
Single solutions.	An experimental process.
Management aims to provide benefits.	Process aims to provide both knowledge and benefits.
Suited to situations that we understand (Outcomes can be assumed).	Suited to situations we understand less (Outcomes cannot be assumed).

The main principle shaping the approach

People will only work together if they can see the benefits of doing so. Commitment to transparency, developing skills, empowerment and explanation. Developing trust and mutual respect, including of different knowledge types is crucial.

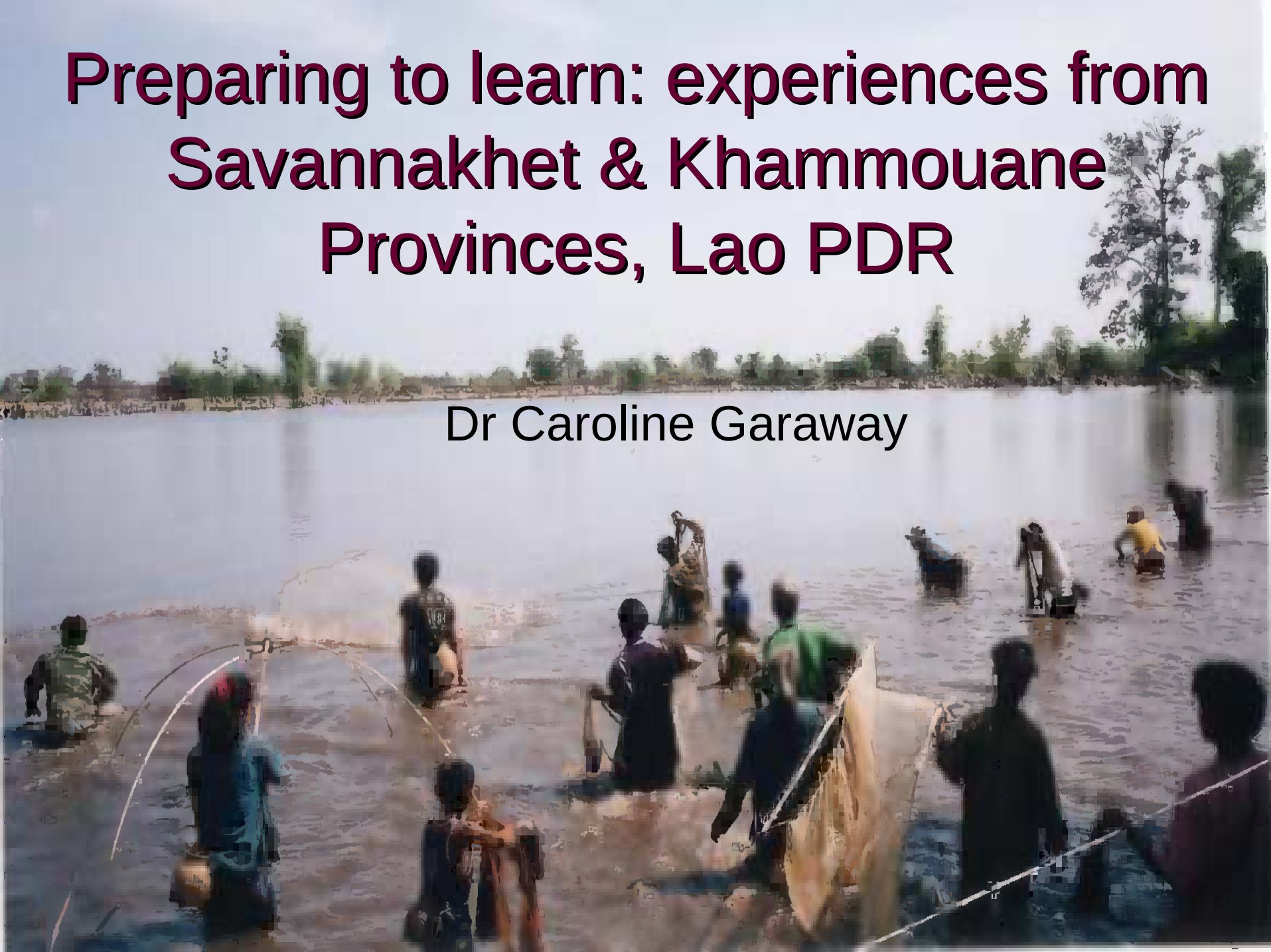
Putting it into practice: the adaptive learning framework

The adaptive learning process:



Preparing to learn: experiences from Savannakhet & Khammouane Provinces, Lao PDR

Dr Caroline Garaway



Objectives of talk

- Who was trying to learn about what?
- The principles driving our philosophy for ‘preparing to learn’
- Challenges faced

Who was trying to learn about what?

Objectives ?

Systems?

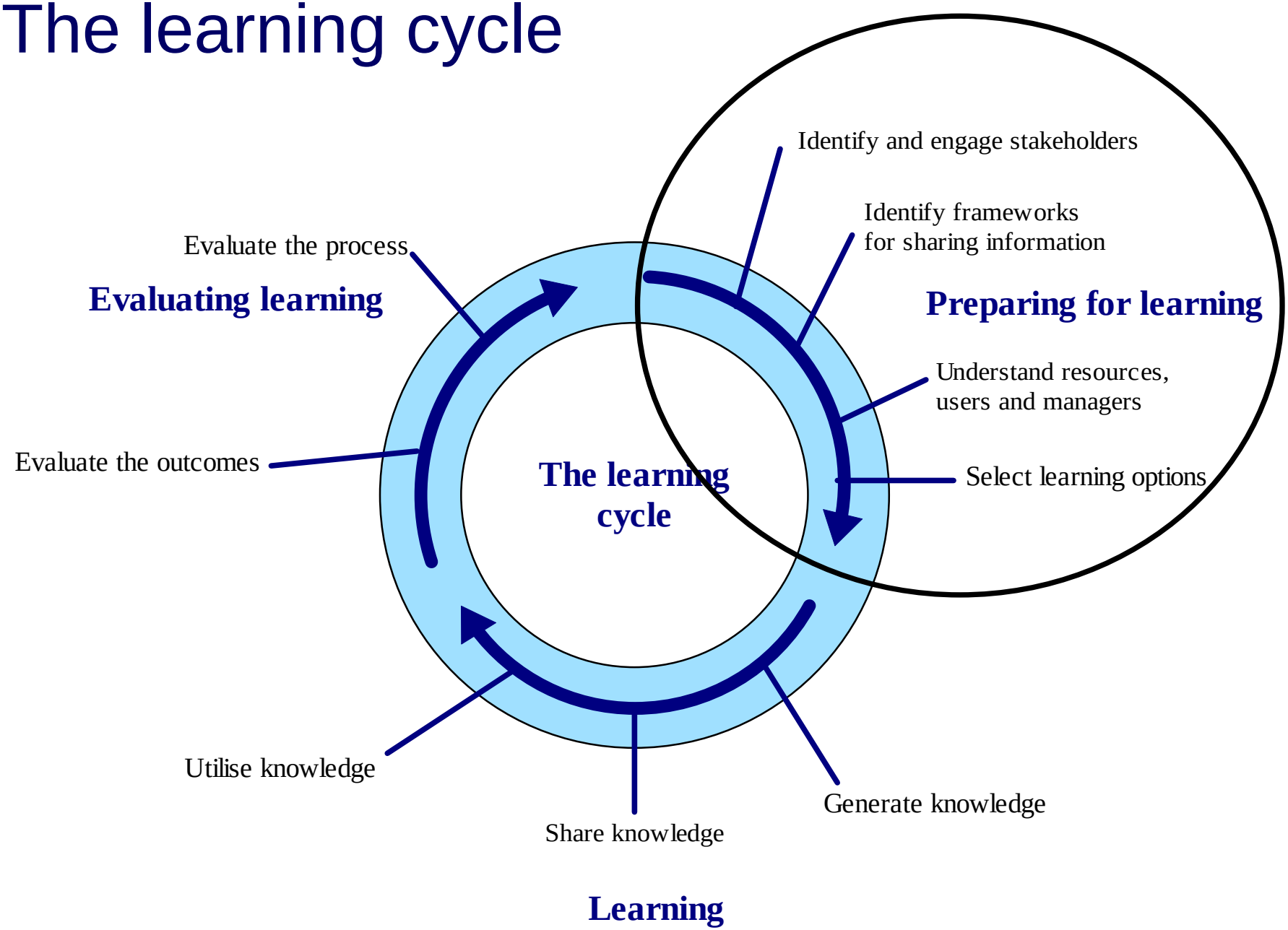
Species ?

Opportunities for learning were high…..

Uncertainty high but…

- Interest in systems high
- Villagers already experimenting with their own systems. Localised knowledge & experience
- Fairly well developed government extension service
- Multiple systems for comparison
- Interest in learning from others' experiences.

The learning cycle



Who were the stakeholders?

- Provincial Government staff in two Provinces
- District staff in 12 districts
- 38 village communities
- MRAG Ltd staff, London

Identifying stakeholders

Principle 1: The process should be asset based , building on strengths rather than identifying gaps and weaknesses.

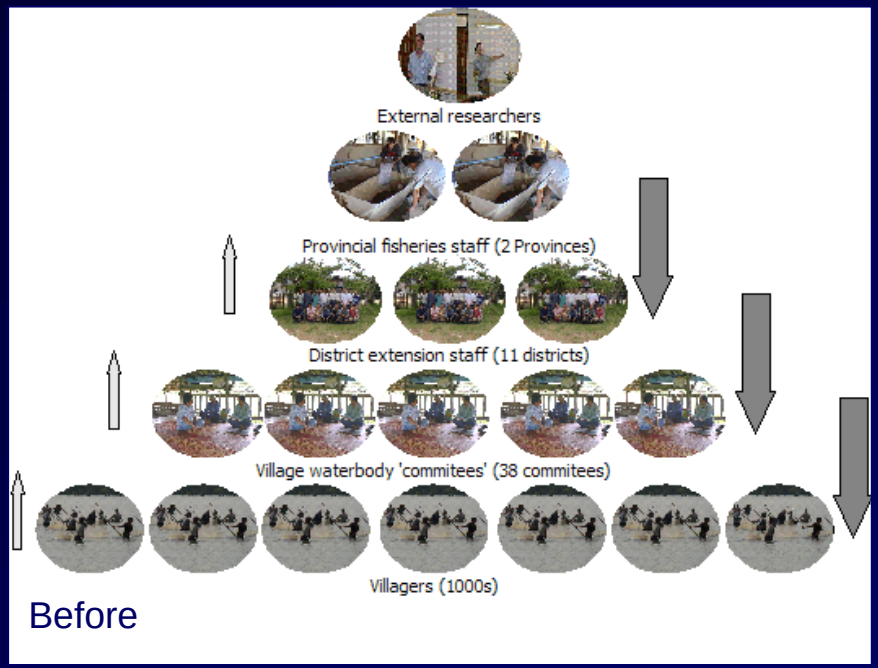
Strengths in small waterbody management, Lao PDR	**Local communities**	**Government**	**External researchers**
Capacity to make management regulations	☑☑☑	☑☑	
Capacity to monitor and enforce regulations	☑☑		
Knowledge of local resources and needs	☑☑☑	☑☑	☑
Technical knowledge	☑	☑☑	☑☑☑
Formal research skills		☑	☑☑☑
Access to experiences of others	☑	☑☑	☑☑☑
Financial resources	☑	☑	☑☑
Capacity to bring stakeholders together to share experiences		☑☑	

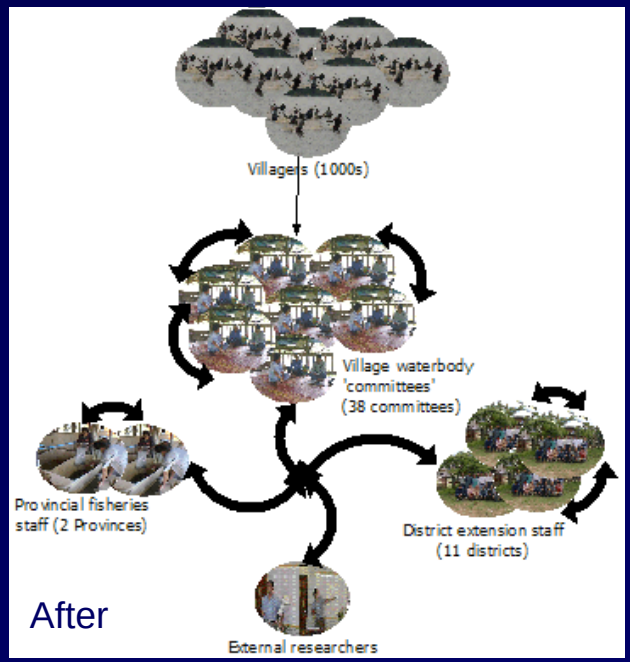
Engaging stakeholders

Principle 2: Learning must be both demand-led and appropriate, answering questions that are interesting and relevant to stakeholders' needs.

Identifying frameworks for sharing information, knowledge & experience

Principle 3: Information needs to be generated and shared in an appropriate and timely fashion. This must occur both within and between stakeholder groups and information must flow in all directions.





Understanding resources, users and managers

Principle 4: Natural resource systems are human/environment systems. To understand them, requires an understanding of the resources, the people who use them and the systems of management and control affecting the interaction between the two.

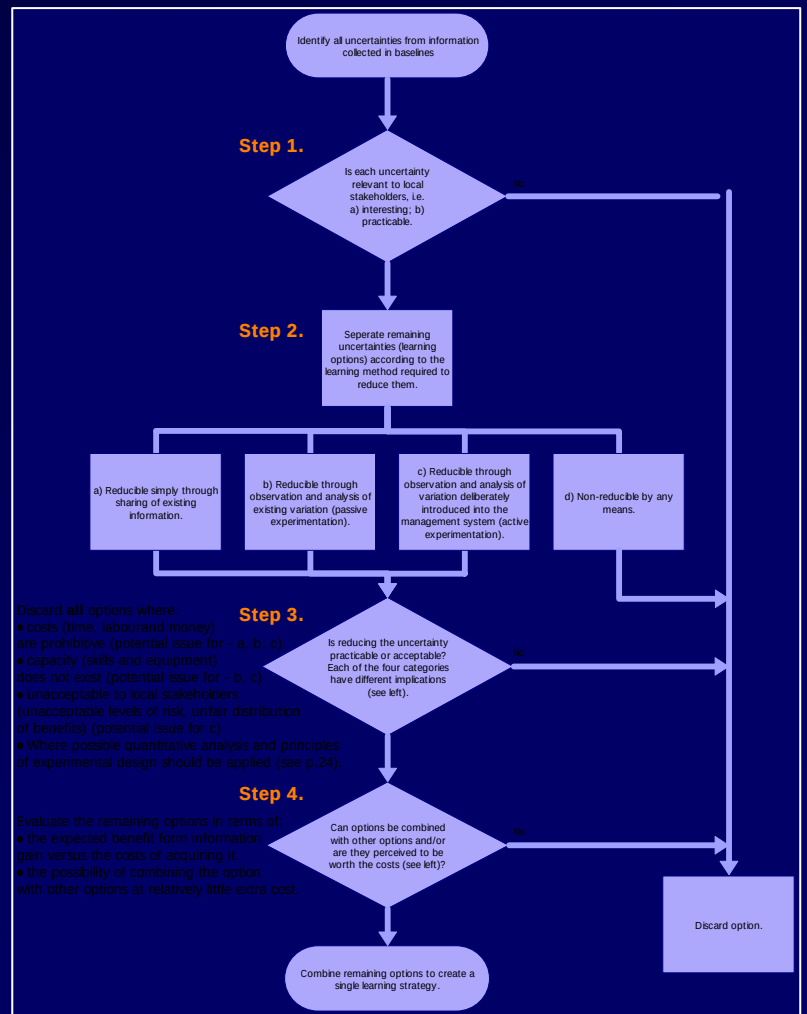
Fishing day, Savannakhet Province, Lao PDR

Selecting learning options

Principle 5: Experimentation leads to greater learning & learning is an <u>objective</u> of management not just a useful by-product. Realistic and pragmatic assessment of what is achievable is key

Needs were prioritised and experiments were designed to **generate** desired information (given the available skills and resources).

Experiments were combined with other activities designed to more effectively **share** existing information (scientific and local).



The learning strategy in Lao PDR

- Active experimentation
- Passive experimentation
- Facilitating information share

High productivity	Low productivity
Tilapia (3,500/ha) 6 villages	Tilapia 6 villages
tilapia / carp mix 5 villages	tilapia / carp mix 7 villages
Carp 5 villages	Carp 7 villages

‘Contract’ between villagers and government

Communities

- Agree to stock certain species, certain density
- Agree to try to manage waterbody for community benefit
- help to monitor results through record keeping and sharing problems with district staff
- agree to come back next year and share experiences with fellow communities

Government

- stock waterbodies with different mixes of tilapia, bighead, mrigal & rohu
- visit villages at least once every two months and provide technical advice where available and desired
- analyse information and present results back to the villages

Outcomes of the process – what did we learn?

High productivity	Low productivity
Tilapia ***	Tilapia *
Carp **	Carp **

Challenges faced during this part of the process

- Unfamiliarity with approach
- When should government intervene?
- Organisational flexibility to adapt
- Finding appropriate experiments & gaining consensus
- Flow of information as far as village administration only

To be continued.....

Principle 1: The process should be asset based, building on strengths rather than identifying gaps and weaknesses.

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