4. The learning-by-doing phase

Starting point for learning by doing

- Several institutional actors (stakeholders) have participated in the negotiation process.
- The institutional actors have produced and ritualised a common vision of the future they desire.
- The institutional actors have also identified a strategy to achieve that vision, including key components and objectives for each component.
- For each strategic component, the institutional actors have agreed on a course of action, and have produced relevant co-management plans and agreement(s).
- For each plan and each agreement, the institutional actors have identified expected results and impacts, as well as indicators and procedures to monitor and evaluate them (follow-up protocol).
- The institutional actors have agreed on organisations and rules to implement and remain in charge of the co-management plans and agreements.
- The relevant communities are aware of the co-management plans, agreements, organisations and rules that have been collectively produced, and consider them legitimate.

4.1 Setting to work the co-management plans, agreements and organisations

As soon as possible after the public celebration of the end of negotiations, the comanagement plans for the natural resources and the agreements that complement them as part of the same strategy are implemented. The organisations and rules agreed on by all institutional actors are also set up and enforced. This allows the partners to capitalise on the momentum of the negotiation phase.

A committee and/or specific individual should be in charge and made accountable for each component of the strategy, co-management plan or main activity, reporting to the institutional actors (and/or to the organisations set in place by them) on on-going progress.

Compliance with the plans, agreements and rules is essential to the effectiveness of the whole CM process. If some actors violate the rules or do not accomplish what they agreed to do, others are soon likely to follow suit. To prevent this, the co-management plans and agreements need to specify who is responsible for enforcement, what means are at their disposal and what regular checks they are to carry out.

4.2 Clarifying the entitlements and responsibilities of the institutional actors

In the course of implementing activities, diverging interpretations of the co-management plans and agreements may surface. For the more formal agreements, contract law and environmental law will provide some basic reference. For the less formal agreements it is important to foresee in advance who will assist the parties to clarify entitlements and responsibilities and to mediate in the event of conflicts.

'accountability' —

the clear and transparent assumption of responsibilities, the capacity and willingness to respond about one's own actions (or inactions) and the acceptance of relevant consequences

In this sense, an important concept and principle to apply is that of "accountability". It is also important that the process is not entrapped in some rigid and bureaucratic enforcement system. Co-management feeds on the passion and creativity of the groups and individuals involved, and on their ability to manage human relations in an informal and convivial manner. Flexibility and good human relations may go a long way towards solving even complex and thorny controversies.

It often becomes clear during implementation that the effectiveness of an agreed course of action depends on specific changes in the country's policies and laws. These changes can be pursued, as far as possible, by the institutional actors (different actors may be able to use different pathways towards the desired changes).

4.3 Collecting data and information as described in the follow-up protocols

In the negotiation phase, follow-up protocols are prepared for the co-management plans and agreement to be implemented, and individuals are identified to apply them. The protocols

make explicit the results each activity is expected to obtain, what indicators will be used to assess them and what changes each indicator is expected to reveal. The indicators will likely refer to the status and quality of the natural resources in the NRM units as well as to the social and economic objectives of the accompanying agreements. Besides monitoring results,

'monitoring' —

the regular recording and analysis of selected information on a given phenomenon or activity

however, the *process* of co-management itself deserves to be monitored. To do so, a variety of qualitative indicators are useful (see some examples listed later in this section). All indicators should be monitored regularly and the measured data and collected information should be made accessible to the institutional actors and general public. Unplanned collection of unexpected information may also be extremely useful.

In order to learn by doing it is not only important to collect data and information, but also to have a constructive attitude. If mistakes are regarded as opportunities for learning and if people are rewarded for identifying problems and promoting innovative solutions, learning by doing is strongly encouraged. On the other hand, it is important that innovations, and in particular innovations regarding NRM plans agreed on by all institutional actors, are not introduced without careful analysis and authorisation.

4.4 Identifying the main factors with an impact on natural resources and stakeholders, and experimenting with innovations

A great deal of learning takes place while the co-management plans and agreements are being implemented and the NRM organisations are tried out on the ground. This may include the gathering of data and information not even mentioned in the follow-up protocol. Such data and information should be documented and analysed, to understand in detail the main factors that have an impact on the natural resources and the stakeholders. This should be in the sense of both negative impacts and positive influences and accrued benefits. The factors identified shall be brought to the attention of the responsible CM organisations in the monitoring, evaluation and review meetings.

While the co-management plans and agreements are being implemented, the people with access to the natural resources generally develop a heightened sense of responsibility and legitimacy of their role. This may encourage them to refine NRM rules and apply more efficient and complex technical solutions. In addition, the area in which the co-management plans and agreements are enforced may grow in size (e.g. when new communities wish to sign the plans and agreements) and/or new actors (e.g. a federation of village associations) arrive on the scene. In such cases the organisations in charge of natural resource management will have to experiment—judiciously— with innovation. Judicious innovation, a key component of learning-by-doing, is facilitated by flexible management plans and budgets.

4.5 Evaluating co-management plans, agreements and organisations

Throughout implementation, meetings are held at regular intervals to evaluate the results of

the co-management plans and agreements. If the activities and the financial and human commitments are particularly substantial, the evaluation should be both internal (participatory) and external (independent), and the results of these evaluations should be compared and analysed together. Various participatory methods can be used, including methods that may already be known by the institutional actors who have participated so far, such as the SWOT analysis (see Annex 1).

'evaluation' —

result evaluation is the measuring of progress with respect to some original objectives, assessing whether they have been attained and/or whether they are still pertinent. Impact evaluation is the measuring of the intended and unintended, positive and negative consequences of an initiative.

In a participatory evaluation process, the institutional actors ask themselves whether the comanagement plans and agreements succeeded in progressing towards their own objectives as well as the agreed common vision, and thus whether the hypotheses on which the work was based are correct. They also ask themselves whether the context conditions have changed, whether lessons have been learned from experience and whether the process is on the right track (using CM process indicators). Most importantly, they examine the environmental and social results and impacts achieved in relation to those expected.

The learning-by-doing phase

On the basis of these discussions, the institutional actors decide whether the co-management plans and agreements have to be modified and, if so, what modifications are needed and who should carry them out. If necessary, the process reverts to a phase of negotiation—although generally at a faster pace than the first time. It is also useful to have an Emergency Plan for situations in which fast intervention is needed.

Examples of process indicators for co-management

- knowledge and understanding of the institutional actors about the CM process, comanagement plans, agreements, organisations and rules; about the CM objectives and schedule of events; about the management entitlements and responsibilities assigned to each concerned actor; etc.;
- existence of regular mechanisms for exchange and dissemination of NRM information as well as platforms to communicate and negotiate co-management plans and agreements;
- actors' ease of access to communication and negotiation platforms (are some actors discriminated against?);
- availability of facilitators to assist during meetings, mediate conflicts and help institutional actors to communicate among themselves;
- active participation of the institutional actors in the preparation of co-management plans and agreements (presence at meetings, effective expression and defence of the respective interests and concerns, willingness to take on responsibilities, etc.);
- existence of co-management plans and agreements linking various institutional actors (either oral or written, formal or informal);
- specific definition of the functions, entitlements and responsibilities of each institutional actor in the co-management plans;
- existence of CM organisations (with executive, advisory, decision making or mixed roles) expressing a plurality of NRM entitlements in the context at stake;
- institutional actors adhering to and complying with their agreed entitlements and responsibilities;
- institutional actors satisfied with the co-management plans, agreements and organisations;
- availability of competent personnel to clarify entitlements and responsibilities and mediate in the event of conflicts among the institutional actors during implementation of the plans and agreements;
- institutional actors committed to and active in promoting political and legal changes that facilitate the implementation of the co-management plans and agreements;
- in time, plans and agreements extended in both geographical scope and complexity;
- in time, the co-management plans, agreements and organisations progressively "institutionalised" in society.

Results of the learning-by-doing phase

The learning-by-doing phase generally has some or all of the following outputs:

- Co-management plans and agreements implemented and enforced
- CM organisations and rules in operation, and new values and behaviours slowly becoming part of social normality (institutionalisation)
- On-going clarification and adjustment of the entitlements and responsibilities of the institutional actors
- Data and information collected, analysed and made available as described in the followup protocol on the results of the NRM plans and related agreements, as well as on the CM process itself
- Experience with some judicious NRM innovation
- Positive and negative impacts of activities, and lessons learned in the process, monitored, analysed and evaluated
- Activities, plans and agreements modified on the basis of on-going monitoring and evaluation, as necessary