Co-management of Natural Resources

Organising, Negotiating and Learning-by-Doing

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Co-management of Natural Resources

Organising, Negotiating and Learning-by-Doing

Dr. Grazia Borrini-Feyerabend

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Contents

Abbreviations

CM   co-management
GTZ   Deutsche Gesellschaft fuer Technische Zusammenarbeit
IUCN   The World Conservation Union
IA   institutional actor (stakeholder)
NR   natural resource
NRM   natural resource management

Preface and Acknowledgements

This document was developed on the basis of five presentations given at a workshop of the Réseau Cogestion (Co-management Network) in Maroua (Cameroon), in January 1999. The network was set up by the GTZ/IUCN project *Co-management for Nature Conservation in Unstable Socio-political Conditions : "Learning by Doing" in the Congo Basin*, for which the IUCN Collaborative Management Working Group is called to provide technical assistance. After the workshop, I revised and completed the presentations and added the Annexes. A final revision of the document was made on the basis of field lessons presented at another workshop of the same network in Buea (Cameroon), in November 1999. Because of its origin in a set of transparencies for an oral presentation, this document is still quite schematic and does not contain real-life examples (during the workshops examples were elicited from the participants and made the subject of discussions). As such, it is not meant to provide an exhaustive treatment of the subject, but only some broad guidelines, as well as tools and ideas for practitioners in the field. Several members of the IUCN Collaborative Management Working Group are currently working on a more in-depth treatment of the subject of this document. We hope that that book will be available by the end of the year 2000.

Practitioners engaged in promoting and facilitating co-management initiatives should know (and usually do know!) that their specific context of work is much more important than any externally devised instructions and guidelines. In other words, **co-management processes are invariably experimental** and **ideas, tools and lessons learned—those of this document included—need to be adjusted and bent around specific situations and environments**. With this spirit in mind, this document may actually be of some use.

The advice and technical inputs of Eileen Babbit, Didier Babin, Marco Bassi, Dianne Buchan, Christian Chatelain, Paul Chatterton, Kevin Clements, Emmanuel de Merode, Alex de Sherbinin, M. Taghi Farvar, Andrea Finger-Stich, Hillarie Greening, Alain Karsenty, Lisa Naughton, Tom Nesbitt, Josiane Olff-Nathan, Elinor Ostrom, Yves Renard, Farhad Vania and Jacques Weber, as well as the conversations with these experts and friends, were very important in the preparatory phases of the first Congo Basin workshop, in 1999. I would like to extend my sincere thanks to all of these colleagues, as well as to Thomas Barton and Will Allen, who generously dedicated their time to set an earlier version of this paper into Word format and post it in the Internet (a fact that prompted the reception of further interesting comments and ideas). M. Taghi Farvar has offered extremely valuable comments and advise for this latest version of the document. To him goes my heartfelt appreciation.

The generous professional and personal encouragement of Kirsten Hegener and her colleagues at the Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ) has made possible both the co-management project in the Congo Basin and this publication. Jean Claude Nguinguiri, the Coordinator of the Co-management Project and Network in the Congo Basin, has contributed his unfailing support with competence and sincere dedication. I would like to thank them both most warmly.

Daniel Ngantou, Roger Kouokam and their colleagues of the Waza Logone project welcomed the workshop at Maruoa with kindness and remarkable hospitality, as did Mambo Okenye for

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1. Introductory overview

1.1 Co-management

(also called: participatory management, collaborative management, joint management, mixed, multi-party or round-table management)

'co-management' —
a situation in which two or more social actors negotiate, define and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given territory, area or set of natural resources

Co-management is:

- a pluralist approach to managing natural resources (NRs), incorporating a variety of partners in a variety of roles, generally to the end goals of environmental conservation, sustainable use of NRs and the equitable sharing of resource-related benefits and responsibilities

- a political and cultural process *par excellence*: seeking "democracy" and social justice in natural resource management

- a process that needs some basic conditions to develop, among which are: full access to information on relevant issues and options, freedom and capacity to organise, freedom to express needs and concerns, a non-discriminative social environment, the will of partners to negotiate, confidence in the respect of agreements, etc.

- a complex, lengthy and sometimes confused process, involving frequent changes, surprises, sometimes contradictory information, the need to retrace one's own steps

- the expression of a mature society, which understands that there is no "unique and objective" solution to manage natural resources but, rather, a multiplicity of different options compatible with both indigenous knowledge and scientific evidence, and capable of meeting the needs of conservation and development (and that there also exists a multitude of negative or disastrous options for the environment and development)

Natural resource management (NRM) is a major political arena. In the past, many traditional societies formed relatively closed systems in which natural resources were managed through complex interplays of reciprocities and solidarities. These systems were fully embedded into local cultures and accommodated for differences of power and roles (including decision-making) within holistic systems of reality and meaning. Dialogue and discussion among interested parties on the basis of field experience (what some, today, refer to as "co-management") were widely practiced in some of these societies. In others, different social values (religious authority, caste predestination, cultural norms, etc.) determined most NRM decisions and the related sharing of costs and benefits. Communal property was generally widespread, and constituted a crucial element in the cohesion and sustainability of traditional NRM systems. Local knowledge and skills, built through extended historical experience, were another cornerstone. Most importantly, local communities tended to *create themselves* around a body of natural resources that they could manage together. In other words, in traditional societies the units of natural resource management and the units of social life tended to coincide.

The historical emergence of colonial powers and nation states, and their violent assumption of authority over most common lands and natural resources induced nearly everywhere a demise of traditional NRM systems. The monetarisation of economic exchanges weakened local systems of reciprocity and solidarity, as did the incorporation of local economies into increasingly more global systems of reference. In addition, the rise in power of modern "scientific" practices induced severe losses in local knowledge and skills. This generalised break down of local NRM systems ended up inducing the disempowerment and "de-responsibilisation" (see Banuri and Amalrik, 1992) of local communities. Attitudes of confrontation and reciprocal mistrust between them and the representatives of the state became widespread. Community-based trial and errors and the detailed discussion of local NRM practices, whenever existed, were largely substituted by the coercive imposition of practices through laws, rules, extension services, the police and the army.

In such situations, as in all societies structured around large power differentials such as feudal hamlets in Europe or colonial possessions in Africa and Latin America, the "weapons of the weak" have rarely included a frank and open discussions above-board. On the contrary, the disadvantaged groups, whenever they did not resort to violence, attempted to protect themselves and gain access to natural resources by means of subterfuge, lies, passive resistance, ridicule, feigned misunderstanding, theft, raids and the like (see Scott, 1985).

In some societies characterised by large power disparities, the recent development of democratic systems and the state of law allowed a number of social movements, unions, consumer and minority groups to adopt a transparent and direct strategy of confrontation, sometime even in an overtly legal manner. In others, the conditions for this to happen are still far on the horizon Whether an above-board dialogue and confrontation is the best strategy to protect the interests of the less privileged groups can be assessed only within a specific context.

Some such groups opt for an all-out confrontation with little to no open space for compromise (this is the choice of some Indigenous Peoples still fighting for the basic recognition of their ancestral rights). Others attempt to find a place at the negotiation table with more powerful actors (business, the government and the like) and encounter all sorts of obstacles and difficulties. In some cases, all groups and individuals with interests and concerns about a given territory, area or set of resources understand that co-operation is necessary for NRM effectiveness and efficiency, and agree to pursue that cooperation in the interest of everyone. This latter attitude may not yet be the most common, but it is spreading. In fact, many contemporary NRM situations show an evolving mixture of the old and the new. Some elements of traditional NRM systems persist, others are crushed by the powers of modernisation, and still others adapt and evolve incorporating new traits and ingredients.

From the point of view of development and conservation professionals— to whom this document is primarily addressed— the history of co-management is rooted in decades of field-based and theoretical efforts by individuals and groups concerned with:

- **equity and social justice**

– **sustainable use of natural resource**

– **community-based and community-run initiatives**

Many political battles have been fought for and against co-management in the field as well as within national and international organizations. The following schematic figure summarises some of the arguments voiced by participants in the battles and debates.

some arguments for and against CM

We need equity, social justice and democracy in natural resource management.
The people paying the price of conservation and "development" need a voice in decision-making!

Effective management needs the knowledge, skills, resources and comparative advantages of a variety if stakeholders: only CM can deliver those!

What is the alternative to CM? Do we want endless conflicts among the stakeholders and destructive behaviours towards the natural resources?

The CM process is long and expensive. We need to invest in other priorities.

Support CM

The interaction between people and environment is part of nature; it should not be severed because of one-sided theories and arguments. Biodiversity may even *depend* on the interaction between people and nature, not on their separation!

Oppose CM

We cannot compromise conservation goals!   CM will give us only minimum common denominator d

Do not take a position

CM is politically loaded! Leave it out of conservation.

We do not care, the issue is not important.

Main CM values and principles

- recognising **different values, interests and concerns** involved in managing a territory, area or set of natural resources, both outside the local communities and within them

- being open to **various types of NRM entitlements** beyond the ones legally recognised (such as private property or government mandate)

- seeking **transparency** and **equity** in natural resource management

- allowing the **civil society** to assume ever more important roles and responsibilities

emphasis on natural resource management PARTNERSHIPS

- harnessing the **complementarity** of the capacities and comparative advantages of different institutional actors

- **linking entitlements and responsibilities** in the NRM context

- appreciating that the **process** is more important than the short-term products

- learning-by-doing through **on-going revisions** and improvements in NR management

There are no blueprints or universally applicable paths for a CM initiative. On the contrary, there is an enormous variety of options that can suit a specific context. In order to allow comparisons and to break down the process into manageable units, however, four key CM components and three main phases in a CM process can be identified:

four inter-related CM components

→ CM context
        → CM process
                → CM plan(s) and agreement(s)
                        → CM organisation(s)

three main phases in a CM process

1. Preparing for the partnership (organising)
2. Negotiating co-management plans and agreements
3. Implementing and revising the plans and agreements (learning by doing)

1.2 Concepts and approaches contributing to understanding and practicing co-management

- adaptive management

- pluralism

- governance

- patrimony

- management of conflicts

- social communication

Many other relevant concepts and practices– such as participatory action research, environmental stewardship, *gestion du terroir*, etc. – exist, but will not be explored here.

Concepts and approaches →   adaptive management

The adaptive management approach is based on scientific findings on ecosystems and on field-based experience gained in several environments.

> *'adaptive management'* —
> *a management approach that acknowledges the lack of unequivocal and definitive knowledge of the ways in which ecosystems work, and the uncertainty that dominates our interaction with them*

Its central tenets are that natural resource management is always experimental, that we can learn from implemented activities, and that NRM can be improved on the basis of what has been learned. For this to happen, NRM activities have to state explicitly what they aim to achieve, including indicators and monitoring and evaluation methods (see for instance Holling 1978 and Wilston 1986).

basic elements of adaptive management

- explicit NRM objectives and explicit hypotheses on how they are to be achieved (including monitoring indicators)

- prompt collection of data on the monitoring indicators

- ongoing evaluation of monitoring data and NRM results

- coherent changes in NRM practice in line with the results obtained and the lessons learned

the stages of adaptive management (adapted from Taylor, 1998)

- appraisal of the NRM situation and problems; generally in workshops, with several institutional actors

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- design of NRM activities; also generally in workshops, on the basis of a comparison of several possible options

- implementation of NRM activities closely following the chosen plan (which may include zoning the land and experimenting with different activities in different zones—a procedure known as "active management")

- monitoring the achievement of the expected results on the basis of indicators drawn up for the expected changes

- evaluation of results to test the effectiveness of the activities implemented

- adjusting activities in line with lessons learned; this may include the re-formulation of the problems, the NRM objectives, the activities and indicators, etc.

all of the above stages have to be documented and communicated, to share and disseminate the acquired information; this is particularly important in the case of long-term initiatives (key persons may change their jobs, but the learning should not leave with them…)

Concepts and approaches → pluralism

A pluralist approach focuses on the recognition that in any society there exist various actors, interests, concerns and values. In particular:

> *'pluralism' —*
> *a situation in which autonomous and independent, or inter-dependent, groups freely interact and collaborate on natural resource management issues on the basis of different views, interests and entitlements*

- there are different categories of social actors– for example governmental and non-governmental, groups and private individuals, local communities and outsiders with entitlements to local resources– bearing important complementary capacities for natural resource management.

- communities are social actors *in themselves* and provide the most natural and effective unit of identity, integration and defence for many under-privileged groups and individuals (see Farvar, 1999). Yet, communities are not homogenous entities, and their internal sub-divisions should be recognised. In other words, while keeping their basic cohesion and identity, a plurality of values, interests and concerns should be recognised *within* any local community (see Agrawal, 1997).

A multiplicity of views and voices in the negotiation process is a fundamental pre-condition for equity and justice. It does not follows from this, however, that all views and voices are *equal*, that they all carry the same weight or are all equally entitled to participate in the negotiation of the co-management plans and agreements.

equity is profoundly different from equality!

Concepts and approaches → governance

Adequate governance depends on the legitimacy of the political system and on the respect shown by the people to its institutions. It also depends on the capacity of such institutions to respond to problems, and to achieve social consensus through agreements and compromise.

Governance:

- is neither a system of rules nor an activity; it is a process

- is not based on domination but on compromise

- involves both private and public actors

- is not necessarily formalised, and is generally based on an on-going interaction

> *'governance'* —
> *the complex of ways by which individuals and institutions, public and private, manage their common concerns*

A comparison adapted from Karsenty (1998):

conventional scenario

law → tools → projects → participation
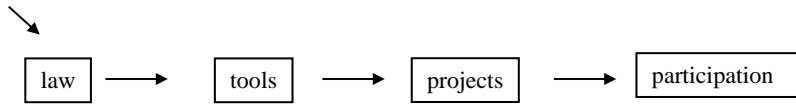
negotiated governance perspective

legal principles of reference → negotiation → definition of long-term objectives → joint selection of tools and establishment of management authorities → evolution of jurisprudence and adaptation of the law (including customary law) → legal principles of reference

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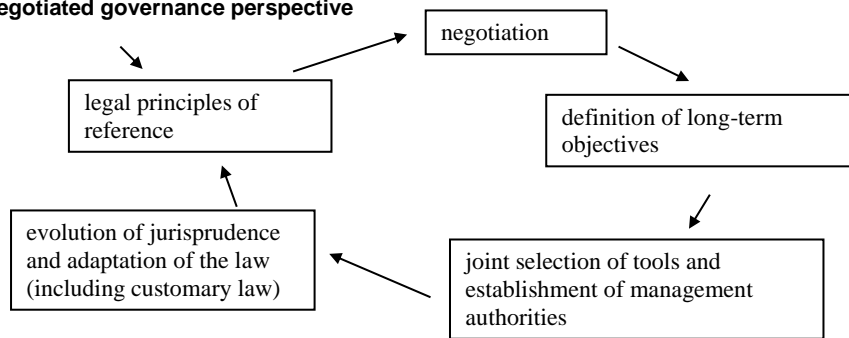
Concepts and approaches →   patrimony

A patrimonial representation of a
territory, an area or a set of
resources

- links past, present and future
  generations of managers;

- focuses on the owner's
  obligations more than on the
  owner's rights;

> *'patrimony'* —
> *" the compendium of all material and immaterial
> elements that help maintain and develop the identity
> and autonomy of its owner, through time and space, by
> adaptation to its evolutionary context." (Ollagnon,
> 1991)*

- promotes a common vision of sustainability that reconciles the needs and opinions of
  various actors.

distinctive features of the notion of patrimony
in comparison with the notion of property
(Karsenty and Marie, 1998)

property	patrimony
rights of owner	obligations of owner
mobility of goods (real-estate market)	predestination of goods (obligation of use)
market value determined at present time	value of use determined by passage of time
impersonal	constituent component of owner's identity

various stages of patrimonial mediation (adapted from Weber, 1998)

- Launching: identifying actors, debating current trends for the status of natural resources
  and the acceptability of such trends; communicating one's own point of view and
  listening to the points of view of others.

- Establishing long-term patrimonial objectives and legitimating them by culturally
  appropriate "rituals" that make them inalienable, non-negotiable and difficult to violate.

- Elaborating medium-term NRM scenarios by the actors, to achieve their patrimonial
  objectives; defining acceptable resource uses, as well as access and control; agreeing on
  tools, methods, responsibilities and needed technical support.

- Setting up NRM organisations: deciding on executive, decision-making and advisory
  bodies and their operating rules (on the basis of a discussion of the variety of possible
  types); legitimising but not ritualising the specific NRM bodies, rules and adopted
  strategies.

Concepts and approaches → conflict management

(from Babbit et al., 1994)

Conflict management is a non-violent process that promotes dialogue and negotiation. It implies:

> **'conflict management'** — *guiding conflicts towards constructive rather than destructive results*

- taking care of disagreements before they generate hostility

- helping the institutional actors to explore a multiplicity of options for agreement and subsequently select an option everyone can live with

- recognising and intervening on the underlying causes of conflict, with a view to preventing them in the future

Modern processes of conflict management are quite close to processes of negotiating a co-management agreement; both express the same values (dialogue, transparency, pluralism, fairness, etc.), have the same main constituents and can be facilitated in similar way.

main constituents of modern approaches to conflict management

- some concerned social actors

- a common area of interest and some points of conflict (different values, interests and needs of the various actors involved)

- a forum for negotiation and some basic rules for the concerned actors to meet and discuss issues together

- some reliable data on the points of conflict

- various options for action generated by the concerned actors and discussed among them

- a written agreement on one of these options

- the legitimisation of the agreement

- the implementation of the agreement

Many traditional systems of conflict management obtained effective results via values, constituents and processes that do not fit the above description and list. Such culturally specific ways (which may used a variety of methods and techniques, from non-verbal social pressure to trance induction, from chance decisions to linguistic reframing of issues) should be recognised and responded to in a sensitive and inclusive manner. If they are sufficient and effective to deal with the conflicts at hand, by all means they should be given the way. However, when traditional systems do not suffice and/or when conflicts involve a variety of non-traditional partners, it may be appropriate to consider also the modern approaches.

Whenever the conflicts are serious and the parties involved are distant and hostile, the presence of a facilitator, mediator or arbiter is highly recommended. A conflict-management instructor could also be called upon. Their role is similar, but not exactly the same. These people could come from official state agencies or non-governmental organisations. They could also be private individuals (religious authorities, retired judges, local wise-men and women, etc).

facilitators

assist only in the running of the process. They never allow themselves to be drawn into the arguments.

mediators

act as facilitators, but also help develop a wide range of options for the parties to discuss and choose from. They help conflicting parties to reach an agreement satisfactory for everyone.

arbitrators

act as judges: they listen to the various parties, review pertinent documents and issue a decision, which is treated by all concerned as an expert opinion or an obligation, depending on what was decided in advance.

instructors

help the institutional actors (usually in separate sessions) to learn the elements of conflict management. Hopefully, the IAs will succeed in applying those to their own conflict situation.

difficult circumstances	– one social actor controls another – one actor gains from prolonging the conflict – one or several actors have no confidence in the conflict-management process – prejudices and stereotypes prevail – some authorities and chiefs are stubborn and unwilling to negotiate an agreement – the country's laws ought to apply to the conflict's matter, but they are not enforced
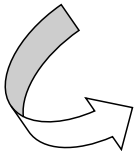
Some suggestions on how to overcome such special circumstances are offered in section 6 in this paper. They are, unfortunately, no guarantee of success. Here are five main checkpoints for effective conflict management (adapted from Lewis, 1996):

- **Shift the attention from positions to underlying interests.** "Interests" are people's fundamental needs and concerns. "Positions" are the proposals that they put forward to try to satisfy those interests. As many different positions can satisfy the same basic interest, focusing on interests can open the way for conciliation and compromise.

- **Appreciate the merits of fair compromise.** A conflict management effort in which all interests are satisfied is much more likely to result in a lasting and satisfactory resolution than one where the interests of only one side are addressed. A fair compromise may be the best way to serve everyone's needs in the long run, especially when overt conflict is replaced with the stability and predictability of a mutually agreeable solution. On the other hand, an unfair compromise, which may seriously curtail the entitlements of one or more social actors without effective compensation, may just be a recipe for brewing even more serious conflicts in the long run.

- **Address both the procedural and substantive dimensions of conflicts.** Procedural issues can include a group's need to be included in decision-making, to have their opinions heard and to be respected as a social entity. "Substantive" refers to interests that relate to tangible products, such as availability of firewood, protection from predatory animals or stopping a major source of pollution.

- **Include all significantly affected institutional actors in arriving at a solution.** Failure to involve all affected stakeholders in a co-management initiative generally leads to unsustainable solutions and to new conflicts arising in the future.

- **Understand the power of various institutional actors, and take that into account in the process.** There are often extreme differences in power between different stakeholders. Each party's approach to the conflict will depend on their view of the power they have in relation to the other stakeholders. For example, a group that feels powerless to influence an outcome through a bureaucratic process may choose to use illegal activities instead.

Concepts and approaches → social communication

Social communication is vital for any activity in which the participation of local people is envisaged and sought.

It is people who bring about development and manage natural resources. There can be no change for the better without involving them, mobilizing their capacities and energies and enhancing their knowledge and skills. Social communication caters to all these human dimensions. It is about fostering the discussion of problems, opportunities and alternative options for action, i.e. providing the conditions for informed decision making. Interpersonal communication— including one-to-one dialogue and group meetings—is a main component of social communication, and often has remarkable effects, such as raising morale, enhancing the sense of one's own value and dignity, and promoting social solidarity and collaboration.

> *'social communication'* —
> *social communication is about bridging understanding within a human community; it involves exchanging messages (communicating) to create meaning and enrich common knowledge, often in order to face change (adapted from Ramirez, 1997)*

There are various types of communication **media**, including:

- **traditional** (e.g., the spoken word, writing, theatre, songs, the arts)

- **graphic** (e.g. diagrams, illustrations, pictures, compositions, maps)

- **electronic** (e.g. film, videos, audiocassettes, television, radio, the Internet)

Providing communities with the access and skills to control and effectively use both traditional and modern media is an essential component of community development, and thus of sound management of natural resources (see Annex 1 for street theatre and community radio, two examples of participatory methods in social communication). **Local media** refers to communication material produced locally, whether traditional or modern (electronic).

Development and natural resource problems place great strains on communities, and their local media are usually employed to channel the ideas and feelings that accompany their efforts and struggle for change. In fact, there is a close link between traditional media and local culture, including the social patterns to accommodate change.

The challenge of cross-cultural communication is to bridge local and outside knowledge. For expert professionals this challenge is mostly about **learning to listen**. This does not mean that expert professionals cannot set up information campaigns or training programmes— on the contrary! Such initiatives may be important as part of a social communication campaign, but they should be developed with respect, intelligence and care. In particular:

- "Communication occurs when people have something in common." (Fuglesang, 1982). If we wish to communicate with people we need to **understand the language(s) by which they describe their own reality**, including fundamental beliefs, values and concepts (such as time, space, matter).

- Effective communication processes and tools **do not discriminate** against the weaker and less powerful in society (e.g. people who do not feel confident enough to attend meetings, who are not literate, who live far from main centres, etc.). In this sense audiovisual presentations, such as picture stories and community radio programmes, or "broad participation events", such as street theatre, are much less discriminatory than others.

- Any **information** conveyed should be **truthful, fair and reasonably complete**. Information depends on context, and decisions are conditioned by the perception of available alternatives. Fairness in communication is thus a complex phenomenon, depending on completeness of information as much as on strict adherence of information to "facts".

- Most importantly, a social communication campaign should include **plenty of occasions for dialogue and discussion**, and the opportunity for everyone to express their own views, to ask questions and to dissent. This, in fact, represents the main difference between social communication and conventional information, education and training initiatives. While in the latter information flows from one node to others, in the former information flows in all directions and is actually *generated* as part of that very flow and exchange (e.g. by social dialogue and debate).

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Taking into account concepts, approaches and values in a co-management process: a schematic view

```
┌─────────────────────┐        - Pluralism of interests and
│                     │          views
│   preparing for the │◄═════   - Social communication
│     partnership     │        - Active support for the social
│                     │          actors to organise
└─────────┬───────────┘          themselves
          │
          │                     - Recognising a plurality of
          ▼                       management options and
┌─────────────────────┐           entitlements
│                     │         - Overcoming communication
│  negotiating co-    │           challenges
│  management plans   │         - Effective facilitation of meetings
│  and agreements     │◄═════     and mediation of conflicts
│                     │         - Transparency of negotiation
│    agreements       │           procedures
│                     │         - Patrimonial vision of
└─────────┬───────────┘           environment
          │                     - Integrating environmental, social
          ▼                       and governance aims
┌─────────────────────┐         - Seeking equity in sharing
│                     │           management benefits and
│ implementing and    │           responsibilities
│ revising the plans  │
│ and agreements      │◄═════   - Keeping in mind the
│ ("learning-by-      │           experimental nature of
│  doing")            │           NRM (adaptive
│                     │           management, action-
└─────────────────────┘           research)
                                - Changing practices as
                                  learning proceeds
```

2. The preparatory phase

The typical situation in the beginning

- different social actors are concerned about a territory, area or set of natural resources; they may include local communities, government representatives at different levels, traditional authorities and elders, user groups within local communities, NGOs, individuals, private businesses, and so on; the number of interested actors is historically increasing as a result of recent processes such as the decentralisation of government authority, the privatisation of previously state-controlled economies, the emergence of new democratic institutions, etc.

- there are different points of view on that territory, area or set of natural resources, as well as different interests and concerns and different assigned values

- there is some (perhaps minimal) form of management for that territory, area or set of natural resources, even when is may be hardly discernable by non-local people

what can be done to promote co-management?

- the first task is a realistic assessment of the need for co-management and of the feasibility of the process

- if co-management is deemed to be needed and feasible, the next task is to identify the human and financial resources necessary to support it

- once such resources are identified and secured, a Start-up Team should be established to take on the task of promoting and facilitating the process through which stakeholders will negotiate a pluralistic and flexible management system. (Over time, such a system will need to respond to the changing needs of both the concerned ecosystem and society.)

- the initial phases of the process may sometimes be long, difficult, costly and even arduous. Yet, the participants can look forward to a positive outcome that, in addition to a judicious management of natural resources, will bear upon some of the most important aspects of social life– such as democracy, equity, culture and development.

2.1 Assessing the need for co-management and the feasibility of the process

Is co-management needed in the context at stake? The analysis may begin with a realistic evaluation of the existing NRM system, including the situation *de jure* (i.e. according to existing laws and norms), and *de facto* (i.e. according to what concretely happens on the ground). In other words the analysis should cover the existing power system

> *'entitlement' to manage natural resources —*
> *a socially recognised claim to participate in one or several management activities, such as planning, advising, taking decision, implementing plans, sharing benefits, assuming responsibilities, monitoring and evaluating results, etc.*

(who takes decisions?) as well as the existing entitlements to manage (for instance, who plans? who advises? who has access to the resources? who benefits from the resources? who evaluates whether NRM activities need to change?) and the unrecognised claims.

Some form of consultation and the seeking of consensus among the main stakeholders in a given territory, area or set of resources can be recommended in all situations. Yet, depending on the particular context, initiating and devoting energy to a negotiation process may be more or less appropriate. For instance, CM may be particularly suitable when:

- the active commitment and collaboration of several stakeholders are essential to manage the territory, area or resources at stake;

- the access to such territory, area or resources is essential for the livelihood security and cultural survival of one or more institutional actors.

On the contrary, it may be inappropriate (or not yet appropriate) to embark on a CM process when:

- very rapid decisions are needed (emergency situation);

- legal clarification is necessary and in process;

- relevant information will not be available for some time;

- the political environment does not secure the safety of the negotiating parties.

Other favourable conditions to embark on a CM process may be relevant from the perspective of particular institutional actors. From the point of view of government agencies possessing legal jurisdiction over a territory, area or resources at stake, it may be quite appropriate to pursue partnership agreements with other stakeholders (and prevent wasteful conflicts) when one or more of the following conditions apply:

- local actors have historically enjoyed customary/legal rights over the territory or resources;

- local interests are strongly affected by NRM decisions;

- the decisions to be taken are complex and controversial (e.g., different values need to be harmonized or there is disagreement on the distribution of entitlements over the land or resources);

- the current NRM system has failed to produce the desired results and meet the needs of the institutional actors;

- the institutional actors are ready to collaborate and request to do so;

- there is ample time to negotiate.

From the point of view of local communities who have customarily enjoyed full access to the relevant territory, area or resources, it may be appropriate to pursue a NRM partnership when:

- powerful non-local actors are forcing their way into the territory or extracting resources with no respect to traditional customs and rules (in this case a partnership agreement with the national government or some NGO or research organisation may help assure some protection and respect of customary practices);

- customary practices are falling into disarray and an open access status has ensued with resources being extracted in an unsustainable way.

It may instead be not advisable to enter into a NRM partnership when in so doing they would be renouncing a customary status of unique rights with no comparable advantage in exchange.

When some individuals or groups will have clarified for themselves that co-management is needed and desirable, they may wonder whether it is feasible in the particular context at stake. For this, some questions could be answered/discussed:

is co-management legally feasible?

Who has the mandate to control the land and the resources? Can a pluralist approach be accommodated within the existing customary/ legal frameworks? Examine traditional and modern laws, regulations, permits...

is co-management politically feasible?

What is the history of land management and resource use in the territory or area at stake? Examine current political will and stability, capacity to enforce decisions, confidence in the participatory process, presence of phenomena such as corruption and intimidation...

is co-management institutionally feasible?

Is there a chance to build a pluralistic management institution for the territory, area or natural resources? Examine inter-institutional relations and their possible conflicts, existing examples of multi-party resource management organisations and rules, the capacity of stakeholders to organise themselves and express their choice of representatives to convey their interests and concerns...

is co-management economically feasible?

Are there economic opportunities and alternatives to the direct exploitation of natural resources? Examine local opportunities to reconcile the conservation of nature with the satisfaction of economic needs, examine the extent of poverty in the region, the availability of capital for local investments …

is co-management socio-culturally feasible?

Are there local traditional systems of natural resource management? What are (or were) their main features and strengths? Are those still valid today? Are the traditional NRM systems still in use? Whether yes or no, why? By whom? What is specifically sustaining or demeaning them? If not any more in use, is there a living memory of the systems (such as elders who practiced them and still remember clearly "how it was done")?

Examine the current population status, population dynamics and structure, the main socio-cultural changes under way...

Examine social and cultural diversity amongst the institutional actors and the history of group relations among them

Examine factors affecting opportunities for social communication, including:

- language diversity
- differential access to information
- different attitudes, for example with regard to speaking in public or defending personal advantages
- traditional and modern media currently used in the particular context

Feasibility conditions do not need to be absolutely ideal to decide to embark on a co-management process, but thinking about factors of feasibility gives a good idea of the obstacles and hot spots to expect along the way.

An important question is also: "For all main stakeholders, what are the best alternatives to a negotiated agreement?" If some stakeholders are better served by the *absence* rather than the presence of co-management plans and agreements (e.g. if they currently enjoy undue benefits and/or dump on others some important management costs) they will have no incentive to enter into the process of negotiation. In such cases the feasibility of co-management is severely reduced and one may even expect an outright opposition to the CM process. Some special incentives, cajoling or even law enforcing and coercive measures may be needed to get all the stakeholders around the negotiation table. (Outsiders, however, should be very careful before assuming that a group is blocking the negotiation for its undue advantage. A local community, for instance, could rightly feel better protected by a firm and uncompromising stand than by entering into a negotiation as the weakest of all parties.)

2.2 Assessing the available human and financial resources

People engaged in promoting and supporting the CM process need knowledge and skills in the ecological, social and economic disciplines. They also need the capacity to communicate with all concerned stakeholders and to obtain and maintain their confidence and trust. And they need energy, passion, willingness, creativity, sacrifice and continuity. Their work is certainly not routine work… In other words, the co-management process needs "champions"!

Are such human resources locally available? Are there individuals willing to become part of a Start-up Team to prepare and launch the co-management process (see sections 2.3-2.10)? Are there financial resources to support the co-management preparatory phase (including visits of the Start-up Team to the potential institutional actors, participatory assessment exercises and a social communication campaign)? Are there financial resources to support the negotiation phase (including meetings, independent facilitation and the technical support that may be required along the way)?

The initiators of a CM process— which may be local individuals (e.g. an enlightened politician), local associations and NGOs, governmental agencies (e.g. the agency managing a protected area) or conservation and development projects supported by donors— need to dedicate time and care to assemble the necessary human and financial resources before embarking on the initiative.

2.3 Establishing a Start-up Team

A Start-up Team (or Initiation Committee, Launching Committee, etc.) is a small group of people (perhaps 4 or 5 individuals) who accepts to be in charge of the CM preparatory phase.

The group is usually selected by the initiators of the CM process, and/or is self-selected on the basis of a strong personal motivation. When the initiator is a donor-supported project, one or more project staff may become members of the Start-up Team (at times this helps assure the public perception of an impartial Team), but they should not be the majority.

Most importantly, all institutional actors should trust and feel capable of communicating with *at least one* person in the Start-up Team, even if they do not feel represented by him/her.

Some key characteristics of appropriate Team members are: diversity, credibility, personal motivation.

Some key qualities of a good Team are: being active, efficient, fair, multi-disciplinary, and transparent in decision-making; acting on the basis of consensus and collaboration; being determined to launch but not to lead or dominate the CM process.

the tasks of the Start-up Team

The Start-up Team is entirely responsible for one phase of the process only: the one in which the partnership is prepared and rooted in the local context. After that, the stakeholders themselves need to take control.

During the preparatory phase, the main tasks of the Team are:

2.4 Gathering information and tools (such as maps) on the main ecological and social issues

The Start-up Team may wish to begin its work by gathering existing information and tools to describe the main ecological and social issues (problems, opportunities, history, existing conflicts, existing power relations, etc.) and the existing descriptions and delimitations of the territory, area of natural resources of interest. Maps (including old maps) are particularly valuable tools in this sense.

A preliminary outline of the issues at stake can be summarised in a short report, written if appropriate, to be offered to the institutional actors at the beginning of the negotiation process. The report may summarise the particular NRM context from various perspectives (historical, social, legal, political, institutional, etc.). The report would benefit from the inputs of various social actors, which can be gathered during the preparatory phase (see later). Yet, the members of the Start-up team should refrain from stating or rephrasing the positions of various parties and give only a matter-of-fact account. If there are controversies, the report may mention them, and say what they are about.

Not only the report, but also the maps and other relevant data and information must be made available to all stakeholders, particularly to local communities who may otherwise be deprived of the information they contain. In fact, the Start-up Team may wish to constitute a small reference library at the disposal of all institutional actors during the negotiation phase.

2.5 Identifying in a preliminary way the natural resource management unit(s)

On the basis of the preliminary ecological analysis, possible natural resource management units (e.g. a water catchment area, a forest patch, a lake, a fishery area) can be identified Ideally, the NRM units will make ecological sense (for instance they will comprise the essential elements of an ecosystem), but also social sense (for instance they will fall within a given administrative units or community). When this coincidence is not possible, the negotiation process may become quite complex. In addition, it is good when the RNM units are fairly small, as in that case the actors who negotiate the co-management

> **"At what 'level' should negotiations be held?"**
> In general, it is best to negotiate at the local level, among the communities, agencies, organisations and people directly involved in NRM activities— all while maintaining links with other levels (e.g. larger ecosystem, administrative units, region, country, etc.)

plans and agreements are likely to be the same ones who implement the activities (this criterion goes often under the name of "subsidiarity"). It is also possible to envisage a series of nested management units (for instance several micro-catchments, all nested within a river basin watershed, itself part of a larger island ecosystem).

It may be useful to recall that in traditional societies one finds a remarkable coincidence between a distinct body of natural resources and the social units (local communities) related to those resources. In more than one way, in fact, the territories, areas and natural resources under the care of a local community naturally identify a NRM unit.

2.6 Identifying in a preliminary way the institutional actors to participate in natural resource management

Usually, several communities, organisations, social groups and individuals possess a direct, significant and specific stake in the identified NRM unit(s). In other words, there are many "potential institutional actors" in natural resource management. Among them, only some will be willing and capable of investing time and resources, organising themselves, taking action to get their

> *'institutional actor' (stakeholder) —*
> *a community, a public entity, a group or an individual who organises itself, takes action to gain social recognition of its own interests and concerns and is willing to assume some task and responsibility for a given NRM unit*

interests and concerns socially recognised and being ready to take on some NRM responsibility. Those will be the true "institutional actors" in co-management plans and agreements, the ones that the Start-up Team needs to contact and involve in the process. And, in case of nested NRM units, such true actors need to be identified at each level (e.g. for the micro-catchments as well as for the river watershed and for the island as a whole).

How can the Start-up team identify the potential institutional actors in a specific context? There is no recipe for that, but a checklist may help.

Identifying the potential institutional actors: a checklist

- Are there communities, groups or individuals actually or potentially *affected* by the management decisions? Are there historic occupants (e.g., indigenous communities or regular transients) and traditional resource users with customary rights of ownership or usufruct? Are there recent migrants? Non-resident users of resources? Absentee landlords? Major secondary users of local resources (e.g., buyers of products, tourists)? Are there local associations or NGOS concerned with natural resources? Are there businesses and industries potentially impinged upon by the NRM decisions? Are there research, development or conservation projects in the area? How many employees (national and international) live in the area because of such projects? Are these people active in natural resource management?

- Who are the main traditional *authorities* in the area at stake? Are there government agencies officially responsible for the management units or resources at stake? Are there respected institutions, to which people recur in a variety of needs and circumstances?

- Who has *access* to the land, area or resources at stake? Who is using the natural resources at present? In what ways? Has this changed over time?

- Which communities, groups and individuals are most *dependent* on the resources at stake? Is this a matter of livelihood or economic advantage? Are these resources replaceable by others, possibly in less ecologically valuable or fragile areas?

- Who upholds *claims*, including customary rights and legal jurisdiction over the territory, area or resources at stake? Are there communities with ancestral and/or other types of acquired rights? Are various government sectors and ministry departments involved? Are there national and/or international bodies involved because of specific laws or treaties?

- Which communities, groups or individuals are most *knowledgeable* about, and capable of dealing with, the territories or resources at stake? So far, who has a direct experience in managing them?

- What are the seasonal/ geographical variations in resource use patterns and interests of the users? Are those interests geographically and seasonally stable (e.g., are there seasonal migration patterns)? Are there major events or trends currently affecting local communities and other social actors (e.g., development initiatives, land reforms, migration, important phenomena of population mobility or natural growth or decline)?

- Are there other co-management initiatives in the region? If so, to what extent are they succeeding? Who are their main partners?

At times the "potential institutional actors" are not clear about their own interests and concerns in a NRM unit. Even more often, they are not organised to communicate and promote them and/or are not willing to take on NRM responsibilities. For their preliminary stakeholder analysis, the members of the Start-up Team may begin with a list of social actors obviously possessing *major* interests, concerns, capacities and/or comparative advantages in natural resource management. Through contacts and meetings with them, that list will be modified. Likely, not all the ones initially identified may be willing to organise and invest time and resources in management, but new and possibly less obvious social actors might be.

A fairly usual dilemma in stakeholder analysis presents itself when, within an identified potential institutional actor (let us say a community in the vicinity of a forest), the Start-up Team discovers a variety of different interests, concerns and capacities vis-à-vis the natural

resources. Should one or several institutional actors be invited to participate in the negotiation process? There is no simple answer to this question. The Start-up Team may wish to explore the pros and cons of the dilemma with the most directly concerned people and groups as part of their own process of self-organisation (see below). For instance, a united community has more weight at the discussion table than several people who cannot get themselves together. And yet, the community may be willing to speak as one voice in certain occasions and as many in others… In other words, the people who find themselves united as "one stakeholder" for some decisions may need to split and regroup on another one. This phenomenon, at times referred to as "multiculturality" of stakeholders (see Otchet, 2000), should be acknowledged and recognised as normal.

But, are interests and willingness sufficient to take on a management role? Shouldn't the Start-up Team also ask, "Who are the social actors *entitled* to manage the unit(s) at stake?" –

The roots of entitlements: examples of grounds to claim a "title" to manage natural resources

- existing "legal" rights to land or resources, whether by customary law or modern legislation (e.g. traditional access rights, ownership, right of use, tenancy,);

- mandate by the state (e.g. statutory obligation of a given agency or governmental body);

- direct dependency on the natural resources in question for subsistence and survival (e.g. for food, medicine, communication);

- dependency for gaining basic economic resources;

- historical, cultural and spiritual relationships with the concerned territory, area or natural resources;

- unique knowledge of and ability to manage the concerned NRM unit(s);

- on-going relationship with the territory, area or natural resources (e.g. local communities and long-time resource users vis-à-vis recently arrived immigrants, tourists, hunters);

- loss and damage suffered as a result of NRM decisions and activities;

- level of interest and effort invested in natural resource management;

- present or potential impact of the social actor's activities on the land or the natural resources;

- opportunity to share in a more equitable way the benefits of natural resources;

- number of individuals or groups sharing the same interests or concerns;

- general, social recognition of the value of a given point of view or value (e.g., based on traditional knowledge; based on scientific knowledge; aiming at "sustainable use"; aiming at "conserving natural and cultural heritage"; following the "precautionary principle", etc.);

- compatibility with national policies;

- compatibility with international conventions and agreements.

It certainly should. And yet, the understanding of what constitutes a legitimate entitlement is an evolving socio-political phenomenon, best approached in a participatory way. The Start-up Team could begin by asking the potential institutional actors whether they consider that they have a fair claim to participate in the management of natural resources and, if so, on what grounds. In this way, the Start-up Team will obtain a list of factors and characteristics that at least *some* people recognise as legitimate "roots of entitlements" in the local context. Some examples of such factors and characteristics are listed in the box in the preceding page.

Not all societies or groups within a society recognise *all* NR management claims from *all* social actors. They may recognise some but not others. They may recognise claims only in combination with others (e.g. dependency for survival + long-term relationship with the resources + uses based on traditional technology and practices).   Some social actors may recognise their respective claims, but other actors may deny them.

Given such a multiplicity of possible views, how can resource management claims be assessed vis-à-vis one another? Who can determine their respective value and "weight"?

Ideally, this would be done via a **socially endogenous process**, i.e. a socio-historical development in which groups and individuals organise to express their interests and concerns (and thus define themselves as "institutional actors"), stimulate society to recognise their claims as "entitlements", participate in negotiating an equitable division of benefits and responsibilities, and learn-by-doing in natural resource management. In this process, the institutional actors with socially recognised entitlements may also be subdivided between "primary" and "secondary", and thus accorded different roles in natural resource management.

> **"Who are the 'primary' and 'secondary' institutional actors?"**
> This question cannot be answered outside of a specific context. Yet, some social actors are pretty much everywhere in the frontline of needs, knowledge and comparative NRM advantages and can claim a unique historical relationship as users, managers, protectors and "producers" of the natural resources at stake. These actors are the *local communities*.

In many contexts, such a process will unfold with great difficulties, if at all. It may be blocked by individuals with vested interests, or by too strong a power imbalance among the involved social actors (e.g. big business and national and local administrations versus a traditional community). It may lack the human or financial resources to allow it to take off. It may be impeded by a history of violence and bitter fights among relevant groups and factions. Or it may just be foreign to the local context because of a weak tradition of participatory democracy in the country.

Promoting and supporting co-management in a specific context means helping the aforementioned process (organising, negotiating and learning-by-doing) to start, and to develop in a fair way. In particular, it means to help local communities to identify and overcome obstacles such as the ones just listed above.

Towards empowered and responsible institutional actors: a schematic view

communities, groups, organisations and individuals   **key steps**

potential institutional actors

recognition of the values, opportunities and risks associated with land and natural resources; self-organisation to express those as own interests and concerns

institutional actors

recognition/ negotiation by society of the interests and concerns of the institutional actors as "entitlements" (customary and legal rights included)

entitled institutional actors

entitled actors negotiate agreements and set-up organisations, rules and systems to enforce the rules to share natural resource benefits according to their own entitlements and capabilities

empowered institutional actors

co-management partnership: the institutional actors share benefits and responsibilities amongst themselves; they contribute knowledge, skills and financial resources to resource management; they are held accountable for their agreed responsibilities; they learn by doing in management tasks

responsible institutional actors

2.7 Launching and maintaining a social communication campaign

A social communication campaign is basically an on-going flow of information and dialogue between the Start-up Team and the institutional actors, and among the institutional actors themselves. It can be launched by some specific event (a fair, a public party, a community meeting, a travelling theatre piece, etc.), but it should also include an on-going component, to take care of communication needs that come up through time. In the preparatory phase, a social communication campaign promotes the critical understanding of the need for, the objectives and the process of co-management for the natural resource unit(s) at stake. This may lead to the adoption of CM concepts and practices but, even more importantly, should lead to their appropriation and transformation into the local socio-cultural context. In other words, a social communication campaign does not aim at "passing a message about an issue", as an information or education campaign would usually do, but at promoting its critical understanding and discussion in society.

To begin with, the Start-up Team may wish to identify where and how local people discuss and take care of NRM issues. Whenever applicable, the local media employed to convey this kind of information—from songs to gossiping and story telling, from sermons in a religious temple to drawings on walls—should be identified and possibly utilised (often within a spectrum of other media). As a communication campaign must make sense for the society much more than for the organiser of the campaign itself, the Start-up Team may have to abandon some favourite conventional means (e.g. pamphlets or microphone speeches) for more creative and effective ones (e.g. an environment-awareness game or lottery on local market days). Importantly, communication channels should always promote dialogue and discussion, and the Team should avoid any "teaching" or "preaching" attitude (see also section 1.2).

An important initial step in the campaign is the decision about a description (words, images, definition of problems, etc.) of the ecological and social issues to be tackled and the co-management process being promoted. For the latter, a culturally meaningful name or phrase in the local language, which would be perceived as appealing and inspiring (e.g. "Let's manage the forest together!", "Our community in the 21st Century", "Solidarity and wise use of our wetlands" etc.) should be tested and adopted. The terms and phrases should not be too trite or resemble party slogans; on the contrary, they should convey the spirit of a-partisan collaboration, solidarity, working together for the common good. In particular, the name of the process is a main entry point for local acceptance and success. It is important to avoid picking a "good name" from the top of the head of some professionals. Instead, the name should evolve in conversations with members of local communities and various potential institutional actors. Possible problems and inadequacies with the translation of the names and descriptions in the local languages should be carefully considered.

2.8 Engaging the institutional actors

The main task of the Start-up Team is to contact the potential institutional actors identified so far and to inform them about the upcoming process of co-management and the opportunities it offers to all parties concerned about the NRM unit(s) at stake. A member of the Team (usually the closest and best trusted by the relevant people) meets with some individuals

belonging to a community, an agency or a group identified as "potential institutional actor" and asks to be accompanied to visit the NRM unit(s) at stake. On the spot, issues and problems will naturally come up and will be discussed. Participatory appraisal exercises such as mapping, historical mapping, transect walks, interviews with spontaneous groups and key informants, etc. can be very useful to bring about the discussion. The next step will be meetings with more people broadly sharing the same interests and concerns as the ones initially contacted (i.e., part of the same "institutional actor" camp). In such larger meetings the identified NRM issues and problems will be re-introduced and discussed, and thereby validated or modified.

The goal of these meetings is for the potential institutional actors to identify and clarify their own NRM interests, concerns and capacities, as well as to decide for themselves (and for others) if and on what grounds they wish to claim any entitlement to manage. In addition, they may also clarify what *type* of entitlement they claim. Do they wish to take an advisory, executive or decision-making role? Do they simply wish to have a share in the benefits deriving from the natural resources? In this way, the Start-up Team deepens and refines its own preliminary situation and stakeholder analyses with the help of the stakeholders, while the institutional actors prepare themselves for the phase of negotiation.

It is particularly important to examine the *grounds* on which various actors base their claims to natural resource management, what we described before as the "roots of entitlements". These offer an overview of the main NRM stakes in the specific context, and inform the Start-up Team of controversies likely to surface during the negotiation phase.

2.9 Helping the institutional actors to organise

To participate in the negotiation process, the institutional actors need to arrive at an internal consensus on the values, interests and concerns they wish to bring forward. They also need to appoint people to represent them vis-à-vis other actors. For some (e.g. an established government agency) this may be a given, and may require no effort. For others (e.g. a traditional community living in a remote area) it may require major investments, at least in terms of time, and it may even need some external facilitation and support.

For instance, a member of the Start-up Team may help a community or user group to select the most appropriate person(s) to represent them. He/she may facilitate a meeting in which the main qualities and characteristics of a good representative are elicited, listed, discussed and agreed upon through brainstorming. On the basis of such a list of criteria (including, for instance, factors such as knowledge of the local NRM situation, personal commitment, honesty, negotiation skills, capacity to represent the interests of the community, etc.) the group can consult on names of people who actually comply with the

> **"What *type* of assistance should the Start-up Team provide to the institutional actors?"** External assistance is at times necessary for certain individuals or groups to participate in the negotiations. Some types are usually not problematic (e.g. financing the participation at meetings or facilitating the choice of a representative), but others (e.g. supporting the establishment and legal recognition of an organisation) possibly imply more continuous and onerous financial commitments. They may also assume a clear political connotation.

criteria and can thus effectively represent the group as a whole. In this way, a group can free itself from having to choose the usual expected names (such as the person who usually deals with government officials, the son of the village chief, etc.…). It is important that the criteria are genuinely identified by the community or interest group, and not by the Start-up Team, and that the decision on the name of the representative is taken in a congenial atmosphere, free from coercion. On the basis of specific needs and available resources, the Start-up Team may thus provide stimulus as well as technical and/or financial support to the self-organising of the institutional actors. This step completed, they indeed will be ahead in the CM process.

2.10 Preparing for the negotiation meetings: rules, procedures and equity considerations

This task is another of the Start-up Team's most important duties. On the basis of the preliminary decisions on the institutional actors and the level of agreement to be reached, the Team proposes *how* the negotiation should be held— an advice charged with cultural and political implications.

Traditional societies have arrays of convivial procedures for negotiating agreements, such as a meeting of community elders or a larger gathering on the occasion of a religious festivity or a market fair. Many of those are simple, effective and inexpensive. If the Start-up Team is truly in tune with the stakeholders, it will consult them and eventually agree on whether any such culturally specific event is suitable for deciding on the issues at stake. In some cases, however, convivial gatherings may not be sufficient for negotiating a fair and sustainable NRM agreement.

For instance, the institutional actors may not share the same cultural backgrounds, values, attitudes and habits. A handshake equivalent to a sacred pact for some may just be a pleasant discussion of possibilities for someone else. Some people may not speak the same language, both literally and metaphorically, in the sense that the meaning of terms and concepts may need a careful "translation" between them. There may also be large power gaps or unsettled conflicts among the stakeholders, so that people may not feel comfortable, or even safe, to volunteer their views and expose their interests and concerns.

In such cases, the Start-up Team may well take a pro-active role to propose a schedule of meetings, some rules and procedures for participation, and some support in facilitating the negotiation. The institutional actors could well discuss and modify those, but it is important that en entity trusted by all parties takes the initiative to plan in detail at least the first meeting among the institutional actors. In other words, the Start-up Team should obtain an agreement on the place, date,

> **"What does 'equity' mean in a co-management process?"**
> Specific answers depend on specific contexts. In general, equity can be sought by helping the less privileged to "develop their own entitlements". It can be sought by promoting the recognition of entitlements rooted in valid and legitimate grounds (as defined by the relevant society) rather than entitlements rooted in the exercise of one form of power or another. It can also be sought by promoting a fair negotiation of functions, benefits and responsibilities among the entitled actors.
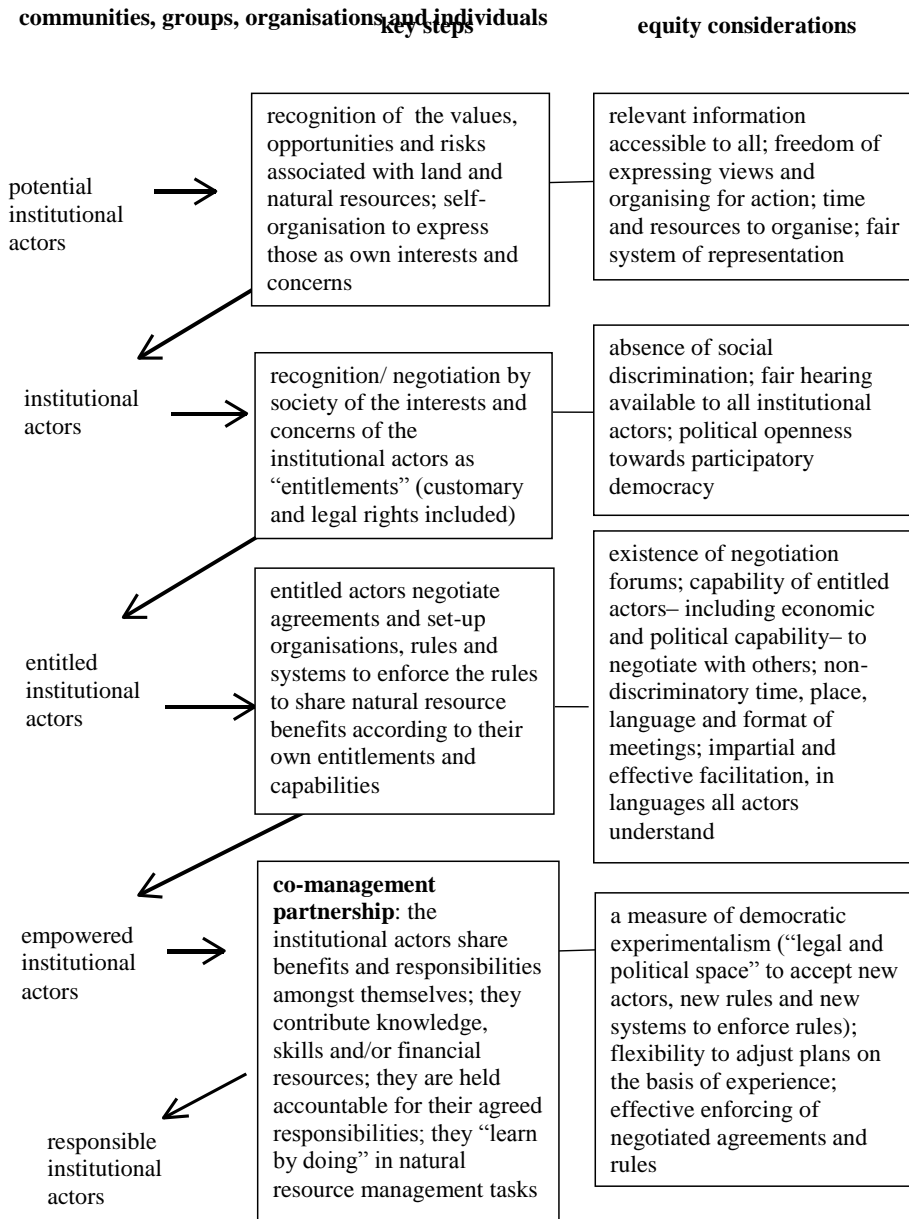
hour, working language (or languages), participants, agenda, logistics and facilities necessary for the meeting that will launch the CM process.

But the Start-up Team needs to remember that its tasks are not only of a practical nature. Indeed the Team is also the prime guarantor of fairness and equity in the whole process. For that, it is never too early to carry out a specific reflection on equity, and on how it can be fostered throughout all the CM process. The results of such a reflection can be made explicit and incorporated into the rules and procedures of the negotiation phase.

Promoting equity in co-management: some examples and ideas

- disseminating information on the environmental values, opportunities and risks of relevance to potential institutional actors

- disseminating information on various natural resource management options

- assuring freedom of expressing views and organising for action

- giving a fair hearing to every actor's grounds for entitlements, with no discrimination in favour of some with respect to others (discrimination may be based on ethnicity, gender, age, caste, class, economic power, religion, residence, and so forth)

- helping the institutional actors to participate in the negotiation process, for instance by supporting them to organise, to develop a fair system of representation and to travel to meetings

- organising forums where all the institutional actors can voice their ideas and concerns, selecting the least discriminatory places, times, languages, formats, etc.

- supporting the negotiation of a fair share of management functions, rights, benefits and responsibilities

- ensuring effective and unbiased facilitation during negotiations

- supporting (via training and allocation of resources) the capability of actors to negotiate

- promoting a tight proportionality between the management entitlements and responsibilities and the benefits and costs assigned to each institutional actor

- keeping an open door to new institutional actors who may arrive on the scene

- supporting participatory democracy and multi-party agreements and organisations in all sorts of social decisions

- assuring a fair measure of democratic experimentalism, allowing to adjust NRM plans, agreements, organisations and rules on the basis of experiences learned-by-doing.

- assuring that the negotiated co-management plans, agreements and rules are effectively enforced.

Including equity considerations in the process towards empowered and responsible institutional actors: a schematic view

communities, groups, organisations and individuals	key steps	equity considerations
potential institutional actors →	recognition of the values, opportunities and risks associated with land and natural resources; self-organisation to express those as own interests and concerns	relevant information accessible to all; freedom of expressing views and organising for action; time and resources to organise; fair system of representation
institutional actors →	recognition/ negotiation by society of the interests and concerns of the institutional actors as "entitlements" (customary and legal rights included)	absence of social discrimination; fair hearing available to all institutional actors; political openness towards participatory democracy
entitled institutional actors →	entitled actors negotiate agreements and set-up organisations, rules and systems to enforce the rules to share natural resource benefits according to their own entitlements and capabilities	existence of negotiation forums; capability of entitled actors– including economic and political capability– to negotiate with others; non-discriminatory time, place, language and format of meetings; impartial and effective facilitation, in languages all actors understand
empowered institutional actors →	**co-management partnership**: the institutional actors share benefits and responsibilities amongst themselves; they contribute knowledge, skills and/or financial resources; they are held accountable for their agreed responsibilities; they "learn by doing" in natural resource management tasks	a measure of democratic experimentalism ("legal and political space" to accept new actors, new rules and new systems to enforce rules); flexibility to adjust plans on the basis of experience; effective enforcing of negotiated agreements and rules
responsible institutional actors		

Results of the preparatory phase

- information and tools (e.g., maps) on the main ecological and social issues at stake in the identified NRM unit(s), gathered together for the use of the parties in the negotiation

- a short report on the NRM context (e.g., listing historical, social, cultural, legal, political and institutional issues)

- one or more proposed NRM unit(s), identified on the basis of ecological and social considerations

- a preliminary analysis of relevant institutional actors, including entitlements, claims, power differentials and NRM conflicts, both existing and potential, among them

- a "name" and a description of the co-management process that are culturally valid and broadly understood and accepted in the context at stake

- a social communication campaign that opened and maintained two-way communication channels between the Start-up Team and the institutional actors, and fostered a broad discussion of NRM issues in society

- institutional actors reasonably well-informed, organised (e.g. they have identified their own representatives) and ready to negotiate co-management plans and agreements

- a set of suggested procedures for the negotiation process, including a first meeting among the identified institutional actors organised in detail

- ideas and concrete proposals on ways to promote fairness and equity in the negotiation process

3. The negotiation phase

Negotiating among institutional actors: the heart of co-management

The co-management plans, agreements and organisations are as good as the process that generated them. It is wise to invest in this process!

critical challenges

- to develop a partnership by which the benefits and responsibilities of natural resource management are shared in the most efficient and equitable manner possible, starting from a situation that may be neither efficient nor equitable. Also, sometimes:
- to develop a partnership among people who do not share the same culture (e.g. values, attitudes, capacities, ways of working, reference systems, languages), which means overcoming serious communication difficulties.

what does one need to remember?

- that there exist a multiplicity of good and poor NRM options (the terms *good* and *poor* referring to the goals and objectives to be defined, which themselves constitute a multitude);
- that– given the complexity of ecological and social systems– the best approach is one of adaptive management (learning-by-doing);
- that conflicts of interest between the institutional actors are inevitable but can be managed, and all the more so if recognised as early as possible (not every one has to share the same goals, it suffices that a compromise can be reached among all those concerned);
- that even when a satisfactory NRM solution will have been found, it will not remain valid forever; the conditions in the given context will change and the NRM solution will need to change in response to them– something everyone has to be prepared for;
- that many entitled institutional actors may not be able to prove and/or impose their claims on others, and that every effort should be made to be just and impartial.
- that all the institutional actors (and especially the professional experts!) need to adopt a mature, non-paternalist and non-ethnocentric attitude, and that they need to acknowledge the legitimacy of values, interests and opinions different from their own.

the negotiation meetings

Ideally, at the beginning of negotiations there are:

- some reasonably well-informed and organised institutional actors
- a discussion forum, a set of suggested rules and procedures, and a preliminary schedule of meetings and events
- available professional support to facilitate the negotiation meetings and mediate conflicts, if necessary

No matter whether the institutional actors are many or few, whether they are formally or informally organised, whether they feel in basic agreement or opposed by strongly contrasting values and interests, they need to *meet* and *discuss* issues of common concern. The goal of such meetings is usually a broad accord on:

- a long-term *vision* (ecological and social) for the NRM unit(s) at stake

- a short- and medium-term *strategy* to achieve such a vision, including *co-management plans* for the natural resources at stake and complementary *agreements* to address socio-economic issues related to such resources

- an evolving *institution* (organisations, rules, etc.) to implement the strategy and, on an on-going basis, review it as necessary

3.1 Agreeing on the rules and procedures of negotiation

All institutional actors will receive in advance a copy of the proposed agenda for the first of a series of meetings and an invitation for their chosen representative to participate in it. The note will make reference to the name and process description already adopted during the social communication work. The goal of the meetings to come may be set quite high, for example a series of meetings "..to understand the main challenges to our natural resources in the next twenty years, and prepare together to face them". It should be specified, however, that not only lofty goals but also substantive issues of relevance to the institutional actors will be part of the agenda. The conveners will be the Start-up Team as well as, whenever possible, some respected local authorities and personalities. The presence of a facilitator may be useful.

Main qualities and tasks of a good facilitator/ mediator

Facilitating meetings is a task firmly anchored in the culture of the actors concerned. As mentioned, many traditional societies do not need external facilitators and know well how to negotiate in convivial manners as part of normal life. An external facilitator may be important, however, when there are strong power imbalances, unresolved conflicts or communication problems among the concerned parties, and when the parties belong to quite different cultural backgrounds.

an external facilitator should be:

- recognised as independent

- generally respected by all those involved

- capable of relating with everyone

- able to listen

- able to pose the key questions (for example, on the root causes of the various problems and the feasibility of the options put forward)

- capable of getting the best out of the participants and helping them to see a different future for themselves and their communities

tasks of an external facilitator:

- helping the Start-up Team and the institutional actors to identify and agree upon the rules and procedures of the negotiation meetings

- being responsible for the logistics of the meetings (e.g., agenda, seating arrangements, translation services, discussion tools, etc.)

- ensuring that the process takes place in accordance with the agreed rules (ensuring a comfortable situation in the meetings) and that everyone has a fair chance to participate

- checking out that the representatives of the institutional actors truly represent them (e.g., they are not merely self-appointed)

- promoting the best possible communication among institutional actors, e.g., by re-phrasing points, asking questions, suggesting the exploration of new ideas

- helping a group to be conscious of itself and of its goals, mission and opportunities

- helping a group to broaden its range of options

- pointing out the positive aspects of the process, i.e., when the actors' old habits have given way to more constructive attitudes, for example:
    - when the institutional actors actually talk to each other directly, if this was impossible before
    - when new points of doubt and self-doubt are raised
    - when the institutional actors clarify and enhance their perception of the others
    - when new information is brought to the attention of everyone
    - when an agreement that has a chance of being sustainable has been found.

- *not* stating his/her opinion on substantive issues and *not* deciding anything

The first meeting among institutional actors may begin with an introduction by the members of the Start-up Team, who will describe their work thus far. It is important to be transparent on who has facilitated and financially supported the Team's work and why. The participants (representatives of the institutional actors) may then introduce themselves and mention how they have internally organised and identified the representatives who participate in the meeting. The facilitator and Start-up Team may then illustrate a proposed set of rules for the negotiation phase as well as procedures and a schedule of meetings. The discussion will then be opened to adjust and modify the proposed rules and procedures until a broad accord is achieved.

Example of rules for the negotiation process

(rules for negotiation processes are strongly dependent on the cultural milieu; it cannot be stressed enough that below is only an *example* of a set of rules, and that this example may be appropriate in some situations and entirely inappropriate in others)

- all main institutional actors should be present in the meetings and participate via their formal representatives

- participation is voluntary but whoever does not come is taken as not being interested in taking part in decisions; however, if more than X% of the institutional actors are not present for a meeting, the meeting will be adjourned

- language should always be respectful (people should refrain from insults and verbal abuse)

- everyone agrees not to interrupt people who are speaking (the facilitator will remind people of the need to be concise)

- everyone agrees on talking only on the basis of personal experience and/or concrete, verifiable facts

- everyone agrees about not putting forth the opinions of people who are not attending the meetings (and are not represented officially)

- consensus is to be reached on all decisions and voting should be resorted to in most exceptional cases only

- "observers" are welcome to attend all negotiation meetings (this rule needs to be carefully evaluated vis-à-vis the context, in certain environments confidentiality may be needed in certain delicate phases of the process)

Checklist for procedures and logistics

- Who will need to be present at the next meetings? (Who are the main institutional actors in NRM in our specific context? Have we missed anyone so far?)

- The representation shall be formal (written *affidavit*) or accepted also in informal ways? (A written affidavit may be very inappropriate in non-literate context, as it may force a domination of the literate within traditional communities.)

- How many institutional actors need to be present to declare the meeting valid? (Consider possible coalitions of stakeholders who may wish to boycott meetings.)

- What language(s) shall we speak? Is there a need for interpreters? (This is a fundamental issue to assure a fair and equitable negotiation.)

- Approximately, how many times shall we meet?

- Where shall we meet and, at least approximately, when? (Consider seasonal changes in workload of rural communities.)

- Is there a need for one or more facilitators? Could the facilitator be a local person, or should we call for a professional from outside?

- How shall people be seated in plenary meetings? (Round arrangements, with or without tables, are generally preferable.)

- Are facilities available for smaller meetings of working groups?

- Are there financial resources to support the meetings? Who can provide those resources?

- Who will be responsible for the logistics (e.g. send a reminder to the agreed participants, getting the premises opened, cleaned, etc.)?

- Is there a need for chairs, tables, rugs and mats, lamps, boards, paper, cards, felt pens, sticking tape, pins, projectors, and/or other materials to support discussions and presentations? Will everyone feel comfortable using those means for presentations?

Procedural and practical aspects such as the ones listed above are generally easier to deal with than questions of substance (e.g., what natural resource uses are allowed) and relationships among the institutional actors (e.g. who has a legitimate title to manage the resources). In the first meeting, it is good to limit the discussion to matters of rules, procedures and logistics. An initial meeting in a calm and productive atmosphere is a good way to help the institutional actors finding out where they stand, establishing working relations among themselves and starting to "own" the participatory process.

It may happen, on the other hand, that at the moment of discussing who shall attend the next meeting, some people object to the very presence of others and attempt to exclude them. The facilitator could help diffuse these potential disruptive objections by assuring that an inclusive approach at the discussion table does not mean that everyone present will *equally* share in entitlements and responsibilities for natural resource management. The people present at the meeting are representatives of social actors who organised to express their concerns. It will be the task of *all* representatives together to identify everyone's role and weight in terms of substantive issues and decisions.

3.2 Developing a common vision of the desired future

One or more meetings can be devoted to establishing a base of common interests and concerns among all the institutional actors. In such meetings, the participants are encouraged to discuss their long-term wishes for the NRM unit(s) at stake, i.e. the kind of environment, natural resources and living conditions they would ideally like to leave to their children and grandchildren. On this basis, the facilitator helps the participants to develop a consensus on a "vision" of such a desired future, with specific descriptions– as visual and concrete as possible– of the ecological and socio-economic situation in the NRM unit(s) (see Annex 1 for some guidance on visioning exercises and Annex 2 for an example of "vision" of a rural community).

The social consensus on a vision of a desired future is extremely important for the negotiation of effective co-management plans and agreements. If conflicts and disagreements surface during the negotiation process, the facilitator will be able to bring back everyone to the vision they all wish to achieve. For this, it is useful to record the description of it on a large sheet of paper (or other appropriate support) and pin it on a visible surface at the site of the negotiation. It is also good to transform the vision into a charter of principles or other appropriate form of social contract (see again Annex 2).

3.3 Ritualising the agreed common vision

An agreement is legitimised when it is accepted and recognised as binding not only by the institutional actors who developed it, but also by the society as a whole. The process by which such legitimisation is achieved, however, is different according to the importance of the agreement. A simple local rule is easily legitimised and easily undone. A common vision of the desired future of an entire community, instead, is a sort of constitutional agreement. In many cultures this calls for a strong ritual, respected and acknowledged by the whole society. Such a ritual helps raising the common vision to the spiritual and symbolic level, making it valid in the long term and particularly difficult to disavow.

The choice of the appropriate type of ritual is a culturally specific act, concerning the moral, spiritual and often religious values of the institutional actors at stake. Traditional practices are often at the heart of such ceremonies. When non-traditional actors and/or governmental representatives are involved, however, it is advisable that the institutional actors also produce and sign a written document. In this case, the ceremony held to ritualise the vision could include both a traditional ritual and a modern ritual. The latter could be the public reading, signing and celebration of a document, such as a charter of principles for natural resource management and development approaches in the territory at stake.

The common vision of a desired future is a most appropriate type of agreement to ritualise. If such a vision is ritualised, in fact, it will be regarded as intangible and sacrosanct. As such, it will be possible to use it as a common ground where all stakeholders can reconcile the controversies and conflicts that may present themselves in the course of negotiations. It cannot be said, on the other hand, *when* it is best to hold the ritual ceremony. In certain cases, the ceremony precedes the negotiation of specific plans and agreements. In others, the ritual comes only after the agreements, as the partners need to see that something concrete can come out of their vision before committing the time and social capital necessary to celebrate a strong ritual.

3.4 Reviewing the current socio-ecological situation and trends, and agreeing on a strategy towards the common vision

With the help of a facilitator, the institutional actors can analyse the present ecological, social and economic situation and trends in the context at stake, as well as their desirability and acceptability. The discussion can start on the basis of a short report illustrated by the Start-up Team (and possibly submitted in advance), although the report should not define the limits of the discussion. Other good starting points are participatory exercises such as mapping, historical mapping, trend analysis, group interviews with the local elders, a transect walk, etc. (see Annex 1 for a description of some of these methods).

When institutional actors have had time to discuss current issues and trends, the common vision of the desired future is recalled and compared with the present situation. What are the main points of difference? Given the trends identified and discussed, is society moving towards or away from the common vision? What are the problems and obstacles blocking progress towards the common vision? What opportunities, resources and assets can be relied on? After a realistic discussion of these points, the facilitator may ask the institutional actors to focus their attention on identifying the components (dimensions of work, key performance areas) of a strategy to achieve the common vision from the present starting point. Basically, these would be the areas in which it is necessary to act in the short to medium term in order to achieve some tangible results (objectives). Such results will constitute the building blocks of the common vision i.e. will help transforming the desirable into the possible and/or real.

Some of the components will deal directly with natural-resource management, whereas others will bear upon it in more indirect and complementary ways, such as via interventions for economic development, health, education, social organising, governance, culture and so on (see the example in Annex 3). Indeed, it would be neither effective nor wise to conceive a management plan for the natural resources in isolation from the socio-economic reality embedding them. Coordinated interventions in several sectors are also important to allow an equitable distribution of the social costs and benefits of sound natural resource management.

At this stage it is not yet necessary to clarify the details of what needs to happen, but just to specify:

- the key areas or problems that need to be tackled (i.e., the components of the strategy); and

- the broadly desirable outcomes (objectives) for each such component.

If the discussion proceeds well, the facilitator may challenge the participants not only to identify the main components of the strategy, but also to understand and evaluate the links among them, so as to assemble a coherent overall plan.

A few methods and tools that can be useful in facilitating the development of a common strategy are listed below:

Methods and tools to identify the components and objectives of a common strategy

- **Brainstorming**. This is a crucial technique employed to gather the views and perceptions of a group of people. It is based on a freewheeling offering of ideas started by an open-ended and somewhat provocative question put forwards by the facilitator, such as "What are the main obstacles that forbid us to live in the ideal community we visualised for our children?" Opening statements and questions should be general and non-leading, i.e., should not stress or overemphasize a point of view that could bias the participants. It should be clear that brainstorming is a free and non-committal way of exploring ideas, i.e., no one commits him or herself to something by suggesting it in a brainstorming session. At times people offer ideas orally, one after another, and the facilitator writes the ideas up on a board. The distillation of these ideas is then done by general discussion.

  If all the participants in the exercise are literate it is also possible to utilise a **structured brainstorming** exercise. In this case the facilitator asks a question, leaves time for people to think individually and then asks them to write their replies in large letters on colour cards and to present them, one by one, to the rest of the group. After each idea card is illustrated, it is pinned up on the wall and the whole group decides where it should be set, to cluster it with related ideas. The final result is a series of "card clusters", each dealing with a main idea. Each cluster can later be assigned to a sub-group, which will summarise it, rephrase it and explore it in detail (see Annex 1 for details on these methods).

- **Analysing strengths, weaknesses, opportunities and limitations** (SWOL). SWOL is a powerful tool for a group to assess an issue of concern, in particular a project, and organisation or a public service, and to identify opportunities for action and change. Basically, it is a group brainstorming on the positive factors (strengths), the negative factors (weaknesses), the possible improvements (opportunities) and the constraints (limitations) related to the initiative or entity at stake. Usually the results of the brainstorming are listed on a four-column matrix, drafted on flipcharts on a wall.

  At times, participants have different opinions or express contradictory statements. In such cases, the facilitator can ask further questions to deepen the arguments, but a consensus among the group members is not necessary. Contrasting views and alternative

options can be listed on the same column in the matrix. In particular circumstances, it may be necessary to gather more information once the meeting is over, information that will be communicated to the whole group in the next meeting (see Annex 1 for details on this method).

- **Situation analysis and problem analysis**. Depending on the questions posed to the group, a strategy component may be expressed as tackling an issue (such as "management of the watershed") or a problem (such as "deforestation in the watershed"). In all cases, the situation, issue or problem needs to be clarified and analysed by the institutional actors with the help of the facilitator.

  "Clarifying" means obtaining a coherent common understanding of the situation, issue or problem at the present moment. In particular, can everyone agree on what constitutes a "problem"? If people disagree on that, a sort of helpful definition may be "a blockage towards the achievement of the common vision of our desired future". If the main components of the strategy end up being described in a concise and effective manner, it is a good idea to have them written up on a large sheet of paper and posted on the wall on the premises of the meeting, possibly next to the description of the agreed vision of the desired future.

  "Analysing" means setting the situation/ issues/ problems within a meaningful context of root causes and consequences, in particular with respect to the vision of the ideal future agreed upon by everyone. Such an analysis is vital to direct energy and resources in an effective way. Can everyone see the same causes and consequences for a given issue or problem? A good analysis is comprehensive and invests several dimensions of a given context, but can be completed in a reasonable amount of time and, most importantly, is understood by everyone. Graphic conceptual frameworks are very useful to organize and communicate a situation or problem analysis (see below).

- **Conceptual frameworks**. A conceptual framework is a schematic illustration of the relationships between an issue or problem, the phenomena contributing to creating and maintaining it, and the consequences arising from their existence. Usual forms may be a graph of boxes and arrows or the drawing of a problem-causes-effects tree (see Annex 1). Ideally, a conceptual framework is coherent and comprehensive, for instance able to accommodate the potentially multi-sectoral nature of problems, but also simple. If possible, it includes some consideration of the time dimension (history, seasonality, processes of social and environmental change, etc.).

  A conceptual framework can be produced collectively during a meeting to analyse the situation or problem. The facilitator may ask people to write names or very short phrases on cards and pin those on a wall over the drawing of an issue or problem tree, and/or arrange them for similarities and connect them by lines and arrows. Multiple cards are better than a single drawing, as cards can be individually moved and changed at will at the suggestion of the participants in the meeting. In this way, the collective thinking of the group can be developed and expressed. The discussion on the conceptual framework should continue until everyone is satisfied and no more ideas are offered or corrections requested.

3.5 Negotiating co-management plans and agreements for each component of the strategy

For each component of the strategy, the institutional actors need to identify what needs to be done to progress towards the desired future. The objectives identified up to this point are generally broad (e.g. "to manage the forest on top of the hills in a sustainable manner") and need to be transformed into work plans that answer specific questions such as "What exactly shall be done? Who shall do it? By when? Where? How? With what financial means and human resources? To what specific aims? What indicators will be used to measure progress?" This is the moment when everything becomes concrete, a multiplicity of strategic options and choices becomes apparent to everyone, different points of view abound, and conflicts surface in all their power and complexity.

At this time, it is expedient to form a working group for each component of the strategy, making sure that the actors most directly affected are represented in the relevant group. It is also a good idea for each group to have its own facilitator/moderator, perhaps one of the parties themselves, who could take on the neutral role learned by watching the professional facilitator at work (the latter can remain available for all eventualities).

The groups have to come to terms with the great many avenues and options open to them to achieve a given objective and, among them, select the one best suited to the conditions and needs of the given context. Since different avenues and options will bring different costs and benefits to the institutional actors, each actor may have strong interests and concerns attached to one course of action versus another. How can they all reach a consensus or at least a broad accord among themselves? The tools already used to arrive at the long-term vision and strategy (e.g. brainstorming, problem analysis) can help again, but other methods can also be useful. Among those are the ones listed below:

Methods and tools to agree on a course of action

- **Breaking down large issues into smaller or sectoral issues**. A problem that is too large and complex is often very difficult to treat. A way of overcoming an impasse is to break it down into smaller sub-issues or problems and to assign them for discussion to sub-groups and task forces of the participants in the meeting. Moments of common discussions and an overall strategic view, however, should always be maintained.

- **Stimulating** the **explicit discussion** of the hypotheses and basic assumptions underlying alternative options. Why it is thought that a certain action will lead to a certain outcome? Taking a natural resource management plan as an example, the expected results of implementing the plan should be made very specific (including the values expected to be attained by biological and environmental indicators) and the ecological plausibility of achieving those values should be examined in depth. The results to be expected from socio-cultural or economic interventions should also be made specific (values expected to be attained by social or economic indicators) and lessons learned from similar interventions in the past or in other places should also be examined.

- **Calling upon expert opinion** on controversial issues. If disagreements among the institutional actors exist over matters of fact, it may be useful to call upon the service of

expert professionals (such as a biologist to explain the characteristics of a viable habitat, a hydrologist to estimate how much water can be extracted from a source in a sustainable way, a community elder to recall instances of local extreme weather, and so on). This is not to say that expert opinion should be followed, nor that, indeed, different experts may not disagree. On the contrary. But expert opinions (especially when free from economic and political conditioning) can be helpful to elucidate a controversial discussion.

- **Providing effective conflict mediation.** Conflict mediation focuses on the fact that an agreement that satisfies every party is likely to be more long lasting and more satisfactory than win-lose results. In the long run, compromise may be the best way to serve everyone's interests, especially when overt conflict is replaced by the stability and predictability of a mutually agreeable solution. An effective mediator brings the conflicting parties to agree upon a compromise solution with the help of several expedients.

  One expedient is to provide space and time for everyone concerned to clearly explain their views and positions: what they want and why. They should not be interrupted except for points of clarification. Another expedient is to recall the common vision of the desired future (coming back to the present from the future). If all institutional actors have agreed upon, and perhaps even ritualised, a common vision of the desired future, it is difficult for anyone of them to abandon the negotiation table. The mediator can in fact bring back the disagreements to a matter of different paths to reach the same goal. Another powerful expedient is the comparative analysis of different paths, positions, and options vis-à-vis various criteria (see below).

- **Facilitating the comparison of alternative options.** Alternative options can be examined vis-à-vis various **criteria**, such as effectiveness, feasibility, cost in human, material and financial resources, expected benefits and impacts (in particular impacts in terms of environment and social equity), sustainability, and so on. The open comparison of alternative options is a very useful tool to help a group decide on selecting one option over many. The discussion can be easily summarised on a board, with alternative options listed on rows and criteria on columns. For all the criteria chosen by the group the alternative options can be scored, and the matrix will then offer a broad comparative view of options and scores. Scores, however, should not be assigned from the top of the head, but only after a discussion of concrete issues. For example, regarding feasibility, who is ready to take on the major responsibility for each alternative option? In what time frame? With what material and financial resources? Regarding the impact, what are the expected environmental but also the social and economic consequences of the proposed options? To what degree of certainty are those foreseen? Are there options expected to have a positive impact on *all* the components of the strategy? Are there options expected to have a negative impact on one or more strategic components? And so on.

- **Facilitating** the achievement of **satisfactory compromises** by the use of **flexible instruments**, such as the **zoning** of the territory or area to be managed and/or the specification of **detailed conditions of resource use** (such as by type, time, season, users, technology, etc.). Zoning basically involves subdividing a territory or area into sub-areas subjected to different objectives, conditions and rules. Examples of detailed conditions of resource use include type of resources, time of day or season, legitimate

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users, technologies that can and cannot be employed, etc. Specifying the zoning of an area and the detailed conditions of use of its resources greatly enhances the spectrum of options available to the negotiation partners. Thus, it enhances the flexibility of a given NRM plan and the chances of achieving an effective compromise.

- **Asking the institutional actors to devise incentives** that will encourage them to agree on a given option. If one option that otherwise appears particularly interesting demands major costs and sacrifices from one or a few institutional partners, all the partners could figure out how to compensate the relative losers for everyone's benefit. This could involve the provision of specific incentives and clauses in the plans and agreements. The very actors who would be compensated may advance suggestions about the incentives that they would like to receive, which could then be discussed by everyone (costs, feasibility, assurance of benefits to be obtained, etc.).

- **Facilitating** the setting up of **Community Investment Funds** for sustainable development, which benefit both whole communities and the individuals or groups engaged as partners in various productive and conservation activities and services. While discussing NRM plans, one often encounters the case of a community with customary entitlement to a set of natural resources (say a forest or a fishing area) but not yet organised to invest the means and human resources necessary to manage it productively or to defend its own acquired rights. As a consequence, the natural resources may be falling into an open-access status, and being used in an exploitative fashion by all sorts of entitled and un-entitled actors. In other situations there may be no problem of the local resources being mismanaged or threatened, but still a clear need to generate funds for sustainable community development.

  In such cases it is most useful to facilitate the establishment of a productive partnership among the community (which may contributes natural resources such as land, water or access to the fishing area), some individuals (who may contribute their labour, including surveillance labour) and other partners who may bring in the missing factors of production (such as seeds, water, boats, engines and nets, a tourism business, etc.). The productive partnership will be set up and the benefits will be divided among the production partners, one of which is thus the community in its entirety. The community share of such benefits (or an initial "factor of production" provided from the outside, such as pumps for irrigation water, boats for fishing, tractors for ploughing or vehicles for transport) can be utilised to set up a Community Investment Fund.

  The rules to manage a Community Investment Fund need to be devised by the members of the specific community, which may also set up a managing committee. In general, the fund is not loaned nor replenished by payments. It is instead invested in productive activities, which *generate* a suitable wealth for the community and income for those directly involved in its operations. This tends to make a Community Investment Fund grow rather than shrink under the effect of inflation and missed repayments. At the end of each production cycle the growing Fund can be partially or totally re-invested for community-based productive initiatives, with or without partnerships with other groups or individuals.

  Community Investment Funds for sustainable development have important and natural applications in the field of co-management, both as an approach that promotes and

strengthens collaboration in society and as a co-management institution in its own right, with internalised incentives for using natural resources in a sustainable way.

comparing types of community funds

(adapted from Farvar, 1999)

community investment fund	community revolving fund
is managed by, and benefits, the whole community;	may be managed by the whole community but loans are made to, and benefit, individuals;
does not need to be in cash, it can be a factor of production (e.g. land or natural resources owned by the community, or an initial outside input);	is in cash;
is invested in productive activities, usually in partnership with community groups or individuals;	is loaned as cash to individuals in the community;
produces wealth and capital for the community to re-invest;	produces income or emergency support for individual members of the community;
is subject to production risks, which are shared by all the partners;	is subject to re-payment defaults and inflation risks;
stimulates community initiatives and joint activities between the community and other partners;	stimulates individual initiatives (may even weaken community spirit and cohesion);
accommodates for and sustains common property resources.	fosters the privatisation of natural resources;
accommodates for cultural values opposed to interest charges;	where interest is charged, is unfit for cultural values opposed to the practice (e.g. some Islamic societies);
the owners or contributors of each factor of production receive a share of what is produced;	the "beneficiaries" receive loans, which they need to pay back, possibly with added interest;
the community and partners have the same incentive to improve production;	incentives are for individual production only;
the partners have incentives to use the factors of production, including communal NRs, sustainably;	incentives are for sustainable use of individual property only;

Agreements, disagreements, consensus and compromise

Despite best efforts, a working group may not arrive at a consensus on any one given option for a strategy component. In this case, a possibility is to present all the retained alternatives to the general assembly of the institutional actors and ask for the advice of everyone. The assembly may again examine and compare alternative options vis-à-vis a number of specific criteria but also with respect to the courses of action retained for the other components of the strategy. Examining at once all the strategy's components may reveal, for instance, that the "losers" in one of the dimensions are the "winners" in another one. Or the discussion may advance with the help of proposals for cross-component compensations and incentives.

The aim of the negotiation is a consensus on what needs to happen– such as specific objectives, actors, means and activities– to foster each component of the strategy. As mentioned, this is likely to include specific co-management plans for the relevant unit(s) of natural resources, but also agreements dealing with other building blocks of the common vision of the desired future. The co-management plans will specify a share of functions, benefits and responsibilities and will be signed by all involved institutional actors (see below). Formal agreements on the other building blocks, also co-signed by the concerned actors, may include project implementation contracts, a letter of intent, a municipal by-law, etc. The more actors and the more finances involved, the more advisable it is for the plans and agreements to be made binding (such as formal or legal contracts). The signatories should be those individuals who are directly assigned responsibility in the plans and agreement (and *not* the authorities who may represent them!).

The elements of a co-management plan

- the geographical limits of the territory, area, or set of natural resources at stake;

- the complex of functions and sustainable uses it can offer;

- a co-coordinated series of objectives, priorities and activities for the management of natural resources;

- the recognised institutional actors;

- the *functions* and *responsibilities* assigned to each institutional actor;

- the *entitlements* and *benefits* granted to each institutional actor;

- procedures for negotiating on-going decisions and managing eventual conflicts;

- procedures for implementing and enforcing decisions;

- expected results at given times;

- rules for monitoring, evaluating and eventually revising the co-management plans and agreements (follow-up protocol).

All NRM plans and the associated agreements should specify actors, activities and means but also a follow-up protocol, including the anticipated results and impacts to be monitored, the indicators and procedures to follow and the individuals to be held accountable. It should also be noted after how long the actors concerned will meet again to assess whether the chosen

course of action has been effective and/or needs to be adjusted (for example through evaluation reviews). Finally, it is good to specify a set of indicators and follow-up procedures for the co-management *process* itself (see section 4.3).

Copies of the co-management plans and agreements– written in terms that are simple, easily understandable and in the local language(s), or also in the local language(s)– need to be disseminated to the institutional actors and to the public at large. If a system of zoning has been agreed upon, the maps illustrating it will also need to be reproduced and disseminated.

It is important to keep the institutional actors informed about what happened in the negotiation meetings, and especially to communicate why certain options have been retained and others excluded. The social communication system set up during the preparatory phase will again be very useful for this purpose.

3.6 Agreeing upon specific CM organisations

Socio-economic development and the management of natural resources require a variety of initiatives and activities, as well as on going experimenting and learning. In fact, the process of negotiating and implementing plans and agreements is never "finished", and some organisations need to remain in charge of executing and reviewing those plans and agreements on an on-going basis. It is also important to make sure that a pluralistic perspective in NRM is internalised in society and becomes the norm rather than the exception. In other words, it is useful to "institutionalise" the process in line with local practices and needs.

> *'institution'* —
> *the complex of organisations, rules, behaviours and values by which society pursues a goal*

One of the crucial ingredients of a social institution is *time*. Only a day-by-day experience through time can give people the sense of normality and the confidence associated with a spontaneous, acquired behaviour and the associated social values. Another essential ingredient is relatively stable organisations and rules, developed on the basis of the agreed pattern of entitlements.

Functions and characteristics of co-management organisations

The organisations that may be set up to sustain the co-management plans and agreements through time may be of different types (e.g. a Board, a Council, a formal or informal Association, a Fund). Their functions (Terms of Reference) may also be fairly different, including:

- **executive bodies** (responsible for implementing plans and agreements on the basis of decisions produced by others, such as a local co-operative responsible for executing a project negotiated between the director of a protected area and the bordering communities)

- **decision-making bodies** (fully responsible for the management of a given territory, area or set of resources, e.g. the Co-management Board in charge of a state forest, or

responsible for the management of fund, such as the committee in charge of a Community Investment Fund)

- **advisory bodies** (responsible for advising decision-makers, e.g. a Coastal Council, directly linked with the regional authorities charged with the NR management mandate)

- **mixed bodies** (for instance holding partial management responsibility and partial advisory responsibility, such as an Advisory/Management Committee responsible for advising a Park Director on the decisions to be taken in park management but fully in charge of decisions and activities pertaining to its buffer areas)

The institutional actors could decide to set up several CM organisations for the same NRM unit(s), for instance an advisory body and a management body, including an executive secretariat. Other important characteristics of CM organisations are:

history and duration

Does the organisation pre-date the co-management plans and agreements or is it set-up on an *ad hoc* basis? The former is sometimes preferable, as organisations and rules are a form of valuable social capital that requires time and resources to develop. Yet, the perpetuation of the organisations existing in a society may also mean the perpetuation of its internal systems of power and social inequities. Also, is the organisation permanent or is its life limited to a given period or activity?

composition

The members may be representatives of *all* the institutional actors who developed the co-management plans and agreements, representatives of only a few among them, or mere professionals who do not represent any of the concerned actors (which may be the case for executive bodies). For a decision making body, composition is a crucial issue. It is important to know who is represented and what is the balance of power among the different institutional actors (e.g. relative number of members with faculty to decide).

internal rules

Is the organisation formal (legally recognised) or informal? Is it voluntary and self-organised or mandated by the State? Is it an open-membership organisation or a closed body, whose members can only be elected or appointed? Can anyone become a member or are there specific requirements? How is membership terminated? Is there a Chair? If yes, how is the Chair elected? Is there a Secretariat? What are the terms of reference of the Chair and/or the Secretariat? How and how often are the meetings organised and held? How are decisions taken (for example by consensus, by majority vote, etc.)? How are conflicts managed? Can the public attend the meetings? Are there reporting rules and/or arrangements for the diffusion of the proceedings? Etc.

economic resources

How is the organisation sustained? Does it own economic assets? Are there membership fees? Are there income-generating activities? If some members regularly spend time on delegated tasks, are they compensated? If so, is the compensation by salary or by shares?

As mentioned, a social institution is something more than a body and a set of rules. In fact, it is akin to an internalised state of normality in doing things, including expectations and routine reflexes (in particular the sense of shared responsibility in managing natural resources), social norms (the habit of discussing decisions with various stakeholders, and accepting the value of different points of view) and the use of specific terms and concepts in everyday life (such as co-management, but also entitlements, equity, linking of benefits and responsibilities, etc.). In other words, agreeing on a NRM plan and setting up a pluralist board are crucial but not sufficient steps towards institutionalising a co-management regime. This will be achieved only when—besides and beyond rules— behaviours and ideas become spontaneously pluralist and respectful of a variety of entitlements and concerns in society.

3.7 Legitimising and publicising the co-management plans, agreements and organisations

The end of the negotiation process is marked by a meeting in which the results of the participatory process are made known to the relevant community or public. The meeting is usually held in the presence of authorities with more extensive powers than those who participated in the negotiations. The institutional actors review the common vision of the desired future, the components of a strategy designed to move from the present situation to the common vision, the co-management plans for the natural resources, the agreements set up for each component of the strategy and the organisations and rules developed to accompany everything through. For each agreement involving a NRM plan or any other major initiative or project, someone also describes the follow-up protocol (results anticipated, progress indicators, the responsible individuals and/or organisations, etc.).

This meeting is an excellent opportunity to acknowledge the work of the negotiators and institutional actors and, in general, to celebrate the new hope generated for the entire stakeholder community. At this meeting, the institutional actors can also publicly vow to respect and "collectively guarantee" the co-management plans and agreements, which are presented for all to see, for example by exhibiting copies.

It is important to notice that the co-management plans, agreements and organisations are here reconfirmed and celebrated, but not ritualised to render them sacrosanct, as it should be done for the common vision of the desired future agreed upon by all institutional actors. On the contrary, plans, agreements and organisations are to be monitored, evaluated and *modified* in an on-going way, according to their performance, results and eventual impacts.

Results of the negotiation phase

- A vision of the desired future produced together by all the concerned actors. The vision is legitimated by an appropriate socio-cultural ritual that renders it sacrosanct.

- An analysis of the situation/ issues/ problems at stake and a strategy to achieve the common vision, sub-divided into components with clear objectives.

- Negotiated co-management plans and agreements among the institutional actors on specific courses of action (objectives and activities) for each component of the strategy. The plans specify the sharing of functions, entitlements and responsibilities in natural resource management among the institutional actors at stake. The agreements deal with a variety of socio-economic issues related to the co-management plans, and are often

established to complement one another. Plans and agreements are collectively guaranteed by the partners in the process, and often have a contractual form.

- One or more CM organisations, with corresponding functions and rules, expressing the plurality of entitlements recognised in society and in charge of the activities and follow-up of the co-management plans and agreements.

- The co-management plans, agreements and organisations are publicised and made socially legitimate by some public event, but are not ritualised and, in fact, are expected to change with time responding to lessons learned by doing.

- Follow-up protocols to monitor and learn from the co-management plans and agreements (including indicators, methods, responsible organisations, a time schedule, etc.).

- A shared experience in participatory analysis, planning and decision-making for a variety of institutional actors concerned with natural resource management.

4. The learning-by-doing phase

Starting point of learning by doing

- Several institutional actors participated in the negotiation process.

- The institutional actors produced and ritualised a common vision of the desired future.

- The institutional actors also identified a strategy to achieve that vision, including key components and objectives for each component.

- For each strategic component, the institutional actors agreed upon a course of action, and produced relevant co-management plans and agreement(s).

- For each plan and each agreement, the institutional actors identified expected results and impacts, as well as indicators and procedures to monitor and evaluate them (follow-up protocol).

- The institutional actors agreed upon organisations and rules to implement and remain in charge of the co-management plans and agreements.

- The relevant communities are aware of the produced co-management plans, agreements, organisations and rules 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 co-management plans for the natural resources and the agreements that complement them as part of the same strategy are implemented. The organisations and rules agreed upon 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 the on-going progress.

Compliance with the plans, agreements and rules is essential to the effectiveness of the whole CM process. If some actors disobey 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, as well as by what means and what regular checks are they 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

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important to foresee in advance who will assist the parties to clarify entitlements and responsibilities and to mediate in the event of conflicts. In this sense, an important concept and principle to apply is the one of "accountability". But 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 informal and convivial manners. Flexibility and good human relations may go a long way in solving even complex and thorny controversies.

> *'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*

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 were prepared for the co-management plans and agreement to be implemented, and individuals were 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'* —
> *the regular recording and analysis of selected information on a given phenomenon or activity*

monitoring results, 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.

In order to learn-by-doing it is 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 by all institutional actors, are not introduced without careful analysis and authorisation.

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

Much learning takes place while the co-management plans and agreements are 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. And this should be in the sense of both negative impacts and positive influences or benefits accruing to them. These factors 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 having 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 those evaluations should be compared and analysed together. Various participatory methods can be used, including methods that may be already known by the institutional actors who participated so far, such as the SWOL analysis (see Annex 1).

> *'evaluation'* —
> *the measuring of progress with respect to some original objectives, assessing whether they have been attained and/or whether they are still pertinent*

In a participatory evaluation process, the institutional actors ask themselves whether the co-management 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.

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, co-management 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 forums to communicate and negotiate co-management plans and agreements;

- actors' ease of access to communication and negotiation forums (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 implementing co-management plans and agreements;

- with time, plans and agreements extended in both geographical scope and complexity;

- with time, the co-management plans, agreements and organisations progressively "institutionalised" in society.

Results of the learning-by-doing phase

- 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 on the results of the NRM plans and related agreements, as well as on the CM process, collected, analysed and made available as described in the follow-up protocol

- 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 the on-going monitoring and evaluation, as necessary

5. The co-management process: a summary view

a point of departure
- assessing the need for co-management and the process feasibility
- assessing the available human and financial resources
- establishing a Start-up Team

phase I: preparing for the partnership
- gathering information and tools (such as maps) on the main ecological and social issues at stake
- identifying in a preliminary way the NRM unit(s) and institutional actors at stake
- launching and maintaining a social communication campaign on the need for, the objectives and the expected process of co-management
- contacting the institutional actors, facilitating appraisal exercises and continuing with them the ecological, social and stakeholder analyses
- helping the institutional actors to organise and identify their own representatives, as necessary
- organising the first meeting of institutional actors and proposing a set of rules and procedures for the negotiation phase, including explicit equity considerations

phase II: negotiating plans and agreements
- agreeing on the negotiation rules and procedures
- developing a common vision of the desired future for the NRM unit(s) at stake
- ritualising the agreed common vision
- reviewing the current socio-ecological situation and trends, and agreeing upon a strategy towards the common vision
- negotiating specific co-management plans and agreements for each component of the strategy (this includes identifying what will be done by whom and with what means; mediating conflicts; clarifying zoning arrangement and the sharing of NRM functions, rights and responsibilities among stakeholders; agreeing on follow-up protocols; etc.).
- agreeing upon CM organisations and initiatives to institutionalise CM
- legitimising and publicising the co-management plans, agreements and organisations

phase III: learning by doing
- applying and implementing the co-management plans, agreements and organisations
- clarifying the entitlements and responsibilities of the institutional actors, as necessary
- collecting data and information on results and process, as specified in the follow up protocols
- identifying the main factors impacting upon natural resources and stakeholders; judiciously experimenting with innovations
- organising review meetings at regular intervals to evaluate results and lessons learned; modifying the co-management plans, agreements and organisations, as necessary

6. Lessons learned and tips for action

Lessons and tips for all phases and seasons

- Remember that social dynamics have their own rhythm and cannot be forced. Developing an effective and equitable co-management regime in most contexts is nothing less than a profound political and cultural revolution, which most of all needs *time*.

- Understand the cultural and traditional roots of the activities to be implemented and rely on them, possibly by developing a syncretic approach (e.g. *ad-hoc* fusion of traditional and modern NRM practices).

- Stress the *complementarity* of the capacities of different institutional actors, and of the roles they can play for the sound management of natural resources and socio-economic development.

- Identify and bring to the fore the benefits derived from the *ecological functions* performed by the natural environment (e.g. maintenance of local climate, forests keeping and slowly releasing water, regenerating soil, etc.), which may not be well known or appreciated by all. If recognised, such functions represent effective incentives for sustainable resource management.

- Recognise and highlight the value of *non-economic benefits* accruing to individuals involved in the participatory process (e.g., social standing and prestige, experience, personal contacts).

- Recognise and highlight the value of *economic benefits* potentially accruing to communities and individuals involved in the participatory process (e.g. via sustainable productive activities, Community Investment Funds, etc.)

- Disseminate information on the *positive process outcomes* to be derived from co-management and the negotiated plans and agreements (e.g. enhanced local authority and responsibility in NRM; enhanced sustainability of local environment; promotion of a more mature and responsible society; experience with democratic practices; etc.).

Lessons and tips for the preparatory phase

- Ensure clarity of purpose in the preparatory phase and methodological confidence and skills in the Start-up Team: people practice well only what they understand and feel comfortable with.

- Pay great attention to issues of language, in terms of both idioms used and coherence and cultural significance of messages conveyed. On the one hand, the people supposed to take a role in the CM process should be able to express themselves in their own idioms. This may introduce the need for translations fairly often in the process. On the other hand, the Start-up Team should be careful regarding concepts, words, the "name of the

process", titles, stories, examples, descriptions of starting point of the local situation, description of the common vision of the desired future and all sort messages in non-verbal language (e.g., attitudes, clothing, eating and drinking habits, transportation, housing, sitting and seating arrangements)

- Invest in social communication even before launching the process. Use all available traditional/ local media to promote discussion of the NRM situation and related socio-economic conditions; recruit local artists, broadcast radio interviews, promote special days at schools, invite elders and religious authorities to hold special discussions and sermons...

- Insist that all institutional actors hold internal discussions on their interests, concerns and entitlements, and that they all are well organised and prepared to express themselves in the negotiation meetings.

- Improve communication among the institutional actors. Facilitate informal direct contacts between individuals belonging to different groups and conveying different interests and concerns to the negotiation table (it may be enough to have to share transportation or housing facilities, or to eat together for a few days on the occasion of a workshop).

- Ask all the institutional actors to say which other actors ought to be invited to the negotiation meetings. Ask all institutional actors what, for them, constitutes a legitimate title to manage natural resources. Produce and discuss a list of "roots of entitlements" in the local context.

- Always maintain a net distinction between the Start-up Team and political parties.

Lessons and tips for the central phase of negotiation

- The Start-up Team has to be as transparent as possible (e.g. who are their members and why, what resource allocation they have, etc.)

- Circulate preliminary reports (e.g. a short report on the NRM context) prior to the meetings, but with a note stating that those are not final, on the contrary, everyone can discuss them, correct them and add their contribution.

- Reassure everyone that no "solution" will be imposed on any of the institutional actors and that the process will take place at a comfortable pace.

- Professional facilitators? Yes, but also as trainers of local people, who will then have a chance to act as facilitators in sub-committees, working groups, etc.

- Consider carefully the desirability of observers at negotiation meetings: in some cases they have a powerful negative influence on the process (some negotiators may take a populist stand for the sake of the audience). In other cases, closed meetings cause the excluded to distrust the process. The decision on whether the meetings should be open or closed needs to be carefully evaluated vis-à-vis the specific context. In fact, the decision

to allow close meetings should be taken by the institutional actors themselves, rather than by their representatives.

- Make sure that the representatives of the institutional actors have a solid mandate and are not just self-appointed. Encourage them to consult with the groups they represent whenever necessary, and give them enough time to do so.

- Use as many visual aids as possible: maps, videos, photos, etc. Make the discussion as concrete as possible. Conduct field trips during negotiations. Give plenty of opportunities and time for the local communities to show what for them constitutes a problem, and to express their views on solutions.

- Give all the institutional actors enough time to think and to voice their ideas; problems need to come out and people need to be listened to! As often as possible, ask questions, to stimulate people to think and express themselves.

- When negotiating access to resources, use imaginative ways of promoting effective compromises (e.g. use based on zoning, limited permits, leasing, assured security of access even in the absence of a cadastre, detailed conditions of use, etc.).

- Appoint sub-committees and working groups to deal with specific issues.

- Ask the institutional actors several times, even on a one-to-one basis, whether all main obstacles and problems have been dealt with.

- Probe in depth the feasibility of agreed activities and the availability of means to implement them.

- Involve the authorities *personally*, via meetings, public events, etc.

- If one of the institutional actors exerts pressure on the others in the form of corruption, coercion or violence, the negotiation is no longer valid. The situation may be resolved with higher authorities taking a stand or with an internal dissociation within the group exerting the pressure (possibly not all the members of that group agree with certain methods).

Lessons and tips for learning by doing

- Find someone to be the "champion" of every major task or area of responsibility

- Promote voluntary contributions and offer plenty of social gratification in return.

- Make sure that *all* those working for the CM initiative are recognised and appreciated.

- Remember that any important NR management activity and/ or change therein should be closely monitored.

- Learn from mistakes, transform them into sources of knowledge, tell "stories" of what has been learned along the way.

- If community animators are to be employed, make sure that the communities themselves chose them and adequately support and reward them for their front-line work. This should be done through community-based funding mechanisms and not direct pay from outsiders. Community-based funding strengthens the animators' allegiance to their own communities, while direct pay may even infringe upon it.

- Maintain a network of relations with colleagues working in other locations and countries, yet facing similar problems (as in the case of the Co-management Network in the Congo Basin).

Annex 1. Participatory methods and tools

(modified from Borrini-Feyerabend, 1997 and Barton et al., 1998)

Street or village theatre (and film shows)

Street or village theatre is a method of social communication that promotes public information and discussion of a specific issue or problem. It basically prompts the attention and interest of people by telling a story, and needs the contribution of local storytellers, theatre groups, clowns, dancers and/or puppet artists. The show usually capitalises on attractive imagery, music and humour to raise people's awareness of an issue affecting them. The audience can be encouraged to join in and play a part in the show. The show can be filmed or recorded for radio broadcasting, and thus made available to a wider audience.

At times, a live theatre piece cannot be produced. In those cases, consider substituting it with a film describing the life of local people, and how the issues and problems at stake affect them.

The show (or film) should be entertaining and stimulate people to think, participate and discuss among themselves. It should strive to illustrate several points of view on a given subject and avoid passing-on a "pre-cooked message". When humour is used, it should not be at the expenses of one institutional actor in particular, as this could compromise the chances of dialogue and communication in co-management processes.

how is it done?

With the Start-up Team, identify a co-management problem or issue that needs local attention and action.

Meet with local entertainers to discuss how the issue or problem could be illustrated by a story or told through a play, dance or some other local form of entertainment. If none of this is feasible, consider a film.

Support the production of a show (or a film), and have it tested with a small local audience for interest and effectiveness.

Present the show at local gatherings, such as a festival or market day. Some presentations can also be taken to schools or to the streets.   At the end of the show (or film), encourage the audience to discuss among themselves about the main issue or problem. Let them know that there exist some groups and initiatives willing to do something about it, and that they are welcome to offer their advice and contributions. Say specifically who is doing what and how people can contribute.

strengths and weaknesses

+ an entertaining and non–threatening way of promoting the discussion of an issue/ problem
+ based on local customs, traditions and culture and therefore readily understood and accepted
+ does not usually require large capital investment
+ does not usually depend on technology that can break down
+ can be highly credible and persuasive where folk media has a strong tradition

– requires skilful local artists
– may be difficult to organize and requires a close working relationship with local media artists

Community radio programmes

Community radio programmes are excellent means of social communication, to inform people and stimulate their discussion and debate. They can be produced at the local, district or regional level. The content of the programmes may vary from formal documentaries to discussion forums, from plays and storytelling to talk shows where people phone-in and express their views on the air.

Effective programmes are made by mobile radio production teams, who interact with a range of people and record a variety of material in the local language and in various locations. Increasingly, even in the remotest corners of the world one finds community tele-centres, equipped with phones, word processors, e-mails and access to Internet. Such centres can organise themselves also for local radio programming and broadcasting (experimentation is currently under way to broadcast directly from the Internet to local low-power radios). Decision-makers and politicians usually like to participate in radio programmes, and they can be directly confronted with the issues and problems raised by the public. This may promote some effective action or at least some increased accountability of the politicians.

how is it done?

Identify a radio station willing to host a programme on the subject of interest and establish an agreement with it, possibly on a regular basis and at a popular listening time. Alternatively, set up a new (even low-power) emitter in the local area. Have some individuals trained in the techniques of preparing a radio programme, including interviewing. If a documentary approach is to be used, prepare a story line and, as much as possible, involve local people in designing the programme.

For interviewing, select local people who can present a range of experiences and perspectives and express themselves clearly. For discussion programmes, make sure that a variety of local groups and points of view are represented.

Edit the tapes so that they offer a coherent picture of the issues confronting the community and the co-management initiative. Offer plenty of questions to stimulate the audience to think.

strengths and weaknesses

+ can inform many people over a wide area within a short time
+ can strengthen the sense of community and of shared experience
+ if aired on a regular basis, radio programmes can be invaluable as a forum for discussion around the co-management initiative
+ tapes can be copied and distributed to organizations and schools to use as a focus for group discussion; they can also be distributed to local transport vehicles to generate on-the-road discussions

− relies on people having access to radios or to telephones (for talk shows)
− cost and time involved in preparing documentary programmes are substantial
− use of recording and editing equipment requires technical knowledge
− can only be used for raising awareness, not as a substitute for face-to-face discussions with the affected community and other stakeholders.

Participatory Mapping

In participatory mapping a group of people collectively draws a map of a community, a territory or an area at stake. The map shows the geographical distribution of environmental, demographic, social and economic features as seen by the participants in the exercise. Land uses, borders and key resources and problems can be highlighted. The participants draw the map on a flipchart or on the ground, plotting features with symbols that are understood and accepted by all members of the group, regardless of literacy (see the picture on the cover of this book). Purchased maps, aerial photographs or basic drawings on paper or on the ground can also be used as a basis for the exercise. Participatory mapping is useful for providing an overview ('snapshot') of the local situation. It can also serve as a good starting point for environmental and social assessment.

how is it done?

Discuss the purpose of the exercise with the participants. Agree on the subject and limits (borders) of the map and on the graphic symbols to be used; participants choose their own symbols.

Ask a participant to be the main responsible for drawing or plotting symbols according to the suggestions of the group, but leave everyone free to participate.

In fact, promote participation by posing questions to several individuals; allow the group to discuss different opinions and views.

Once the map is finalized, ask participants to interpret the overall picture; if appropriate, suggest that they locate on the map the main problems in the area, as they see them. Ask also to locate on the map available resources, and explain what could be done to solve the problems.

The map is community property; leave the original in the community and make copies of it if other uses are foreseen.

strengths and weaknesses

+ mapping and the associated discussions quickly provide a broad overview of the situation.
+ they encourage interactive communication
+ they help people to see links, patterns and inter-relationships in their territory
+ individuals who are illiterate can also participate

− mapping must be complemented by information generated by other participatory assessment tools to avoid subjectivity and superficiality
− some cultures may have difficulties in understanding graphic representations

Historical Mapping

Historical mapping uses a series of participatory mapping exercises to portray the demographic, social and natural resources situation of a community or territory at different moments of its history. Usually, three maps are drawn, showing the situation as it existed one generation ago, at the present time, and as it is expected after one generation's time in the future. Demographic information can be plotted as household symbols or circles to represent 10 or 100 people. Other symbols can be used for natural resources, types of cultivations, infrastructures, social services, etc.

Historical mapping can be extremely helpful to introduce the time dimension in participatory appraisal and planning. It can provide visual evidence of changes that have occurred and expected trends. In this way people can rather easily identify determinants of environmental and socio-economic problems and options for moving towards their desired future.

how is it done?

A map of the current demographic, socio-economic and environmental situation is drawn with participants.

With the help of elderly community members, the same exercise is repeated to show the situation as it was approximately twenty years ago.

The current and past maps are then compared, often with a brainstorming, to collectively identify major changes and their root causes.

Based on the list of changes and causes, a prospective map can be drawn by the participants to show their expectations of the situation that will exist in the community in 20–30 years from now, if all current trends are maintained.

The future map can be analysed to explore differences between what is projected and what a desirable future would be. The discussion can progress to identify potential ways to address the identified problems.

strengths and weaknesses

+ the technique can be very appropriate to summarise the results of a comprehensive participatory appraisal
+ it may increase participants' understanding that most positive and negative changes in environments and development are shaped by historical, people-related actions
+ it can help to identify mid- or long-term solutions to the problems affecting the community

– the exercise is long and complex; three sessions with the group may be needed to get through the whole sequence of mapping and discussion
– sensitive issues from the past may be raised, including conflicts within the community and between the community and outsiders
– the analysis is likely to identify some underlying causes of problems that are beyond community control; this could generate some discouragement and frustration

Transect walks and diagrams

A way to gain hands-on experience in a community is to take an observational walk, i.e., a walk paying attention to people, activities, resources, environmental features, etc. Observational walks may be taken in a meandering way, following a particular feature of the landscape or the interests of the observer(s). The walks can also be structured as a transect, i.e., a straight line cutting across the terrain in a given direction. Walks of these kinds help to verify the information provided on maps, both through direct observation and in discussions with people met along the way. Ideally the walk is organized for a small group, so as to maximize the opportunities for interactions.

There are several types of transects, among which two broad categories are social and environmental transects. The social category usually concentrates on number and distribution of households, housing types, infrastructures, social services, administrative boundaries, economic activities, literacy levels, work skills, etc. It may also focus on one specific aspect of local life, such as public health, and thus picture incidence of particular diseases, health risk factors, etc. The environmental category focuses on natural resources and land-use features (such as forests, ranges, barren land and erosion phenomena, streams, bodies of water, extension of cultivated land, types of soil and crops). A typical transect includes a combination of social and land-use information.

how is it done?

The Start-up Team agrees with the relevant interest group who will take part in the transect walk and discusses with them the purpose of the exercise. During the walk the participants take notes about the relevant features observed, seek clarifications from people encountered along the way and discuss with them problems and opportunities in informal and convivial ways.

After the walk, the Team and the participants discuss the collected notes and draw together a transect diagram. Under the diagram, related to specific sections of the territory or area at stake, they note environmental and social features, as well as problems and opportunities specific of each sector/ area.

strengths and weaknesses

+ transect walks are a highly participatory and relaxed technique
+ they enhance local knowledge and can be very effectively used in low-literacy communities
+ they are very useful in validating findings of participatory mapping exercises
+ the diagrams illustrate quite concisely a variety of local features and issues

– the walks and the drawing and analysis of the transects take time
– drawing good transect diagrams requires some graphic skills

Trend analysis

Trend analysis is used as part of an individual or group interview and consists of an in-depth discussion of specific issues or phenomena (e.g. tree cover on the hills, fish productivity in the lake, jobs in the region). Has the phenomenon evolved with time? How is it likely to evolve in the future? Is the evolution desirable? If not, what could be done about it? For large areas, such as a region or country, trend-related data are often available, but for small areas, such as a village, it is unlikely that such data exists, especially data covering a long period of time. Thus, the information to show a pattern of change needs to be obtained locally. The main purpose of trend analysis is to assess changes over time, and to raise the awareness of people about phenomena that accumulate slowly (e.g. soil degradation, population dynamics).

how is it done?

The participants in the exercise select the topic/subject to assess and identify one or more accurate indicators of the subject. For instance, if the subject is community well-being the facilitator could ask the participants what constitutes a good life for them. They may list household income, transport facilities, numbers of livestock, access to services such as education and health care, etc. If the subject is the management of the watershed they may list: water flow in the valley, water pollution, vegetation cover, instances of serious gully erosion, etc.

The facilitator then asks the participants to say where they think they are now in relation to each indicator, where they were 5-10-20 years ago, where they think they will be in 5-10-20 years. Together with them, draw a graph of the trend for each indicator, or use some symbolic graph, such as subsequent piles of little stones on the ground (more stones means that the indicator goes up). Once the trends are clear, the facilitator asks the participants to discuss them ("What is happening? Why? Is that good or bad? Good for whom and bad for whom? Should something be done about it? What? What would be happening then?").

strengths and weaknesses

+ creates an awareness of potentially negative and positive trends in the community, including the environmental impacts of activities
+ group interaction enriches the quality and quantity of information provided
+ different points of view existing in the community can surface and be compared
+ allows a comparison of trends of different indicators and, possibly, an estimate of the relationships between them
+ cheap to use and can be adapted to the materials available (e.g. the graph can be drawn on the ground using leaves or stones as symbols and numbers)

– relies on memory and subjective judgement, although group interaction can control that to some extent
– it is quite a complex tool and needs the active participation of local people

Brainstorming

Brainstorming is a basic idea-gathering technique employed in group exercises. It is based on a freewheeling offering of ideas started by an open-ended and somehow provocative question put forward by the facilitator. Opening statements and questions should be general and non-leading, i.e., should not stress or overemphasize a particular point of view that can bias the participants.

It should be clear that brainstorming is a free and non-committal way of exploring views and options, i.e., no one commits oneself to something by suggesting as a potential solution or issue to explore. Brainstorming can elicit multiple ideas on a given issue/ problem, and the group discussion that usually follows can help group members explore and compare a variety of possible solutions.

how is it done?

The issue to be discussed is introduced by the facilitator; the key question is posed aloud and written on the blackboard or on a flipchart.

Participants are asked to provide short answers, comments or ideas (no speeches at this stage!).

An important point to stress at the beginning is that "all ideas are good ideas"; if some people do not agree with someone else's point, they should give what they think is a better idea. The facilitator should accept only additional contributions during the brainstorming, not disagreements or arguments, which should be deferred to the discussion afterwards. The facilitator should also encourage fresh ideas rather than the repetitions of earlier items.

Each participant is allowed to express his/her view. Over-talkative participants need to be quieted, and silent participants can be explicitly asked for their views and ideas.

The facilitator picks the basic point out of participant statements and ensures that it is written (or portrayed with a picture) on the blackboard or flipchart; appropriateness of the summary is checked with the concerned participants.

The brainstorming exercise should be kept relatively short: 15–30 minutes is usually sufficient to obtain most of the ideas on a specific topic without tiring the participants.

Review the results with the participant group. Remove duplicated items and cluster groups of similar ideas. Highlight differences of opinion and discuss those until a list of clearly described ideas is achieved. Record (or summarise) the results of the brainstorming and keep them for future reference.

strengths and weaknesses

+ a properly conducted brainstorming facilitates participation of all group members in the idea-building process
+ a large number of ideas and solutions can be generated quickly
+ it is a good introduction for more structured and focused exercises

– experience in dealing with group dynamics and good mediation and summarising skills are needed for the facilitator to keep the discussion on track
– conflicts and uneasiness within the group may limit the brainstorming results

Structured brainstorming

Structured brainstorming (also called Nominal Group Technique or NGT) is a tool to think as a group. The exercise needs a skilful facilitator, who begins the meeting by posing a clear question to the group (e.g. "what are the key obstacles in front of us in our path towards the desired future?"). In the normal brainstorming people reply to the question as soon as something comes to their mind. In a structured brainstorming everyone is given time to think and to note down his or her main replies on cards. The cards are then presented, discussed and grouped to represent the collective reflection of the participants.

how is it done?

The facilitator presents the participants with a clear question upon which to reflect. The question is written on a flip chart or board for everyone to see.

Each participant has some cards (half the size of a letter sheet is usually good; coloured paper adds to the visual appeal) and felt pens. The participants write down the answers/ issues/ actions they think are relevant to answer the question. These should be written as a simple sentence or few words (ask them to write large, all-caps letters, to be seen from afar, possibly not more than five words per card). The participants can use as many cards as they wish.

Each participant comes to the front of the group, and reads out and explains what he/she has recorded on the card(s). Each card is then pinned or taped on the wall. The first person spreads her/his cards out. Subsequent people are asked to add their cards close to the ones most similar to theirs or, when a totally new item is suggested, to start another cluster on the wall.

When all the people have presented their ideas and placed them on the wall, there will be various clusters of items: some with many cards, some with only one or two. The facilitator then asks the participants to consider whether they need to rearrange the cards among the clusters; if they do, they should discuss the moves and agree as a group. The participants may also decide to remove some cards or cluster(s). (Even those who originally proposed the items may change their mind once they have heard other ideas).

The facilitator agrees with the participants a title or a paragraph to summarize all the aspects and ideas noted in each cluster.

If a rank order is needed among the clusters, follow up with a ranking exercise. More commonly, the large group of participants is broken down into smaller groups, each to discuss in depth one of the various clusters identified. The smaller groups then report on their findings, and a general discussion allows the exercise to be concluded.

strengths and weaknesses

+ the exercise helps participants group their individual opinions as a collective product
+ everyone is asked and expected to contribute and the technique promotes paying great attention to the ideas of others
+ the technique is constructive and adds an important visual element to issues and ideas for action
+ a record of the key ideas is produced during the technique (the cards, the summary statements and the reports from small groups)

− literacy is needed to participate in the exercise
− a skilful facilitator is essential, as it is a balanced participation of stakeholders, to avoid the monopolisation of ideas

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Guided visioning

Guided visioning is an imaginary journey into the future. It is done with a group of people willing to develop together a detailed image of a desirable future for a given community, territory or set of natural resources. The exercise encourages the participants to think freely and boldly, unconstrained by what is in place today or by all the obstacles and problems that may present themselves in the face of change. In most planning exercises, a groups may miss a vision of what "could be" because the discussion remains focused on immediate interests and existing constraints. Engaging in a deliberate exercise of imagining a world "fit for our children" helps people overcoming a focus on personal and short-term interests and the apathy that may derive from existing stumbling blocks. Those blocks may be there, but they will never be overcome without some bold and far-reaching inspiration.

The facilitator should stress that people may indeed come up with some "wishful thinking" and that this is exactly what the exercise is intended to produce: a vision of the future which may or may not be entirely attainable in the lifetime of the participants, but may be approached, and in all cases is desirable for future generations. The facilitator should also mention that more concrete exercises will be later developed, which, in contrast, will focus only on attainable and measurable targets.

how is it done?

In a comfortable setting (not a town hall; possibly sitting under a tree), participants are asked to relax, and close their eyes. They are told they are going on a journey into the future, perhaps 20 or 30 years from now, when their "ideal" community (or territory, etc.) exists. Make sure that people refer to the same area (clarify the boundaries). They should visualise the absolutely perfect and ideal community (or territory, etc.) they wish their children to inherit and live in.

The participants go through the exercise individually, without speaking, while the facilitator accompanies them possibly by reading a prepared text describing a walk through the community or territory at stake and/ or asking open questions on what specific components look like. The participants are not supposed to answer the questions aloud, but just visualise an answer for themselves. Typical questions might be about their homes, the forest, the coastal area, the agricultural fields, the river, the village main square. "What do they look like? Do you see people around? What are they doing?" The facilitator never suggests what the participants are supposed to see. He/she merely sets the stage for the participants to visualize the features in their ideal environment. Questions are posed at suitable intervals, so that people have time to visualise features in their mind.

When the walk is complete, the participants are asked to open their eyes, stretch and reflect on all they have seen and write down the first ten images they recall from their imaginary walk.

The facilitator then goes around the group asking each participant to describe one of the images they have written down. Each is recorded on a flip chart or board. This continues until all the images are recorded.

The facilitator summarizes the images into a vision statement for the participants to amend, add to, etc. until a consensus is reached. He/she may also ask a participant to start mapping the ideal community or territory on a flip chart on the basis of the images provided by the various participants; other participants add to this picture and/or draw other pictures.

The pictures may then be discussed and subdivided into categories (e.g. working environment, housing, protected natural areas). These categories may help identifying the key components and objectives of a strategy towards the common vision of the desired future.

strengths and weaknesses

+ an effective tool for communities wishing to develop a shared vision of their collective future
+ puts present differences in perspective, diffuses conflicts and encourages participants to see beyond their pressing concerns
+ is an interactive and non-confrontational process
+ builds cooperative alliances where communities can work together towards common objectives
+ it is fun

– conflicts may emerge if people's images are very diverse
– a great deal relies on the quality of facilitation, the capacity to elicit a rich vision and the meeting's atmosphere (relaxed but still serious and positive)

Problem-causes-effects trees

Building a tree of causes and effects is a simple and widely comprehensible visual technique to analyse a problem and orient a group toward actions based on that analysis. The technique starts with a consensus on the problem to investigate. A facilitator for this exercise will need to remember that definitions and linkages of problems-causes-and-effects may be interpreted in several ways. The "problem" for a development professional (e.g., soil erosion) could be a "cause" for a community member (e.g., of the problem of declining yields) and an "effect" for a scientific researcher (e.g., of the problem of deforestation and cultivation on steep slopes). This method is suited also for non-literate people, although special attention to graphic symbols may be needed to make the exercise meaningful to them.

how is it done?

Once the participants have clarified which problem they wish to explore, the facilitator draws a large sketch of a tree on a flipchart, showing its trunk, roots and branches. The issue or problem is then written (or represented graphically, if participants are non-literate) on a card, and the card is pinned on the trunk. The facilitator explains that the roots represent the causes of the problem and the branches its consequences. A brainstorming is then carried out among the participants to list their perceptions about the causes of the problem and its consequences. These are also written or graphically represented on cards and placed at the roots and at the tips of the branches of the tree.

During the exercise, a re-negotiation may take place within the group about what is – really – the problem at stake. If this happens, the cards can be changed or moved around by the facilitator. The facilitator may help by asking questions to deepen the analysis and by keeping the discussion centred around concerns, topics and language well understood by all the participants.

Once the diagram is completed, the discussion can move on to explore possible 'solutions' to deal with the causes and consequences of the problem. The purpose is to raise participant awareness that different levels of solutions can be identified to deal with any single problem. This can also help participants to understand that the final decision about what to do may involve a trade-off between higher effectiveness (which usually comes from attacking the very root causes of the problem) and easier or faster generation of specific results (which may alleviate or control some effects and consequences of the problem on daily life, even if it does not tackle the problem itself). People may also start proposing concrete *actions* to achieve the solutions. Those could be written on cards of different colours and also pinned on the diagrams.

strengths and weaknesses

+ the method has a strong visual component, it can be effective also with non-literate people
+ the discussion of possible solutions may help sensitise participants to the fact that most problem are quite complex and can be solved only through a combination of approaches and the collaboration of various social actors

- the method can degenerate into a theoretical discussion of "what constitutes a problem?"
- the method may make people painfully aware of the complexity of issues, and discourage them to act to solve them

Analysis of strengths, weaknesses, opportunities and limitations (SWOL)

SWOL analysis is a powerful tool for group assessment of an issue of concern, in particular interventions or services. It is based on a structured brainstorming aimed at eliciting group perceptions of the positive factors (strengths), the negative factors (weaknesses), the possible improvements (opportunities) and the constraints (limitations) related to the issue.
SWOL analysis is especially useful for evaluating activities carried out in the community. It can be focused on services provided by external agencies, as well as used for self-evaluation of the interest group's own performance.

how is it done?

A four-column matrix is drafted on the blackboard or on a flipchart and the four evaluation categories are explained to participants. It is helpful to phrase the four categories as key questions, to which participants can respond; the issue of concern is written on top of the matrix (if it is the only one to be considered), or on the side, if several items will be SWOL-analysed.
The facilitator starts the brainstorming by asking the group a key question about strengths; responses from the group are jotted down on the relevant column of the matrix. When all points of strength are represented, the group also identifies weaknesses, opportunities and limitations.
At times, participants have different opinions or express contradictory statements. In such cases, the facilitator can ask further questions to deepen the arguments, but a consensus among the group members is not necessary. Contrasting views can be listed on the same column in the matrix. At times, however, it is found out that in order to assess a certain point, some information needs to be gathered. In that case the exercise may be continued on a different day.

strengths and weaknesses

+ the technique stresses consideration of different sides (positive and negative) of the issues. It therefore helps to set the basis for negotiations and trade-offs and promotes understanding of the views of others
+ SWOL analysis is a good means to discuss an issue in detail within a group and to prepare the group to discuss with outsiders
+ SWOL analysis can promote group creativeness. It helps to link perceptions of things as they are with realistic expectations about how things could be
+ "strengths" and "weaknesses" tend to be descriptive and easy for respondents to identify

– "opportunities" and "limitations" (i.e., threats, constraints or barriers) are more analytical concepts and may be hard to elicit
– sensitive topics and differences of opinion may arise during the discussion.
– some group members may attempt to dominate the discussion
– the facilitator needs good synthesising skills

Annex 2. Example of the "common vision of the desired future" of a rural community

The following is a summary of the personal visions of a variety of community residents and stakeholders, as it could be written by a process facilitator. The description is in the present tense, but looks at 15-25 years from now. Notice that the description is ambitious and positive and it has *not* been "kept low" because of present-day socio-economic constraints. It also contains many visual elements.

Mbuya, twenty years from now, is a proud and rich community, a place where people have found a way to work for the common good.

Families find a good income, health care and schools for their children. The elderly lead a dignified life and are respected by everyone. The young people prefer to stay than to migrate away. Women have steadily increased their social standing, and many now hold positions of prestige and responsibility in the community, such as heading businesses and public committees.

In Mbuya, people live and work in peace. There is hardly any crime. When outsiders pose a danger, they are quickly identified and rendered harmless. You always see a lot of people around, young and old, and the atmosphere is busy and pleasant. There is a regular-size football field, very much used by the local youth. In the weekend people enjoy themselves with music and dancing until late at night.

The houses have good roofs. Many are freshly painted and have gardens with flowers. There is a special parking area for lorries, with resting and restaurant facilities for the drivers. In town, people move around mostly by bicycle and taxi motorbike. There are lots of shops and small restaurants everywhere, and plenty of posters announcing events and gatherings. Seemingly, Mbuya is rich in local associations and sport clubs.

In the heart of town, roads are lined with trees. There are two squares: a larger one, extremely lively at market days, and a smaller one, a pleasant space where public ceremonies and festivities are usually held. You can spot the building of the public administration, several churches and mosques, private and state clinics and three schools.

Mbuya's cultural heritage is well appreciated and attracts national and even international tourists, who like participating in local ceremonies and festivities. Local music, songs and dances are renowned. Mbuya craftspeople take part in national exhibitions with woodcarvings, bamboo musical instruments and hand-woven silk textiles.

Many young people from Mbuya have access to higher-level education in the capital or in other main cities, but most of them come back to work in their native town. Some of them have established a community tele-center, with international telephone, word processing, access to Internet and a lively community radio.

The traditional sacred forest has remained unchanged over hundreds of years, and provides refuge for a variety of animals and plants that the people– elderly and young alike– know well. Timber, poles, vines, medicinal plants, silk cocoons and honey are extracted from the non-sacred forests. People hunt wild animals in the occasion of traditional ceremonies. Most of the flat land is used for agriculture and a combination of traditional and modern technologies ensures that the farmers reap good harvests of rice, sugarcane, fruits and vegetables.

(continues…)

> (vision continues…)
>
> There are local enterprises for processing and canning the produce. The community is connected to the regional capital by a tarmac road, and you can find Mbuya's products sold there, as well as in other places in the country. Mbuya's commercial enterprises are lively, and known for their capacity to deliver and for keeping to their word. Everyone in Mbuya has access to electricity and clean tap water. Drainage and sanitation facilities are working well, and rubbish is regularly collected and taken to disposal. The administrative authorities are proud of having provided these services, which promote public health and sustain the local economy.
> The donor agency that supported the development of the community, twenty years ago, has long moved operations to another area. The agency's staff come to visit as welcome guests during local festivities.

The vision above may have been developed by a group of stakeholders including, for instance, the local government administrators, the Council of the Elders, representatives of the farmers, the woodcutters, the shopkeepers, the artisans, the youth, the health department, the forestry department, the agricultural extension, the Mbuya's Women Association, a local NGO concerned with protection of nature, a local NGO concerned with children's health, the main donor agency in the area, representatives of the business regularly coming to Mbuya during market days, religious authorities, etc.

The vision above can be transformed into a broad social contract, for instance a charter of principles including a variety of commitments, such as:

…all institutional actors will co-operate to achieve a healthy and productive environment, in which all citizens can live in safety…
…the Council of Elders will strive to maintain the local traditions alive and respected…
…the Mbuya's community will use the forest resources (including precious timber, medicinal plants and game) in a sustainable manner…
…the peasant households will agree on a fair share of water resources and on common activities for protecting soil and preventing flooding…
…the local administration will sustain local development (transport infrastructures, market connections, training)…
…the health agency, local NGOs and administration will work together to set up a healthy living and working environment in the community..
… the Mbuya's Women Association will help women to develop businesses and take on a variety of social responsibilities…
…the forestry department will help local residents protect their sacred forest from outside exploiters …
…the business community will invest locally to create food processing industries, and will offer jobs to local people…
…the donor agency will facilitate the negotiation of co-management plans and agreements and support the establishment of a Community Investment Fund…

Annex 3. Example of a strategy (components and objectives) to achieve the common vision

To achieve the common, long-term vision identified in Mbuya, the stakeholders need to agree on a strategy. Below is a possible example, subdivided in a number of components (action areas). For each component some broad objectives are listed, as well as some hints on how those objectives could be achieved. In order to take action, detailed natural resource management plans and complementary socio-economic agreements will later need to be developed.

strategic component 1: governance

➢ engage everyone for the development of the community (maintain a general discussion/ negotiation forum on the problems and opportunities in Mbuya, open to all);
➢ prevent and mediate the conflicts that might arise during the implementation of the strategy (set up a committee of wise men and women, old and young, to act as advisors, mediators and arbiters)
➢ revitalise the traditional rules for the protection of the sacred forest and for forest management in general, including game hunting (engage and strengthen the Council of Elders);
➢ improve personal and material safety (have regular planning meetings between the administration and the Council of Elders; set up neighbourhood mutual help groups).

strategic component 2: managing natural resources under communal property

➢ strictly protect and preserve the sacred forest according to tradition, prevent there any timber exploitation or game and plant extraction (follow the rules proclaimed by the Council of Elders; have the forestry department declare a community protected area; set up local forest guards);
➢ manage the non-sacred forests under communal property for the sustainable benefit of the whole community (make sure that user associations regulate game hunting, monitor medicinal plants, maintain original variety of trees, exploit non-timber products, strictly protect the trees that host and feed the silk worms, etc.);
➢ manage water equitably and wisely (farmers groups to establish water sharing rules).

strategic component 3: managing household-owned natural resources

➢ secure the access to cultivable land (set up a legal cadastre or a *de facto* preliminary cadastre);
➢ prevent destructive flooding (farmer groups to clarify the local water dynamics and build terraces, channels and water-retaining structures to prevent soil erosion and destructive flooding of the fields);
➢ prevent the excessive and damaging use of pesticides (farmer groups to share knowledge on cultivation methods, seed varieties, biological control of pests).

strategic component 4: the local economy

➢ sustain local productive enterprises (set up a Community Investment Fund with the initial help of the donor agency, also in partnership with government agencies; establish a local committee in charge, have women strongly represented in the committee);
➢ promote local agriculture (via farmers' collective buying and selling of produce; administrators' help to sell local produce in the national market);
➢ promote local industries (via improved transport infrastructure, local tax incentives);
➢ revitalise traditional crafts with important commercial potential (such as hand-weaving of silk, bamboo musical instruments);
➢ assure that the phone connection with the regional and national capital is dependable and efficient (cooperation between local administration and national phone company).

strategic component 5: health and society

➢ improve public health (via a system to improve and regularly monitor water quality, provision of tap water first at collective points and then in all the homes, vaccination campaigns, public and private sanitation facilities, regular collection and disposal of rubbish, community groups for specific initiatives, local epidemiological studies, road-accident prevention initiatives);
➢ improve the social standing of women in the community (provide training for women in a variety of skills, including commercial and administrative skills; engage women in social responsibilities);
➢ dedicate an area of communal land to youth activities and sports, including a regular-size football field (cooperation among the local administration, sport clubs and local youth);
➢ set up special support services for newly arrived immigrants (cooperation between the Council of Elders and the local administration);
➢ set up a service to promote youth employment, and a service to assist the elderly (cooperation between local administration and NGOs).

strategic component 6: cultural heritage

➢ revitalise the traditional ceremonies and festivals (engage and strengthen the Council of Elders);
➢ engage children in activities that value and preserve local culture and traditions (improve pre-school and primary education programmes, include meetings with the Council of Elders and the environmental NGO about the value of the sacred forest for the whole community);
➢ establish an incentive programme for local artists and craftspeople (collaboration between the administration and local associations);
➢ improve the town's general appearance (up-keeping public places and buildings, running effective clean-ups after market days, providing incentives to improvements of private houses).

strategic component 7: public infrastructure

➢ improve and cover with tarmac the road connecting Mbuya to the regional capital;
➢ build and maintain water supply facilities to serve all the population;
➢ establish a sanitation scheme for the community, including effective drainage facilities.

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