Module 1: Introduction: this resource kit and how to use it

Module aims

This module will help you understand:

- Why this kit was produced, how it is organised and how you as a facilitator can make use of it.

- The broad process involved in carrying out a participatory resource management program.

- The reasons for using a participatory approach to natural resource management in the Pacific.

Topics

This module includes the following topics:

1.1 Participatory natural resource management in the Pacific and the role of this resource kit

1.2 The process of participatory natural resource management

1.3 Issues in project design

Topic 1.1: Participatory natural resource management in the Pacific Islands and the role of this resource kit

Addressing unsustainable resource use and environmental degradation is a central challenge for people of the Pacific. Many programs, past and present, have grappled with such issues as nature conservation, climate change, sustainable use of marine and land based resources, and waste management. Some crucial lessons have been emerged from this recent history. Firstly, natural resource management (NRM) programs in the Pacific Islands (and elsewhere) generally have a much greater chance of success if they engage and work closely with people and groups that have a strong stake in the resources (Whyte, 2002, Baines et al., 2002, see Case 1). Secondly, as well as engaging stakeholders, we need to also base our interventions on a sound understanding of the causes of resource management problems, and their relationship to key social, cultural and economic conditions (Hunnam, 2002, Lal and Keen, 2002). Without these two foundations, we are less likely to achieve lasting and equitable change towards sustainable development.

Case 1: Why participatory resource management?

The South Pacific Biodiversity Conservation Program in the 1990s is one example of a program that tried to apply a participatory approach to natural resource management, based on the idea that efforts to protect resources from degradation in the Pacific and many other parts of the world are often ineffective and inequitable without the involvement and willingness of local people. The need to engage local stakeholders in resource management were seen as particularly important in the Pacific where:

- Local people often depend on natural resources for their livelihoods.

- Local communities own land under customary systems of tenure, and this is recognised by governments.

- There are many examples of functioning customary rules and bodies that manage people's access to and use of natural resources.

(Source: Read, 2002)

This resource kit
This resource kit contains a collection of methods and resources to help you work with stakeholders to learn about NRM problems and plan for change.

Who is this kit for?
This resource kit is intended to support people working on participatory natural resource management programs, whether you are:
- A project manager who is overseeing project planning, doing actual facilitation work with stakeholders (e.g. running meetings and workshops), or coordinating facilitation work by other project staff and supporting them in briefing or training sessions.
- A person who is actively involved in facilitating discussions with stakeholders in a project (a 'facilitator').

- Involved specifically in training project staff for a participatory NRM project.

In this resource kit, we refer to 'project managers and facilitators' to reflect these different kinds of users. Where the term 'facilitator' is used, we are referring specifically to those people who are facilitating discussions between stakeholders. It is important to note here that projects generally involve many people in a range of roles, which we refer to here as a 'project team'. For example, a project team would include project managers, facilitators and other project staff.

These resources can be used whether you work with:

- national government agencies
- non-government organisations,
- local organisations and/or
- community groups.

Background to this resource kit

As coordinators and resource people for participatory programs in the Pacific, we have found a wide variety of manuals, resource kits and guides to support participatory planning processes and to help project participants understand the socio-economic dimensions of participatory NRM. It has been difficult however to find one 'manual' that covers the range of areas that project managers and facilitators working in participatory NRM in the Pacific region need to know about: the key social and cultural issues to be considered in planning and designing participatory natural resource management projects, methods for socio-economic assessment and tools and skills in the management and administration of externally funded projects. For example some manuals focus on participatory tools such as Participatory Rural Appraisal (PRA) for planning purposes, others on how to do a socio-economic baseline assessment and others still on how to conduct a stakeholder analysis.

To address this lack of material, staff of the International Waters Project (IWP) at SPREP and two trainers (Katherine Means and Timothy O'Meara) prepared training materials in 2003 on socio-economic assessment and participatory planning for community based projects. The material developed was delivered in a series of four sub-regional two-week workshops held between May to August in 2003. The sub regional workshops, called "*Train-the-Trainer Workshop in Stakeholder Participation, Facilitation and Social Assessment*", aimed to train participants as either trainers or facilitators in participatory planning processes and socio-economic assessment for pilot projects in participatory resource management being supported by the International Waters Project. The workshops also aimed to increase local capacity within the IWP to design and plan community-based activities for the project. Supported by all 14 countries participating in the IWP, the workshops trained approximately 60 participants including IWP national staff and others from NGOs and government agencies. The production of a customised resource kit to support IWP country staff and their local facilitators was one of the key outputs of these workshops.

After the workshops were completed, a number of SPREP staff agreed to pool resources and collaborate in the revision of the IWP kit to produce a kit that could be used by other people working on participatory environment and resource management in the region.

The kit has now been revised with input from a number of people from both within SPREP and national staff of various SPREP supported projects. We have now included case study material from IWP participating countries that have completed and documented various participatory project planning processes and activities (e.g. Niue and Tonga). The kit also draws on experiences from other initiatives in the Pacific: Capacity Building for the Development of Adaptation Measures in Pacific Island Countries (CBDAMPIC) Project; International Coral Reef Action Network (ICRAN) Projects; South Pacific Biodiversity Conservation Programme (SPBCP); and Biodiversity Conservation Network (BCN). We hope that we can include more material from other projects in a future revision of this kit.

Using this kit

We believe that it is important for NRM facilitators to approach their work in an informed and reflective way: to understand the purpose and conceptual background of the methods provided, and to know about the qualities and skills that can help them to be more effective as facilitators. Reflecting this perspective, the kit is organised into six modules, which broadly relate to a different phase in the project cycle for a participatory NRM program (discussed in the next section.) The modules are:

- Module 1: Introduction
- Module 2: Engaging stakeholders
- Module 3: Learning about natural resource management problems
- Module 4: Learning about the socio-economic context
- Module 5: Planning for Change
- Module 6: Planning for Action

Each of these modules contain a series of topics, including conceptual background, case studies and issues, presented in text boxes, and activities to use with stakeholders or in a training setting.

- **Background** on the key phases of a participatory natural resource management program.
- **Conceptual information** in each module to give you an understanding of the purpose and uses of the methods provided.
- **Case** and **issue** boxes to help illustrate the concepts and issues involved in participatory NRM.
- Practical **activities** that can be used by facilitators in a workshop situation, and **checklists** in each module to help you plan your work and check that you have covered the key issues and steps.
- **Examples** of how the materials can be adapted for a training workshop (see Annex 1).

Further development of this kit and its link to other resources

Over the next 12 months, there will be opportunities to further test and trial some of the material contained in this Kit. As other SPREP training initiatives in participatory planning for NRM are completed and actual participatory planning activities and stakeholder consultations are undertaken across the region, we hope to further refine and revise this Kit. Subject to resources, there may be an opportunity to publish this Kit and possibly develop the material into an interactive learning CD Rom.

This kit is supplemented by other resources being developed through the IWP for the Pacific region:

- Social Marketing, an approach to fostering behaviour change that supports sustainability, is detailed in a separate kit developed by SPREP and the New Zealand Ministry for the Environment;
- Collaboration between United Nations Division of Ocean Affairs and the Law of the Sea, the University of the South Pacific, the Australian National University and the IWP at SPREP has led to a 'Train:Sea:Coast' course on 'economics for community-based environment and development projects in the Pacific.' The course was delivered for the first time in February 2004. The material is to be converted to a text book in 2004, which will complement the contents of this resource kit.

Topic 1.2 The process of participatory natural resource management

Projects or programs generally involve a process of assessing the situation around an issue or problem, and planning a targeted set of activities to change or improve things in some way (Lal and Keen, 2002). As mentioned above, effective resource management initiatives are founded upon a good understanding of the social, economic and environmental conditions around the issue or problem they aim to address. Projects like this can be initiated by a range of organisations, including donor agencies, government, NGOs, or community groups. You are probably using this resource kit because you are working with one such organisation, and are in the process of facilitating a resource management project or program.

In designing programs, we broadly need to: assess the resource management issues and the situation surrounding them, assess and select options for how to address the issues, plan and design the project and its activities, implement (do) the activities, and assess how effective the project is through monitoring and evaluation. This process is often called a 'project cycle'.

An example of a standardised project cycle is given below in Figure 1. Most project cycles include steps to:

- assess the initial situation to some extent.
- identify solutions.
- implement solutions.
- learn lessons.

Situation
analysis

Problem/ Solution
Identification

Project
Feasibility

PROJECT CYCLE

Project
Evaluation

Project
Design

Project
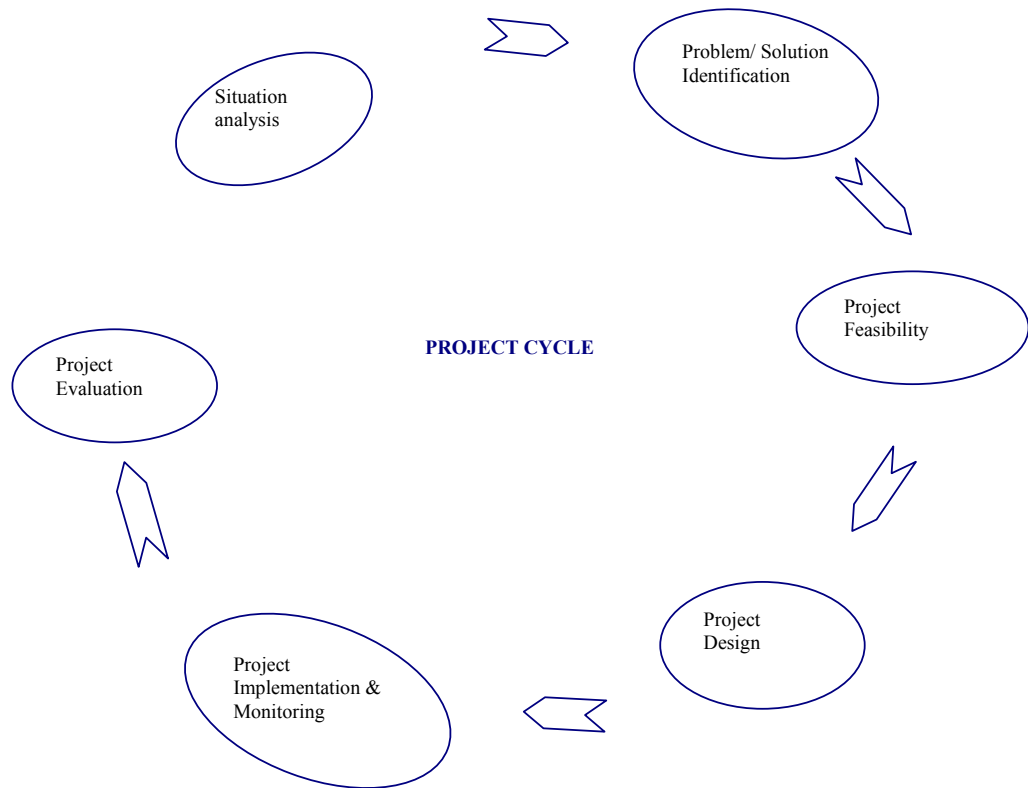Implementation &
Monitoring

Figure 1: Project Cycle (Source: Lal and Keen, 2002)

In practice, the details of project cycles may vary from project to project and organisations, for example in the number of steps used to achieve the outcomes and the terms used for them. See for example, the case study on the International Waters Project below (see Case 2).

Case 2: Mapping a process for the International Waters Project

The International Waters Project supported pilot projects to help Pacific Island communities and governments better manage their marine and freshwater resources. Stakeholder engagement started with the identification of a focal issue and associated communities in each country. This was decided by coordinating committees involving key stakeholders that had been established in each country. The local facilitators then got more detailed information on the resource issues and the social and economic context for these. The next stage was participatory planning with key stakeholders, followed by implementation of a 'pilot' project. Monitoring and evaluation were very important in this project cycle, because the pilot projects were supposed to be 'experimental' so that the lessons learned could be used to further develop the approach at that site, elsewhere in the country, and also in the Pacific more generally.
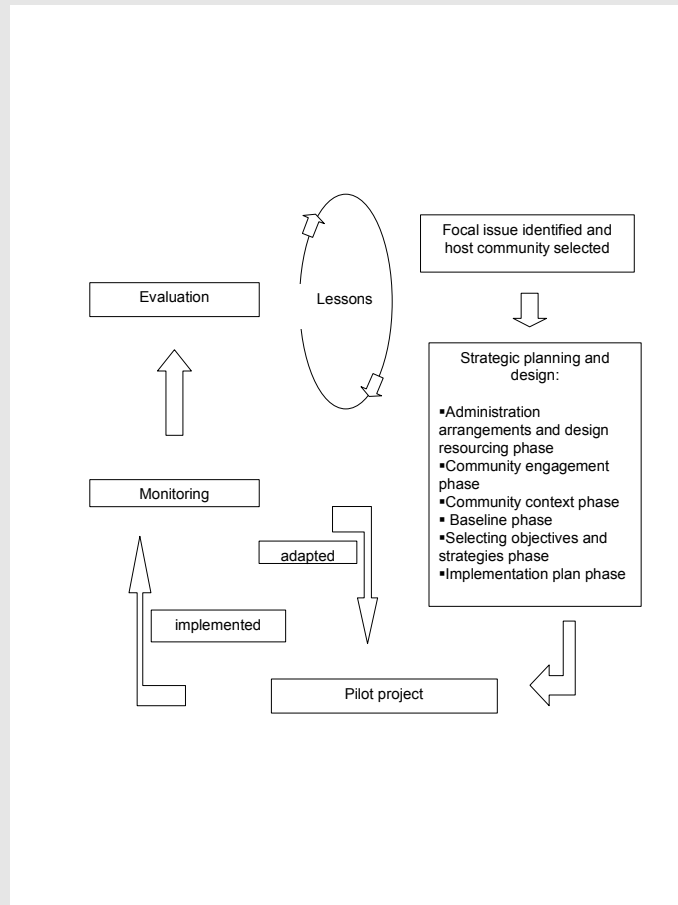
This resource kit is particularly for projects where stakeholders in the project are closely involved in the planning process, and where the project team can take a flexible approach to project activities. This enables activities to be adapted based on lessons learned while implementing the project. The reasons for supporting this kind of approach are discussed in Module 2. The standardised project cycle in Figure 1 can be adapted to pick up some of the important aspects of this kind of participatory and adaptive approach. This has been done in Figure 2 below. This figure represents the project cycle followed in this resource kit, because it shows the focal areas of concern in a participatory NRM program, and highlights the key stages to support these.

Figure 2: Project Cycle for Participatory NRM
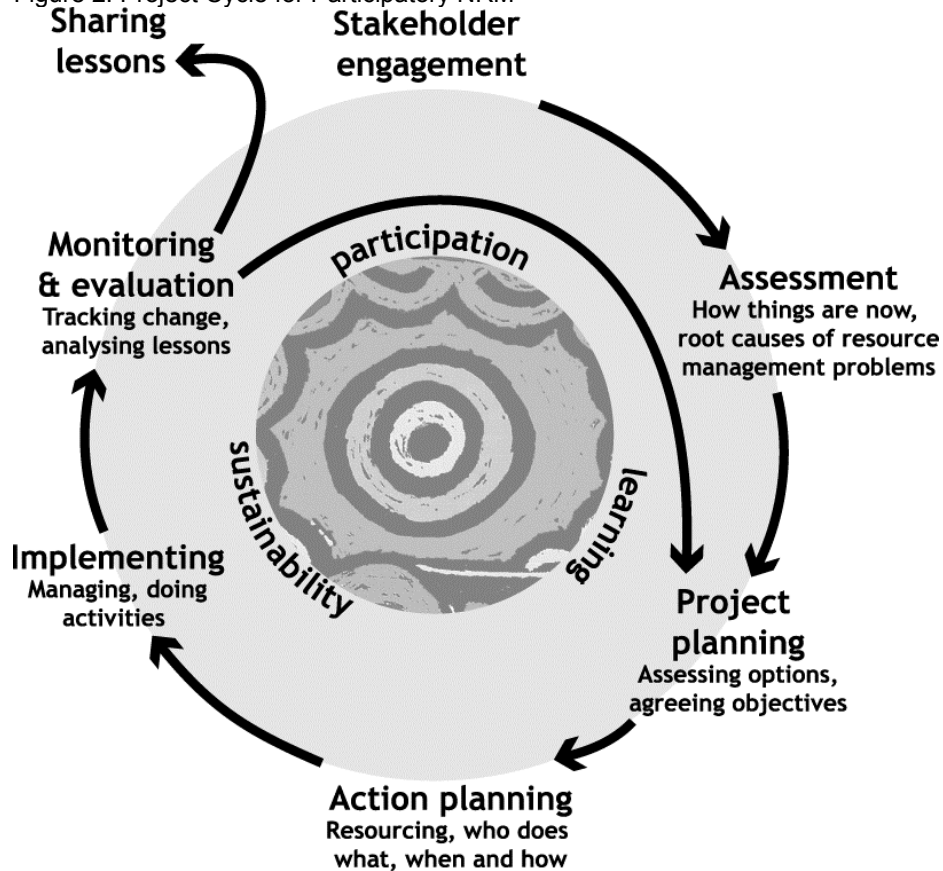
The inner circle represents three core processes that guide collaborative NRM interventions: participation, sustainability and learning. The outer circle shows the main stages in developing and implementing a collaborative project:

Stakeholder engagement: this is the starting point of the cycle. Project staff identifies stakeholders and start initial discussions and negotiations on the issues to be addressed by a project and their potential interests. Facilitators may work through existing bodies to liaise with stakeholders or find that they need to set up a new mechanism for ongoing negotiation and consultation with stakeholders. The material in **Module** 2 covers the important concepts and principles at this stage of the project.

Assessment: project managers and facilitators collaborate with stakeholders to look at the current resource situation, and gather background on the social, economic and ecological conditions for the purpose of planning project activities. This resource kit presents methods for analysing the 'root causes' of current issues together with stakeholders. The material in **Module 3** helps you to find out about stakeholders and the causes of resource management issues. **Module 4** helps you to get more detailed information about the socio-economic situation underlying the resource management issues. Although Module 3 and 4 are presented separately here, both are

essential for good project planning; it is important to work through both if you want to gain a solid understanding of the social, economic and ecological background to the issues to be addressed in the project.

Project planning: project managers and facilitators work with stakeholders to establish project goals and objectives, and select appropriate solutions from a range of options. **Module 5** helps with this stage.

Action planning: project managers and facilitators work with stakeholders to plan how specific activities will be implemented, by whom and with what resources. **Module 6** helps with this stage.

The final two stages in the project cycle are not covered in this resource kit:

Implementation: the action plans are implemented by the relevant stakeholders. Project managers and facilitators have a coordinating and reporting role, and may implement some of the activities.

Monitoring and evaluation: project managers and facilitators collaborate with other stakeholders (eg. Technical resource people, community members, relevant organisations) to monitor the social, economic and ecological impacts of various actions on a regular basis through monitoring. The information should be fed back to stakeholders to decide whether any changes are needed to make project activities more effective, equitable or sustainable. Evaluation at the final stages of the project is an important step to identify lessons for a wide range of stakeholders.

The cyclic nature of the project cycle is important in a learning approach to resource management. The collection of information through monitoring can help to improve the current initiative, and sharing the lessons with a wider community of practitioners helps to improve the effectiveness of programs more widely.

A participatory and learning-focused approach to resource management requires project managers and facilitators to be willing to experiment, make mistakes, and share their learning. The success of a participatory approach also depends on our ability to develop our skills as facilitators (see Topics 2.3 and 2.4).

Topic 1.3 Issues in project design

This resource kit focuses mainly on the methods and skills that facilitators need to plan projects in a participatory way. At the same time, it is important for facilitators to be aware of some crucial planning issues and lessons that have emerged from a long history of development and resource management programs. We look briefly here at what some of these key issues are.

Administrative requirements

Project activities will often require financial support from sources such as donor agencies, NGOs and government, and this usually comes with administrative requirements (see Issue 1 below). Some key administrative issues and questions you will need to consider include financial management, personnel, equipment needs, reporting requirements and timelines.

Issue 1: I am a facilitator, not an administrator!

Without a doubt, administration must be one of the least liked aspects of facilitating participatory resource management programs. Most of us are there because we care about people and we care about the environment, rather than a particular fondness for report writing and maintaining financial spreadsheets!

Here is another way of looking at it. Unless we look after the finances, people, and things associated with a project, it cannot succeed in meeting its aims. Unclear guidelines and lines of authority on the use of finances, use and misuse of equipment, workloads, staff burnout and tensions within a project team can all undermine projects (Mayer and Brown, no date).

By learning to integrate these requirements into our work, we can also help stakeholders build their capacity in project management.

Financial:

- What financial resources are needed for project activities? (Consider this broadly here, and specifically for the work plan in Module 6)

- What requirements does the funding body impose? E.g. Do they require quarterly reports on expenditure, do they have any special formats or templates for recording costs and expenditure?

- Who will be accountable for expenditures associated with the project?

- What kinds of things will the project pay for and not pay for? For example, some stakeholders may have an expectation that they will receive sitting fees for attending a meeting. Transparent guidelines on such issues, and putting some time into explaining the background to the guidelines, can help to ward off tensions down the track.

Personnel:

Personnel refers to people working with the project, whether they are paid or unpaid. Some important questions include:

- How many paid personnel will work with the project?

- What recruitment procedures will we follow to make sure we find well qualified and appropriate people (see Issue 2 below)?

- What kinds of salaries can we offer?

- If there are people in unpaid roles, are there any issues and expectations regarding payment or alternative forms of compensation for the time spent on project activities?

    o Clarify these up front to avoid disappointment and conflict.

- Are the expected workloads reasonable?

- Are there opportunities to share workloads through partnering with other organisations?

- Do staff have any training and development needs to carry out their roles?

- Are staff committed to staying with the project for the long term? Rapid turnover increases the workload for other staff, and can strain relationships with stakeholders.

Issue 2: Recruiting suitable staff

A project in the Pacific found that clearly documented Terms Of Reference helped to clarify the roles and responsibilities of project staff, and to recruit appropriate people. For example, some of the responsibilities of local facilitators included:

- with the support of the project manager, facilitate generation of social, economic and physical information relating to environmental problems at selected sites (such as base line information generation, monitoring and evaluation activities and training activities) with stakeholders;

- summarise findings from community consultations and provide these findings to the national coordinator;

- report regularly to national coordinator on issues associated with community consultation;

- assist the national coordinator, as necessary, in the preparation of reports on information generation; and

- participate in local meetings and workshops that may, from time to time, be convened to discuss community consultation-related issues.

Source: IWP Kiribati Draft Baseline Assessment Terms of Reference, 2003

Reporting schedules and responsibilities

- What reporting requirements does the funding body have?

- Who will prepare reports and liaise with funders?

Equipment needs

Rightly or wrongly, funds often come with restrictions on how they may be used. A common issue is restrictions on the use of funds for purchasing

vehicles or 'capital' expenses (eg. Constructing a building or having to use a certain supplier). Once you work out the equipment needs associated with a project, these may need to be negotiated with the funding body, or additional resources sought from other partners to meet those needs.

Timelines

Timelines may seem like a trivial aspect of a project, but they have a lot of significance for participatory programs. Participation takes time. Rushing participatory processes is often at the cost of consulting a wide range of stakeholder groups and inclusive decision-making processes. A key question to consider in relation to timelines is:

- Are we setting realistic timelines for the activities and processes planned? Bear in mind that in participatory projects we may need to 'educate' funding bodies that are used to a *blueprint approach*, where project design being set out at the beginning of a project, rather than being established during the project through consultation with stakeholders. The latter requires greater flexibility with timing.

Communication strategy

In developing a communication strategy for your project, it is important to do some initial background research on what communication activities are currently being carried out by existing organizations such as government departments and NGOs that you could tap into, and what media options are available for disseminating information and raising awareness about your project to key stakeholders and the general public. This is discussed further in Topics 2.7 and 5.4.

Some questions to think about as the project design is firming up include:

- What sorts of communication strategies (eg public relations, social marketing, formal education) will help to keep stakeholders informed and involved? (See Issue 3).

Issue 3: Examples of Communication Tools

Examples of some communications tools include:

- Booklets/Pamphlets/Brochures

- Posters

- Calendars

- Community meetings

- General multi-media presentations/workshops

- Kits/educational materials for teachers

- Newspapers and magazines

- Media Releases

- Television

- Video programs

- Radio programs

- Public television

- Internet and World Wide Web

- Special events/competitions/launches/celebrations

- T-shirts; key rings

- Reports

- Theatre performances

- Which groups do we need to target?

- What messages do we want to communicate? When (timing), how often (frequency) and for how long (one off or repetitive long term)?

- What communication channels and tools will we use to deliver information and messages?

- Who are our partners, communication networks (eg NGOs) and media sources?

- How will we monitor our communications activities?

- Importantly, have we allowed for communications activities in the budget?

- Who will be responsible for communications related activities?

- What communications professionals and services are available to support communications activities locally (eg printers, graphic designers, web page developers, translators, photographers, video production etc)

An example of a communication strategy can be seen in Case 3 below.

Case 3: IWP Communication Strategy

The Pacific International Waters Project (IWP) has an overarching communications strategy that addresses all major communication elements of the Project. The strategy details the objectives, guiding principles, audiences, communication channels and tools for IWP communication activities. A diverse range of communication services and tools are necessary because of the IWP's broad interaction across five thematic areas, different technical outputs and target audiences. This includes information dissemination at global and regional levels and awareness raising and promotion of sustainable behaviour change at a national and local level.

The strategy is made up of three distinct plans: public relations, social marketing, and community education. By dividing the activities into three different sets of communication disciplines, the tools and communication channels required to achieve the strategy's goal are more directed and focused. Public relations activities cover all levels and use a range of tools to raise awareness and disseminate information about the IWP. Social marketing makes use of methods from the commercial sector to promote change at an individual, community and societal level. It uses commercial principles and processes to try and change the behaviour of target audiences by promoting benefits and reducing barriers to change. Community education sets out how to develop a formalised learner-focused education programme that is based on learning outcomes. Together these

provide an integrated framework for the implementation of communication activities for the regional project and national and local level pilot activities. (IWP Communication Strategy, 2002).

Governance and institutional strengthening

Apart from lack of information, resource management problems often stem from issues with the institutions or rules that guide decision making and behaviour, including:

- unclear property rights regarding access to and ownership of a resource;
- missing or inappropriate rules to guide resource users;
- mismatch between rules at different levels (e.g. Government law does not support local management rules); and
- lack of information flow and coordination between stakeholders (Lal and Keen, 2002).

These issues are discussed further in Topic 2.2 and also emerge in participatory problem analysis (see examples included in Topic 3.2). To address resource management issues, solutions must logically address such weaknesses in institutional arrangements.

Institutional issues can be addressed by refining institutions at the local, national or international level. Experience shows that locally introduced changes often require support at a national or international level to be implemented and supported. For instance, a village may establish a marine protected area but fish protected in that area may swim outside it only to be caught in the fishery belonging to others, or external users may disregard local rules. To ensure that the fish are properly conserved, the marine protected area may need to operate as part of a coordinated district plan for fisheries management. In other words, institutional support would be required at the provincial or national level.

Projects often address these issues by making changes to such institutional arrangements. For example, it may be appropriate to change ownership and access systems for resources by introducing new rules or refining old ones. Such changes alter the incentives that people have to use them, and therefore their behaviour.

For community based environment projects, institutional changes may be relevant at a number of different levels. For example:

- They may occur at the *local* level with the introduction of new local rules that encourage different choices;

- They may occur at the *national* level with the introduction of new policies, laws or educational programs to encourage different choices;

- They may occur at the *international* level to change the choices made by national governments and thereby affect the policies that they introduce or enforce domestically.

Institutional change for the better implies strengthening institutions to ensure that management will be more effective. Often this requires:

- coordination *within* levels so that communities and people work collectively for the greater good; as well as

- coordination *between* levels (so that, for example, rules introduced at one level are supported (and not undermined) by rules or processes elsewhere.

Some key questions related to institutional strengthening include:

- What intervention is needed?
- Do policy or formal rules (eg legislation) need to be reviewed or changed to support the intervention?

- Are property rights (eg. access and management responsibilities) clearly defined? If not, what steps can be taken to improve this?

- What barriers constrain key organisations (government agencies and others) in their role? How can these be addressed?

Partnerships and coordination arrangements (include project consultative mechanisms and institutional arrangements)
Participatory programs that involve stakeholders at different levels generally require coordination and partnerships between stakeholders. These arrangements can take different forms:

- *Network*: A loose linkage of individuals around a particular topic or issue.

- *Coordination:* A closer arrangement for an agreed goal, activities undertaken individually but checked with other members against the goal.

- *Collaboration:* When two or more groups establish formal agreement to work together. Involves a clearly defined relationship and often written goals.

- *Consortium:* Open and non-binding. Any individual or organization with an interest in the goal can join.

- *Alliance:* Usually has a legal basis and a permanent organizational set up.

- *Joint-venture:* An arrangement where two or more parties undertake a specific economic activity together (Borrini-Feyerabend et al., 2000).

It is possible that partnership arrangements for the project could involve more than one partnership type.

Project managers and facilitators, together with stakeholders, will need to assess potential partnerships and partnership responsibilities early in the project design stage to ensure that all project partners have a common, clear understanding of their obligations, responsibilities and commitments to the project. Failure to address this early in the design phase will lead to difficulties throughout project implementation. (SPREP/IWP, 2003 Guidelines).
Some key questions to consider in relation to partnerships include:
- Which stakeholders will be involved in partnerships?

- What kinds of partnerships are appropriate? (Consider the options mentioned above.)

- Is everyone clear about who is responsible for what?

  Written agreements or guidelines can help clarify responsibilities and obligations for stakeholders.

- What will we do if there is conflict between partners?

  In some projects, arrangements for dealing with conflict or disagreements are specified in written agreements.

You may find it useful to use a table such as the one below to help you think explicitly about these issues and prepare for potential disagreements:

Table 1: Assessing partnership potential

Existing or potential Partners	Partnership type	Purpose/Strength of partnership	Problems/constraints in partnership

Source: Borrini-Feyerabend et al., 2000.

Stakeholder Participation
The stakeholder analysis (see Module 3) will highlight which potential stakeholders will have a strong interest in or influence on project activities. Some key questions to consider in relation to engaging stakeholders in the project include:
- Which stakeholders should be encouraged to participate in the project? Why? (thinking about reasons will push you to consider their interests and influence.)

- Where? (… physically will you meet with these groups)

- When? (...in the process will their involvement be sought)

- How? (…will they be invited to participate in the project)

- Do you anticipate any difficulties in promoting participation by certain groups?

This will help you consider any special strategies you may need to engage and work with particular groups or individuals.

Capacity building and Training
Learning is important to participatory NRM at a number of levels: for project managers and facilitators, for key organisations involved in the NRM issue they are working with, and amongst community and other stakeholders. Learning is about improving the capacity of individuals and organisations to work effectively towards sustainable resource management.

In this sense, it is a very broad process, and can include such diverse elements as collaboration and facilitations skills, management skills, and greater understanding about the resource and socio-economic context.

It is therefore important to think broadly about capacity and how it can be built. Formal training courses are one approach. However, don't forget other options such as:

- mentoring (supervision and advice from experienced resource people),

- reflective practice (reflecting on what you learn as you 'do', for example keeping diaries and holding workshops/discussions to reflect on personal learning)

- on-the-job training (learning by doing with supervision from someone experienced or knowledgeable about the task or skill you are trying to learn).

Think also about opportunities for sharing experience with other facilitators of participatory NRM projects in your area, country, region and generally. Some key questions to consider in relation to training and capacity development include:

- What capacities do project staff and stakeholders need to carry out their roles/participate in the project?

- Are there additional skills and knowledge that they need? This will involve thinking about what skills and knowledge they already have.

- What are the best ways in which to meet these needs?

- Are there any costs involved? Have we budgeted for these?

Monitoring and evaluation

It is important to plan for monitoring and evaluation as part of a learning approach. Monitoring is a process of gathering data at regular intervals on specific indicators or issues to look at impacts and changes related to a project (Bunce et al., 2000). Monitoring enables us to check how we are going with meeting project objectives during implementation, and what kinds of impacts the project is having on stakeholders, so that activities can be modified accordingly.

Evaluation occurs less frequently than monitoring (for example, mid way through and at the end of a project cycle) and enables us to see how effectively the project is meeting or has met its goals, and to share lessons covered in an evaluation including:

- *Relevance*: How well the project in addressed needs/problems

- *Effectiveness*: Performance of the project in addressing its objectives

- *Efficiency*: Rate and costs at which activities lead to outputs (costs, implementing time, social, economic and financial results)

- *Impact*: Broader ecological, economic, technical, social and political consequences (as relevant)

- *Sustainability*: Potential for continuation of project activities, institutions and impacts after withdrawal of external support. (source: IWP National Coordinator Meeting II Training Materials, 2002)

We will not go into the details of how to conduct monitoring and evaluation here because this goes beyond the scope of the current kit (a useful publication by Bunce and Pomeroy, 2003, covers monitoring and evaluation in considerable detail). It is, however, important to consider at an early stage what you need to carry out a monitoring program, and start to consider what sorts of 'indicators' or signals may be checked over the duration of the project. Also, monitoring is of no use to a project and stakeholders unless the results of monitoring efforts are used to revise and improve the overall project being monitored (Biodiversity Conservation Network n.d.).
Some key questions you need to consider in developing a monitoring plan are:

- What factors or indicators do we need to consider over the life of the project (see Issue 4 below for an explanation of indicators)?

Issue 4: Indicators of change

Indicators are features of the social, economic and biophysical environment that tell us about change. These features may be things that are measurable, as well as changes that can be described, but not counted. Because we can't monitor everything, choosing sensitive indicators about some key processes can tell us a lot about the effects a project may or may not be having (Russell and Harshbarger, 2003).

For example:

- Where new or altered resource management rules are in place, a useful indicator may be the number of breaches of rules and the level of fines raised for non compliance
- Where a project involves some kind of income generating venture, indicators may include: gross revenues; employment levels; the volume of goods and services produced; and economic sustainability including:

  - volume of harvests
  - catch per unit effort
  - royalties or access charges
  - the price of a good or service involved

- Indicators of the social sustainability of a project may include:

  - levels of participation in a project
  - distribution of profits across households or groups. (Lal and Holland, 2004)

- What resources will we need for M&E? (Think about knowledge and skills as well as financial resources and personnel.)

- How will M&E findings be used? By whom?

- Are there any special training and assistance needed from resource people?

In relation to evaluation, some aspects of a project to consider at this time include:
- What changes did the project engender?
- How efficient and sustainable are the changes?
- Did the changes justify the investment? (Was this a worthwhile investment or would we have been better off to invest the money in another activity?)
- What did we learn?

Replicability

Reflecting on lessons learned and sharing information on our experiences is central to good professional practice. This also enables replication of initiatives: following on from projects by using a similar approach or framework elsewhere. Some key questions to consider in relation to replicability include:
- Is the approach we are taking here going to be relevant and useful to other communities or stakeholders grappling with this issue?

- How are we documenting and sharing lessons to enable others to learn from our experience?

Sustainability

Finally, since sustainability in NRM and achieving behavioural change are our goals, we need to think beyond the life of a specific project.
- Will the changes introduced in a project be sustainable beyond the life of the project?
    - Will it be socially sustainable?
        - To what extent will stakeholders have ownership of project initiatives after it has ended?
        - To what extent will stakeholders be able to sustain/use the technology after external support has ended?
        - What will the longer-term social and environmental impacts be and how will any negative impacts be mitigated?
        - Will marginalised groups maintain access to project benefits?
        - Will stakeholders responsible for follow-up have the management capacity to guarantee this?
    - Is it economically and financially sustainable?
        - To what extent will there be sufficient finances to allow for continued running costs, maintenance etc?

- Is there a 'succession strategy' for the project beyond the funding cycle?

o Will it be institutionally sustainable?

- To what extent will supportive policy continue after the project has ended?

- Are mismatches or conflicts between rules at the local, regional or national level being addressed? (Worah et al., 1999)

References for Module 1

AusAID (n.d.) *Guide to Gender and Development*, AusAID, Canberra.

Baines, G., Hunnam, P., Rivers, M. and Watson, B. (2002) *South Pacific Biodiversity Conservation Program: terminal evaluation,* UNDP, New York.

Borrini-Feyerabend, G. (1996) *Collaborative Management of Protected Areas: tailoring the approach to the context,* The World Conservation Union (IUCN), Gland, Switzerland.

Borrini-Feyerabend, G., Taghi Farvar, M., Nguinguiri, J. C. and Ndangang, V. (2000) *Comanagement of Natural Resources: organising, negotiating and learning-by-doing,* The World Conservation Union (IUCN) and GTZ, Gland, Switzerland.

Braakman, L. and Edwards, K. (2002) *The Art of Building Facilitation Capacities: a training manual,* Regional Community Forestry Training Centre for Asia and the Pacific, Bangkok.

Bunce, L. and Pomeroy, B. (2003) *Socioeconomic Monitoring Guidelines for Coastal Managers in Southeast Asia (SocMon SEA),* World Commission on Protected Areas and Australian Institute of Marine Science, Townsville.

Bunce, L., Townsley, R., Pomeroy, R. and Pollnac, R. (2000) *Socioeconomic Manual for Coral Reef Management,* Australian Institute of Marine Science, Townsville.

Grimble, R. and Wellard, K. (1996) 'Stakeholder Methodologies in Natural Resource Management: a review of principles, contexts, experiences and opportunities' In *Paper prepared for ODAS NRSP Socio Economic Methodologies Workshop,* ODI, London.

Hunnam, P. (2002) *Lessons in Conservation for People and Projects in the Pacific Islands Region,* UNDP, New York.

Lal, P. and Holland, P. (2004) *Economics for Community Based Environmental Management in the Pacific, Train Sea Coast course prepared in association with the Australian National University, South Pacific Regional Environment Program, United Nations Division of Ocean Affairs and the Law of the Sea and the University of the South Pacific.*

Lal, P. and Keen, M. (2002) 'Economic Considerations in Community Based Resource Use and Management', *Development Bulletin,* **58,** 68-71.

Leeuwis, C. (2000) 'Reconceptualising Participation for Sustainable Rural Development: Towards a negotiation approach', *Development and Change,* **31,** 931-59.

Mahanty, S. (2002a) 'Building Bridges: Lessons from the Arnavon Management Committee, Solomon Islands', *Development Bulletin***,** 88-92.

Mahanty, S. (2002b) 'Conservation and Development Interventions as Networks: the case of the India Ecodevelopment Project, Karnataka', *World Development,* **30,** 1369-1386.

Mahanty, S. and Russell, D. (2002) 'High Stakes: Working with Stakeholders in the Biodiversity Conservation Network', *Society and Natural Resources,* **15,** 179-188.

Mayer, E. and Brown, S. (no date) *The Story of the Arnavon Marine Conservation Area,* unpublished paper, Biodiversity Conservation Network.

Means, K. and Josayma, C. (2002) *Community-based forest resource conflict management: a training package,* FAO, Rome.

Neuman, W. L. (2000) *Social Research Methods: qualitative and quantitative approaches,* Allen and Bacon, Boston.

Pretty, J., Guijt, I., Thompson, J. and Scoones, I. (1995) *Participatory Learning and Action: a trainer's guide,* IIED, London.

Read, T. (2002) *Navigating and New Course: stories in community-based conservation in the pacific islands,* UNDP, New York.

Russell, D. and Harshbarger, C. (2003) *GroundWork for Community-Based Conservation: Strategies for Social Research,* Altamira Press, Walnut Creek, CA.

Salafsky, N., Cordes, B., Parks, J. and Hochman, C. (1999) 'Evaluating Linkages Between Business, the Environment and Local Communities: Final Analytical Results from the Biodiversity Conservation Network' Biodiversity SUpport Program, Washington DC.

Sithole, B. (2002) *Where the Power Lies: multiple stakeholder politics over natural resources,* CIFOR, Bogor Barat, Indonesia.

Social Development Department, T. W. B. (2002) *Social Analysis Sourcebook: incorporating social dimensions into Bank-supported projects,* The World Bank, Washington DC.

Sutherland, W. J. (2000) *The Conservation Handbook: research, management and policy,* Blackwell Science, Oxford.

Whyte, J. (2002) *A Review of Lessons Learned and Best Practice in Integrated Coastal Watershed Conservation and Management Initiatives in the Pacific Islands Region,* SPREP, Apia, Samoa.

Worah, S., Svedsen, D. S. and Ongleo, C. (1999) *Integrated Conservation and Development: a trainer's manual,* WWF and Asian Institute of Technology, Khlong Luang, Thailand.

World Bank (1996) *The World Bank Participation Sourcebook,* The World Bank, Washington DC.