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Development of Monitoring Process and Indicators for Forest Management, Nepal

Project Leader

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Organisation

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Acronyms

CBO	Community Based Organisation
CPFD	Community and Private Forestry Division
CPR	Common Pool Resources / Common Property Resources
CPR(F)	Common Property Resources (Forests)
DDC	District Development Committee
DFID	Department for International Development
DFO	District Forest Office / District Forest Officer
ECI	Environmental Change Institute (University of Oxford)
ETFRN	European Tropical Forestry Research Network
FECOFUN	Federation of Community Forest Users, Nepal
FFMP	Forest User Groups Forest Management Project
FG	Forest Guard
ForestAction	Forest Resources Studies and Action Team
FRP	Forest Research Programme
FUG	Forest User Group
IRDD	International and Rural Development Department (University of Reading)
LFP	Livelihood and Forestry Programme
NGO	Non Government Organisation
NRSP	Natural Resources Systems Programme
OP	Operational Plan
RP	Range Post (sub-district forest office)
VDC	Village Development Committee

1. Executive Summary

The purpose of the ‘Development of Monitoring Process and Indicators for Forest Management, Nepal’ project¹ was to develop and assess current approaches to managing common property forest resources and biodiversity for sustaining livelihoods in the middle hills region of Nepal, and develop monitoring systems that will enable various stakeholders to plan for forest management activities (see the revised logframe). Chiefly the project has addressed communication between stakeholders and group level knowledge generation in common property forest management institutions in relation to this purpose. These are areas in which critical constraints to the achievement of sustainable common property forest management for the improvement of livelihoods have been identified.

The main outputs of the project are:

1. An understanding of the ways in which stakeholders manage common property forest resources, including approaches to monitoring.
2. A process for improving forest users' monitoring systems for common property forest management for use at the forest users level, which pays particular attention to livelihoods aspects and biological diversity, and is tailored to specific local characteristics.
3. Recommendations of the ways in which stakeholders at the Range Post level can effectively monitor each other and themselves.
4. Increased awareness amongst local institutions of the options for monitoring common property forest resource management.

The project adopted participatory action research (PAR) approaches to research, especially for detailed field investigations. Initial project activities included consultations in the UK and Nepal, and the writing of a scoping study, primarily in order to gain an extensive understanding of the management, and specifically monitoring, practices of the various stakeholders in Nepal community forestry (as relates to output 1). In the next stage of the project, field investigations were undertaken with members of five selected communities in a western hill district (Baglung) of Nepal. A case study approach was used to examine local level monitoring practices within the forest management-planning framework (as relates to output 1).

Field investigations then focused on developing approaches to assisting forest users in forest management planning, using methods that are inclusive of different people's needs and interests, and that enable the users to learn from new experiences through monitoring (as relates to output 2). The Range Post staff were involved throughout the investigations in order to develop their capacity to continue and adapt the process in future. A framework was also developed for comparing local stakeholders' values for biological diversity and for determining how these will influence management decisions. This methodology was tested in one of the sites and then integrated and adapted in other sites.

Research processes (case study and PAR approaches) were documented, and from this recommendations were drawn up for a generic process, with variations related to the characteristics of the forest management institution. This will enable local institutions to facilitate the development of forest users' planning and monitoring systems.

A workshop was held at the district level, with representatives from the DFO, Range Post, LFP, FECOFUN and the local forest management institutions in order to exchange ideas on the initial findings of the field investigations, and to discuss their monitoring requirements (as relates to output 3). Placing the field investigation findings in the overall monitoring framework at the district level, the perceptions of different stakeholders were compared and recommendations were formulated for improving monitoring systems at the Range Post and District level.

A final workshop was held with central level stakeholders (in Kathmandu) to disseminate findings (as relates to output 4). However, further dissemination through journal papers will continue in 2002.

¹ The outside research team members include Dr. Yam Malla (IRDD), Dr. Anna Lawrence (ECI), Richard Barnes (IRDD), Krishna Paudel (ForestAction) and Hemant Ojha (ForestAction).

It was concluded that the current planning practices in common property forest management (and more specifically in community forestry) are too rigid and unrealistic, and thus do not encourage the full participation of forest users. The project has developed a planning and monitoring process that is more gradual in approach, allowing for inclusion of the interests of a broader range of forest users, and encouraging the users to learn through action how they can meet their livelihood needs and interests from the common property forest resource.

There is evidence to suggest that biodiversity provides a useful framework to stimulate local thinking about ecological, as well as utilitarian, aspects of forest management. Management of biological diversity should improve if planning processes reflect the multiple priorities of the forest users. In future the framework developed in the project should enable a wide range of stakeholders to identify areas of collaboration and potential conflict in biological diversity management.

2. Background

Common (and de jure government) property forests have the potential to contribute considerably to the security and improvement of the livelihoods of poor, and more specifically land poor, people in the rural areas of the middle hills of Nepal. There is also increasing recognition of the potential of forest resources to contribute to rural monetary economies. However, historically both local feudal and subsequently state control have affected access to common property forest resources by poor people.

Over the last 11 years the government has been handing over patches of forest to local communities that form Forest User Groups (FUGs), under the community forestry programme, supported by the Master Plan for the Forestry Sector (1988), the Forest Act (1993) and the Forest Rules (1995). The specific aims of the community forestry programme are to provide a legal basis for access to forests by local communities as a means to improving livelihoods, as well as to reverse the trends of forest degradation and deforestation, particularly in the middle hills. Legislation specifies ability and willingness to contribute to the management of the forest as criteria for eligibility to join a FUG, and further emphasises democratic processes in FUG planning.

Field experience has demonstrated that community forestry has, in some instances, led to improved forest condition, though some studies have highlighted problems of the under-utilisation of the forest², and that poor people have reduced access to the benefits from community forests³. There are two main difficulties in community forestry implementation that have contributed to these negative impacts. Firstly, within FUGs, decision-making has been the reserve of a minority of dominant members of the community, who are very often the least dependent on common property forest resources. The result is that forests are not being managed systematically according to the needs of those that are dependent on them. Field experience has also shown that the District Forest Office and Range Post staff often drive these decisions through the elite of the FUG, even including the decision to form the FUG⁴. Secondly, other organisations involved in community forestry face difficulties in identifying support services and policies that are appropriate and responsive to the needs of FUGs and specific groups within them, and accordingly in understanding the impacts of their current services and policies⁵. Linked to this, communication between stakeholders has been identified as a constraint by professionals in the forest sector in Nepal, as in many other countries⁶.

² FFMP (2000) Supply and Demand Relationships in Community Forests, FFMP Discussion Paper no.4, IRDD, University of Reading, UK

³ Paudel, D. (1999) Distributional Impacts of Community Forestry Programmes on Different Social Groups of People in the Mid-Hills of Nepal, Department of Geography, University of Cambridge, UK (Unpublished MPhil Dissertation).

⁴ Springate-Baginski, O., Soussan, J.G., Dev, O.P., Yadav, N.P. & Kiff, E. (1999) Community Forestry in Nepal: Impacts on Common Property Resource Management, Environment and Development Series 3, School of the Environment, University of Leeds, UK

⁵ Pokharel, B.K. & Grosen, J. (2000) Governance, Monitoring and Evaluation, Joint technical Review of Community Forestry in Nepal, Issue Paper No.5. Ministry of Forest and Soil Conservation. Kathmandu, Nepal.

⁶ Lawrence, A., Warren, K. with Mason, T. (1999) Researchable constraints in participatory forest management: a survey of issues and options. AERDD, University of Reading, UK

These problems highlight a need to enhance the ability of forest users to, firstly, systematically plan for forest management on the basis of analyses of needs and forest resource related, social, institutional and economic factors, and secondly to demand services from, and provide feedback to other organisations.

The research project builds on the previous experience of related projects, and principally on the findings of a DFID funded research project – Forest User Groups Forest management Project (FFMP) (R6918), undertaken by University of Reading, that developed a Participatory Action and Learning process to enable FUGs to actively and equitably manage their forest⁷. The current project has drawn on the process and overall communication structure within the FUG, developed in FFMP, that encourages participation of as many users as possible in information analysis and subsequent decision making. FFMP was more focused on the technical aspects of management of a particular forest type (Schima-Castanopsis), than this project, which aims to enable the forest users to plan and monitor a broader set of aspects of forest management including socio-economic factors.

3. Project Purpose

In the light of the NRSP goal to develop and promote 'planning strategies to sustain the livelihoods of poor people dependent on forests adjacent to croplands' this project aimed to identify and address critical barriers to achieving this, principally through focusing on developing forest users' monitoring systems. It was assumed that through integrating monitoring systems into planning, forest users, and particularly the poorer groups within communities, would be better able to collectively learn from and adapt forest management activities according to their needs. Results from FFMP (R6918) indicated that action research, or more generally the participatory action and learning (PAL) can have a positive impact on increasing the level of activity of FUGs towards a productive forest management. It also helps highlighting issues concerning equity and stimulating FUGs to consider ways of increasing the benefits which poorer households can get either directly or indirectly from the community forest.

The original purpose of the project was to assess the perceptions of the various stakeholders on common property forest resources and accordingly to identify 'indicators' that would enable these stakeholders to effectively monitor, negotiate and plan for common property forest management⁸. Many organisations working in community forestry at the district and national level are developing and identifying indicators for both internal performance assessment as well as for impact assessment. Some organisations have been developing indicator sets in collaboration, for example, the Livelihoods and Forestry Programme have collaborated with the DFOs in identifying indicators, so that data collection can be carried out by Range Post staff and used by a wider range of organisations. The monitoring indicators used by these organisations are generally derived from the extensive field experiences of forestry professionals and sociologists in this field.

After stating the initial project purpose to identify indicators it was subsequently recognised that there was an imbalance in both the representation of FUGs' interests (and the interests of various groups within) in cross-stakeholder planning, as well as the opportunities for FUGs to generate new knowledge through their forest management activities. In order to address this imbalance it was intended that a process be developed to identify indicators that reflect the variety of perceptions and interests amongst the forest users and managers and, through establishing baselines, enable them to analyse trends in their own locality.

The field experiences, however, demonstrated that an undue focus on indicators at the level of project purpose meant that it was difficult to address the many more important prerequisites to effective and equitable management processes, without which indicators would either be unidentifiable, inappropriate or simply not cost effective. The purpose was therefore revised at a late stage in the project to ensure that the purpose, outputs and activities remained consistent with each other, and more specifically with the goal of the project (described above). It was also necessary to revise the purpose so that the project team could include more important issues in the analysis that otherwise could not have been included within the parameters set by the original logical framework. The revised project purpose was to develop and assess

⁷ Malla, Y.B., Branney, P., Neupane, H.R., Bhattarai, B., Tamrakar, P. (2001) Forest User Groups Forest Management Project, DFID/ FRP Research Project (R6918). IRDD, University of Reading, UK.

⁸ See Original Logframe in Section 8.1

participatory approaches to managing common pool resources (CPR) and biodiversity, for sustaining livelihoods, including monitoring systems that enable various stakeholders to plan forest management in the mid-hills of Nepal⁹.

4. Outputs

Following the revision of the project's purpose, as explained above, the project's expected outputs changed to the following:

- To develop an understanding of the ways in which stakeholders manage common property forest resources and the ways in which they monitor the resource and the management regime, and identify the constraints to developing more effective monitoring systems.
- To develop a process for improving forest users' monitoring systems at the forest users level, which pays attention to livelihood aspects and biological diversity (including the exploration of local values for the latter), and identify recommendations linked to specific local characteristics.
- To define recommendations of ways in which stakeholders at Range Post level can effectively monitor each other and themselves.
- To disseminate the information amongst local institutions of the options for monitoring common property forest resources.

4.1 To develop an understanding of the ways in which stakeholders manage common property forest resources and the ways in which they monitor the resource and the management regime, and identify the constraints to developing more effective monitoring systems.

The project assessed the current approaches to common forest management planning and implementation at the local level and identified constraints to effective management and adaptive planning within and between the stakeholders.

There has been considerable development of detailed procedures for planning (and monitoring) in community forestry, and indeed attention has been given to encouraging participation of FUG members in planning. Despite this there is a gap in the involvement of different groups. Procedures for planning forest management and monitoring are tailored more to the requirements of the DFO, which almost has a monopoly in defining the way in which planning and monitoring is done. Even the FUGs procedures for planning are dominated by a few selected FUG committee officials, especially the chairmen and secretaries, who in turn seem to see their role as fulfilling the requirements of the DFO (i.e. protection and limited utilisation of the resource), rather than those of the forest users (who are more concerned with livelihood issues). Consequently, other stakeholders, such as VDCs, and local NGOs / CBOs and even the FECOFUN, who have a better understanding of livelihood issues, have been marginalised from community forestry processes. At present there is no mechanism in place that would enable the various stakeholders to come together and discuss each others' interests in forest resources, agree on management objectives, methods and procedures to achieve these objectives, and the ways (process and indicators) in which to measure progress.

Constraints to improving both the involvement of local people in conscious learning through planning and monitoring in forest management, as well as the service delivery of other organisations to FUGs and users of forests where there is no FUG include the following:

- a) FUG formation begins with the identification of the forest rather than the livelihood needs of the local people. From the outset, planning focuses on linear relationships between one 'community' and an already identified forest area. This reflects the fact that very often it is one or two dominant members of the community that identify the forest according to their own interests, which may not represent the wider patterns of usage of other forest areas across the community. In some instances (in the case study sites) this has greatly compromised the potential contribution that community forestry can make to the livelihoods of local people.
- b) There is very little involvement in community forestry of organisations that prioritise the livelihoods of local people as well as the security of their rights, notably, local NGOs / CBOs and VDCs. In the context of developing monitoring systems for community forestry, it is necessary to involve organisations that

⁹ See Revised Logframe in Section 8.2

understand and sympathise with local people's livelihood needs and can interpret these in relation to government and private services in different sectors. Most notably, local NGOs / CBOs and VDCs that have a better understanding of local livelihoods issues are not involved in the mainstream community forestry process.

- c) The two stated functions of the Operational Plan, namely as a document to guide forest management, as well as a legally binding document for regulatory purposes, are difficult to reconcile with each other. In reality the regulatory function takes precedence, such that detailed management decisions are also scrutinised by the DFO.
- d) The schedules for management planning, and in particular Operational Plan preparation are ultimately set by the human resource constraints of the DFO. This means that FUG members are forced to come to decisions in a very short space of time, and many of these decisions require far more investigation, negotiation and experimentation than is possible in the time available. Consensus requires a recognition of the need to experiment with unknown or unresolved issues and a containment of disagreement within certain parameters. There is no scope for this in the procedures for preparing the Operational Plan.
- e) There is little understanding within the Department of Forests as a whole, of why particular monitoring information is being gathered, how it will be used and what their capacity will be to respond to that information. This point is crucial if the DFO is to increase its service orientation. Possibly because there is little demand coming from FUGs the DFO monitoring systems are less focused towards self-assessment (impacts of DFO activities, rather than just general changes in FUGs), than towards monitoring the work of others.
- f) The development of monitoring information systems has focused on 'scaling up' to different levels. This is of course a vital component of the monitoring system, though such detailed indicators, ranking and scoring systems are only used by professionals within the forestry sector. It is unlikely that a monolithic monitoring system could be developed that will integrate 'subsidiary' monitoring systems at the FUG level, and even less likely that it would be at all meaningful. Such inclusive monitoring systems cannot be contrived by controlling the way in which different stakeholders communicate with each other. Rather, it is important that monitoring systems are developed for each group of stakeholder and level within the organisation, thus increasing diversity between them. Until all actors are consciously involved in planning and monitoring it will be hard for them to effectively communicate their interests to each other.

4.2 To develop a process for improving forest users' monitoring systems at the forest users level, which pays attention to livelihood aspects and biological diversity (including the exploration of local values for the latter), and identify recommendations linked to specific local characteristics.

The project developed a generic process (see Figure 1) that can enable forest users to identify priority issues relating to forests and livelihoods, undertake critical enquiry and self-analysis, negotiate interests (especially of disadvantaged groups), and develop flexible plans that allow for experimentation, monitoring and review. A set of guidelines for information requirements and data collection methods was prepared to assist facilitator institutions undertaking this process with FUGs in the future. These guidelines also include recommended variations in the process for adaptation to different local contexts.

The core elements of the methodology are very simple and replicable, and the process shows the major steps, in terms of what activities to undertake, when, how and by whom. Once the system is in place, the concerned FUG members will be able to use the process on their own and adapt it to their local circumstances.

Although initially some outside support will be required to help initiate and facilitate the process, it is intended that the involvement of outside facilitators should be minimal in the future. The methodology:

- Reaches the majority of FUG members, beyond the FUG committee officials, and ensures that all the interest groups' views and concerns are taken into consideration;
- Provides a sequential framework for information collection and analysis, explaining the required actions and the objectives for each step or activity;
- Explains the stage at which the interests of various interest groups and individuals should be brought together for discussion and negotiation, and the ways in which this can be done.

The major role of the external facilitators can be summarised as follows:

- Defining the overall process of research and communication in terms of the sequence of meetings (in particular, tole meetings) – though the users set the timetable;
- Assisting in bringing together different issues, interests and perceptions in relation to group functioning and the forest resource (particularly where these conflict with each other), and helping to negotiate solutions;
- Providing a broader picture of social, economic, environmental and political realities (in particular, equity, power relations and environmental degradation) that are global concerns. This will create a critical group awareness, and group level self-assessment, by relating these issues to their own social reality;
- Providing a standard set of information that gives a common basis for transparent decision-making in common property forest.

For monitoring biological diversity, a separate framework has been developed which enables stakeholders to explore values for different components of biodiversity. Some of the major lessons learned include as follows:

- *Flexibility*: Discussing biological diversity with forest users requires flexibility, particularly in relating different kinds of values for biological diversity should be linked to the issues prioritised by the forest users.
- *Multiple interests and biological diversity*: The process of negotiation among stakeholders can lead them to identify a range of tree species that reflects the diversity of requirements across the FUG. This identification was apparent when looking at the way in which decisions are made about forest management planning, specifically when deciding on planting trees, and conserving or clearing certain species.
- *Perception of access or use rights*: Values of the biological diversity of forests and trees are affected by local people’s perception of the access or use rights to forests and tree resources (specific tree species and forest products).
- *Perception of outsiders’ interests*: Outsiders’ interests in biological diversity and forest conservation and their action towards these objectives also influence local people’s action, especially that of the local elites, such as FUG committee officials.
- *Matching forest users’ perceptions with other stakeholders’ monitoring requirements*: It is important that in any monitoring system the local community members know other stakeholders’ interests in biodiversity, as it will enable them to actively negotiate with each other. Our framework provide a basis for doing that.

The full process is shown in Figure 1. The circles represent the core activities in the process and the text in the rectangles indicate the purpose of each activity. The sequence of information collection, analysis and reflection is explained in Figure 2. Biodiversity issues can be introduced at an early in the process so that FUGs and other stakeholders can decide if they are to be included among their “critical” issues.

Figure 1: FUG Participatory Action and Learning cycle

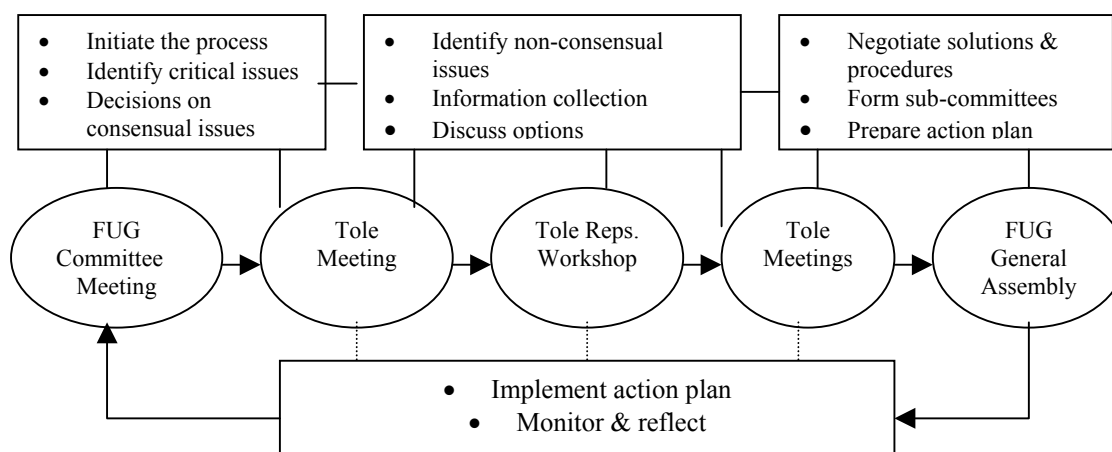
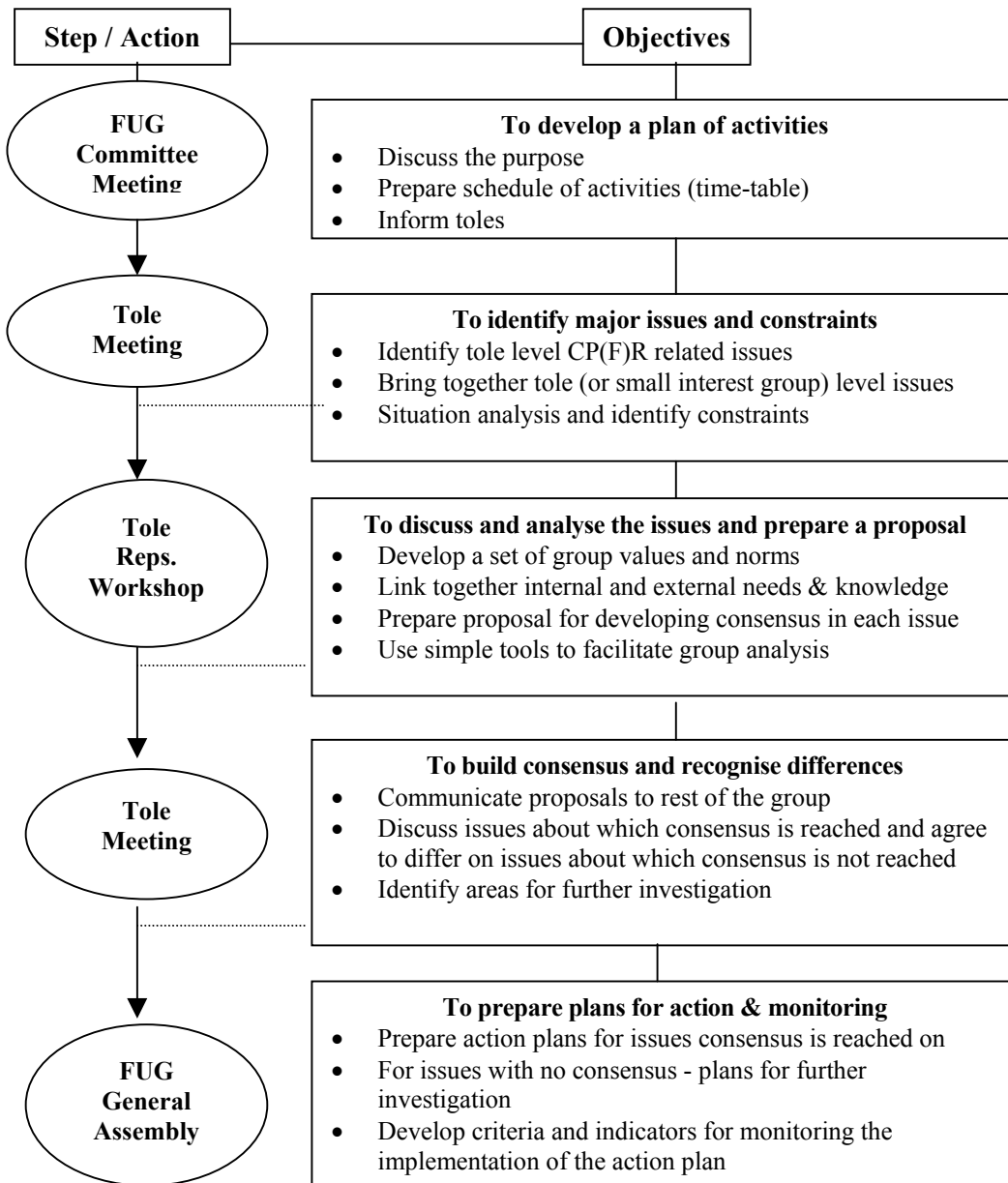


Figure 2: Sequence of information collection and analysis



The process was developed initially after the fieldwork in two pilot sites and was subsequently finalised following the fieldwork in all of the five sites. The project was too short to fully test sustainability of the process, but an attempt was made to institutionalise action-learning processes within the case study sites through planning for on-going data collection and analysis. Sub-committees were formed to participate in a follow-up study to assess the effectiveness of the process. Results of this follow-up will be available in 12 to 18 months time.

4.3 To define recommendations of ways in which stakeholders at Range Post level can effectively monitor each other and themselves.

The project has drawn up recommendations of the ways in which stakeholders at the Range Post level can effectively monitor each other and themselves.

- a) Field experience suggests that it would be unrealistic to develop a systematic and hierarchical monitoring system that combines indicators from different levels whilst ensuring the conscious participation of all

stakeholders. Rather, all stakeholders, particularly at the Range Post level, need to be encouraged to develop their own unique monitoring systems, whilst communication, both structured and unstructured, between stakeholders in negotiation and joint planning will enable them to further adapt and develop their monitoring systems.

- b) In addition, it is apparent that the FUG Operational Plans would not be an appropriate medium for incorporating provisions for FUG monitoring. Instead, FUGs should be encouraged to incorporate monitoring provisions in annual plans, that will provide them with the necessary flexibility, whilst the Operational Plan should be treated as a Memorandum of Understanding between FUGs and the DFO to fulfil more basic requirements.
- c) In order for FUGs to actively engage in negotiation with other stakeholders they must also be provided with information on the services and overall mission statements of other stakeholder organisations.

4.4 To disseminate the information amongst local institutions of the options for monitoring common property forest resources.

Workshops were held with institutions at the Range Post, district and central level to discuss the options for improving the monitoring of common forest management. At all levels there was some agreement that Range Post level institutions need greater autonomy in planning and monitoring. However, at the district and central level concerns were raised about the sustainability of such a process in the context of current community forestry procedures.

One paper was published (Annex 2) in a local Nepalese journal and a brief note on monitoring biodiversity was presented (Annex 3) at the E-mail conference organised by the European Tropical Forestry Research Network (EYFRN).

Opportunities are being sought for further publications – these will be followed up over time.

5. Research Activities

5.1 Overall approach to research

The project adopted a Participatory Action Research approach to the research process, in which the main activities of education, research and action were combined. The overall research process used by the project can be divided into five stages as follows:

- | | |
|----------|---|
| Stage 1: | Preparatory (e.g. consultations with key stakeholders in Kathmandu, selection of district and case study sites, discussing with the selected communities the research objectives and process and preparing for detailed investigation etc.) |
| Stage 2: | Formation of research group for inquiry and preparing plan of activities for research |
| Stage 3: | Developing process for determining monitoring criteria and indicators, decision-making and preparing action plan |
| Stage 4: | Implementation of the action plan and monitoring, and |
| Stage 5: | Analysis of the research process and reflection for future monitoring and evaluation |

While Stages 1 and 5 were solely for the benefit of the project's external team members, including the Range Post staff, Stages 2 through 4 involved the members of the individual selected communities, especially the committee officials and tole representatives. Stages 3 and 4 are critical as these involve the actual process of developing monitoring and evaluation systems, which would be carried out by a FUG.

The preparatory stage was initiated by consultation activities with interested individuals and institutions, in the UK and Nepal, and these were followed by the selection of the sites for field investigations. The rest of the preparatory stage was used to develop understanding between the project team and the forest users as to the objectives of the research project, through meeting with key representatives, the committee and then in

toles¹⁰ to reach as many households as possible. Subsequently, in each tole, the tole members selected representatives to conduct detailed investigations in the next phase. Table 1 below shows the general process used for the field investigations in each research site.

In the second stage the representatives, forming the research group¹¹ were facilitated in group inquiry, discussing the issues brought together from the tole meetings, with a view to developing a set of proposals for both short-term and long-term solutions and objectives. These were then discussed between the tole representatives and the other households in their respective toles.

In the third stage all the household members came together in an assembly meeting to make decisions on the priority issues, develop a work plan for each decision, and plan ways for monitoring both implementation and impact. Where there was no consensus on particular issues, or where there was a clear need for further research, the information requirements and method for researching the issue, were also discussed.

In the fourth stage, decisions were implemented, and monitored, and the planned data collection undertaken. This was only partially covered in this project, with some preliminary observations. A follow-up to the project is currently underway (September 2001-September 2002) in order to gain some understanding of the sustainability of the process, and the constraints encountered by both the forest users and Range Post staff.

The final stage involved the analysis of the research process and reflection and planning for the subsequent activities of the project. This involved reflection on the methods, tools and techniques used, the sequence in which these were used, the role of the facilitators and the ways in which the methods, tools and techniques could be adapted in the future activities.

5.2 Research sites

The field research was conducted in five sites (4 FUG sites and 1 non-FUG site) in the Kushmisera Range Post of Baglung district in West Nepal during November 2000 – May 2001. Criteria for the selection of the sites were established following consultations of the DFO and LFP in Baglung and Range Post in Kushmisera, and a list of potential sites was drawn up according to these (see Table 1). The list does not include all the FUGs at the time. The community that represented the non-FUG sites is Jyamire.

Table 1: Criteria used for the selection of potential FUGs for detailed investigations. FUGs in italics were eventually selected for participation in research activities

Weight	Criteria of weighting		FUG Site
5	Altitude	Besi (Lower altitude)	<i>Bhane, Pallo Pakho</i> , Sirupata
		Lek (Higher altitude)	Gaja Deurali, <i>Jana Chetana</i>
4	Forest Type	Sal	<i>Pallo Pakho</i>
		Katus-Chilaune	Narayan Dihi, <i>Bhane</i>
		Sallo	Kot Bhairab, <i>Sirupata</i>
		Khasru	Gaja Deurali,
		Mixed	<i>Jana Chetana</i>
3	Time since OP approved	Long-established	Kot Bhairab, <i>Pallo Pakho, Bhane</i> , Narayan Dihi
		Newly formed	<i>Jana Chetana</i> , Gaja Deurali
3	Caste/ ethnicity	Homogenous	<i>Pallo Pakho</i> , Gaja Deurali, Narayan Dihi
		Heterogeneous	Kot Bhairab, <i>Bhane, Jana Chetana, Sirupata</i>
2	Access to market	Near	<i>Pallo Pakho</i> , Narayan Dihi, <i>Bhane</i>
		Remote	Gaja Deurali, Kot Bhairab, <i>Jana Chetana</i>
1	Resource utilisation	Low	Kot Bhairab, <i>Bhane, Sirupata</i>
		High	<i>Pallo Pakho, Jana Chetana</i>

5 = Most important, 1 = Least important.

¹⁰ Tole is the Nepali word for a hamlet or similar small settlement within a larger one. It is not always easy to identify toles in a large village, though most people will understand it to be cluster of about 10-20 houses. It is also recognised as the level at which most informal communication takes place.

¹¹ The research group differs from the executive committee in that, firstly, it is a larger group of people, secondly, the representation in the research group should change annually in future, and thirdly, the research group is also there to discuss the committee and its relation to the rest of the group, and accordingly the committee is also regarded as a stakeholder group within the institution.

It was important to ensure that, as far as possible, a set of sites that represent a wide range of contexts found throughout the middle hills of Nepal was selected.

One criteria that was not recognised at this time, but which later turned out to be quite crucial was the ratio of forest area to FUG households. It was possible to look into this issue within the five research sites - Jana Chetana having a high ratio and Sirupata having the lowest. During the fieldwork it also became apparent that this criteria would be an important factor affecting, at the very least, the nature of participation in the process, and also the kinds of issues that would be researched.

A one-day workshop was organised with representatives from potential sites to discuss research objectives, and to select research sites from those expressing interest in participating in the research. The four FUGs that participated in the research were Pallo Pakho, Jana Chetana, Bhane and Sirupata. At the time of the selection of research sites, there were twenty-three FUGs in the Range Post. There were no representatives from non-FUG sites, and it was decided that further discussions would be needed.

The project also aimed to undertake a study in at least one site where local people have yet to formally become involved in the community forestry programme. However, this was not so easy, mainly because the Range Post staff only keep information on the forests that have been handed-over to local communities as community forests. Although forest guards have knowledge of some communities forming their own forest protection (conservation) committees, there is no record of these in the Range Post.

After discussions with the Ranger, Forest Guards and some FUG representatives during the selection workshop at the Range Post, a potential site, Kamere Pakho, was provisionally selected as a representative of the non-FUG sites. However, this had to be changed later on, mainly because of the large number of user households and wide reaching conflicts over forest resource uses, involving complex political alliances.

Another non-FUG site, Jyamire, was selected late on in the process, after discussions with the vice-chairman of Painyu-Thanthap VDC, during the research workshop with Bhane FUG of the same VDC. Apparently, due to the complete stagnation of Bhane FUG (the only FUG in the VDC), many neighbouring wards were showing interest in the overall fate of this FUG. After discussions with the VDC vice-chairman and some other members in the VDC, Jyamire, which neighbours Bhane FUG, was selected.

5.3 The research process used in individual sites

This represents the main research process that the project team and members of the selected team adopted for determining ways to develop forest users monitoring systems. It is the process (or outcome) arising from this activity that would be used by the FUGs to monitor their forest management planning activities (Project Output 2).

In each of the five research sites, a systematic process of research was used for detailed investigations. Table 2 provides information on the general research process, activities undertaken and the objectives and expected outcomes of each activity.

A range of methods, tools, techniques and games were used including resource and social mapping, village and forest walks, situation analysis (web diagram), visioning, wealth rankings, focused group discussions, forest resource assessment, sample plots etc. A reflection on the use of these tools and techniques can be found in the project full report.

The research methodology was adapted to the needs and situation. The methods, tools and techniques were chosen by the research team to fit the particular circumstances of each site. As Table 3 shows, not all of these methods, tools and techniques were used in every site.

As the research work progressed, the project team constantly assessed and reflected on the usefulness of the methods and tools used, and accordingly adapted the research methodology. For example, in Pallo Pakho and Jana Chetana, tole meetings were used basically to inform people about the project purpose and to select the tole representatives for the detailed investigations of the forest management issues facing the FUG. However, these representatives in the subsequent workshops were unable to reflect on the major issues faced by the FUG members.

Table 2: General process used for field investigations in each research site

Phase	Activity	Objective / Outcome
Preparatory	Discussion with key members	<ul style="list-style-type: none"> Discuss the project objectives, rationale & benefits Fix a date, time and place for meeting with FUGC members
	FUG Committee meeting	<ul style="list-style-type: none"> Discuss forest user group activities, achievements and issues with the Committee officials Discuss the project objectives, rationale & benefits Discuss the need to communicate the project objectives to the rest of the forest users through tole (hamlets) meetings Fix dates, time and place for tole meetings and arrangements for informing the villagers for the meeting
	Tole meetings	<ul style="list-style-type: none"> In each tole, discuss forest user group activities, achievements, issues them. Discuss the project objectives, rationale and benefits Nominate/select tole representatives, at least 1 man and 1 woman per tole, to participate in the project workshop Inform of the date, time & place of the workshop, and its logistics
Detailed Investigation	Workshop with Tole representatives	<ul style="list-style-type: none"> Discuss and agree on the agenda of discussion in the workshop, relating to forest management practices, including monitoring (visit fields & forests) Document the outcomes of the discussion, including a set of monitoring indicators, if any, that arise Plan and prepare for sharing and reflection of the outcome of the workshop with the rest of the FUGC officials and tole members

Table 3 Summary comparison of activities undertaken in each site

Stage/activity	Objective	Research Sites *				
		a	b	c	d	e
Preparation	Social / resource mapping (preliminary investigations with key informants)					
Tole meetings	Develop list of major tole level issues relating to community forestry at tole meetings					
Workshop	Summarise major issues arising from tole meetings and development of research questions					
	Situation analysis (web diagram)					
	Visioning / objectives setting					
	Criteria and indicators for achievement of objectives					
	Preparation of criteria and indicators for forest condition prior to forest visit					
	Discussion on forest sample plots					
	Established forest sample plots and baseline information based on criteria and indicators					
	Demonstration plots (for firewood and fodder harvesting)					
	Blockwise qualitative forest assessment					
	Use of social and resource map during discussion of major issues					
	Visits by tole reps. to (and learning from) sites identifying research questions for own group			Site 1	Sites 1-3	Site 3
	Identification of critical constraints to further progress in forest management					
	Discussion on equity issues					
	Wealth ranking					
	Norms and values in decision-making and communication					

* Research sites: a = Pallo Pakho; b = Jana Chetana; c = Bhane; d = Sirupata; e = Jyamire

Consequently, it was recognised that the first set of tole meetings could also be facilitated in such a way that the tole members are able to raise their concerns and interests relating to community forest management. These issues were noted down and used as the agenda for discussion at the tole representative workshop.

This also enabled the tole members to select the right people to be representatives in the workshop, making the discussion much more focused and relevant to the real issues facing the FUGs.

Some activities, such as the visioning of an ideal FUG and forest resource condition, and the setting of criteria and indicators to measure whether or not these ‘ideals’ are achieved, were not found to be very helpful. Although at times interesting and helpful in engaging people, in the end they proved to be rather theoretical exercises, which did not focus on the real issues facing the FUGs.

In some situations, the participants did not want to undertake certain activities. For example, in Jyamire, people were reluctant to do wealth ranking and the estimation of the demand and supply of forest products, so the project team decided not to pursue these activities.

The extent to which the research process used was adaptive is also reflected in the time spent in each site for different stages/activities (see Table 3).

Table 3: Time used for the field research in each site (number of days)

Stage/activity	Research Sites *					Total
	a	b	c	d	e	
FUG committee meeting **	1	1	1	1	1	5
Tole level meeting **	4	3	4	5	3	19
Visit to other research sites	-	-	1	5	1	7
Tole representative workshop	12	8	7	7	5	39
Tole meetings – share w/shop results & feedback	4	3	1	2	1	11
FUG general assembly – prepare action plans	1	1	3	1	1	7
Follow up arrangements	2	2	2	2	2	10
Total	24	18	19	23	15	109

* N.B: Research sites: a = Pallo Pakho; b = Jana Chetana; c = Bhane; d = Sirupata; e = Jyamire

** On average each FUG committee and tole meeting lasted for 2 to 2.5 hours, and was possible to organise either early in the morning or in the evening.

In Pallo Pakho, the main pilot site, almost every tool was used, hence the highest number of days for the tole representative workshop. The members of Bhane, Sirupata and Jyamire decided to ask their tole representatives to visit Pallo Pakha and Jana Chetana first before organising a workshop for detailed investigations. They asked the Pallo Pakho and Jana Chetana people to reflect upon their experience. They then tried to relate the experience with their own FUG situations and identify issues facing the group for the focus of discussion in the workshop. In Bhane, the FUG members used three days in the general assembly to discuss issues and to develop an action plan. Sirupata also has a relatively high number of days, mainly because they decided to visit all of the three sites.

In summary, the participatory action research, especially Stages 3 and 4 above, does appear to offer significant potential for FUGs to manage their forests more actively, and to function better as sustainable and equitable local institutions. However, participatory action research cannot be solely developed and “delivered” by outside researcher. It has to be integrated into a support programme involving better information gathering and analysis; better and more equitable forest management planning; and encouragement for FUGs to learn through doing and to be flexible and innovative in their forest management.

6. Contribution of Outputs

The purpose of the project was to develop and assess participatory approaches to managing common property forest resources and biodiversity for sustaining livelihoods, and develop monitoring systems that enable various stakeholders to plan for forest management at the local level.

The project has considered monitoring issues in the context of the overall process of planning for common property forest resource management at the local level, rather than as a separate activity. It has involved the selected forest user group members as well as the Range Post staff at all stages of research activities. It has identified the main constraints to the development of an effective monitoring system and the ways to

addressing them. Not only has it enhanced capacity of the Range Post staff and concerned FUG members, it has also helped the concerned FUGs and Range Post staff develop their own unique monitoring systems. There is a strong feeling of ownership amongst the community members and Range Post staff over the outcome (the monitoring system and the process of developing it). The majority of the participants feel that not only will the process (or methodology) developed through this research help better monitor their community forest management planning, it can also be adapted to monitor a range of other village development activities.

In isolation, it is unlikely that the process developed during the project can achieve the goal of significantly increasing the conscious participation of local people in community forest management, as there are many prerequisite factors that affect the sustainability of an FUG as a whole. Whilst these factors were external to the scope of the field process the project has produced recommendations for addressing them. In many instances the benefits of active involvement in community forest management planning and monitoring will not meet time and opportunity costs. Principally, in order for local level planning and monitoring to be cost effective in terms of improvements in natural, social and economic spheres, local people need to have the opportunity to plan for community forestry as part of their overall community livelihood plans, even prior to community forestry hand-over. This will also better enable them to influence local service delivery institutions in the forest sector, rather than being forced to segregate their own livelihoods planning processes according to different sectors.

6.1 Contribution of outputs to NRSP's goals

The DFID Nepal country strategy relating to natural resources specifically identifies the objective of seeking to 'enhance the contribution of community forestry management to sustainable rural livelihoods, building on the successes of the existing community forestry projects'. The outputs of the project will contribute directly to this objective. Not only has the project identified some of the major problems facing community forest management and monitoring in Nepal, it has developed a methodology, which appears to be able to address them. The process developed through this research helps to linking forest management with livelihoods, and provides a way of bringing together a range of local stakeholders and interest groups and individuals, and presenting and negotiating their interests.

6.2 Target institutions

The main direct beneficiaries of the project are the Forest Department and a range of field projects in Nepal supporting the community forestry programme, including the new DFID-supported Livelihood and Forestry Programme (LFP). Essentially the outputs of the project will enable them to make community forestry more effective – thereby providing greater benefits to rural people in Nepal.

The LFP has a specific provision for a range of monitoring and evaluation programmes, including the programme to assist FUGs and DFO/Range Post to set up their own self-monitoring systems. The outputs of this project will make a useful contribution to the LFP goals.

It is expected that the research result will be useful for teaching at the Institute of Forestry, Pokhara and Hetauda, which is responsible for producing trained foresters for the country. In a seminar (by Dr. Y. Malla) to share the findings of FFMP, the Head of the IoF's Department of Forest Management and Community Forestry expressed the lack of information on monitoring and evaluation of community forest management. He has specifically asked for a copy of the report on this project and if possible to organise a seminar on the project findings for the faculty members and BSc final year students.

7. Publications and other communication materials

7.1 Internal Reports

IRDD (2000) A report on the Reading consultation meeting. Development of Monitoring Process and Indicators for Forest Management, Nepal Project, International and Rural Development Department, University of Reading, UK

Hurst, J., Malla, Y., Lawrence, A. and Barnes, R. (2000). Scoping Report, Development of Monitoring Process and Indicators for Forest Management, Nepal Project. International and Rural Development Department, University of Reading, UK.

Lawrence, A. (2001) A report on the biodiversity component. Development of Monitoring Process and Indicators for Forest Management, Nepal Project, International and Rural Development Department, University of Reading, UK

IRDD (2001) Summary report Development of Monitoring Process and Indicators for Forest Management, Nepal Project, International and Rural Development Department, University of Reading, UK

7.2 Published articles

Paudel, K. P., Ojha, H. R. and Barnes, R. (2001) Local level monitoring systems in community forestry: challenges, opportunities and directions for future. *Journal of Forestry and Livelihoods*. No 1 July 2001.

Lawrence, A., Barnes, R., Paudel, K. and Malla, Y. (2001) Biodiversity values inferred in five communities in Nepal - a brief note prepared for the European Tropical Forestry Research Network (ETFRN) E-workshop on Participatory Monitoring and Evaluation of Biodiversity.

8. Project logframe

8.1 Original logframe approved by NRSP (1999)

Narrative summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
<p>Goal Planning strategies to sustain livelihoods of poor people dependent on forests adjacent to croplands developed and promoted.</p>	<p>- Improved strategies adopted by at least 25% of the total FUGs in the hills region by 2005</p>	<p>- Reports of target institutions - Research progress reports - Evaluation of FAI</p>	<p>- Enabling environment (policies & institutions) exist.</p>
<p>Purpose Perceptions of the various stakeholders on common property forest resource assessed and indicators identified.</p>	<p>By 2005 indicators developed by the project adopted: - for monitoring and assessing at least 25% of the total community forests by F/D & FUGs, - for planning community forest management in the field by F/D staff & FUGs, - for training field staff and forest user groups by the Forest Ministry's Trg. Div., and - for teaching forestry students (BSc/ISc) at the Institute of Forestry.</p>	<p>- Project reports. - Reports from target institutions including For. Dept. and field projects.</p>	<p>- Target institutions (For. Dept., Training Div., Institute of Forestry, and field projects invest in the uptake of research results</p>
<p>Outputs 1. A set of quantitative and qualitative indicators to assess both biophysical and socio-economic outcomes of community forestry intervention prepared and tested. 2. Methods for devising and adapting indicators for use at the local level documented.</p>	<p>- Guideline indicators to monitor and assess community forests (in English and Nepali) prepared by April 2001 - Methodology documented, refined through stakeholder review and published by June 2001.</p>	<p>- Project reports and final workshop proceedings with a set of guidelines for community forest assessment. - 1 article in international journal; 1 in Nepal-based journal; 1 in informal network press (e.g. FTTP).</p>	<p>- Acceptance of inadequacy of present CF operational guidelines. - Commitment to action for improvement of community forest management by For. Dept. & FUGs.</p>
<p>Project Activities 1.1 Consultation workshop in Reading. 1.2 Desk study leading to draft methodology for participatory development of indicators 1.3 Planning workshop with representatives of major institutions. 1.4 Local workshops to meet and plan case studies with primary stakeholders. 2.1 Field investigation: site specific case studies, testing and adapting indicators with primary stakeholders 2.2 Document the process and methods used to devise and adapt indicators with the concerned stakeholders 2.3 Project completion workshop 2.4 Disseminate research results widely</p>	<p>Input/resources: £78,479.50 (see financial summary for details)</p>	<p>- Milestones - Quarterly reports - Annual reports</p>	<p>- Appropriate FUG sites can be identified. - FUGs are able & willing to participate in the research. - Co-operation from the government District Forest Office forthcoming. - Suitably qualified research Fellow can be recruited and retained.</p>

8.2 Revised logframe approved by NRSP (2001)

Narrative summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Goal			
Planning strategies to sustain the livelihoods of poor people dependent on forests adjacent to croplands developed and promoted	By 2003 new approaches to the management of common pool resources and forest biodiversity validated in two targeted areas. By 2005 these approaches incorporated into participatory management strategies to maintain forest integrity and adopted by target institutions in two targeted countries.	Reviews by programme manager Reports of research team and collaborating / target institutions Appropriate dissemination outputs. Local, national and international statistical data Evaluation of FAI.	Target beneficiaries adopt and use strategies. Enabling environment exist. Budget and programmes of target institutions are sufficient and well managed.
Purpose			
Participatory approaches to managing common pool resources (CPR) and biodiversity for sustaining livelihoods developed and assessed, including monitoring systems that enable various stakeholders to plan forest management in the mid-hills of Nepal.	<ol style="list-style-type: none"> 1. By 2002 monitoring systems developed during the project adopted by concerned people in the research sites and the relevant Range Post. 2. By 2002, project recommendations are used by the concerned District Forest Office and field projects (e.g. LFP Baglung Area). 	For OVI 1 - Case study and final reports. - Tri-monthly follow-up reports - Revised community forest Operational Plan For OVI 2 - Tri-monthly follow-up reports - Final follow-up report -Record of actions taken in the FUG register. -Annual work plan of DFO and LFP	Target institutions open to critical re-assessment of the community forestry guidelines.
Outputs			
<ol style="list-style-type: none"> 1. An understanding developed of ways in which stakeholders manage common property forest resources (CPR-F), including approaches to monitoring. 2. Process for improving forest users' monitoring systems for CPR-F for use at the forest users level developed, with attention to livelihoods aspects and biological diversity, tailored to specific local characteristics 3. Recommendations of ways in which stakeholders at the Range Post level can effectively monitor each other and themselves. 4. Awareness amongst local institutions of options for monitoring CPR-F increased. 	For Output 1 - At least 3 ways in which DFO/RP and FUGs each manage CPR-F documented. - At least 3 ways in which DFO/RP and FUGs each monitor the resource condition and management regime documented. - At least 3 constraints to developing more effective monitoring system for CPR-F for use at the forest users level identified. For Output 2: - By the end of the follow-up period (09/02), at least 2 FUGs use and evaluate the new monitoring system.	<u>For Outputs 1, 2 & 3:</u> - Case study, and final reports For Output 4: - - Workshop report - 2 peer reviewed papers - Paper in Nepali journal.	

	<p><u>For Output 3.</u> Recommendations and means of arriving at recommendations documented by Nov. 2001 for use in the preparation of new FUG Operational Plan, or the revision of the existing Operational Plan.</p> <p>For Output 4</p> <ul style="list-style-type: none"> - Senior government officials and project managers participate in final workshop in Sept 2001 - 2 peer reviewed papers submitted by June 2002 - Recommendations published in Nepali journal by June 2002 		
Project Activities			
<p>1.1 Consultation workshop in Reading</p> <p>1.2 Scoping study based on literature and consultations in Nepal</p> <p>1.3 Local workshops to explore current forest management practices through case studies</p> <p>2.1 Characterise communities and natural resources</p> <p>2.2 Field investigations: site specific case studies to:</p> <p>a) Develop management system with primary stakeholders.</p> <p>b) Support Range Post in this process</p> <p>2.3 Develop a framework for comparing stakeholders' perceptions of biological diversity and test in at least 1 case study site</p> <p>2.4 Critical reflection and documentation of processes and methods used to develop monitoring systems</p> <p>2.5 Analyse and extract recommended processes with respect to local characteristics identified in 2.1.</p> <p>3.1 Workshop to elicit responses from district level forestry staff to output 2, and discuss their monitoring requirements</p> <p>3.2 Drawing on the results of 1.1 to 1.3, 2.1 to 2.5 & 3.1, compare the perceptions, and, where applicable, indicators, of different stakeholders</p> <p>3.3 Formulate recommendations & final reports.</p> <p>4.1 Organise a final workshop for the government senior forest officials and field project managers for informing research results and feedback.</p> <p>4.2 Write final report.</p> <p>4.3 Prepare at least two peer reviewed journal articles for wider circulation of research findings.</p> <p>4.4 Prepare a summary report for a Nepali journal</p>	<p>Project inputs/ resources: £78,479.50 (see financial summary for details)</p> <p><u>Milestones:</u></p> <ul style="list-style-type: none"> - Consultation workshop in Reading - Preparation of inception report - Desk study and consultations with concerned individuals and organisations in Nepal - Local workshops for site selection for case studies and outline schedules for case studies - Field investigation and site specific case studies - Framework for biodiversity monitoring at the forest users level and test in one pilot site. - Joint workshop of representatives of case study sites, RP staff and FECOFUN members - District level workshop in Baglung - Final workshop in Kathmandu 	<ul style="list-style-type: none"> - Inception report - Scoping report - Case study reports - Biodiversity component report - Joint workshop report - Final workshop report - Final Technical Report (FTR) - Main research report (appendix to the FTR). - Journal articles 	<p>Appropriate FUG sites can be identified</p> <p>FUGs are able & willing to participate in research</p> <p>Co-operation from the government DoF/DFO forthcoming</p>

9. Keywords

Nepal, community, forestry, community forestry, forest user groups, participation, participatory monitoring and evaluation, criteria, indicators, participatory action research

10. Annexes

Annex 1: Common property forest resource management in Nepal: developing monitoring systems for use at the local level A Final Report to the DFID on Research Project R7514 by Yam Malla, Richard Barnes, Krishna Paudel, Anna Lawrence, Hemant Ojha and Kate Green. International and Rural Development Department, University of Reading, Reading (2002).

Annex 2: Local level monitoring systems in community forestry: challenges, opportunities and directions for future by K. P. Paudel, H. R. Ojha and R. Barnes. *Journal of Forestry and Livelihoods*. No 1 July 2001.

Annex 3: Biodiversity values inferred in five communities in Nepal by Anna Lawrence, Richard Barnes, Krishna Paudel and Yam Malla. A brief note prepared for the European Tropical Forestry Research Network E-workshop on Participatory Monitoring and Evaluation of Biodiversity.

Scientific annex (Annex A) to the FTR together with additional annexes that include publications and some other grey literature published through the project but not previously provided for the NRSP library. Final annex: Final project inventory