
COOPERATION AND CONFLICT IN COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT IN INDIA: A DISCUSSION PAPER

Czech Conroy and Kerry Albright 33

1. INTRODUCTION

Designing community-based natural resource management (CBNRM) programmes, or working out how best to support CBNRM is not easy, and conflicts are probably unavoidable, if not inherent. The factors giving rise to conflicts need to be better understood, and the most effective ways of managing them need to be identified and appropriate structures and processes incorporated into CBNRM programmes.

This paper draws on information from two research projects ii in India that have been coordinated by one of the authors (CC). One project studied 33 cases of self-initiated community forest management (CFM) iii in the state of Orissa, where a few thousand iv communities are managing forests. Many communities initiated CFM more than 20 years ago. The second project has been studying goat feeding systems in semi-arid parts of NW India, particularly Rajasthan, and ways of overcoming problems of seasonal feed scarcity. Protected silvi-pasture areas (PSPAs) on common lands are one form of intervention that has been studied: case studies of 13 PSPAs have been reviewed in preparing this paper.

The paper is structured as follows. The remainder of this section describes the context and nature of CBNMR in the two survey areas, and the basis on which cases of CBNRM were selected for study. Section 2 then describes some of the main types of stakeholders that may have interests in common pool resources in India, with particular emphasis on forests and their products. It highlights the fact that even within communities there may be different sub-groups with different, and sometimes conflicting, interests. Section 3 goes on to describe and categorise the various types of conflict that can affect CBNRM. Conflicts relating to, or affecting, CBNRM are quite common in both Orissa and Rajasthan, and occasionally undermine it.

Section 4 considers what implications the various types of conflicts have for the design of external interventions to promote CBNRM. It describes various measures that can help to identify, avoid, or minimise conflicts: participatory natural resource management projects have sometimes been weak in recognising and taking account of

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32 We would very much welcome comments on this paper, which has been prepared for presentation at the Development Studies Association/Bradford University Conference on 'Environmental Resources: Conflict, Co-operation and Governance', May 17th-18th 2000. The paper is being circulated to colleagues in India, and will be revised after the conference to take account of feedback.

33 The authors are researchers in the Social Sciences Department, Natural Resources Institute, University of Greenwich. We would like to acknowledge the contributions (direct and indirect) of others to this paper, including: Man-Kwun Chan, Mr Bhise, Mohan Dangi, Ashwini Ghorpade, Viren Lobo, Abha Mishra, Ajay Rai, Kishore Saint, Sandeep, Neera Singh and Bhaskar Vira.
conflicting interests (Grimble et al., 1995). The use of stakeholder analysis is discussed, particularly in relation to improving the design of policies, programmes or projects.

Section 5 outlines five general approaches to conflict management at the micro-level that external agencies can adopt, the potential advantages and disadvantages associated with each, and which are most appropriate and when in CBNRM in India. Many conflicts cannot be anticipated and taken into account at the design stage, particularly since some conflicts that negatively impact on NR management are primarily concerned with other issues. Yet the options for management of natural resources that are immediately available tend to have a number of weaknesses associated with them. Thus, it is desirable for CBNRM projects and programmes to include local (particularly community) capacity building for conflict management as an important component, and ways of doing this are described in section 6. Section 7 contains some general conclusions.

1.1 The Context and Nature of CBNRM in Orissa and South Rajasthan

Common pool resources (CPRs) can be important sources of products for local people, and particularly the poor, in rural India. For example, grazing is the most important source of fodder for cattle and other ruminants, and most grazing takes place in CPRs, such as forests, permanent pastures and grazing areas, and non-arable lands (World Bank, 1999). Tree leaves and grass undergrowth from forests constitute an important source of fodder, particularly in hilly and arid areas (ibid.). Where forest cover is still substantial (say 15-30%), as in Orissa, forests are an important source of a wide range of products that are used for subsistence purposes and/or sold (see below for details).

The productivity of CPRs has been declining for several decades. Top-down policies and programmes to raise their productivity have generally failed to do so, largely because of the lack of emphasis on the strengthening of local community organisations (ibid.). More recent programmes, notably those concerned with joint forest management (JFM) and watershed development, are attempting to take a more participatory approach and to involve communities directly in the management of these resources. However, conflicts are sometimes a serious obstacle to sustained community-based management.

1.1.1 Orissa

Orissa is a state on the eastern coast of India, with a tropical climate. The mean annual rainfall of the state as a whole is about 2000 mm, but there is a lot of variation and in parts of western Orissa mean annual rainfall is as low as 1000-1200 mm. Orissa’s forest cover is about 30%, one of the highest in India. The principal forest types are: tropical moist deciduous, tropical dry deciduous, tropical semi-evergreen and subtropical broad-leaved hill forests (Orissa State Gazetteer, Vol. III 1990).

There are two broad administrative categories of forest in Orissa: Reserved Forests (RF) and Protected Forests (PF). The former belong to, and are (at least in theory) managed by, the FD; whereas the latter belong to the Revenue Department, although the FD is legally responsible for their management. In practice the FD has tended to
ignore PF. In RF local rights do not exist, and everything is prohibited unless specifically admitted; while in PF, which are located within village revenue boundaries, local people have greater rights.

A substantial variety of forest products is harvested by local people, including: fuelwood, tubers, edible green leaves, fruits and berries, mushrooms, green leaves for plate-making, dry leaves for use as fuel, bamboo, small timber, medicinal herbs, creepers for rope-making, and seeds for making oil. CFM involves the active protection of a forest area, and regulation of its use, by a community. Orissa has several thousand self-initiated CFM groups, perhaps more than anywhere else in the world of comparable size. A large proportion of them have been in existence for more than 10 years, and some for as long as 30 or 40 years.

1.1.2 South Rajasthan

South Rajasthan is a semi-arid region in western India. All but one of the cases studied are located in Udaipur District, which has a mean annual rainfall of about 600 mm. The area used to be heavily forested, Teak and bamboo being common species, but there has been extensive deforestation during the last few decades. Most households in the region are agro-pastoralist. Crop production tends to be their major activity, but animal husbandry (cows, buffaloes, goats and native chickens) is also important for most: seasonal labour migration is another important activity for most poor households. Animals, particularly smallstock, are kept partly as a drought-proofing mechanism: in the event of crop failure they can be sold to provide income to purchase food.

The principal product derived from both forests and village grazing areas is fodder for livestock, and fuelwood is also an important product from forests. Fodder may be either grass (consumed primarily by large ruminants) or tree fodder (consumed mainly by goats). Other NTFPs are much lower in quantity and in their contribution to livelihoods than is the case in Orissa. This may be partly related to the different agro-climatic conditions, with Orissa’s higher rainfall enabling trees to grow more rapidly than those in Rajasthan (in general, although there are, of course, differences between species).
Many rural livestock-keepers tend to be small or marginal farmers (or landless people) who do not have sufficient land to grow fodder crops, preferring to give priority to food crops and cash crops. For them, common lands are usually an important source of forage. Two principal types of common pool silvi-pasture land are village pastures and forests. Under the Rajasthan Tenancy Act (1955), pasture land (Charagah) is defined as “land used for the grazing of the cattle of a village or villages or recorded in the settlement record as such…” (Cited by Saint, 1993).

Numerous NGOs in Rajasthan have sought to reverse the degradation of common lands by fencing off areas of Charagah or other commons, planting fodder trees and improved fodder grasses and legumes, and applying soil and water conservation measures. The Forest Department has taken a similar approach on forest (and sometimes Charagah) lands, under the auspices of its joint forest management (JFM) programme. These protected areas can be termed protected silvi-pasture areas (PSPAs).

Charagah land is under the jurisdiction of the panchayat, the lowest tier of local government. Panchayats usually represent 4-5 villages (but sometimes as many as 10 or 12), and the residents of any one of these villages tend not to feel any affinity with the panchayat, and use of panchayat-owned common lands is generally not regulated. Nevertheless, enclosure and development of charagah by a particular village requires the granting of a lease for this purpose by the panchayat. These leases are usually for three or five years, but in some cases they have had a 10-year duration.

Encroachment is widespread in Rajasthan, and has been going on for several decades, particularly since Independence in 1947 (Jodha, 91). The term usually refers to the use of land to grow crops, but construction of houses is sometimes involved. Encroachment on common lands may be done either by people within the community to which the commons belong, or are said to belong, or people from other neighbouring villages. It is a major political issue. A socio-political movement called Jungle Jameen Andolan has been active in southern Rajasthan for several years, which is lobbying for regularisation of long-standing (pre-1980) encroachments by villagers; and there is a de facto government policy of periodic regularisation (Vardhan and Negi, 1999). Unfortunately, the expectation that long-standing encroachments will be legalised sometimes leads to new ‘spurts’ of encroachment (ibid.). Encroachment is usually done by more powerful members of the village, and is a major threat to the majority of villagers (SPWD, 1991; Dangi in SPWD 1998).

NGOs involved in enclosure of the commons are sometimes motivated by the desire to prevent further encroachment, so that all members of the community, and particularly the poor, can continue to benefit from its use. In addition, preventing encroachment (or removing encroachers) is often a major reason why certain communities, or sub-groups of communities, support the creation of a PSPA.

1.1.3 Institutional arrangements of CBNRM

These arrangements are similar in the two project areas. Various types of community organisations manage CPRs, and develop rules and regulations for membership, access, penalty, watch and ward, harvesting etc.. The organisation could be a village committee, a specially constituted forest committee, a youth club or a group of
village elders. Depending on the situation, communities have developed different arrangements for enforcing protection and using the benefits. Members are recognised on the basis of their contribution to protection, which is in cash at some places and in kind or labour (mainly patrolling) at others. Ethnicity/caste and place of residence (hamlet) influence representation of different sections on the decision-making body.

The community devises a protection system that usually comprises (a) patrolling and (b) a penalty system. Rotational patrolling is a widely used method, in combination with general vigilance. Alternatively, watchers are employed where membership fees are charged, or some community fund has been developed which can support a watcher; or when it becomes difficult to go for patrolling (agricultural season). The penalty system may involve verbal warning, beating, social pressure and monetary fines. It is usually based on graduated sanctions (Ostrom 1990), i.e. the type and size of penalty depends on the seriousness of the offence, and whether or not it is a first offence.

The community generally implements and enforces the protection system itself, only reverting to external authorities when ‘offenders’ (people who have broken the rules governing use of the CPR) refuse to pay the fine. Most conflicts in CBNRM are related to situations in which the rules have been broken.

1.2 Selection of CBNRM Cases for Study

In Orissa, the majority (26) of the 33 protection cases were selected to be representative of most CFM cases in their area (block or panchayat), using either random sampling or typical case sampling. The remainder are special cases that were purposively selected to illustrate particular issues.

In Rajasthan, selection of cases was entirely purposive, to illustrate a wide range of situations regarding factors including: type of management system, principal stakeholders involved in initiating protection, pattern of livestock ownership, and ‘successful’ and ‘unsuccessful’ cases of CBNRM. Thus, as far as conflicts are concerned, they are not necessarily representative of CBNRM in Udaipur District, at least as far as frequency is concerned (major conflicts are probably generally more frequent than in this sample). They do, however, provide a good indication of the kinds of conflicts that tend to arise.

2 MULTIPLE STAKEHOLDERS MEANS MULTIPLE INTERESTS

Stakeholders have been defined as “any group of people, organised or unorganised, who share a common interest or stake in a particular issue or system” (Grimble and Wellard, 1997). They can be at any level or position in society, from global to household or intra-household. A distinction is made between primary and secondary stakeholders. The former are those who depend significantly on a particular area of forest for their livelihoods: they usually live in or near the forest. There is plenty of scope for conflicts, as each stakeholder is likely to have different interests and objectives: those of poorer and weaker groups could easily be disregarded or marginalised.
Table 1  Key Stakeholders in PFM: the case of Orissa

<table>
<thead>
<tr>
<th>Level</th>
<th>Stakeholders</th>
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<tbody>
<tr>
<td><strong>Local on-site - primary</strong></td>
<td>* Management community&lt;br&gt;* Different sub-groups of protecting community (distinguished by class, caste, gender etc.)&lt;br&gt;* Village leader(s)&lt;br&gt;* Other communities nearby who previously used the protected forest, or who are still allowed limited access to the forest and/or selected products.</td>
</tr>
<tr>
<td><strong>Local off-site - secondary</strong></td>
<td>* Federation/apex body of protecting communities&lt;br&gt;* Traditional multi-village body&lt;br&gt;* <em>Panchayat</em></td>
</tr>
<tr>
<td><strong>District/forest range</strong></td>
<td>* Divisional Forest Office&lt;br&gt;* Private sector commercial bodies (e.g. NTFP traders, logging companies, organised timber smugglers, mining companies).&lt;br&gt;* NGOs (forest-support, environment etc)&lt;br&gt;* Urban consumers of forest products (esp.fuelwood)</td>
</tr>
<tr>
<td><strong>State</strong></td>
<td>* Forest Department&lt;br&gt;* Revenue Department&lt;br&gt;* Watershed mission&lt;br&gt;* Ministry of Forests and Environment&lt;br&gt;* Orissa Forest Development Corporation&lt;br&gt;* Tribal Development Cooperative</td>
</tr>
<tr>
<td><strong>National government</strong></td>
<td>* Ministry of Environment and Forests</td>
</tr>
<tr>
<td><strong>International donor agency</strong></td>
<td>* Swedish International Development Agency</td>
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</table>

2.1 Stakeholders in Community-based Forest Management

Participatory forest management (PFM) is a complex business. Forests provide a wide range of products of subsistence and/or commercial value (direct uses); as well as performing environmental services (indirect uses), and often having religious or cultural significance (non-use values). Even small ‘patches’ of forest may be used by people from several villages or hamlets; and different sub-groups within a particular hamlet or village may derive different products from the forest. Management of larger areas of forest is even more complex, as they may transcend administrative, political and social boundaries. Table 1 lists key stakeholders with an interest (actual or potential) in forests and PFM: it is based on the situation in Orissa, but a similar set of stakeholders would be found in most countries.

2.2 Communities and Conflicts of Interest

The term ‘Community-Based Natural Resource Management’ is widely used. The word ‘community’ is sometimes taken to imply a group of people living in harmony with each other and with a common set of interests. In many villages, however, there are numerous sub-groups: the land-poor and the land-rich; men and women; people
of different castes, etc (Guijt and Shah, 1998). The relations between these sub-
groups have tended to be neglected in the literature on CPR use, at least until recently;
yet ‘control and conflict over such resources [can be] closely tied to power relations
[within villages]’ (Beck, 1994). This is illustrated by the conflict example in Box 1.

Different sub-groups have different livelihood systems, and may use the commons in
different ways. Thus, their management priorities and objectives are also likely to
differ, and this may be a source of conflict. This is illustrated by PFM, in which some
sub-groups may object to the placing of restrictions on the harvesting of products: for
example, in Orissa, groups that make a living from selling fuelwood, or making
bamboo products, are sometimes opposed to CFM. Yet few studies of the impact of
JFM have examined “who, within communities and households, has gained and who
has lost by class, caste, ethnicity and gender” (Sarin et al., 1998). The same is true of
silvi-pasture and watershed development interventions that promote CBNRM,
particularly where there are major differences between sub-groups in the pattern of
livestock ownership.

The above considerations do not invalidate the concept of a community, but they do
mean that the term needs to be carefully defined. The following definition is assumed
for the purposes of this paper:

a set of people (i) with some shared beliefs, including normative
beliefs, and preferences, beyond those constituting their collective
action problem, (ii) with a more-or-less stable set of members, (iii)
who expect to continue interacting with each other for some time to
come, and (iv) whose relations are direct (unmediated by third parties)
and multiplex (Ostrom, 1992).

3 THE NATURE OF CONFLICTS AFFECTING NR MANAGEMENT

A wide range of conflicts occurs in both Orissa and Rajasthan in CBNRM. Nobody
knows exactly how prevalent they are, but they are certainly not unusual. When
CBNRM breaks down or stops it is usually because of conflict. The majority of CFM
initiatives surveyed in Orissa had experienced conflicts that had led to a breakdown
(temporary or permanent) of CFM, and/or changes in the protection arrangements
(Conroy et al., 1999). In some cases this had been associated with substantial
degradation of the protected forest. In Rajasthan, three out of the 13 PSPA cases
studied had experienced serious breakdowns in protection, i.e. ones leading to
significant degradation of the PSPA. It should be noted, however, that the majority of
micro-micro level (see below) conflicts are effectively resolved by communities
sooner or later.

The relationships between various stakeholders may involve occasional (acute)
conflicts, or ongoing (chronic) ones. Some may be readily visible to outsiders, while
others may be almost invisible or ‘subterranean’ (Sarin, 1996). Simplifying things
somewhat, one can say that conflicts occur at micro or macro levels, and between
these levels, and can be classified as follows: micro-micro, micro-macro, or macro-
macro lava. In this paper we focus primarily on micro-micro conflicts in CBNRM,
several examples of which, from Orissa and Rajasthan, are given below.
3.1 Micro-Micro Community Conflicts

Micro-micro type conflicts can be classified further into four categories (Conroy et al., 1999 - see Table 2), in terms of:

* whether they are within the community protecting the commons, or between that community and other stakeholders; and
* whether the conflict is directly or indirectly related to management of the commons.

The latter may not always be a clearcut distinction: where there is a history of conflict or mistrust between different stakeholders regarding non-NRM matters, there is more likely to be conflict between them in relation to NRM.

Table 2 Types of Micro-Micro Conflicts, with Examples

<table>
<thead>
<tr>
<th>Within protection communities⁴</th>
<th>Directly related to Protection</th>
<th>Indirect effect on Protection</th>
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<tr>
<td>A One sub-group refuses to abide by protection or harvesting rules</td>
<td>B Conflict breaks out between 2 sub-groups, who refuse to cooperate any longer in various matters. Forest protection is affected, sometimes leading to a tree-felling free-for-all.</td>
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| Between protection community and other local stakeholder | C 1+ local stakeholders (e.g. communities, local FD staff, loggers) challenge or do not accept a protection initiative (and may cut down trees in the protected patch). | D Conflict breaks out between 2 communities, related to non-protection issues (such as party politics or personal disputes), leading non-protecting community to ‘loot’ the protected patch. |

³ In combined community protection (i.e. involving more than one village or hamlet) each community is classified as a sub-group.

Out of 33 CFM initiatives studied in Orissa several had experienced either type A, B, or C conflicts. None had experienced type D, although it is possible that in some cases what have been categorised as Type C conflicts may be Type D. Out of 13 PSPA cases in Rajasthan, four had experienced Type A conflicts and four had experienced Type C conflicts. There were no conflicts that were primarily unrelated to protection issues, but one of the Type C cases also had a Type D influence (see Box 3).

3.1.1 Intra-community conflicts

Intra-community conflicts commonly relate to: use or administration of the community fund, party politics, local government elections, hamlet or sub-group level differences on various issues, benefit distribution etc. Boxes 1 and 2 contain examples, from Orissa, of type A and B micro-micro conflicts respectively. The example in Box 2 has been classified as intra-community, because the two villages involved were jointly protecting the same patch of forest.
Adendungri is a village of 139 households in Balangir District, Orissa. It is dominated numerically, as well as economically, by people of the Kulita caste. Kulitas, together with people from some other ‘backward castes’, account for 82 households (hh); followed by the Mirdha (42 hh), who are tribals, and scheduled castes (15 hh). Protection was initiated in 1968.

In 1973 it was decided that the village should have a temple, and that its construction should have first claim on any income from sale of forest products. (The temple is not completed yet.) The Mirdhas were not directly involved in the initial phase of protection. They had no representation on the temple committee that was also acting as the management committee for the forest: on the other hand, they did not contribute voluntary labour or materials towards the construction of the temple. From the mid-eighties, some of the Mirdha families, who had been living at the fringe of the village, started moving inside it. They then began to feel that they were entitled to equal rights over the forest resources being protected. In the late eighties and early nineties incidents of theft from the forest increased, many of them involving Mirdhas.

In 1992 Panchayat elections were held. The Mirdhas voted for the candidate from the neighbouring village, and attitudes against them within Adendungri hardened. The newly elected village leader organised group patrolling of the protected forest. Later in 1992 a patrol group was attacked with sticks by a Mirdha group, and two of them were seriously injured. A police case was filed against the Mirdha. Protection broke down, and a free-for-all situation ensued, in which the villagers of Adendungri, and also people from some neighbouring villages, cut and took away almost 50 percent of the trees. Protection has since been re-initiated, but both groups remain bitter. The Mirdha men say that they have not benefitted from the forest being under protection; and that the decision-making body still represents the interests and priorities of the Kulitas.
In Rajasthan, intra-community conflicts often arise from differences between sub-groups in: (a) the ownership of private land (and hence private sources of forage); (b) the pattern of livestock ownership; and (c) livelihood enterprises. Point A is illustrated by the situation in Tank village where there are three different sub-groups, namely:

- 25 percent who do not need any fodder from the village’s common pastures, because they obtain sufficient from their private land (crop residues and wastelands);
- another 25% who only need fodder from the commons during drought years; and
- 50% who depend on the common pasture land for fodder/forage on a regular basis.

As a result of these differences in private fodder/forage resources, the better-off group favours the auctioning of the grass from the PSPA, as it provides income; whereas the members of the fodder-deficient group prefer to harvest the grass themselves.

**BOX 2  KESIYAPALLI & KULASARA - A TYPE ‘B’ MICRO-MICRO CONFLICT**

These two villages are located in the Tangi area, south of Bhubaneswar, Orissa’s capital. They started forest protection in 1975, when the patch concerned had become highly degraded. Four villages decided to protect, but for practical reasons relating to the size of the protected patch they split the protection responsibilities. Kesiyapalli and Kulasara formed one CFM group, and the other two villages formed another. The combined management system functioned well for nine years, but in 1984 protection broke down.

**Causes of the conflict** One factor was that Kesiyapalli wanted to build a road to link up with another road, so that there would be an alternative route to their village for people coming by vehicle from one side. The most direct route to the road they wanted to link up with would have required filling in some of a village pond that they shared with Kulasara. Any other route would have needed to go round the school and hence would have required more labour and money (more purchasing of land). Secondly, around this time there was a dispute between the two villages over their respective shares of the produce from the pond. Thirdly, there was a Panchayat election around that time and the two villages had voted for different candidates: this had also increased tensions. Kesiyapalli people had voted for a candidate who belonged to their caste and who ultimately won the election.

The combination of factors caused an escalation of tensions that resulted in the protected patch being severely degraded. Kulasara villagers started cutting trees, people from neighbouring villages soon joined them, and there were soon virtually none left. The Kesiyapalli villagers attempted to save the patch, but things happened so fast that there was not time to resolve the conflict.

3.1.2 Inter-community conflicts

*Inter-community* conflicts are common over usufructuary rights: restrictions imposed by one community may be strongly contested by other villages in the area that have been using the resource for many years. In the case of Reserved Forests, conflicts often arise over the demarcation of boundaries between adjacent areas of forest that are protected by different communities. Boxes 3 and 4 contain examples from Rajasthan of Type C conflicts between communities.
**BOX 3  PHILA MAGRA   A TYPE ‘C’ CONFLICT, WITH ELEMENTS OF TYPE ‘D’**

Phila Magra is the name of a PSPA that was created under the auspices of Rajasthan’s JFM programme. It is situated close to the boundary of the villages of Philan and Sabal, and the precise location of the boundary has been a matter of dispute for almost 25 years. Unfortunately, when it initiated the PSPA with the villagers of Philan, the Forest Department did not make any attempt to tally the boundary of the PSPA with the Revenue Department’s records of the village boundary. The people of Sabal were apprehensive about the establishment of the PSPA, as the disputed part would come under the control of Philan, perhaps forever, so they opposed the physical work at the outset. However, when they had the opportunity of wage labour on the site they took it, and their opposition temporarily subsided.

Once the PSPA was created people from Sabal frequently defied the enclosure rules, grazing cattle there and stealing grass or wood; and recently some cut and removed trees and bushes, claiming a share in the patch. The dispute remains unresolved. The conflict over Phila Magra is not purely a boundary dispute, nor is it entirely an inter-village conflict. Within Philan there are different sub-groups with conflicting interests. The Rajputs of Philan, who do not depend much on the village pastureland, have not made any significant contribution to efforts to resolve the dispute, and the Rajput leader has been covertly supporting the people of Sabal with a view to winning their votes in the Panchayat elections.

**BOX 4   KELI: A TYPE ‘C’ CASE, Resulting in Breakdown of Protection**

Working with a local NGO, people in the main hamlet of the village of Keli in Rajasthan initiated protection of common grazing land in 1987, and forbade grazing and the lopping and cutting of trees in the protected area. Fallen leaves and dry wood could be collected and removed. Violation of these rules was punishable with a fine of Rs. 51/-. People from other villages, and from a smaller hamlet in Keli, had been using the area until then, grazing their animals there and collecting fuelwood and leaves, and were reluctant to accept the new rules and frequently infringed them. The rotational protection arrangements and other protection measures were only partially effective, and to curb damage by neighbouring villagers help was taken from the police authorities in Gogunda on some occasions. This reflected the weakness of the Keli community’s self-defence arrangements and coherence. It also aggravated the relations with the neighbours.

The tenuous situation about protection came to a head in 1998 when the families in the smaller hamlet of Keli village, who had been excluded from the village meetings and decision-making and had taken an adversary position towards the main hamlet, started cutting the trees in the pasture. By this time several of the elders had passed away. It was feared that those deaths were caused by the evil powers of the elder, Gamana, in the smaller hamlet. This fear, and the fatigue of long drawn out court case relating to encroachment, broke the community’s will for protection. The families in the main hamlet and others from villagers nearby joined in the cutting and removal of trees. The bulk of decade-old natural and planted trees were cut down in a matter of 2 to 3 weeks during November 1998, the stonewall was damaged and the area became open for grazing.

3.2 Micro-Micro Conflicts between Community and External Agency

Not all local conflicts are confined to communities themselves. Where an external agency is nominally promoting CBNRM, but in reality is only paying lip-service to the approach and is actually working in a non-participatory fashion, conflicts may
arise between the agency and the community with which it is working. This is illustrated by the example in Box 5.

**BOX 5  A MICRO-LEVEL CONFLICT WITH FOREST OFFICERS**

In the jfm village of Patukheda, Rajasthan, the FD planted 10,000 *Prosopis juliflora* saplings in the PSPA. The senior officials accepted in principle that the local species recommended by people should be planted. However, the local officials, under the pressure of achieving high targets for survival rate, insisted on planting *P. Juliflora*, because it is an exceptionally hardy species. However, its hardiness enables it to spread rapidly, and it can become a serious weed. In 1993 several petitions were given to the FD by the people to remove it, with a request that it be planted on the boundaries rather than inside because it was spreading fast and was having a negative effect on grass production. On receiving a cold response from the FD the villagers removed the saplings themselves in 1994. Later various local species were planted.

### 3.3 Micro-Macro Conflicts

These can also be conflicts between micro-level stakeholders and external agencies at a higher-level (e.g. policy or programme design). For example, in the case of PFM the legal and policy environment regarding the collection and marketing of non-timber forest products - NTFPs) may have a major influence on the success or otherwise of a programme: hence it needs to be reviewed, and changed if necessary to make it conducive to PFM. Interventions at the micro-level alone may be inadequate. In this paper, however, we are focusing primarily on micro-micro conflicts. (For a discussion of the influence on PFM of the macro-environment for NTFP collection and marketing see Conroy et al., in press.)

### 3.4 Macro-Macro Conflicts

State governments in India tend to treat JFM as another isolated programme, which they think can be implemented without making any changes in other sectoral programmes (Saxena, 1997). However, several aspects of policies, programmes and laws may have a strong influence on the success of JFM.

In Orissa, there appears to be a conflict between the government’s JFM programme (and overall forest policy) and the macro-environment for NTFP collection and marketing.

In communities that are not protecting nearby forests there is often a high degree of dependency of some community members on unsustainabe harvesting of timber and other forest resources, which can serve as a major deterrent to initiation of protection (Conroy et al., 1999). These community members perceive that CFM would oblige them to reduce their exploitation of forest resources (e.g. timber, firewood, bamboo), and they were not prepared to accept this because of their high dependency.

Community members said that they would be happy to switch to collection of NTFPs as a major source of income if NTFP collection and marketing became sufficiently remunerative for them. Thus, the poor returns available under the government’s
current NTFP policies and practices are fuelling deforestation, whereas the general policy objective, and a major objective for the JFM programme, is forest conservation.

4. THE IMPLICATIONS OF CONFLICTS FOR THE DESIGN OF EXTERNAL CBNRM INTERVENTIONS

Conflicts are liable to occur from time to time, and are not necessarily undesirable. In fact, they can be viewed as a normal and positive feature of human societies and often as a catalyst for positive social change. In CBNRM initiatives that have been promoted by state agencies, such as forest departments, they may sometimes indicate where improvements need to be made (e.g. where group formation had been unsound), and provide an opportunity for change. It is also important to remember that interventions by external agencies to support conflict management are not always necessary, as communities may be able to manage conflicts satisfactorily on their own; nor are they always desirable (Warner and Jones, 1998).

However, where communities are managing forests or trees, if conflicts escalate rapidly they can undermine, almost overnight, several years of community effort in protecting the resource. Thus, development agencies should: (a) do what they can to avoid creating or exacerbating conflicts; and (b) seek to minimise conflicts when designing CBNRM initiatives. Measures for achieving this are described in section 4.1. (Development agencies also need to consider whether and how they can assist in the management of micro-micro conflicts. This issue is discussed in sections 5 and 6.)

Many government programmes to promote CBNRM (e.g. joint forest management programmes) involve some form of joint or shared management of the resource by the state and local communities. Such programmes raise issues about the relationship between government agencies and communities, which may traditionally have been confrontational rather than cooperative, with the state acting as the protector of the natural resource from the local people. Such relationships, attitudes and behavioural norms only change slowly, and hence macro-micro conflicts may be common in the early stages of such programmes, with the state tending to dictate to and over-ride communities. Thus, in designing such programmes it may be desirable to incorporate structures and processes that facilitate a more equal relationship between communities and the state. This is discussed in section 4.2.

4.1 Designing CBNRM Interventions to Accommodate Different Stakeholders and Interests

The formulation of interventions by development agencies that are intended to promote CBNRM should be sensitive to issues of: differential impacts, including potential winners and losers; political economy; the interests of different stakeholders and their likely attitudes and behaviour. If they are sensitive to these issues, the likelihood of certain conflicts diminishes.

4.1.1 Stakeholder analysis

Stakeholder analysis (SA) can make a useful contribution to the design of policies and interventions in natural resource management. In the NRM sector any policy or
intervention is likely to have consequences that bear differentially on different groups and individuals, and on ‘society’ as a whole: and “unless we know what these differential effects are likely to be, it is impossible to assess the value or worth of that intervention or policy” (Grimble and Wellard, 1997). SA attempts to identify winners, losers and ‘payoffs’; and to assist the development of ‘socially-best’ policies and interventions (ibid).

Stakeholder analysis can be used: (a) to improve the effectiveness of policies and projects; and/or (b) to address their social and distributional impacts (Grimble and Chan, 1995). Its proponents argue that, by identifying potential conflicts between the interests of different stakeholders, it “helps avoid the unexpected, facilitates good design, improves the likelihood of successful implementation, and assists the assessment of outcomes” (Grimble and Wellard, 1997).

SA can help to make different objectives mutually compatible by identifying common ground, if it exists, between a number of stakeholders; and hence can assist in the designing of policies and interventions that result in win-win situations (see Table 3).

It should be borne in mind that some stakeholders may not want to acknowledge some of their interests. For example, FD staff are unlikely to admit to receiving income from their collusion with timber smugglers: or government officials to receiving money from private traders to whom they have awarded NTFP collection and processing contracts. However, such hidden agendas can be brought out into the open by asking different stakeholders to specify what they see each other’s interests as being, as well as their own, and by asking them to provide supporting evidence based on their experiences.

A potential weakness of SA is that, as normally applied, it assumes that stakeholder objectives are fixed, and works within these to find a solution. As a result, it focuses on finding a compromise that is acceptable to all stakeholders. By contrast, consensus-based approaches (which are described in section 6) explore the scope for redefining objectives and widening the common ground among stakeholders, with a view to finding a win-win solution.

4.1.2 Political Economy, Equity and Conflict at the Community Level

Most donors and governments promoting CBNRM initiatives are, at least nominally, committed to benefiting the poorest groups. Since the poor tend to be the most dependent on common pool resources, they may also stand to lose most from protection - at least, in the short-term; and they are the ones whose priorities are most likely to be ignored. Where SA (or any other approach) is used with this objective in mind, the stakeholders selected for the analysis should include all those groups, including minorities and the poor, that will be affected in some way by implementation\textsuperscript{vii}.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Rural elite</th>
<th>Rural poor</th>
<th>Political feasibility</th>
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<tbody>
<tr>
<td>A</td>
<td>Gain</td>
<td>Lose</td>
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<tr>
<td>B</td>
<td>Gain</td>
<td>Gain</td>
<td>High</td>
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</table>

Table 3 Distribution Strategies and their Political Feasibility
In promoting equity, the political economy of the situation needs to be taken into account, as power relations within communities cannot be changed easily. Table 3 provides a useful classification of strategies in relation to their political feasibility. An attempt to redistribute benefits radically (Type D strategy) may undermine any chance of effective implementation: in practice, therefore, the major opportunities lie with Types B and C strategies. Type B approaches may be the only feasible option where the poor are weak and unorganised, but Type C becomes possible where the marginal groups are strong and united.

4.1.3 Conflict-Prone Issues to address in Designing CBNRM Interventions

A number of issues associated with the design of interventions are frequently associated with conflicts. If these issues can be addressed effectively at the outset, the likelihood of certain kinds of conflicts occurring can be reduced or eliminated. These issues are discussed below.

**Determining NR management objectives**  The objectives of NR management will strongly influence the way in which the common land and vegetation are managed. Different stakeholders may have different, and sometimes conflicting, management objectives, as is illustrated by the two examples in Box 6 below. Thus, it is important that the management priorities and objectives of all sub-groups are clarified at the outset. On the basis of this information it may be possible (though not necessarily always) to develop a management plan that benefits the poorer groups, and ensures that no one group loses out. Unfortunately, when development agencies promote CBNRM they seldom explore the objectives of the community or its sub-groups in a thorough manner.

**BOX 6  TWO EXAMPLES OF CONFLICTING NRM NEEDS AND OBJECTIVES WITHIN COMMUNITIES**

**Forest management** Sal forests are widespread in parts of Orissa. Sal trees (*Shorea robusta*) can produce several valuable products, notably: good timber, fuelwood, leaves that are widely used to make plates, and seeds from which oil is extracted. If sal was being managed solely for timber production, all the coppice shoots except one would be removed; and the number of green leaves available, particularly at lower levels within the reach of collectors, would be reduced. Thus, women for whom sal plate-making is an important livelihood enterprise would be losers under this management system.

**Silvi-pasture management** In the village of Sagatdi, in Udaipur District, the whole process of pastureland protection was initially opposed by a sub-group whose
livestock were mainly or entirely goats\textsuperscript{34}. Goats prefer tree fodder to grass, browsing on leaves and pods on the tree or on the ground. The goat-keepers recognised that if, as proposed, almost 50% of the village’s pasture land were fenced off, they would lose a major source of browse for their goats and would get little or no direct benefit that would compensate for this loss. Only the people who owned large ruminants (cows and buffaloes) would benefit from the proposed intervention, at least for the first few years.

It is important to be aware of the fact that it tends to be the case in PFM that an elite group plays the lead role, and formulates management plans without much consideration for weaker ethnic groups (see Box 1 for an example) or for the interests of women (see Box 6). This is true of self-initiated forest management in Orissa, as well as FPCs established through JFM programmes (Sarin et al., 98).

Development agencies (particularly state agencies) sometimes impose their own objectives as a condition of collaboration with the community. For example, JFM resolutions refer to the concepts of ‘final harvest’ and ‘major harvest’: these terms belong to conventional plantation forestry and reflect the objectives of forest departments. They are alien to most communities, and are not appropriate to the multi-species, multi-purpose forestry practised by CFM groups.

**Agreement and clear demarcation of boundaries** Boundary disputes between communities are quite common. In Orissa, they arise primarily in relation to contiguous areas of RF that are managed by different communities. An example of a boundary dispute in Rajasthan that resulted in conflict and damage to a PSPA is that of Phila Magra, which was described in Box 3. This was a situation in which stakeholder analysis and negotiations could have reduced a conflict, instead of aggravating it. If the FD had consulted stakeholders in both villages, it would have been aware of the boundary dispute between them; and, by consulting Revenue Department records as to the location of the official boundary, it could have aligned the boundary of the JFM site with the villages’ Revenue boundary. Such actions would have greatly reduced the likelihood of villagers from Sabal cutting and removing numerous trees and bushes from the site.

**Determining the management unit** JFM programmes in India tend to recognise only legally designated Revenue villages as forest management units, although some Revenue villages are composed of a number of hamlets. The JFM approach is too rigid in this respect, and tends to be conflict-prone. The CFM experience shows that forests are sometimes managed by one or two hamlets, and that other hamlets in a Revenue village may not be involved or may have established a separate CFM initiative (Conroy et al., 99). There may even be forest-related conflicts between

\textsuperscript{34} In Rajasthan, silvi-pasture development initiatives have tended to adopt a common approach, which involves fencing-off heavily degraded common land and preventing any grazing inside it. The only type of fodder obtained during the first ten years or so is grass, which is harvested at a particular time of the year and carried back to the farm in bundles. This approach favours the owners of large ruminants, which eat grass and can be stall-fed relatively easily. However, goats prefer tree fodder to grass, and generally browse on leaves and pods on the tree or ones that have fallen to the ground. Thus, people who own goats, but not large ruminants, may lose out from SPD, at least in the short to medium term. (After about 10 years the trees could be large enough to be lopped for tree fodder that could be fed to goats.)
different hamlets in the same Revenue village. Thus, a more flexible approach is needed, otherwise the FD (or other external agencies) may create latent conflicts that will sooner or later result in breakdown of CBNRM.

Appropriate decision-making processes for FPCs  
Research in Orissa (Conroy et al., 1999) and elsewhere in India (Raju et al., 1993) has shown that conflicts are likely to be minimised where the decision-making processes are transparent and perceived to be fair. For example, conflict is less likely where all sub-groups are represented on the management committee, where meetings take place regularly, and where records are kept of decisions and financial matters. Mis-appropriation of funds from CBNRM by one or more members of the management committee is sometimes a source of conflict between sub-groups, and is likely to be minimised by these processes.

4.2 Changing the Balance of Power Between the State and Communities

Micro-macro conflicts are common, particularly between communities and government agencies, including those that are nominally promoting CBNRM. This section describes some proposals for strengthening the position of CBNRM groups vis-à-vis the state.

It would be extremely naïve to assume that the application of SA will ensure that the interests of weaker groups/stakeholders are respected (Hildyard et al., 98). The stronger stakeholders can be expected to continue to dominate decision-making; and, when conflicts arise, to promote their interests over those of others. Many state agencies may be opposed to giving more power to local communities; and may see it as a threat to established patron-client and rent-seeking relationships (Hobley, 1996). There may even be a reverse tendency whereby the state seeks “to expropriate the initiatives of the people” (Jodha, 1990); and, as in India, a history of conflict between certain state institutions and forest-dependent communities over forest resources (Pathak, 1994).

Traditional relationships between state agencies and communities are likely to manifest themselves in shared forest management initiatives. This is illustrated by JFM programmes in India, in which FDs (or individuals or groups within them) often have an ambivalent or hostile attitude towards devolving powers to forest protection committees (FPCs), and they:

- sometimes unilaterally over-rule FPC decisions, without explanation; and
- dominate the preparation of micro-plans, which become an instrument by which the FD retains control over the community (Saxena, 1997).

Power relations between the state and communities cannot be changed overnight, but in certain institutional and political situations there may be room for manoeuvre within which steps can be taken to promote changes. Three types of measures will now be described.

4.2.1 Creating a legal or administrative basis for mutual accountability

In many state JFM programmes in India, FDs have the power to cancel or dissolve FPCs for failing to comply with certain provisions of the JFM resolution or other
state rules and regulations. Furthermore, the reasons for the dissolution can be formulated in such a way that the decision does not appear arbitrary (Saxena, 1997). The FPCs, on the other hand, are not given any formal rights or mechanisms by which they can bring the FD to account. Thus, the FPCs are accountable to the FD, but not vice versa, making the relationship between them highly unequal. Legal or administrative orders embodying some form of mutual accountability would contribute to a shift in power.

4.2.2 Creating multi-stakeholder decision-making fora for PFM

In most countries, PFM involves a major shift from state management of forests to some form of shared management, involving at least two (usually several) major sets of stakeholders. Thus, new multi-stakeholder fora will generally be required (Anderson et al., 98), which should ideally have decision-making powers rather than merely having consultative status. If forest-dependent communities are represented on them, they can:

- strengthen communities’ bargaining power vis-à-vis the state (Vira, 98); and
- help to ensure that negotiations and decision-making will be mutually acceptable to (or at least accepted by) all major stakeholders.

District or division-level fora For Orissa, it has been proposed that committees be established comprising representatives of CFM groups, OFD & NGOs: one such committee could be constituted for each forest division or each district (Conroy et al., 1999). The establishment of this kind of committee or working group is being given consideration by the state government. They would deal with the following kinds of issues (Conroy et al., 99) (and could also have a general responsibility for monitoring the performance of PFM initiatives (Vira et al., 98)):

- lack of FD support, either in dealing with offenders or upholding the CFM group’s rights;
- resolution of inter-village boundary disputes over areas of Reserved Forest managed by several communities;
- alleged involvement of FD staff in timber smuggling from protected patches;
- undue interference of FD staff in the development or implementation of management plans by communities;
- concern of FD staff that management plans are not ecologically sound;
- concern of FD staff over serious deviations from the management plan (e.g. the number of trees being felled by CFM group members);
- concern of FD staff that the CFM group is not enforcing protection adequately.

State and national level fora A similar body is also desirable at a higher level to influence the broader enabling environment, including policy and legislation. Ensuring authentic and effective representation of FPCs at this level is more difficult, however.

4.2.3 Creating and developing forest community apex bodies

Forest-dependent communities involved in PFM tend to be weak, to function in isolation from each other, and to interface with the state individually. Their
bargaining power would be strengthened if they could collaborate, and take a united stance on certain issues. In Orissa, it is quite common for several communities to work together in CFM, particularly where there is a large tract of forest, and they often form apex bodies to coordinate their activities, assist with conflict management and provide an interface for dealings with the FD (Saxena, 1997; Poffenberger et al, 1996). The creations of apex CBOs, or federations, is discussed further in section 6.2.2.

5. OPTIONS IN MANAGING MICRO-MICRO CONFLICTS

Ideally, the communities involved in NRM should be capable of managing themselves micro-micro conflicts affecting them. In Orissa it appears that the majority of cases of conflict are dealt with effectively by them (Conroy et al., 1999). This may be done by the forest protection committee itself; or alternatively, there are often traditional institutions or authorities (e.g. village leaders) that play a role in conflict management at the community/village level, and at the multi-village level. However, the Orissa experience shows that their power and influence may wane over time, and often new bodies are required, particularly at the multi-community level.

Where CBNRM is initiated largely at the prompting of an external agency, the management groups may be more conflict-prone, and hence the need for external support in conflict management may be greater. For example, in silvi-pasture development in Rajasthan it is often the case that some community members are in favour of protection (fencing-off an area), while others prefer the status quo of open grazing. In conflict situations like this, the active involvement of a development agency may be a pre-requisite for continued protection of the resource.

Development agencies need to consider what action they should take, if any, to enable micro-micro conflicts over natural resources to be managed more effectively. Five different strategic options are described below. For each of them some general observations are made, followed by some specific observations on their relevance and use (if any) in CBNRM-related conflicts in India. Whilst they are discussed as possible options for development agencies working at the micro level, some of the general observations are taken from, or are equally applicable to, macro-level situations. It is recognised that many of these options are inter-related and the relationship between them is complicated and dynamic. Figure 1 attempts to show the nature of these multi-levelled linkages in diagrammatic form.
Figure 1: FLOWCHART OF CONFLICT INTERVENTION OPTIONS

CONFLICT SITUATION

- Development Agency Opt Out
- Conflict Still Present
  - External Agency Opt Out
  - Mediation by Third Party
  - Arbitration
  - Adjudication

- Community Negotiation
  - Successful - Conflict Mitigated
  - Unsuccessful - Conflict Still Present
    - Process still present
      - Requested
      - Process unsuccessful - Conflict Still Present
        - Development Agency Intervenes
          - Process successful - Conflict Mitigated
          - Process unsuccessful - Conflict Still Present
            - Referral to Enforcement Agency
              - Process successful - Conflict Mitigated
              - Process unsuccessful - Conflict Still Present
                - Strengthening Community-Based Conflict Management (long-term option)

- Process
  - Development Agency Opt Out
  - Community Negotiation
  - Process successful - Conflict Mitigated
5.1 Opt-out Strategy

5.1.1 Description

An opt-out strategy is where an external agency takes the view, for whatever reason, that communities should be left to sort out their conflicts themselves, without external intervention. This may be due, for example, to development agencies believing that effective and sustainable solutions can only be achieved by communities themselves managing their conflicts; or it may be because the agencies think they should concentrate their limited resources on working with communities, and in situations, where CBNRM stands the greatest chance of success.

5.1.2 General observations

Communities may view conflict resolution activities directed by outsiders as intrusive and unresponsive to indigenous concepts of justice, and prefer to solve conflicts within the community. Traditional assemblies of elders, local courts, kinship mechanisms, compensatory processes and healing ceremonies are all examples of traditional conflict management mechanisms, which may play a role. Mediators from within the community may be perceived to be more sensitive to local needs than outsiders, and are also immersed in the culture of the violence affecting the community. In addition, locally initiated conflict management processes signify as a minimum, a common desire for stability, which may not necessarily be present in externally-driven initiatives.

There are further ethical concerns that external conflict management interventions may be used as an instrument of control by the dominant party in a conflict. Insofar as parties are unequal in status, power or other resources, the weaker party tends to give up more in a mediated or negotiated settlement. However, it could be argued that if a development party chooses not to intervene, this will happen anyway. What remains a valid point is that the development agency must not unwittingly legitimise dominant party control and must be aware of the potential for manipulation. On another level, some people feel that mediating or facilitating a settlement between parties in a highly asymmetrical relationship is in any case unlikely to lead to a successful outcome and as such, do not recommend intervening. However, in many cases, there is no alternative than seeking to mediate conflicts with power inequalities since conflict parties are rarely equal in their resources and capabilities. Instead, ways must be sought to redress the power imbalance without denying the grievances or interests of the opposition.

Potential or actual benefits of this strategy are that it can be empowering, where communities have the capacity to manage conflicts themselves; and it is also a relatively low-cost approach from the point of view of both the community and the development agency. However, some traditional conflict mitigation efforts may be weakened by age or gender bias. For example, in cases with no women elders, some women may believe that male elders are biased against women and that this will be reflected in their discussions. Indigenous traditional authorities are generally not recognised as progressive elements of social change. As a minimum, local mediators must possess moral status, seniority and neutrality as well as respect for the communities involved for this approach to be successful.
5.1.3 Observations in the context of Indian commons

When communities themselves have been attempting to manage a NRM-related conflict for some time, but have failed to do so effectively, a development agency that is working in the area may have to decide whether to opt out or to intervene. This choice may arise at different stages in CBNRM programmes. In situations where the agency has already invested considerable time and resources in developing CBNRM with the communities, it is likely that they (particularly NGOs) will intervene, often as a mediator (see section 5.3).

Where the agency is in the early stages, and is simply exploring the possibility of involving a community in its CBNRM programme, it may choose to opt out. Sometimes an NRM-related conflict exists when the agency approaches one or more communities to become involved in a CBNRM programme, and the conflict is reflected in a lack of consensus as to whether initiation of protection of the commons is desirable or not. The agency then has to decide whether: (a) to leave that community out of the programme (at least for the time being); or (b) to facilitate negotiations, or mediate, with a view to arriving at a consensus.

Faced with this situation, NGOs sometimes opt-out, primarily because they do not want to invest their resources (mainly staff time) in mediation, whose outcome is uncertain, when they could be implementing the programme in other communities where there is a strong consensus in favour of participation in the programme. Government agencies, on the other hand, tend to ignore dissension (or to be unaware of it), because they are anxious to achieve certain targets in terms of the number of communities enrolled into the programme. Where they are offering material incentives to participate – such as wage labour in constructing boundary walls, or planting tree - these may provide sufficient incentive for those in favour of participating to gain the ascendancy over those who are against. Thus, implementation proceeds, but problems may be being stored up for the future (see Box 3 for an example.)

5.2 Negotiation between Conflicting Parties

5.2.1 Description

Negotiation involves direct consultation between the conflicting parties or elected party representatives either from a distance or face to face and does not involve the use of a third party mediator, be it from an external or from a community source.

5.2.2 General observations

As a subset of the opt-out strategy, external agencies may prefer to leave communities in conflict to negotiate amongst themselves without external interference. This is not necessarily because the development agency feels that their assistance will be ineffective, but rather, comes from a deep-rooted belief that wherever possible, the first step should be for conflicting parties to attempt to find a solution between themselves.
In high politics, the process of negotiation is viewed by theorists in many different ways, either as a puzzle to be solved (game theorists); as a bargaining process; as organisational management (representative-led consensus-building among diverse stakeholders) or as a process of diplomatic politics (Zartman, 1999). More recent theorists (such as those advocating the Alternative Dispute Resolution approach, or ADR), point to the sometimes adversarial and confrontational nature of conventional negotiation, where parties are forced into situations of compromise or withdrawal from negotiations altogether (Fisher & Ury, 1991; Warner, 1999; Galtung, 1998). They refer instead to a process of 'principled negotiation', 'consensual negotiation' or 'transcendence' respectively, with a common focus on identifying 'underlying needs and fears' rather than on simply achieving current objectives, as well as the need for more creative and lateral thinking, leading to the possibility of 'win-win' solutions.

5.2.3 Observations in the context of Indian commons

Negotiation is widely used by CBNRM groups in India to address conflicts over NRM. For example, take a situation in which community A is protecting a CPR, and several members of the nearby community B break community A’s use rules and refuse to pay the fines associated with their actions. It is quite common for representatives of the protecting community to have discussions with representatives of community B to deal with the issue. Another example is where there is strong disagreement within the protecting community over a particular rule: the sub-group objecting to it may put their case to the whole community, and the rule may be amended after discussion of the issue.

5.3 Mediation by External Third Party

5.3.1 Description

Mediation involves the intervention of an outsider - an individual, group, or an organisation - into a conflict between two or more actors. Mediation aims to extend the process of negotiation by drawing on experiences from other conflict situations and considering their relevance to the conflict in hand. It aims to produce change in the participants’ attitudes, perceptions, and ideas about the conflict ('reframing'), to generate creative solutions to the problem. Most importantly, it is a non-binding, voluntary form of intervention and conflict management, where the actors involved retain control over the outcome of their conflict, as well as the freedom to accept or reject mediation or mediator's proposals (Zartman and Rasmussen, 1999).

5.3.2 General observations

This is an option favoured by many, and proponents believe that where communities are unable to resolve conflict themselves, the involvement of an external party is essential. This option can also facilitate weaker stakeholders to present their views and to have them considered in the negotiation process. It is generally agreed that mediation has the strongest chance of success when all disputing parties jointly request it. The best time to initiate mediation is roughly halfway through the life cycle of a conflict and certainly when the parties' own attempts at negotiation have failed. However, there are times when a conflict is 'ripe for mediation' (Zartman,
1985), and times when mediation can only make a conflict worse and harm the credibility of the mediators, when it would be preferable for 3rd parties to opt-out. If a decision is taken by a third party to intervene, it is vital that, from the outset, an exit or disengagement strategy is defined and mechanisms put in place for local capacity-building in conflict management. This will reduce the chance of continued dependency on external sources and reduce the financial commitment required by third parties.

5.3.3 Observations in the context of Indian commons

This option is quite common in situations in which a development agency is working with local communities on aspects of NRM. For example, NGOs in Orissa sometimes assist as neutral third parties in PFM; and have been able to break situations of deadlock and create an environment for the conflicting parties to come to negotiations. It is particularly common when the agency has promoted CBNRM in the community concerned and has made provided financial (such as payments for wage labour) and/or material inputs (such as saplings or fencing materials).

Government (e.g. forest department) staff may also become involved in mediation, or something between mediation and enforcement. In Orissa FD staff are frequently called upon by CFM groups managing Reserved Forest to provide third party mediation, usually over conflicts relating to boundary disputes. It should be borne in mind, however, that FD staff are not always neutral parties; and that conflict management may not come easily to them, and may be perceived as an extra burden on their time.

Development agency staff, whether from NGOs or government, have not usually had any training in conflict management, and therefore the quality of their mediation is variable, and may in some cases be quite poor. (This is changing, however, and there are cases, at least in relation to conflicts affecting forest management, where training has been provided for FD staff and for NGOs.) Thus, for shared forest management or watershed programmes there may be a case for creating one or more units specialising in conflict management.

It would clearly be unhealthy, and unsustainable, for development professionals to be involved in mediation in the same communities on an ongoing basis. Thus, we only regard mediation by development agencies as a desirable option (a) in dealing with communities where conflicts requiring external support are rare; (b) only after negotiation by the communities themselves have failed to reach a mutually acceptable outcome; and (c) as a short-term measure until communities have a greater capacity to manage conflicts themselves (see below).

There are situations, however, where mediation by development agencies is being provided on an ongoing basis. In some communities in Rajasthan NGOs are dealing with the aftermath of implementation of the JFM programme by the FD in a way that paid little, if any, attention to social differences and existing tensions or conflicts, such as the case described in Box 3. Where there was no consensus in favour of CBNRM at the outset (at least, not in the form favoured by the FD), conflict between those in the community supporting protection and those opposing it can be chronic.
In these circumstances ongoing mediation by an NGO may be essential if protection is to be sustained. In the words of one NGO observer in Rajasthan, “In the light of divergent interest groups, the role of NGO in strengthening the hands of those who are interested in protection process is a crucial factor” (Singh, 99). However, where there is such ongoing dependence on an outside agency, the sustainability of the initiative, and the wisdom of playing this role, are questionable. It may be preferable for the external agency to abandon this role, and/or to facilitate the re-design of the intervention and management system, based on a review of the interests and needs of the various local stakeholders.

5.4 Adjudication or Arbitration by Government/Legal Authorities

5.4.1 Description

1. Adjudication is a process which involves the use of statutory bodies in the resolution of a conflict. It is basically a dispute mechanism based on legal processes where the dispute is referred to an impartial third party such as an arbitral tribunal or a court. As such, the process usually involves a legal obligation on the part of the parties to accept the third party's decision as settling the dispute.

2. Arbitration is a form of adjudication that involves the referral of a dispute to an ad hoc tribunal rather than to a permanently established court for a binding decision and where the parties themselves establish the tribunal, define the issue to be arbitrated, determine the methods for selecting the arbitrators and the way of paying for the tribunal's costs. Once the tribunal's work is completed, it ceases to exist.

5.4.2 General observations

Potential advantages of both arbitration and adjudication are threefold. First, an arbitral or judicial decision at least puts an end to the dispute and sometimes it is important to the parties just to reach a settlement. Second, decisions may be viewed as impartial and principled and as such have a strong claim to acceptability and legitimacy. Thirdly, because it is a complex, expensive and somewhat intimidating process, it gives an indication the seriousness of a claim and it may even reduce tensions and buy time, serving as a politically acceptable way for the parties to seek further attempts for a negotiated solution.

However, risks and potential disadvantages are also paramount in this approach. A definitive settlement may actually be illusory since because a tribunal must focus on the immediate 'legal issue' before it, it may not identify the underlying causes of a dispute or the true source of contention between the parties. In cases where the legal issue is only the symptom or symbol of a far more complex problem, as is often the case in natural resources disputes, the tribunal may even exacerbate the dispute (Zartman & Rasmussen, 1999). A second risk is that it obviously involves the chance of losing, and submission to binding third-party settlement means that parties give up ultimate control over outcomes. A third risk is that adjudication may not in fact be impartial as judges may be predisposed towards one party's position, or the stronger party may have better links with the judicial system.
A fourth concern is that these processes can often be adversarial, inflexible and potentially escalatory. Parties' options are frozen as they become locked into 'winning' the dispute as the only goal. It is also a zero-sum game wherein one party wins and the other party loses, but many natural resource conflicts are resistant to such all or nothing solutions and may be better resolved by compromise. Furthermore, a decision that legally disposes of a particular dispute but leaves one party feeling it has been treated unfairly may ultimately do more harm than good, may hamper the future relationship between the parties, alienate the losing party from the legal or political system and even risk a recurrence of conflict at a later date. Finally, the process may also be inconvenient, time-consuming and expensive, especially for poorer disputants.

5.4.3 Observations in the context of Indian commons

Forms of adjudicative legal action have been taken in some situations. However, legal actions tend to be expensive and drawn out, so this option is best considered as a last resort. Arbitration has not been used in rural India for dealing with NRM conflicts, presumably because there is no statutory basis for it.

5.5 Enforcement (of law and rules)

5.5.1 Description

Enforcement here does not mean using 'force' or 'violence'. Rather, it refers to the process of turning to local judicial authorities, such as the police, to impose 'fines' or 'punishment' in cases where the party seeking to enforce a particular rule or law believes that there has been a clear-cut wrong-doing.

5.5.2 General observations

This approach has now been written about in any great detail within higher-level conflict management literature. One suspects this is largely due to the negative connotations of the word 'enforcement' which tend to imply that some form of physical violence is being asserted. However, this is an approach frequently used at the micro or community level. An example in a Western context might be that of noise pollution, with an inconsiderate neighbour continuously playing loud music in the early hours of the morning. If initial negotiations between the parties fail to reach a consensus, rather than then taking the matter to court, the next step might be to call the local authority Environmental Health Department to measure the decibel level, and if unreasonable, attempt to enforce a reduction in sound output. Only if this fails, will it then be necessary to resort to legal measures.

This approach does however depend on a common acceptance of an obvious 'right and wrong'. However, this may not always exist, and if one party feels the matter has been dealt with unfairly, or fails to recognise the justice behind the decision, then this may mean that whilst the immediate problem may have been resolved, further conflicts are likely to arise at a later date.
5.5.3 Observations in the context of Indian commons

This approach is used quite often by CBNRM groups in India, usually when they are unable to enforce access rules themselves – for example, when an ‘offender’ who has been caught breaking the rules refuses to pay the fine that the community seeks to apply (see Box 4 for an example). Occasionally, external agencies are asked to facilitate the process, but often, the community themselves directly take the offender to the authorities. It is used primarily in inter-community conflicts, as CBNRM groups are usually able to enforce their rules effectively within their own community, where they are able to exert greater social pressure.

Options one to five may be applicable in certain situations, but they have their limitations (including high cost, unsustainable dependency on external agency etc). Therefore, when serious conflicts arise that communities cannot currently handle themselves, a new option is needed – one that is more sustainable than calling on the services of external agencies. This option is strengthening community-based conflict management. It is different from the six options listed above in that it is not immediately available: and it may take the development agency several weeks, months or even years to develop the capacity of local communities. In the next section we describe some steps that external agencies can take to develop the capacity of CBOs to manage conflicts more effectively themselves.

6. DEVELOPING LOCAL CAPACITY FOR CONFLICT MANAGEMENT

6.1 Introduction

Community-based conflict management uses local actors and traditional community-based judicial and legal decision-making mechanisms to manage and resolve conflicts between or within communities. It aims to resolve conflicts without resorting to state-run judicial systems, police or other external structures.

This approach aims to use skills brought into the community by external intervention to strengthen the capacity of local organisations and communities to manage the conflicts themselves. External parties thus help local partners to think through some of the traditions to peacemaking that have worked in the past and see whether they will still be helpful today; and conduct workshops focusing on processes by which local groups can be empowered to help themselves to manage conflict. Wherever possible, training is built upon the foundations of traditional conflict management mechanisms and it is vital that conflict management strategies are adapted to local and cultural circumstances, rather than just being imported from Western schools of academic thought.

There are very few cases of this approach being taken in relation to CBNRM, either in India or more generally. Thus, the proposals that we outline below are relatively new and untested in this sector.

6.1.1 Consensus-based approaches
Force may be necessary for dealing with particular stakeholders and their activities (e.g. timber smugglers, encroachers, poachers), in which case suitable legislation should be in place and the resources needed to enforce it made available to the forest department, police etc. However, where different stakeholders are prepared to negotiate peacefully, consensus-based approaches (sometimes called *consensual negotiations* or *alternative conflict management*) may be best, as they seek to generate mutual gains with the minimum of compromise and trade-off (Warner and Jones, 1998). Alternative conflict management (ACM) has evolved primarily from experiences and thinking in peace-building and business, and environmental disputes. A summary of the principles of ACM is given in Box 8. Further information about the application of ACM in participatory natural resource management can be found in ODI, 1998.

Although these approaches to conflict management are appealing, do the principles really work in conflicts involving natural resources? Some observers have expressed scepticism about the feasibility and efficacy of consensus-based approaches in natural resource management, arguing that “consensus on questions of substance…. is highly unlikely or partial and temporary at best” (Anderson et al., 98); while others are more optimistic (ODI, 98). Their appropriateness may depend on both cultural and legal conditions, such as a willingness to publicly acknowledge a conflict, and administrative and financial support for negotiated solutions. They also depend on the voluntary participation of all relevant stakeholders. These conditions are not present in many contexts in both the North and the South (Buckles, 1998?).

Consensus-based approaches should only be promoted where conditions are conducive to their effective use. They are most likely to be effective in micro-micro conflicts of the kind this paper has focused on, where: the number of stakeholders is small; all stakeholders are motivated to resolve the conflict; and where power relations between them are not highly skewed.

**Box 8 Principles of ACM**

- full stakeholder analysis (including those who might contribute to a resolution and those who might undermine it)
- cultural differences accommodated in the design of capacity-building and negotiation strategies
- perceptions acknowledged and then transformed
- meaningful communication pathways constructed
- a ‘level playing field’ for genuine collaborative negotiations created
- rapport built and maintained
- negotiations focus rapidly onto underlying needs and motivations
- common ground identified and exploited
- creative options brainstormed and widened
- motivations and options re-framed and clarified
- mutual gains facilitated
- agreements tested for financial, technical and democratic feasibility

Two broad types of capacity development for improved conflict management can be built into projects and programmes, namely:
facilitating the creation of new fora and community organisations; and
training in consensual negotiation, facilitation and mediation skills.

The goal of both types of assistance is ‘facilitating people to bring about change of their own choosing’ (Resolve, 1994). Both of these are elaborated on below.

### 6.2 Creation of New Mechanisms and Bodies for Mediation of Conflicts

#### 6.2.1 General observations

In situations of armed or violent conflict, usually between states, Peace Commissions are formal, officially supported or informal grassroots-derived structures at the national, regional or local level to involve community members in resolving issues through joint action to reduce, counter or prevent conflict. To do this, they involve local private citizens in resolving issues through joint action with other community representatives. They can provide an important non-partisan forum for the peaceful expression of macro-micro and micro-micro conflicts and can conduct educational outreach and training in cross-cultural communication and co-operative problem solving skills and processes within communities (Creative Associates International, 2000).

There are important lessons to be learned for development agencies from such structures, and the establishment of a similar or parallel body at the micro-level is an interesting option. As with the Peace Commissions, any committee designed must have members who represent the various ethnic, religious and national groups within their communities, and who are respected members of the communities in which they serve, not outsiders. Experience has shown that the best results have been obtained from having members who live under the same conditions as the people they serve and therefore personally experience the consequences of their decisions. At the same time, this means that commission members are not neutral. In addition, if a long-term sustainable solution is to be found, it is critical that a conflict resolution mechanism be built into the programme so that conflicts generated from different sources, such as the lack of transparency, accountability and equity, can be dealt with in a timely fashion.

Not all members must be professional mediators or formally trained in conflict resolution skills, although it may be helpful to have at least one professional mediator as a member. These commissions are comparatively low-cost and extremely cost-effective. Such structures are especially useful for conflicts in which institutions of government, justice and police at national, regional or local levels are considered inadequate to address grievances.

However, whilst such bodies can address symptoms of political conflict, they cannot in themselves overcome the structural causes of conflict such as a need for political and constitutional reform. They can mitigate disputes from escalating into major
confrontations, but are not substitutes for viable institutions such as the police, judicial system and governing structures.

Construction of an environment in which conflicts over NR can be dealt with productively will also require new structures and processes for governing NRM decisions. Negotiating for change can be wasted effort if policy, administrative and financial factors at higher levels block or contradict the decisions made locally. Changes may be needed to national policies and legal frameworks to accommodate the development of relations between formal and informal institutions at various levels. Governing structures and processes which bring previously excluded groups into decision-making offer new opportunities for improving NRM decisions and finding better ways to avoid, resolve or manage conflict.

6.2.2 Creation of new multi-community organisations

The evolution and strengthening of apex organisations of CBNRM communities can create new fora for conflict management between member communities. In Orissa there are many examples of such bodies being initiated and developed by the local communities themselves, and they generally identify inter-community conflict management as one of their main functions. NGOs have also facilitated their emergence (see section 4.3.2). Some Indian NGOs, such as Vasundhara and the Regional Centre for Development Cooperation in Orissa, and Seva Mandir in Rajasthan, have also encouraged the development of apex bodies, including district- and block-level federations.

6.3 Training in Consensual Negotiation, Facilitation and Mediation Skills

6.3.1 General observations

Training in conflict management has the basic aim of reframing the parties' perceptions of their conflict which are typically that their situation is out of control or hopeless. A training programme can offer its participants accumulated knowledge about conflict dynamics and options for intervention to prevent or de-escalate a conflict. The value of this type of training is twofold. Firstly, it gives the participants some hope that there may be unexplored approaches to help them in their quest for a settlement and it can be extremely useful for the protagonists to hear examples of other case studies, choices and options that may end the dispute. Secondly, the training can present the antagonists with entirely new ways of looking at the conflict. If the general view holds that conflict can only be resolved by one part defeating another, then a training programme can introduce more constructive ways of thinking about 'win-win' approaches to conflict, thus laying the groundwork for longer-term, more sustainable solutions.

Training can also assist participants in developing or improving communication, negotiation and problem-solving skills that will be useful as they search for ways to resolve their conflict. In addition the training format offers a relatively safe environment in which to learn and test new approaches and skills. Since the participants are not involved in actual negotiation or problem-solving, they are free to try out new behaviours and strategies without having to commit to outcomes publicly.
However, trainers must beware of creating dramatic change in individuals but not in structures - the simple act of bringing disputing parties together in a training session can have a huge impact on participants, but whilst people may have changed, their society may remain the same, including the structural inequalities that continue to fuel hostilities.

6.3.2 Recommendations about training in relation to CBNRM in India

Training in consensual skills needs to be provided for three different sets of stakeholders:

- CBNRM communities themselves (including apex CBOs);
- staff of NGOs involved in CBNRM programmes; and
- staff of government agencies (e.g. forest departments).

7 CONCLUSIONS

Conflicts are common in CBNRM in India. The caste system, and the stratified and heterogenous nature of Indian society associated with it, tend to mean that different sub-groups have different NR needs and objectives, and thereby increase the likelihood of conflicts. Nevertheless, CBNRM initiatives in India, as in other countries, have generally not given adequate consideration to conflicts and their management, although that is starting to change (Anderson et al., 1998; Vira et al., 98). Related to this has been the general tendency of external agencies involved in promoting community management of natural resources (e.g. forest departments in JFM programmes) to ignore power relations between different sub-groups within a given community.

Stakeholder analysis can play a valuable role in identifying all of the stakeholders, and in identifying ways of reconciling their priorities and objectives. It is also important that macro-level factors, such as NTFP policies and practices, are taken into account; and, if necessary, revised so as to provide a supportive enabling environment for CBNRM. Discussions among different stakeholders involved in CBNRM need to be ongoing and institutionalised, and this is likely to require the creation of new fora.

Some conflicts are inevitable in CBNRM programmes. It is important, therefore, to ensure that there is adequate capacity to deal with conflicts when they do arise. CBNRM programmes should, therefore, include provision for capacity development for conflict management, which can take two forms:
• the creation of new mechanisms and bodies for mediation of conflicts; and
• training in consensual negotiation, facilitation and mediation skills.

Trees are different from many other renewable natural resources, in that the resource, or a large proportion of it, can be removed virtually overnight. Thus, failure to resolve conflicts quickly may result in local communities losing much of the assets that they have spent years building up.

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\(^i\) Where SA is being used solely to improve the effectiveness of policies and projects, the stakeholders selected may only include those groups whose interests, resources and position of power imply that they are likely to affect substantially the way in which the project will operate, or fail to operate, in practice.

\(^ii\) Both projects have been supported by research programmes of the Department for International Development, i.e. the Natural Resources Systems Programme and the Livestock Production Programme, and are for the benefit of developing countries. The views expressed in this paper are not necessarily those of DFID.

\(^iii\) CFM can be described as a system where a community has “developed institutions, norms, rules, fines and fees to sustain forest resources. CFM systems characteristically involve one or more communities (social group, village) protecting and using a specific forest area” (IUCN, 1996). While the forest may not be under the legal jurisdiction of the community, “…the community management groups strongly identify with the resource and perceive they have special rights and responsibilities for its management”.

\(^iv\) JFM can be defined as “sharing of products, responsibilities, control, and decision making authority over forest lands, between forest departments and local user groups, based on a formal agreement. The primary purpose of JFM is to give users a stake in the forest benefits and a role in planning and management for the sustainable improvement of forest conditions and productivity. A second goal is to support an equitable distribution of forest products.” (Hill and Shields, 1998).

\(^v\) Nobody know exactly how many cases there are. The total number of villages in Orissa is about 50,000: of these, there are probably 4,000-5,000 villages involved in managing natural forests. This is probably more than in any other Indian state or comparable geographical area anywhere else in the world.

\(^vi\) PFM is used as an umbrella term covering joint forest management, collaborative forest management, community forestry and, in some cases, social forestry. ‘Participatory’ has been defined as a process whereby those with legitimate interests in a project both influence decisions which affect them and receive some, or all, of any benefits that may accrue (ODA, 1996).

\(^vii\) Some authors (e.g. Grimble et al., 1995) identify two combinations involving micro and macro (i.e. micro-macro and macro-micro), in which the first half of the ‘pair’ is the active decision-maker, and the second half the passive party. In practice; however, it can be difficult to distinguish the ‘active’ from the ‘passive’ party, so we have only used one combination in this chapter.

\(^vii\) Where SA is being used solely to improve the effectiveness of policies and projects, the stakeholders selected may only include those groups whose interests, resources and position of power imply that they are likely to affect substantially the way in which the project will operate, or fail to operate, in practice.