Community Conserved Areas in India

An overview

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Community Conserved Areas in India - An overview

Neema Pathak[1]

Introduction

In 1798, in a small village called Vedanthangal near Chennai, British soldiers shot some storks in the local wetland. The villagers stormed the collector's office and made him issue a *koul* or order that no one was to harm the nesting birds.[2] This is long before the concept of protected areas (PA)[3] as we know them today was even thought of. Indian history is peppered with numerous such examples, many reported by the British and in recent times by many other scholars and researchers such as Chandran and Kalam (1997),[4] Chandrashekhara and Shankar (1998),[5] Das and Malhotra (1998),[6] Gadgil (1995)[7] and Gadgil and Guha (1962)[8]. Many of these local efforts at conservation, regeneration and/or management have continued for generations but many others are emerging in newer situations and circumstances. The reasons for their existence, continuance and emergence are varied: countering depletion of life-sustaining resources, maintaining watersheds, seeking ecological benefits, conservation of wildlife and biodiversity and or religious/cultural sentiments. The local institutions used to achieve these objectives are also diverse: they could either be traditional structures, revived structures in modified form, or sometimes even completely new structures. One common thread in these efforts is that their roots often lie in the traditional or local knowledge systems and experiences, and the primary managers and decision-makers are the local communities. The mechanisms and approaches followed are locale-specific, based on the nature and character of the residing or user human society, surrounding natural resources, nature of interaction between the two, and other internal and external factors influencing the community and the resource. Considering that India is a country of a huge diversity of cultures, ecosystems and species, it is not surprising that the community efforts at conservation are also extremely diverse. The strength of these systems lies in the social rules that they follow and local systems of conflict resolution that they adopt. In a country as culturally and ecologically diverse as India, the diversity of such initiatives, their characteristics, objectives, systems of management, rules, regulations and impacts is but natural.

On the other hand, whether in India or abroad, nature conservation today is formally predominantly understood to happen only within the limited boundaries of PAs declared and managed by government agencies under statutory provisions. Invariably these PAs are conceived as islands where any form of human intervention is considered harmful for the ecosystem and species. It is therefore not surprising that in a densely populated country like India, where millions of people still live within and depend for survival on natural ecosystems, this has resulted in numerous conflicts between the local communities and official managers of these protected lands and waters.[9] The fact that a relatively large network of conservation efforts by local people in India could provide a system of biodiversity conservation that is complementary to the government-run network of protected areas has remained largely unrecognised and hence unexplored. As per our understanding, losing out on this experience of generations has been one of the greatest loses for wildlife and biodiversity in India, as many of these efforts could provide important lessons on how to tackle the conflicts that wildlife officials face with the local people, or how to build robust institutions for governance and management.

Lack of sufficient and detailed information about these initiatives and their assimilation into the policy making system is to a great extent responsible for their lack of recognition as important models to achieve conservation and livelihood security in the country. We believe that if such initiatives are officially recognized and lessons learnt from their strengths and weaknesses find their way into conservation laws and policies, then India could bring more than 10 per cent of the country's landmass under conservation (official PAs cover a little less than 5%).

In the past few decades, much work has been done towards examining traditional systems and knowledge related to conservation, religious and spiritual sentiments and their role in conservation, and government-sponsored schemes such as joint forest management (JFM) and their role in involving local people in forest regeneration. However, there were only occasional mentions and articles on other kinds of efforts of local communities, such as those achieving conservation while protecting resources for livelihood needs, or local communities protecting resources to assert their rights and responsibilities, or local communities protecting biodiversity for the sake of biodiversity or to protect a specific species or habitat. Thus the full range, extent and impacts of the phenomenon that we have chosen to call community conserved areas (CCAs) (as defined in Section 1.2) remained unrecognised.

With this realisation, the Directory of Community Conserved Areas was initiated less than a decade

ago to document a diversity of efforts. Conservation here does not only mean 'strict protection', but includes a continuum of practices ranging from strict protection to regulated multiple-use.

What are the main objectives of the CCA Directory?

The main objectives with which this Directory was started included exploring the following facets in detail:

1. Reasons that motivate communities to start conservation initiatives
2. Social and ecological processes that are involved in these initiatives
3. Constraints that these communities face and opportunities that are available to them
4. The manner in which internal differences and inequities in a community impact the conservation efforts and vice versa
5. Effective legal and policy changes needed to facilitate these initiatives
6. Area of the country that is under such conservation
7. The reasons because of which these initiatives succeed or fail
8. Role of these initiatives in sustaining local livelihoods
9. Role of these initiatives in achieving conservation of resources and protection of species

This analysis and compilation is not to give the impression that communities everywhere in India are conservation-oriented. Even if they number in their thousands, initiatives like the ones mentioned in this directory would still be small compared to India's enormous landmass. In many communities (probably the majority), traditions of conservation have been eroded, and natural ecosystems have been converted to other land uses. Nor are we implying that all village-level initiatives are unqualified successes. Like official protected areas, CCAs too have a host of serious problems to contend with. These include dissension and inequities within the community, weaknesses in countering powerful commercial forces from outside, lack of knowledge regarding the full range of biodiversity and its value, the pressures of abject poverty, and others.

However, the fact remains that many such efforts have existed and continue to emerge in the current fast-changing global and local socio-economic situations. They can do with considerable support from NGOs and government agencies to deal with internal weaknesses and to thwart external pressures and threats. There is an immediate need for further studies on these initiatives, so that their full biodiversity and social values can be gauged and others can learn about and from them. Some such work has been done, such as by Godbole et al (1998);[10] Gokhale (2001);[11] Kalam (1996);[12] Kushalappa et al. (2001);[13] and others, yet much needs to be done, particularly in areas outside of those protected for religious reasons. It may also often be necessary to accord these CCAs legal backup, especially so that communities can enforce their customary or unwritten rules.

About the overview

The rest of this overview is an attempt to share our understanding of key characteristics of CCAs, their strengths and weakness, some major issues facing them today, important lessons that they reveal, and the limitations and constraints that they face. This overview draws partly from the work done in the past by a number of researchers, academics, grassroots workers and others, but is largely based on the state chapters and case studies in this directory (please do bear in mind that the limitations of the Directory as mentioned in the 'Introduction to the Directory' may have a bearing on this analysis too). A number of national and international dialogues and debates have also helped in the analysis presented here. **For a detailed list of case studies see annexure 1.**

How is this overview structured?

Section 1 deals with definitions, criteria and clarifications.

Section 2 deals with some of the main characteristics of CCAs, such as how much area a single CCA conserves, how these efforts get initiated, who or what motivates them, how they evolve in different circumstances, what kinds of rules and regulations they follow, what kinds of institutions they have established, and so on.

-**Section 3** explores whether CCAs in the Indian context can be considered PAs.[14] This section

draws from international experiences, debates and discussions in this regard. It further explores the similarities, differences and complementarities between CCAs and PAs.

Section 4 looks at the positive and negative impacts that CCAs have had on the conserving communities, as well as the biological diversity in these areas. This includes kinds of costs and benefits that the communities have incurred.

Section 5 deals with some of the major threats that CCAs face, dividing such threats into two main categories—external threats and internal threats.

Section 6 considers whether CCAs can provide solutions to all problems of conservation in India or do they have limitations too. It examines what these limitations are and how they can be overcome.

Section 7 explores a large range of issues and lessons that are involved in a discussion on CCAs, mainly to see if the environment in the country is conducive to support and promote CCAs. This section then goes on to examine some ways in which such an environment can be created. This section also explores the lessons that can be learnt from the strengths and weaknesses of CCAs for a more inclusive conservation model in the country, including consideration of a landscape approach.

Section 9 looks at how effectively current Indian laws and policies are able to support CCAs or whether they are in fact a hindrance.

Section 10 is the concluding section which also briefly discusses some steps for future action.

There are also a number of annexures along with this analysis. These further elaborate some of the points mentioned in the text or provide more in-depth background.

1. Definitions and clarifications

This section deals with the definitions and terms that we have used.

1.1 What are Community Conserved Areas (CCAs)?

Before exploring the concept and the definition of CCAs it may be useful to take a glimpse at different kinds of conservation efforts by ordinary people across India. Boxes 1 to 4 describe some such efforts in different ecosystems (for details on these case studies see the case studies section of specific states).

Box 1

CCAs for forest ecosystems

- The Gond tribal community in Mendha (Lekha) village of Gadchiroli District, Maharashtra, initiated protection and de facto control over 1800 hectares of forest over two decades ago.
- Jardhargaon village in Uttarakhand has regenerated and protected 600-700 hectares of forest, and revived several hundred varieties of agricultural crops.
- *Van panchayats*[15] like Makku in Uttarakhand are protecting tens of thousands of hectares of high-altitude pasture lands and forests.
- Villagers in Shankar Ghola in Assam are protecting forests that contain the highly threatened golden langur.
- Community forestry initiatives in several thousand villages of Orissa have regenerated or protected forests. Elephants are reportedly being sighted here now.
- Areas have been conserved as forest and wildlife reserves in Nagaland by various tribes in dozens of villages, including a people's sanctuary for the endangered Blyth's tragopan in Khonoma village.
- In Tokpa Kabui village of Churachandpur district in Manipur, 600 hectares of regenerated village forest have been preserved in the Loktak Lake catchment by the Ronmei tribe.
- With help from the NGO Tarun Bharat Sangh (TBS), several dozen villages in Alwar district have restored the water regime, regenerated forests and, in one case (Bhaonta-Kolyala), declared a *lok abhyaranya* (people's wildlife sanctuary).

Box 2

CCAs for wetland, coastal and marine habitats

- Uttar Pradesh is a locus of traditional wetlands conservation. In Amakhera village of Aligarh district, the traditional wetland is used for irrigation and fishing. The wetland hosts a large number of migratory birds, whom villagers are careful not to disturb. Patna Lake in Etah District is home to up to 100,000 water birds in favourable seasons. The lake, declared a wildlife sanctuary in 1991, has been protected for centuries as a sacred pond. Sareli village in Kheri District supports a nesting population of over 1000 openbill storks, considered harbingers of a good monsoon.
- Communities in hundreds of villages across India have protected heronries (e.g., Sareli in UP, Nellapatu in Andhra Pradesh and Chittarangudi in Tamil Nadu). At Kokkare Bellur, Karnataka, villagers offer protection against hunting and untoward treatment, sometimes even foregoing their tamarind yield so that nesting birds are not disturbed. In Tamil Nadu, the 700ha Chittarangudi tank attracts storks, ibises, herons, egrets, cormorants and other migratory birds. Villagers do not allow any hunting or stealing of bird eggs. They do not burst crackers during Diwali,[16] and avoid commercial fishing. Local communities are protecting similar tanks throughout coastal and wetland regions of India.
- Fisherfolk in Mangalajodi and other villages at the Chilika lagoon, Orissa, are protecting a large population of waterfowl (once extensively hunted).
- A number of coastal communities are protecting critical coastal wildlife habitats such as mangroves (in Orissa) and sea turtle nesting beaches (in Orissa, Goa and Kerala).

Box 3

CCAs for protection of individual species

- Protection of sea turtle eggs, hatchlings and nesting sites by fisherfolk communities is taking place at Kolavipaalam in Kerala, Galgibag and Morjim in Goa, and Rushikulya and Gokharkuda in Orissa. In 2006 and 2008, over 100,000 olive ridley turtles are reported to have nested at Rushikulya.
- Youth clubs from the villages around Loktak Lake (Manipur) have formed the Sangai Protection Forum to conserve the greatly endangered brow-antlered deer, which is endemic to this wetland. They take part in the management of the Keibul Lamjao National Park, which forms the core of the lake.
- The Buddhist Morpa community in Sangti Valley in Arunachal has co-existed with the endangered blacknecked cranes for generations, viewing them as a harbinger of better rice yields.
- In Khichan village in Rajasthan, the local population provides refuge and food to a wintering population of up to 10,000 demoiselle cranes, ungrudgingly spending up to several hundred thousand rupees annually to feed them grains.
- The Bishnoi community in Rajasthan, famous for its self-sacrificing defence of wildlife and trees, continues strong traditions of conservation. In neighbouring Punjab, lands belonging to the Bishnois have been declared as the Abohar Sanctuary in recognition of their wildlife value. At all the Bishnoi sites, blackbuck and chinkara are abundant.
- At Buguda village in Ganjam District, Orissa, inhabitants have been protecting blackbuck for centuries. Buguda was recently awarded the Chief Minister's Award for wildlife conservation.

Box 4

Sacred sites as CCAs

- Sacred groves[17] and landscapes are found throughout India, serving to protect rare and endemic species, as well as critical biodiversity assemblages. Such groves also help meet the

religious, cultural, political, economic, health and psychological needs of communities. Local livelihood needs are sometimes met through restricted harvesting of biomass. Sacred forests (*orans*) in the desert regions of Rajasthan are typically managed by the *gram sabhas* (village assemblies). Some are open to limited grazing by livestock. *Orans* are important components in the recharge of aquifers in the desert, where every single drop of water is precious. In most *orans*, particularly in western Rajasthan, the dominant tree, khejari, is worshipped for its immense value, as the tree enriches soil nitrogen, and during drought and famine its bark is mixed with flour for consumption.

- The Khasi Hills of Meghalaya are characterised by pockets of rich biodiversity that have been protected by the Khasi tribe and form the basis of nature worship practices in the area, manifested in the trees, forests, groves and rivers. The Khasi people believe that those who disturb the forest will die, and that sacred animals such as the tiger bring prosperity, happiness and well-being. In fact, the people of Thaianing believe that the destruction of their forest by their forefathers has caused 'good luck' (i.e., the tiger) to leave, leading directly to suffering due to a scarcity of medicinal plants, wood, water and fertile soils. Sacred groves are often quite limited in size, but there are at least 40 of them in Meghalaya (out of a total recorded 79) that range from 50-400 ha, including the well- known Mawphlang sacred grove at 75 hectares.
- There are several thousand sacred groves in Maharashtra, some still managed well, others under grave threat. These include the famous Bhimashankar and Ahupe *deorai* in Bhimashankar Wildlife Sanctuary, Durgubaicha Kila and others between Bhimashankar and Kalsubai Harishchandragad Wildlife Sanctuaries. Ajeevali village in Pune district manages a protected site for both spiritual and commercial reasons.
- Often entire landscapes are considered sacred (e.g. the Rathong Chu/Khangchendzonga valley in Sikkim), helping to conserve many of its elements.

In addition to the kind of examples mentioned above there are many communities who have traditionally led lifestyles with a minimal ecological footprint such as the Changpas of Ladakh (see Ladakh section in Jammu and Kashmir chapter for more details). Such initiatives and lifestyles, although highly threatened by today's fast changing socio-economic conditions, have been responsible for maintaining biological diversity in many parts of India to a great extent. Given this, it is not surprising that India is among the 12 biodiversity hotspots in the world. In fact, it may be one of the community-conservation-initiative hotspots too.

In these times when India is on a fast track of economic development and globalisation, the community conservation initiatives of the kind mentioned above are crucially supported or complemented by grassroots activism against destructive development. Several large hydroelectric projects, such as those in Bhopalpatnam-Ichhampalli (Maharashtra and Chhattisgarh), Bodhghat (Chhattisgarh), and Rathong Chu (Sikkim), which would have submerged valuable forest ecosystems and wildlife habitats, have been stalled by mass tribal movements. Hundreds of communities across Orissa, Chhattisgarh, Jharkhand and other states are fighting against large and powerful mining companies and industries, and are often brutally killed in the process. Many fisher communities across India are struggling against destructive fishing, including demanding a ban on commercial trawling and fighting for implementation of the coastal regulation zone (CRZ) notification. Their struggle will also help to save coastal and marine ecosystems from destructive development activities.

1.2. How can CCAs be defined?

Considering the huge diversity of initiatives, it has been a big challenge for us to define these dynamic efforts in a few words. After much discussion with a number of individuals working on this subject we have finally adopted the following working definition for CCAs in India.[18]

Natural ecosystems (forest/marine/wetlands/grasslands/others), including those with minimum to substantial human influence, containing significant wildlife and biodiversity value, being conserved by communities for cultural, religious, livelihood, or political purposes, using customary laws or other effective means.

The three important components of the term 'CCA' are 'community', 'conservation' and 'area'. To be able to understand CCAs better, it is important to understand what we mean by these three terms.

a. What do we mean by a 'community'?

For the purpose of this compilation the definition of a community can be considered as:

A group of people geographically, culturally and traditionally linked, sharing an interest in and/or interacting with a common natural resource base (ecosystems and species). The term, 'community' does not necessarily indicate a homogeneous entity.[19]

The term 'communities' in the subsequent sections could refer to an entire village or a group or section of people (but not an individual or an individual family), who manage or conserve a given area. It is also used as short form for an indigenous people (also called tribal people in India).

b. What do we mean by 'conservation'?

By conservation we mean ***maintenance of one or more natural ecosystems and species***. This could be through absolute protection of a site or a species or through regulated multiple use. Ecological data on most CCAs is non-existent and a glaring gap that needs to be filled. In the absence of such data to ascertain the conservation efforts, we have based our conclusion that an effort is leading towards conservation on perceptions, impressions and observations by a range of actors, including local people, forest officials, personal observations of Kalpavriksh team members, NGOs, amateur or professional ecologists and others. This data has been used in conjunction with two other parameters:

1. There should be a specific aim (cultural, ecological, political or economic) of management or conservation.
2. Taboos, rules and regulations (e.g., no hunting, no commercial use, regulated self-use) have been established under local[20] or state laws and are being followed. In our view, this implies that resource use is regulated, providing a greater chance for sustained existence of ecosystems and species.

c. What do we mean by an 'area'?

For this documentation we have selected sites where conservation values are operating within specified boundaries. Systems, rules and regulation are implemented within this area. In India there are numerous examples where conservation principles are ingrained in the ethos of the common people such as worshipping the peepal tree, not harming the Hanuman langur, etc. However, this does not necessarily mean that those who maintain these beliefs would definitely come together as a community to protect the species if it is faced with a threat. This Directory has not documented such widespread belief systems.

We do realise that the above definition is not very sharp and contains non-quantified terms such as 'substantial human influence' and 'significant biodiversity value'. However, some openness in the definition is in the very nature of our current incomplete understanding of this phenomenon and of its sheer diversity. We hope these terms will become more sharply defined as this understanding grows. Rather than a concept to be defined, our experience reveals that CCAs need to be seen as **a *philosophy of biodiversity conservation based on transparency and participation, a philosophy that is open to a vast array of approaches in which, at any given time and place, the local context would determine the most appropriate approach towards conservation.***

1.3. What criteria can be used to call an area a CCA?

For the purpose of this Directory sites which fulfill the following criteria have been considered CCAs:

1. There is an identified **group of people** that can be considered a community (as defined above) who are involved in the effort.
2. The concerned **communities have substantial ethical, livelihood, cultural, economic or spiritual associations with and dependence** on the conserved area.
3. The concerned **communities are the major players or among the major players in decision-making** and implementation of decisions.
4. The concerned communities have **established systems** (institutions, regulations, processes) for achieving their objective.

5. Irrespective of the objective of the initiative, the efforts lead towards **maintenance or enhancement of one or more natural ecosystems and species** therein.
6. The effort is taking place within a locally **identified boundary** (even though this may not always be very clear on a map).

In the above definitions and criteria much still needs to be sharpened and clarified. Keeping this in mind we consider this ***compilation only a preliminary and baseline information on community conservation*** **rather than a comprehensive assessment of CCAs*.***

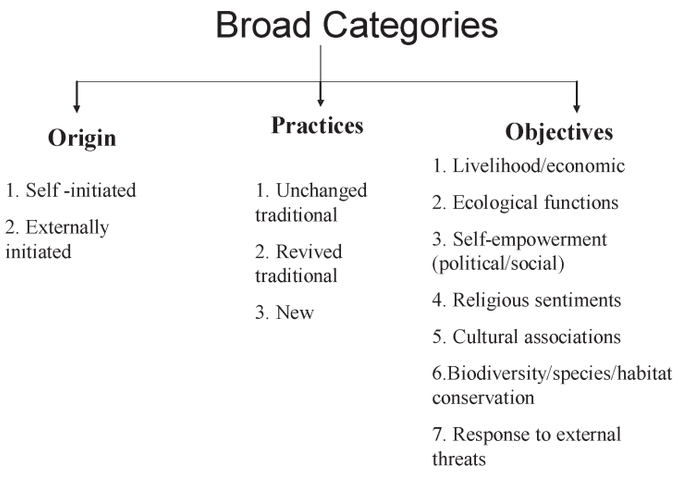
2. A categorisation of CCAs based on some of the main characteristics[21]

As mentioned above CCAs are site-specific in their approach and varied in their origin. In the following sections we attempt to analyse case studies presented in the Directory based on some key characteristics and develop a categorisation. Note that the 'categories' are not necessarily distinct, and that CCAs will not always neatly fit into one or the other category. Also to be kept in mind is that this analysis is based on information that is not necessarily comprehensive about all aspects of the case study.

Some of the characteristics used for defining categories are:

- Origin
- Objectives or motivations
- Area under conservation
- Ecosystems being conserved
- Management systems being followed, and
- Institutions established

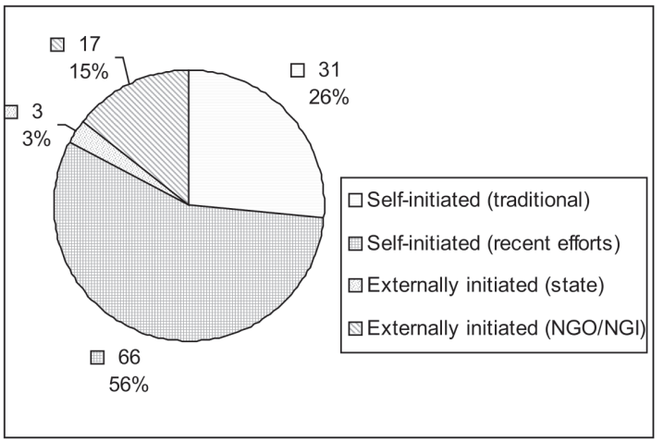
Figure 1: Example of a broad categorisation based on three of many characteristics.



2.1. What are the origins of CCAs?

CCAs are either initiated by local communities on their own without any external help, or external individuals and institutions have played an important role in initiating the process. The latter could be either on a request from the local communities themselves, or an NGO or a government agency on their own responding to local situations. Objectives for initiation could vary under both categories (see Section 2.2 on objectives of CCAs). It is sometimes difficult to locate the origin, especially in older CCAs, which could be a combination of many factors such as a need being felt in the community to revive a dying tradition, concern for depleting biodiversity, and these factors coinciding with the emergence of an inspiring local leadership. Sometimes the origin may well be a mix of internal and external factors, e.g., a young person from the community who has studied outside and brings back new ideas (the youth representing internal factors but influenced by external factors such as education). Our classification in Figure 2 is based on 'who the main initiators' are, irrespective of the direct or indirect influences that motivated them.

Figure 2: Origin of CCAs



i) Self-Initiated

These include community conservation efforts initiated by the communities entirely or primarily on their own. Such initiatives may be influenced by a number of factors as mentioned in Box 5. Such initiatives could be:

Continuation of traditional practices: This is usually an old practice, the roots of which are difficult to trace. It is difficult to say how this practice began but communities are continuing with it. This continuation of the practice could also be with or without particular objectives or reasons, e.g. protection of birds in numerous heronries across the country.

Initiated by a local individual: One or two members of the community are motivated by local factors or influenced by factors mentioned in Box 5. Usually these are started as village discussions on issues such as resource scarcity, water depletion, reducing crop fertility, forest degradation, external development-related threats, concern for the species or habitats and so on. Examples include Saigata in Maharashtra, Jardhargaon in Uttarakhand, Ghusuria and Jharsuguda in Orissa. Examples such as Binjgiri Hills in Orissa and Sangti Valley in Arunachal clearly highlight role played by local conservation-oriented individuals or local schoolteachers in initiating conservation efforts. These individuals are often able to inspire and influence a large number of people and villages because of their neutral position and the respect that they command locally.

Initiated by a group of individuals from within the community or community as a whole: In many instances a group of individuals from the community, influenced by various factors, start conservation efforts on their own. This group may bring their concern to the entire community or the *gram sabha* for discussion and with the consent of the entire *sabha* decide to initiate conservation efforts. Such groups often include the local village youths, church groups, women's groups or groups of respected elders, e.g. several CCAs in Nagaland.

Box 5

Influences and inspirations behind CCAs

It is not inevitable that communities facing resource scarcity or ecological hardships would initiate conservation efforts collectively on their own. However, often it is some influence or catalysts that triggers off the conservation effort. Some such influences or catalysts are mentioned below:

Spiritual and social movements: CCAs initiated under the influence of spiritual or social movements include, villages such as Hiware Bazar in Maharashtra which was influenced by the neighbouring Ralegaon Siddhi village and its legendary leader Anna Hazare. The success of Ralegaon Siddhi led to the Government of Maharashtra announcing an award for model villages under a scheme called the Adarsh Gaon Yojana (Model Village Scheme)[22], inspiring many villages. Similarly veteran leader Baba Amte, and the Bhoodan Gramdan Movement[23] have inspired many communities. Some young students in the late 1970s were influenced by Jayaprakash Narayan (political and social leader) and his philosophy of using youth power for social upliftment in India. A number of individuals who subsequently spread out to various

parts of the country and played important role in initiating social and ecological movements were part of his Chhatra Yuva Sangharsh Vahini (a youth social movement).

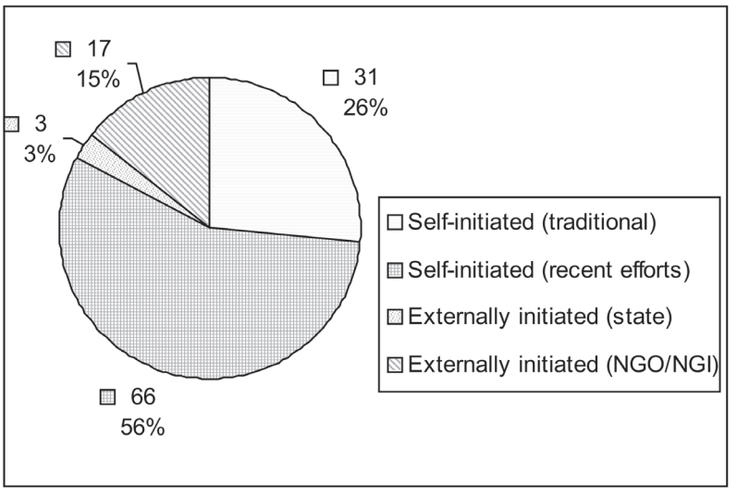
As mentioned in Section 1.1, in recent times many communities have had to stand up and fight against strong commercial or developmental forces threatening their livelihood resources. These movements may die down or subside once the conflict is resolved, but have sometimes resulted in reviving the communities' faith in cohesive community efforts. Consequently they have lead to collective efforts towards achieving social justice and/or better management of natural resources. Such cases include,

Mendha (Lekha) in Maharashtra, where the movement towards tribal self-rule and forest conservation was a result of a larger struggle against a hydro-electric project; and natural resource and traditional seed conservation in Jardhargaon was an outcome of the famous Chipko movement in the hills of Garhwal in Uttarakhand.

Other CCAs or neighbouring villages: In some villages in Orissa, Uttarakhand, Maharashtra, Rajasthan and other parts of the country the conservation effort was initiated after being influenced by similar efforts in neighbouring villages. There are examples where the benefits resulting from conservation efforts in one village has inspired others to conserve. There are also examples where conservation in one village meant restrictions on use by others, or conserving villagers going to the non-protected forests of other villagers to meet their own needs. In the latter circumstances the neighbours initiated conservation to ensure that their resources are not degraded while others protect their own.

Other Influences: The influence of researchers who come to a village, or radio and TV programmes are also common factors influencing villagers to initiate conservation.

Figure 3: Agency that inspired the origin



Fifty six per cent of all initiatives described in this Directory have been initiated in recent times by the communities on their own (Figure 3). 26 per cent have always been part of a culture and tradition and are continued by the communities, while 17 per cent have been initiated with the help of NGOs, 3 per cent by government agencies or individuals.

ii) Externally initiated

By external we mean agents outside of the conserving community.

Initiated with the help of NGOs/NGIs:

These are cases where an NGO or NGI from outside the community has directly influenced the natural resource conservation process. The association of the NGO/NGI could be for the following reasons:

1. A new initiative as part of a larger natural resource conservation programmes aimed at overcoming a resource availability crisis, to fight against social injustice, to work for conservation of biodiversity. For example, WWF-India[24] in Arunachal and Samrakshan[25] in Meghalaya and Mizoram.

2. Intervention to revive a lost tradition or support a continuing tradition, e.g., the regeneration of river Arvari in Rajasthan, through the revival of the system of *johads* (checkdams) facilitated by the local NGO, Tarun Bharat Sangh.

Initiated as part of state-sponsored programmes or by individual government officials:

In some areas sensitive government officials have played a crucial role in starting successful community conservation initiatives. The credit for the Indian government adopting the joint forest management (JFM)[26] programme goes as much to forest officials as to the local communities. Even in the government schemes and programmes that adopt a participatory approach in natural resource management, it is the sensitive and interested officials who are responsible for the extent of the success of these programmes. For example success of JFM in Satara Tukum in Maharashtra was because of the sensitive forest staff that was posted there at the time. [27] Similarly, the North Eastern Region Community Resource Management Project for Upland Areas (NERCORMP) is a joint project of the Government of India and International Fund for Agriculture Development (IFAD). This programme has also helped revive or initiate many community conservation efforts in north-eastern India.

2.2. What are the main objectives of CCAs?

Communities appear to have a range of objectives for which they conserve biodiversity, indeed the primary objective is not necessarily always biodiversity conservation. Some of these objectives are described below. Figure 4 given below also analyses 120 case studies from the Directory to understand what are the major objectives:

Resource enhancement and/or maintenance: Communities facing a serious scarcity of fuelwood, fodder, timber for household needs, medicinal plants could start an effort towards conservation and sustainable management of surrounding ecosystem. In some situations where resources have not already degraded, communities start such efforts to ensure continued availability. For example the sanctified *van panchayat* forests in Uttarakhand, community conserved forests inside Kailadevi Wildlife Sanctuary in Rajasthan, Jardhargaon in Uttarakhand, many community forest management (CFM) villages in Orissa and West Bengal (some of which subsequently became a part of the official JFM scheme)[28]. The analysis shown in Figure 4 below indicates that resource enhancement and maintenance is one of the highest motivations for communities to start conservation at 77 (64 per cent) sites.

To counter ecological threats: Communities facing ecological threats or hardships such as reduced soil fertility because of erosion; frequent landslides; recurring drought situations; reduced or non-availability of water because of degraded watersheds; and impacts of cyclones along the coastal areas and other natural calamities. Examples include Hunsur village in Karnataka, and Konark-Balukhand in Orissa. In Khambi village in Manipur, if villagers had not regenerated their forests they would have had to relocate their village because of water scarcity. 2.5 per cent of the cases were motivated to take action because of ecological hardships.

To fight external development threats: Impending threats from development or commercial forces, or alienation from the resource/habitat on which the community's livelihood depends. Examples include the Chipko Movement (against timber logging) Uttarakhand and Mendha (Lekha) village (against dams and a paper mill) in Maharashtra.

Religious sentiments: Religious sentiments associated with species, sacred landscapes and other elements. Examples include sacred groves like Ajeevali village in Maharashtra, wildlife protection by the Bishnois in Rajasthan, sacred landscapes of Sikkim, and sacred ponds and forests of Uttarakhand. Nine percent of the analysed CCAs had religious sentiments as the major objective.

Cultural concerns and traditional systems: There are many traditional and cultural practices which are not necessarily linked to religious sentiments, but to ethics or cultural beliefs. Examples include community land-use systems in the north east India, and heronries in villages like Kokkare Bellur in Karnataka. Figure 4 indicates that religious and cultural sentiments together are responsible for motivating 28 (22.5 per cent) of CCAs.

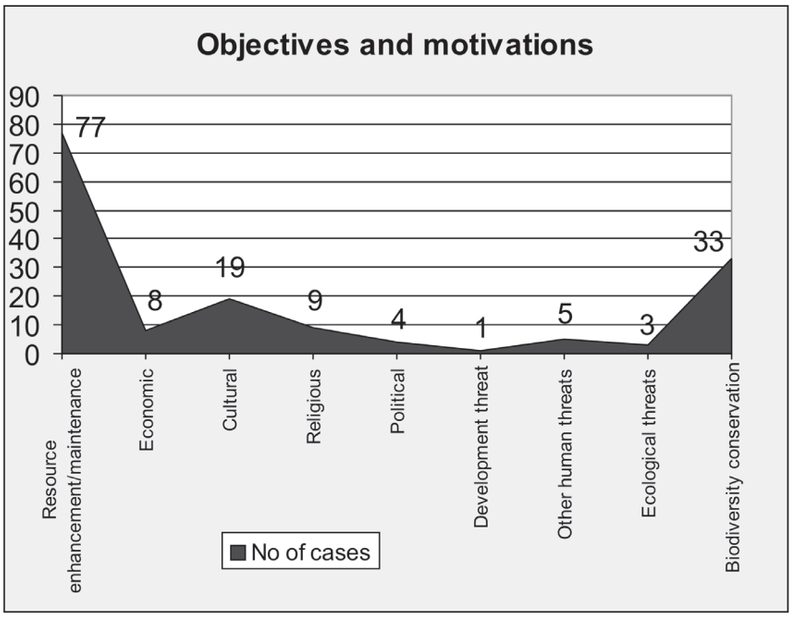
Political reasons: A larger movement towards self-rule and local empowerment where rights and responsibilities over natural ecosystems and species therein are considered very much a part of all other rights and responsibilities of the local inhabitants in the concerned area. Examples include Mendha (Lekha) in Maharashtra, and Kudada in Bihar. 3 per cent of the CCAs were initiated because of a movement towards self-rule, or had political assertion as one of their objectives.

Biodiversity concerns: In recent times, there is a realization among the youth in many villages about the threatened status of wild species are found in their area. For example, there are a number of villagers along the coasts of Goa, Kerala and Orissa who are extending protection to marine turtles. Such protection is also often given to many other species and habitats as part of tradition, for example protection of fish and fresh water turtles. In these situations the attention is more on the protection of the specific species and only occasionally is the habitat or other species in that area taken into consideration. However, conservation of the habitat as a whole for a particular species, is also not uncommon. For example wildlife reserves in Nagaland, and Shankarghola in Assam and a few more in the other north-eastern states of India. (for more details on these see Section 4.3). As per Figure 4, the second highest motivation for CCAs appears to be the concern for certain species and their degrading habitat. This accounts for 33 (27.5 per cent) of the cases. (Interestingly, 58 per cent of these 33 have their roots in strong cultural and religious sentiments, while 42 per cent have been initiated in recent times out of concern for wildlife).

Other external human threats: Threat from human factors such as government deciding to harvest timber or carry out plantations of only commercially important species at the expense of local ones, increased activities of timber smugglers, increased activities of migratory herders, etc. have been responsible for initiating 5 (4 per cent) of the CCAs.

Economic reasons: Economic reasons have been one of the motivating factors behind eight (6 per cent) of the cases. This does not mean that economic benefits are not welcome in other cases or that such benefits do not accrue but that this is not often the main motivation behind starting an initiative.

Figure 4: Objectives and motivations behind CCAs

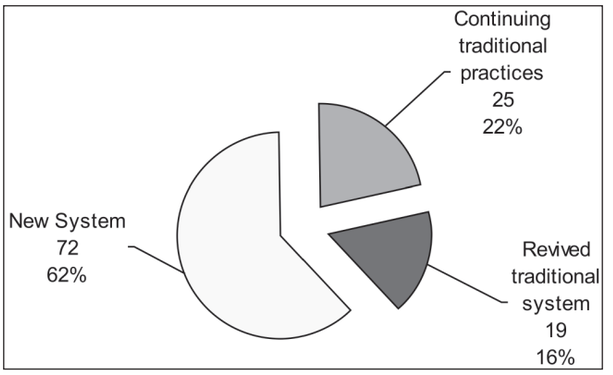


It is important to mention here that any one of the above mentioned case studies could have more than one objective for initiating conservation efforts. For example, communities could start conservation with the objective of resource enhancement as well as to overcome ecological hardships and protecting some endangered species.

2.3. Are the management practices new or old?

CCAs can be classified based on whether the management practices adopted for the CCAs are traditional (old) or new. Traditional practices can be those that are continuing without a break or those which had broken down and were subsequently revived. By traditional or old practices we mean those practices whose time of origin and often even the rationale cannot be traced by anyone in the community, while new practices are those where the time of origin exists in the memory of the community. It is important to mention that most traditional practices, whether continuing or revived, do get modified over a period of time depending on the changing circumstances and situations.

Figure 5: Old or new management practices



a. Continuing traditional practices

An analysis of 116 CCAs shown in Figure 5 indicates that in 22 per cent of the documented CCAs, traditional conservation and management practices are being followed. These could be in their original form or with modifications. Examples include heronries, Indian peafowl conservation, blackbuck conservation, and sacred groves.

b. Revived traditional practices

Figure 5 also shows that in 16 per cent of the documented cases, the management practices that were adopted were revived traditions that had once broken down. This is irrespective of who initiated the process—the communities themselves, NGOs or government agencies, or individuals. For example, in many instances there existed in the past a system of the entire village selecting a few respected and elderly people (for e.g. *gaon buras* in many north eastern states) in the village as village heads to resolve conflicts and take decisions. In some cases village assemblies as a whole (*gram sabhas*) used to take decisions. When villagers or NGOs are in the process of initiating a conservation effort they often look into the history of the community itself to arrive at the best system of decision-making for that area, e.g. by trying to revive the role of village elders.

Similarly the past is sometimes explored when solutions are needed for recurring problems. For example, in areas with water shortage, conserving communities or associated NGOs have looked at traditional systems of water harvesting in the area and tried to revive them with or without modifications.

Box 6

Reviving tradition out of necessity

In the Himalayan State of Uttarakhand, villagers have been legally in charge of surrounding or adjoining forests for over seven decades. The local *van panchayat*s (forest councils) were entrusted with the management of forests. With the burgeoning populations, reducing resources, and monoculture plantations in the surrounding government controlled forests, *van panchayat*s were increasingly finding it difficult to sustainably manage the forests. Consequently many *van panchayat*s decided to revive the tradition of sacred groves and declared the forests under their management sacred for a specified period of time to allow for their regeneration. After five (in some cases ten) years, the results are extremely encouraging, e.g., in the Dharamghar region of Uttarakhand (see case study section of Uttarakhand).

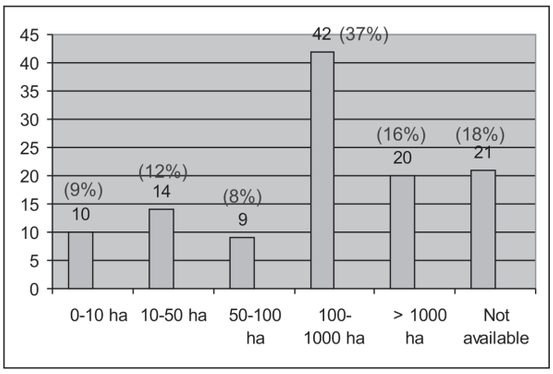
c. New management systems

According to Figure 5, the highest number of examples, at 62 per cent, are from CCAs where new management practices have been devised after the decision to conserve. This challenges the common belief that community conservation efforts are only in those areas where they have existed traditionally. New community conservation initiatives are continuously emerging. Examples of this are turtle conservation at Rushikulya in Orissa, CCAs in Nagaland, Satara Tukum and Saigata in Maharashtra and many others.

2.4. How much area do CCAs conserve?

It is generally believed that communities, if and when they conserve natural resources and biodiversity, do so only in small and sporadic patches. This may be true if one considers only those areas as CCAs which communities have set aside as completely no-use zones, such as a few sacred groves. However when a diversity of initiatives are considered (such as in this Directory), with a huge range of objectives (Section 2.2) and institutional arrangements (Section 2.6), this does not hold true. Conservation in such examples is achieved through a continuum of land-use practices ranging from areas of no human use to areas of regulated multiple use. Resources cannot be sustained if the area on which communities are dependent and are conserving is very small. It is therefore logical that, given an option, communities would want to bring larger areas with multiple-use systems under CCAs (This reality has been reflected in Figure 6). This indicates that conservation requires a landscape approach with management taking into account high human use, low human use and no use.

Figure 6: Range of area within which the documented CCAs fall



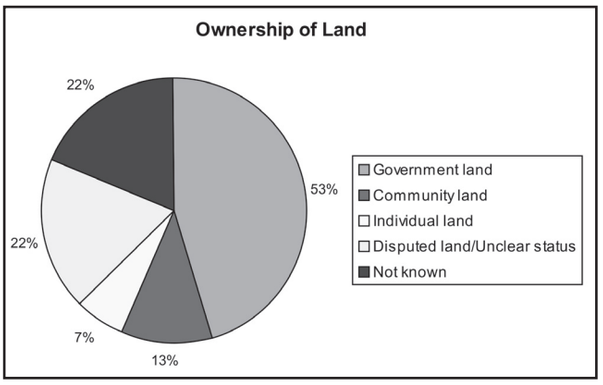
Over one third of the CCAs (37 per cent), recorded in this Directory are conserving areas between 100 to 1000ha, and 16 per cent over 1000ha.

In states like Nagaland, where communities own much larger landscapes, the size of a few no-use zones (declared in last couple of decades) meant exclusively for wildlife protection is also large. But the situation is different in rest of India. Here the populations are rising and available resources are shrinking, so sacred groves (which are usually inviolate with no or minimal use) become smaller and smaller in size. It is therefore important that CCAs including sacred groves are not seen as isolated entities but as part of the larger landscape, and effective management of the surrounding landscape is also given as much importance for conservation as the conserved site (with varying degrees of use-regulation).

2.5. Who owns the lands on which CCAs exist?

Our experience with CCAs in India shows that existence of CCAs is often not dependent on the ownership of land. CCAs documented here were found to be existing on lands owned by communities, government agencies, or even disputed lands (disputes could be among various communities or between communities and government agencies). The analysis in Figure 7 shows that 53 per cent of the CCAs exist on government-owned lands.

Figure 7: Who owns the lands on which CCAs exist?



In 22 per cent of the CCAs, the ownership status is not known but it is likely that many of these would also be on the government lands. Only about 12 per cent of the CCAs are on lands owned privately or by the community as a whole. Most of these are in Nagaland (which is the only state in the country where almost all the land is owned by communities or individuals), or are in areas like the Bishnoi lands in Punjab and Rajasthan. This could be because land and forests are largely owned by the government in most parts of the country. Some of the state chapters in this Directory deal extensively with the history of nationalization of land by the colonial and post-colonial governments (see chapters on Uttarakhand, Himachal and Karnataka).

In many such areas where CCAs exist, even when owned by the government, communities have had traditional or customary rights and associations for generations. Sometimes such rights have been accepted and recorded in the government documents, such as the *nistar* [29]rights of the erstwhile Central Provinces and Berar region (now forming parts of Maharashtra, Chhattisgarh, and Madhya Pradesh). However, in most cases these rights have neither been recognized nor recorded. Conservation efforts on such government lands are initiated by first claiming a *de facto* control within their own traditional boundaries. Such boundaries are often not part of any government records but are strongly embedded in local oral traditions and historical and cultural memories. Traditionally, these areas have been divided among the resident villages, defined largely by the drainage patterns, rivers, mountains and so on. However, since these are unofficial boundaries there are no physical demarcations of such traditional boundaries on the ground. Nowadays, this sometimes gives rise to conflicts with neighbouring communities. Such conflicts are more pronounced in areas where land has been taken over by the government in the past and redistributed for usufruct[30] rights (without recognizing the original boundaries)—e.g., in the case of *van panchayats* in Uttarakhand.

2.6. What institutions are commonly used for conservation?

CCAs use a variety of institutions to fulfil their objectives. These range from a single institution for all decisions in a village (including the ones related to conservation) to multiple institutions established for different purposes. Some of the commonly used institutions are mentioned below. It is important to keep in mind that the categorization (as mentioned below) is not hard and fast—local variations within each of the categories is encountered from community to community.

2.6.1. Village as a whole (*gram sabha/aam sabha* or village assembly)

In such CCAs the village as a whole makes the decisions about the initiative and is also collectively responsible for implementing them. Usually in such examples the village assembly or council meets at regular intervals (periodicity and regularity varies from case to case). In most such examples, the presence of a certain minimum number of members is compulsory. Who constitutes a council or assembly also varies from case to case. In some cases it is the entire voting population (or all adults) of the village, while in others it could be one member per family. In a few cases participation of women is compulsory and encouraged by the men in the village, while in others women are not allowed to participate in *gram sabha* meetings. Even if in the government revenue records the conserving village or hamlet is a part of another larger village or group of villages, the conserving community often considers its *gram sabha* to be separate from that of the larger village and decisions are made at their own level. The role of the *gram sabhas* is taken over by the village councils (VC) in Nagaland. VCs are a combination of a traditional institutional structure, officially accepted in a modified form (see Nagaland state chapter for more details). Under the Village Council Act of the state, all decisions related to the village governance, including forest and other natural resources, are taken by the village council.

In some cases a village may decide that the matters related to forests and conservation would be handled by the *van suraksha samiti* (VSS) or forest protection committee (FPCs) in the village. However, the composition of the VSS is exactly the same as that of the *gram sabha*—the distinction here is that in VSS meetings only matters related to the forests are discussed.

CCAs which are also part of JFM follow the official JFM structure. They have a general body constituted of either one member per family, or one male and one female member per family, depending on the state. For day to day matters an executive committee is elected, usually comprising of 7-9 members from the general body. The local forest officer is the member secretary of the VSS. It is mandatory to have members from underprivileged communities and women in this committee. In villages like Mendha (Lekha) in Maharashtra, the VSS executive appointed under JFM exists only on paper and decisions are made by the entire *gram sabha*, which meets once a month or more.

The term 'entire community' can also refer to a specific group of people interacting with a common resource and informally coming together for use, management and conservation of the resource. For instance, all the clam collectors in Ashtamudi lake in Kerala have formed an informal group that decides on how the clams should be caught and when a ban on fishing should be implemented. This group ensures that fishing ban orders are issued by the District Collector at an appropriate time every year.

2.6.2. A representative body/ies

This could be of the following kinds:

i. **Set up by the entire village, *gram sabha*, or village council**: In these cases the entire village decides to elect or select a few members to take decisions related to conservation. It is important to keep in mind that the reality on ground may vary from case to case. For example, in some situations the institutions mentioned below may have actual decision-making powers, while in others they may have the responsibility only of implementing the decisions. In still others they may be mandated to make some decisions but not all. Various categories under this could be the following:

   - A few respected elders in the community who meet as and when required. Usually, they play an important role in conflict resolution within the community.
   - Specific institutions selected/elected by the village, such as the *van panchayat*s of Uttarakhand, for management and conservation of forests.
   - A *van suraksha samiti* (VSS) but not under JFM. In such cases too there is a huge diversity in representation and equity. Some villages are very careful about equitable participation and ensure presence of women and representatives from minority groups, while in other such institutions powerful individuals dominate, and women and minorities have nearly no role to play. However, wherever the VSS is more equitable, the community initiative appears to be more successful. In some cases, even when decisions are made by the dominant communities the needs of the minority groups or underprivileged groups are given special consideration, e.g., Binjgiri Hills in Orissa.
   - Sometimes, when the village is very large the community decides to notionally divide the forests for management and use among various sub groups. The institutional arrangements of these smaller units may vary from each other. In Makku village in Uttarakhand, the *van panchayat* is managing over 2000 ha of forest. The village decided to divide some patches of forests closer to the village among women's groups for management and use. The forests further away from the village are protected and managed by the *van panchayat*.
   - Wildlife Management Committees instituted for the protection of wildlife such as in Sendenyu village and Khonoma Nature Conservation and Tragopan Trust (KNCT) in Nagaland.
   - Women's groups, which either come together organically with village consent or are elected by the village, are taking the lead in conservation efforts in many parts of Uttarakhand, Orissa and other states. In Dengajhari (Orissa), and in Ganeshpura and Karundamuda (Chhattisgarh), forest protection is entirely the responsibility of women's groups. In other villages such as Jardhargaon in Uttarakhand and Mendha (Lekha) in Maharashtra, women's groups are an important part of the decision-making process and in implementation of CCA rules.
   - Youth groups in many areas are concerned about the threatened species or habitat and are taking a lead in initiating action towards conservation. In most cases, however, their role is more about ensuring protection and making sure that the rules and regulations are being followed rather than about taking decisions—e.g., Luzuphuhu, Ghosu and some other CCAs in Nagaland. These youth groups are often responsible for a number of other village-related issues apart from forest protection.
   - As in the case of Rupabalia in Orissa, management of different patches of forests can be a responsibility of different caste communities.

ii. **Set up by an external agency:** This could include a representative body that has been constituted by an NGO, government agency or any other agency for the purpose of a conservation programme initiated by them. Such institutions could be functioning independently but with the acceptance of the local community[31]. These could also be the representative bodies, which have been formed with the consent of the traditional institutions. Examples of such institutions include:

- A few members elected as per the JFM resolution of the state governments to constitute the executive committee of the VSS, usually about 7-9 people. The forest department (FD) plays a crucial role in such selections.
- Natural resource management group (NaRMG) formed under the International Fund for Agricultural Development-funded North Eastern Region Community Resource Management Project for Upland Areas (NERCORMP-IFAD).

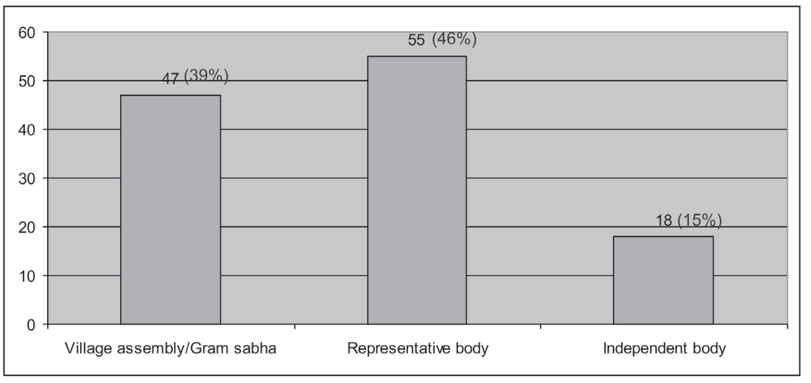
2.6.3. Sub-unit of the larger village community but functioning independently

These could again be those that have set themselves up with or without external help or that were set up by the larger village but given a mandate to function independently. Examples include:

- Theeram group in Kerala working for turtle conservation and protection of the beach against sand mining.
- Rushikulya Turtle Protection Group in Orissa.
- Kuraj Sanrakshan Vikas Sansthan working for the conservation of demoiselle cranes in Khichan in Rajasthan.
- In cases like Binjgiri and Dahni Panch Mauja in Orissa it is seen that forest protection is started by groups of individuals who get together organically.
- Many times the community entrusts the responsibility of managing the sacred grove to a larger trust, e.g., Aravanchal Kavu in Kerala.

These groups work more or less independently of the decision-making process in the village. In fact, some of them are now registered trusts or societies. They are usually not in conflict with other village institutions and follow local rules, regulations and interests, but are not necessarily answerable to those institutions regarding conservation-related activities.

Figure 8: Types of institutions



Analysis of existing case studies (Figure 8) shows that nearly half (46 per cent) of the CCAs use a system of decision-making in which the village or the concerned community as a whole elects or selects a group of people for day-to-day functioning and decision-making. The general body in such cases meets at regular intervals (with variations from case to case) to ratify decisions, monitor and elect or select the next executive body. In 39 per cent cases the decisions are being made by the village as a whole and in 15 per cent of the examples, an independent sub-unit has been formed or has formed itself.

2.7. What are the conservation systems, rules and regulations used?

Our experience with a wide range of examples, including those documented here, indicates that the nature and kind of rules are as varied as the institutions involved in management. All CCAs do have some kind of rules and regulations to ensure that the objectives are being met. However, monitoring systems may vary from very stringent to fairly relaxed. Rules and regulations could vary from very well worked-out to not so detailed out to not well-defined but well understood, and from formally written down to orally passed on, and so on.

Figure 9: Written and unwritten rules

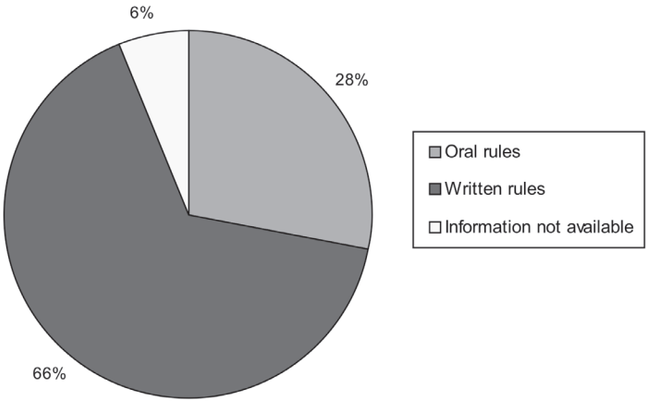


Figure 9 shows that in 66 per cent of the documented CCAs, the communities have decided to have written down rules while in 28 per cent cases, rules are orally followed.

Irrespective of whether these rules are written down or not, explicitly specified or not, the success of the CCA seems to depend on how effectively these are implemented, followed, or monitored.

a. Rules and regulations

Protection through traditional beliefs is among the common systems of protection and management, particularly in areas where traditions and religious sentiments are still very strong.

In newer initiatives, when the villagers decide to protect, they discuss a set of rules to be followed. These rules are often not static but change according to the situation and context. Sometimes rules are selectively relaxed. For example, in Dhani Panch Mauza in Orissa absolutely no extraction was initially allowed, so as to ensure regeneration of forests. However, once the forests regenerated, rules had to be changed to accommodate some local needs. Similarly, in some situations rules are relaxed for lower-income groups.

In many cases, the communities have now started recording the minutes of the meetings where rules and their violations are regularly recorded.

Given below are some of the most commonly used rules (various combinations of which are used in different CCAs). Rules are framed depending upon the kind of protection to be accorded.

- Strictly no extraction of resources.
- Regulated extraction by the local villagers and absolutely no extraction by outsiders. This could mean specifying how many cartloads of fuelwood can be extracted, how many timber trees (for personal use only) can be felled, that only dead and dry wood can be collected for fuelwood, that axes are not to be carried in the forests and so on.
- Permission to be sought from local institutions for any extractions.
- Regulated extraction by local villagers as well as some neighbouring villagers (especially if they have been traditionally dependent on the same resources).
- No hunting or regulated/seasonal hunting/fishing.
- No commercial exploitation of timber.
- Using local resources to meet only local needs. Most villagers have worked out details of how many live trees can be cut in a year and for what purposes.
- Zonation, e.g., villagers from Gadabanikilo in Orissa mark out zones for extraction, zones for grazing, completely inviolate zones and so on.
- Specifying the number of livestock that can be kept per family in the village.
- Regulated use and equitable distribution of water, e.g., not growing water intensive crops.

b. Monitoring systems

In some situations, particularly in the case of conservation based on traditional beliefs, there are no specified monitoring systems and no action is taken by the community if rules of entry and

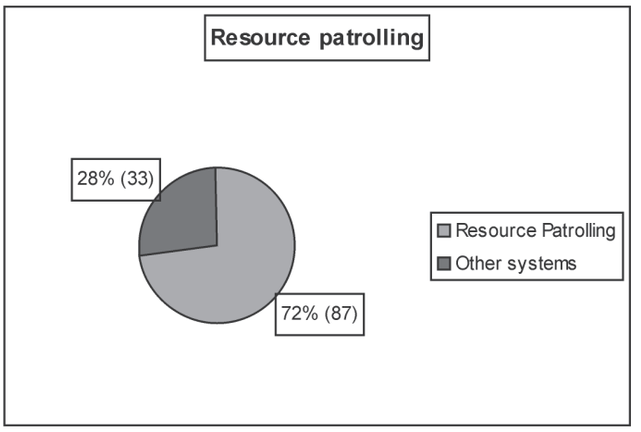
resource collection are violated. It is the fear of a wrathful deity and misfortune that may befall if rules are broken that keeps offenders away. Local people often tend to make connections between such misfortunes and violations of traditional belief systems. Such beliefs are further strengthened in the local folklores and mythologies. An interesting example of this is the Thaiang sacred grove in Meghalaya, where the village elders revived the system of sacred grove protection when they felt that disappearance of the tiger has led to misfortune for the village in the form of lack of water and medicinal plants. The youth in the village are now strictly protecting the grove.

In the community-managed heronries, or in Bishnoi areas in Punjab and Rajasthan, or where Indian peafowl and blackbuck are protected, there is a general understanding about not harming the concerned species. Usually all local people adhere to the rules. A few violations may even go unchecked, but if the frequency increases the community would come together to deal with the situation. For example in Buguda village in Orissa (see Orissa state chapter for details), if someone comes across incidents of blackbuck-hunting they inform the village, which gathers together to deal with the situation.

Sometimes villagers do not have any specific monitoring system and it is the responsibility of the entire village to keep an eye on violations and report them to the village institution. Since everyone is more or less equally involved, violations rarely go unnoticed. There may in such situations be a penalty even for those *not* reporting a violation to the community, e.g., Bhaonta-Kolyala in Rajasthan.

One of the most commonly used systems of monitoring is that of patrolling of the CCA by rotation as shown in Figure 10. This system is used in about 72 per cent of the documented CCAs and the system has different names in different places. In Orissa, this is referred to as *thengapalli* and in Uttarakhand as *lath panchayat*. Here the villagers take turns at patrolling the forests—a person who has finished his turn places a *thenga* or *lath* (stick) outside the door of the family who then has to take the next turn. In areas like Satara Tukum the stick is not used, but the patrolling assignments are decided in the village meetings.

Figure 10: Resource patrolling as a monitoring system



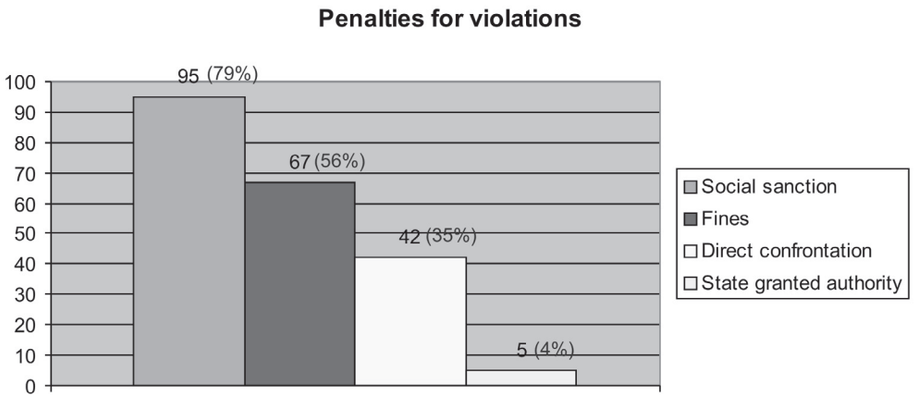
Another commonly used system is that of appointing watchers. The village community contributes either in kind or cash to pay the remuneration of the watchers. Contrary to common belief, the watchers can be both men and women. The forests of Thapalia-Mehragaon in Uttarakhand were zealously watched over by Rewati Devi (now well into her seventies) for years. In numerous situations there are local individuals who take a keen interest in protection activities and monitoring activities voluntarily.

Local innovations for guarding forests are quite common. In Dengajhari, for example, forest protection against timber smugglers proved difficult for the menfolk due to threats to life. The women then came forward and started protecting the forests in small groups. They were certain that it would be difficult for the offenders to attack women because of social and political reasons, and they have been proven right.

c. Fines and punishments

Rules and regulations and monitoring systems would not be effective if communities did not put in place a system of penalties or fines for offenders. Such penalties could include social sanctions, and fines in cash or kind, or directly confronting the offenders and confiscating what they have extracted and tools they used.

Figure 11: Penalties for violation of CCA rules



As illustrated in Figure 11, penalties in cash or kind are one of the most commonly used systems of punishment for violation of rules and regulations with 95 (79 per cent) examples following this system. This system is more common with offenders from within the community. 67 (56 per cent) follow a system of direct confrontation with the offenders. Usually, confrontations are more common with offenders from outside the community. 42 (35 per cent) CCAs follow a system of social sanctions where the offender is socially boycotted. This is more common with habitual offenders from within the community. Only in 5 cases (4 per cent) was the conserving community found to have some kind of authority from the government to deal with the offenders directly. It must be mentioned here that the fields in Figure 11 are not mutually exclusive, which means that one community may have followed one or more of the above systems. Some commonly used penalties are:

Fines for violations: Such fines often depend on the economic value or the value assigned by the community to the illegally procured article. For example, sambar is considered locally threatened in Sendenyu village in Nagaland and its hunting invites much higher fines than other species. The fines may also vary depending on the number of times a certain offence has been committed by the same offender, as also on the basis of the economic status of the offender, with economically better-off people paying higher amount. Sometimes the value of fines for a certain crime changes according to circumstances.

Box 7

Hunting fine in Khonoma, Nagaland

In Khonoma, Nagaland, villagers recount an interesting story. In order to discourage it the village has imposed a heavy penalty on hunting wild animals. In one incident a group of villagers had hunted a sloth bear. The village had imposed a fine of Rs 5000 on killing sloth bears. The hunters negotiated a rate of Rs 10,000 with the trader to ensure that Rs 5000 could be paid as a fine. The village then changed the rule such that the fine for hunting an animal is as per its market value and also includes confiscation of the hunted animal.

- Confiscation of implements such as axes, sickles, fishing nets, used for the offence is another common punishment.
- Compounding of livestock that stray into prohibited areas for grazing.
- Social sanctions which prohibit the individual or the family from attending any community meetings or functions or barring them from marriage relations. Most villagers would keep away from offences for the fear of social ostracism.
- For outside offenders and habitual offenders, the communities often seek assistance from the FD, police or others.
- There are also instances in Orissa where offenders from the other villagers are tied to trees in the forests till the elders of the offenders' village come for negotiation. These elders have to guarantee that such incidents would not be repeated.

d. Conflict Resolution

Intra-community conflicts that arise because of the implementation of the rules or for other reasons are often resolved within the community. Such conflicts are taken outside the community only in exceptional circumstances or when the internal unity and cohesiveness of the community is very low. Resolution of such conflicts is usually done by the *gram sabha* or a group of trusted elders.

Inter-community or inter-village conflicts are mostly resolved at inter-village/community institutions (traditional or new). For example, in Kailadevi in Rajasthan, such conflicts are resolved by *barah gaon ki panchayat* (executive committee of 12 villages). This is a traditional conflict-resolution body where elders from 12 villages make decisions together. The offending village has to host this meeting and bear all costs. Once a decision is taken, the respective *panchayats* ensure that individual villagers adhere by it. Similarly, Mendha (Lekha) village in Maharashtra is a part of a cluster of 32 villages that have been traditionally meeting to resolve such conflicts. In Nagaland, all tribes have their own traditional area councils called the tribal hoho. In recent times, new area councils such as Chakesang People's Organisation (for the Chakesang tribe), Angami People's Organisation (for the Angami tribe) and so on have taken over the role of overall monitoring of tribal affairs, including district-level conservation activities and conflict resolution. In Orissa, such conflicts are resolved by district-level community forest management (CFM) federations, such as Ranpur federation that consists of 180 villages.

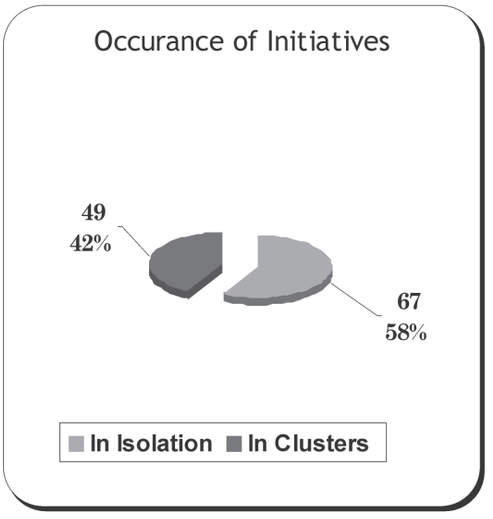
Such institutions for inter-village disputes do not exist in all cases, and where they do not exist, villagers largely depend on the government agencies, in particular the FD, for such conflict resolution.

2.8. Do CCAs always exist in isolation?

Contrary to the general belief that CCAs are sporadic and isolated, the documentation reveals that CCAs often tend to exist in clusters (see Section 7.7). The clustering of CCAs seems to be most common under the following circumstances:

- In areas where the pressure on resources is very high and resource scarcity pushes people to initiate conservation efforts. When one village starts protecting, it sometimes leads to higher pressure on the forests of the others (till the resources are regenerated). The neighbours then start protecting their forests to safeguard against over-use.
- In areas where neighbours initiate conservation after seeing the benefits of conservation for the concerned CCA.
- In areas where leaders that have initiated the effort in one village also inspire others in the neighbourhood to take similar steps.
- Programmes such as JFM are also often initiated in more than one village in an area.
- Large NGOs or institutions that initiate action (e.g., IFAD-NERCORMP programme in north-eastern India) also prefer to work in more than one village in a neighbourhood at a time.

Figure 12: CCAs occurring in clusters

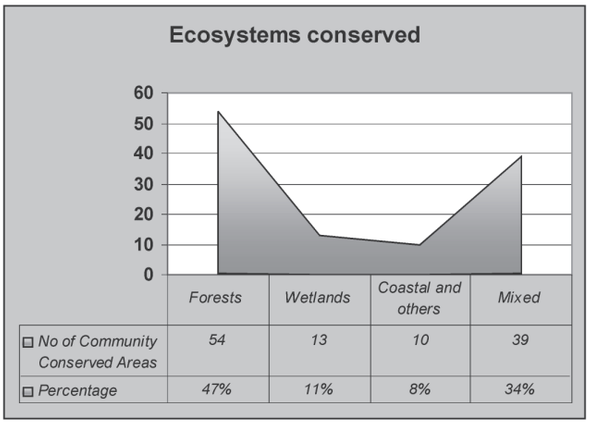


Our analysis (Figure 12) of the documented CCAs shows that about 49 (42 per cent) exist in clusters while 67 (58 per cent) exist in isolation or in groups of two. The trend in cluster formation is more prominent in some regions and states. The best examples of clusters of CCAs are found in Orissa, particularly in forest ecosystems. Nagaland, Uttarakhand and Gadchiroli district in Maharashtra also have clusters of CCAs. Although not documented in the Directory, anecdotal accounts indicate that such cluster formations are also found in Chhattisgarh and Jharkhand regions. The phenomenon of clustering appears to be more common among communities conserving forest ecosystems and species therein. The incidents of clustering of turtle conservation sites by communities in marine areas (inspired by neighbours) are also now coming up, e.g., in Rushikulya area, and in Kerala.

2.9. Which ecosystems do CCAs cover?

Are CCAs restricted to certain kinds of ecosystems or habitats only? The documented examples show that this is not the case, though forests seem to be the commonest. Of all the cases documented in this Directory, the maximum pertain to forest ecosystems (more than 47 per cent). 34 per cent of CCAs exist on mixed ecosystems, which would normally contain a combination of forests, grasslands, wetlands, and/or high-altitude pasturelands and so on.

Figure 13: Ecosystems that CCAs conserve



The third most protected ecosystem seems to be the wetlands at 11 per cent. Only 8 per cent of CCAs documented are located in marine and other ecosystems. The reasons for this could just be that the conservation efforts in forest areas are better known and documented than other ecosystems, which in turn could be due to the larger number of organizations and individuals working on forest-related issues. Anecdotal accounts and observations suggest that there is much more happening out there, many more undocumented CCAs than what we have been able to bring out in this compilation, particularly in ecosystems other than forests.

3. CCAs as protected areas (PAs)

As CCAs are gaining greater recognition the world over, governments and conservation organizations are faced with the question: Can CCAs be compared to PAs and hence given equal attention from the point of biodiversity conservation? Considering the various kinds of threats faced by CCAs in current times (see section 5 for details), getting such recognition and support will be valuable for many CCAs. In this section an attempt has been made to answer this question, albeit only in the case of CCAs in India.

In India, any area can be declared a PA by the government if the government 'considers that such area is of adequate ecological, faunal, floral, geomorphological, natural or zoological significance, for the purpose of protecting, propagating or developing wildlife or its environment' under the Wild Life (Protection) Act 1972. Cultural and other values have so far not been taken into account. The most widely used and common categories of PAs in India are national parks and wildlife sanctuaries. Conservation reserves and community reserves are two new categories that have been added as per amendments in the Act in 2003 (see Section 8.1(i) on laws and policies for more details). Since in this process there are no identified criteria based on which a PA can be declared, it is difficult to say whether CCAs in India can fit those criteria. Additionally, declaration and management or administration has so far been the prerogative of the government. CCAs, on the other hand, are established by the concerned communities, based on values identified by them, and administered

with the help of local rules and regulations and through local institutions. In the absence of clear criteria the available legal spaces could be used to review whether CCAs fit in those spaces. This has been dealt with in greater detail in Section 7.

Internationally,[32] the most commonly used definitions of a PA are those used by the International Union for Conservation of Nature (IUCN) and the Convention on Biological Diversity (CBD).

IUCN/WCPA (World Commission on PAs) defines PAs as: '*An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.*' CBD defines PAs as '*A geographically defined area which is designated or regulated and managed to achieve specific conservation objectives*.'

The key elements of PAs emerging from both these definitions are:

- Well-defined geographical limits.
- Main aim is to achieve conservation (although other related objectives or benefits are not excluded).
- Establishment and management by legal or other effective means.
- Existence of a body of governing rules.
- A clearly identified organization or individual with governance authority.

An analysis of case studies documented in the Directory (Figure 14) indicates that 30 per cent of the case studies fit all the key elements mentioned to be a PA (Type 1). 27 per cent fit all other criteria except that the CCA was not initiated with the *main* objective of biodiversity conservation, although biodiversity conservation could be one of the objectives and the initiative may be leading towards conservation (Type 2). 43 per cent are such examples, where the primary objective of the CCA may or may not be biodiversity conservation (but is one of the objectives), but they do not fulfil at least one of the other criteria—for instance they may not have well-defined rules and regulations rather may be working on some common understanding on what to do and what not to do. This analysis shows that the CCAs documented in this directory, barring a few, exhibit most of the key elements except that their main aim may not always be conservation (although the initiative may result in conservation).

Box 8

Major points emerging from international debates on whether CCAs can be considered PAs

Are CCAs 'natural' enough? IUCN's guidance on the PA categories is that only those areas be considered PAs in which two-thirds of the area is in its 'natural state' (defined as 'ecosystems' where since the industrial revolution (1750) human impact (a) has been no greater than that of any other native species and (b) has not affected the ecosystem's structure'). Many CCAs (or for that matter PAs!) would not fulfil this criterion; however, if the CBD definition is accepted, CCAs would certainly qualify as PAs. It can in fact be argued that a more inclusive conservation-oriented definition may be needed to accommodate not only CCAs but also many existing PAs and other areas that are important from a biodiversity conservation point of view, even if they do not fulfill this 'two-thirds' criterion.

Do CCAs always have geographically defined boundaries?: It has been pointed out that community conservation initiatives may be embedded in notions of 'cultural' spaces rather than strict or easily delimited geographical spaces; the boundaries may shift in time, or may be notional, 'porous', related to seasons and weather patterns rather than to geographical territories (e.g., in some communities, the 'sacred hill' or site may shift from time to time, and the community shifts with it). Given that one of the criteria for defining a PA is that it should have a clearly defined boundary, does this pose problems for such CCAs coming under the PA category? This issue is of particular relevance to special cases, such as mobile communities. One way of resolving this may be to define, as the CCA the entire possible territory in which the 'shifting' conserved site is located and then to consider appropriate internal zonation (which can change over time) to demarcate the actually protected area within the overall CCA. Another option is to suggest flexibility in the definition of PAs, to accommodate, in the case of CCAs, shifting geographical boundaries which are defined by communities through cultural means. In addition, time-related variability, i.e., the existence of seasonal patterns of protection should be explored/accommodated.

Are areas with considerable agrobiodiversity, to be considered as CCAs and indeed as PAs? If one takes the CBD definition, such areas would fit. The latest WCPA/Cardiff Guidelines on Category V PAs (2002) clearly includes areas with agrobiodiversity. However, acceptance of this will need attitudinal re-orientation amongst conservation professionals, since the tendency so far has been to focus exclusively on predominantly natural sites. There needs to be growing recognition that in the case of many community managed areas, and especially landscape-level CCAs, the presence and maintenance of agrobiodiversity (which also directly or indirectly supports greater wildlife than monoculture farming/pastoralism) should be considered a positive attribute for considering them as PAs.

Source: Note prepared by Ashish Kothari, based on inputs from Grazia Borrini-Feyerabend, Hanna Jaireth, Gonzalo Oviedo, Adrian Phillips, and Marshall Murphree. The note was written for the IUCN Strategic Direction on Governance, Communities, Equity and Livelihoods (TILCEPA) formerly known as the Theme on Indigenous and Local Communities, Equity, and Protected Areas. Contact: asishkothari@vsnl.com, gbf@cenesta.org, or tilcepa@vsnl.net.

One major difference between PAs and CCAs in India is that CCAs have been established by different communities under a diversity of rules and regulations and have been managed by a diversity of institutions, while PAs are established under specific statutory provisions, and follow uniform rules, regulations and institutional structures. Till the year 2002 only the FD was mandated to manage PAs. This has legally changed with an amendment in 2003 and inclusion of community reserves as one of the categories of PAs. However, use of this category has remained highly restricted because of various reasons (see section 8.1 for more details). Therefore, for all practical purposes it can safely be said that PAs in India till today continue to be managed by government agencies (i.e., the FD), with other governance models slow to come.

Arguments in this section attempt to equate CCAs with PAs in order to emphasise two basic points:

1. CCAs in many situations are able to resolve a number of contentious issues such as land encroachment, resource smuggling, wildlife hunting, and achieve resource enhancement. This indicates that if taken into account people can become strong allies in conservation programmes. However, their strengths, weaknesses, values and limitations as explained in subsequent sections will have to be taken into account.
2. Often CCAs fulfil many requirements of officially declared PAs, and also need to be given similar recognition, importance and support. However, if CCAs are to be formally accepted as a model of conservation in the country and recognized as PAs, then much effort will be required towards resolving the issues related to the responsibilities, access and rights of the local communities in these areas as also in recognizing and maintaining their diversity (as detailed in Section 7). CCAs cannot be managed in the same exclusionary manner in which PAs have been managed in India so far.[33]

The situation mentioned in point 2 above can be resolved by looking at recent discussions about the six PA categories of the IUCN. The categorization here is based on the objective of the protected area. However there is an active proposal to add a 'governance' dimension to this category system. This essentially means that categorisation of PAs would remain as per the objectives, but management of such PAs could be either by the government or by the communities or a collaboration of one or more organisations depending upon the local situation[34]. The acceptance of this proposal would add weight to the increasing demands of including non-official conservation areas that are being managed by agencies other than the government in national PA systems.

Following on from this, a table can be formulated with CCA types that could fit into each of the 6 IUCN PA categories (for international discussions on this see www.tilcepa.org).



Table 1: CCAs in India that can potentially be included under various IUCN PA categories.[35]

IUCN Category	Description	CCA type that could fit in this (with suggested interpretation and variations that would facilitate their inclusion)	Potential CCA , some examples
Ia & 1b	Strict Nature Reserve: PA managed mainly for scientific purposes or wilderness protection Wilderness Area: PA managed mainly for wilderness protection Absolutely no use allowed except research in 1a.	Sacred/forbidden or otherwise 'no-use' groves, lakes, springs, mountains, islands, etc. with prohibition on uses except very particular occasions, such as a once-a-year ceremony (IUCN definition may need to be expanded to include cultural and/or religious aims, as these may often be the main reasons for the communities to protect many areas with such strictness)	• Khonoma Nature Conservation and Tragopan sanctuary, Nagaland • Sendenyu wildlife reserve, Nagaland • Chusana Island, Gujarat
II	National Park: PA managed mainly for ecosystem protection and recreation	Sacred/forbidden or otherwise 'minimal-use' areas (as above) with minimal and strictly regulated use (collection of dry and fallen wood, collection of sap, eco-tourism, etc.)	• Chakrashila Sanctuary, Assam • Shankarghola, Assam • Longwood Shola, Tamil Nadu • Tuofema village forest reserve, Nagaland
III	Natural Monument: PA managed mainly for conservation of specific natural features	Natural monuments (caves, waterfalls, cliffs, rocks) that are protected by communities for religious, cultural, or other reasons	
IV	Habitat/Species Management Area: PA managed mainly for conservation through management intervention	Heronries and other village tanks, turtle nesting sites, community managed wildlife corridors and riparian vegetation areas	• Nellapatu heronry, Andhra Pradesh • Uppalapadu heronry, Andhra Pradesh • Rushikulya (sea turtles), Manglajodi (waterfowl), and Buguda (blackbuck), Orissa • Khichan (demoiselle cranes), Rajasthan
V	Protected Landscape/ Seascape: PA managed mainly for landscape/seascape conservation and recreation.	Traditional grounds of pastoral communities/mobile peoples, including rangelands, water points and forest patches strongly inter-dependent for herd, ecosystem and cultural survival; sacred and cultural landscapes and seascapes, collectively managed river basins (such natural and& cultural ecosystems have multiple land/water uses integrated into each other, and given a context by the overall sacred/-cultural/-productive nature of the ecosystem; they would include areas with high agricultural biodiversity)	• Apatani Valley, Arunachal • Arvari Sansad area (River catchment landscape), Rajasthan • Lands of the Chagpa's of Ladakh • Sacred landscapes of Sikkim Range, Orissa
VI	Managed Resource PA: PA managed mainly for the sustainable use of natural ecosystems.	Resource reserves (forests, grasslands, waterways, coastal and marine stretches, including wildlife habitats) under restricted use and communal rules that assure sustainable harvesting through time	Jardhargaon, Uttarakhand • Mendha (Lekha), Maharashtra • Behroonguda, Andhra Pradesh • Hiware Bazar, Maharashtra (Nearly all cases mentioned in section 2.2 under resource enhancement and maintenance)

Source: Adapted for India from a table presented in a note prepared by Ashish Kothari, based on inputs from Grazia Borrini-Feyerabend, Hanna Jaireth, Gonzalo Oviedo, Adrian Phillips, and Marshall Murphree. The original table was for the IUCN Strategic Direction on Governance, Communities, Equity and Livelihoods (TILCEPA) formerly known as the Theme on Indigenous and Local Communities, Equity, and Protected Areas. Contact: ashishkothari@vsnl.com, gbf@cenesta.org, or tilcepa@vsnl.net.

4. Impacts of CCAs

4.1. What costs do CCAs entail for communities?

It is now well established that people living closest to conserved areas or protected areas pay the highest price for achieving conservation, willingly or unwillingly[36]. Conservation does not come without a cost even when it is being done by communities themselves. Many times communities consider these costs integral to their efforts while at other times the costs begin to impact the sustainability of the initiative and communities even look for help to counter them. Some of the major costs incurred by communities from CCAs include:

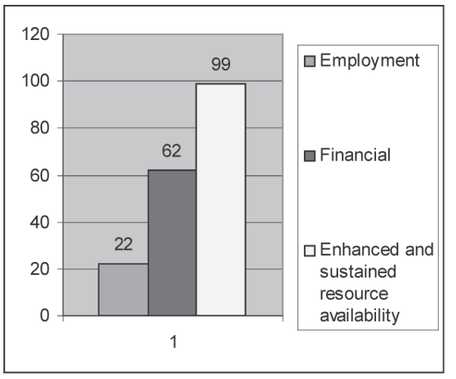
- ***Investment of time and effort for protection, management and planning activities:*** Most of the communities involved in conservation activities are subsistence farmers, forest produce collectors, fishers and other economically underprivileged people. They must work everyday on their farms or forests, wetlands or pastures, or be engaged in daily wage activities, to be able to sustain family incomes. In these situations, giving a certain number of days for conservation activities (including patrolling, meetings, and at times even court cases, etc.) can have a serious impact on the family's income. The situation is more serious for families where there is only one earning member or which is constituted of widows or old men and women (see Section 6.2 on social limitations for more details).
- ***Investment of funds for salaries or corpus conservation fund*****:** Some communities have taken a decision to contribute a certain percentage of their earnings to pay for the conservation effort, mainly to avoid being dependent on external sources for funding or to be able to sustain the efforts irrespective of external support. These contributions are meant for carrying out various management activities or payments to the watchers and guards, and so on.
- ***Temporary loss of access to natural resources***: When the objective of management is regeneration of natural resources, villagers have to face self-imposed restrictions and hence scarcity of resources for a few years till their resources have regenerated. Such restrictions again affect those who are more dependent on the resources, such as women, artisans, and pastoralists (see Section 6.2 on social limitations for more details).
- ***Donation of private lands for conservation***: In states like Nagaland and in areas belonging to Bishnoi community, privately owned lands or community lands have been donated for conservation. Often there is little or no compensation for such donations, which are done for the larger good of the community, either willingly or under community pressure.
- ***Conflict situations with neighbours or migrating communities***: Once communities start protection, they need to clearly identify the boundaries within their jurisdiction. Since traditional boundaries in many areas have not been recognised in government records and these are the boundaries that villagers claim for protection, it gives rise to conflicts with other villagers who may also be extracting resources from the same area. Sometimes conflicts may also arise between two conserving communities. Conflicts between migratory communities and settled communities (which in the past had traditional tie-ups) are among the highest (see the case study on Buldhana in Maharashtra for details). In many situations where the conserved land is owned by the government, conflicts with government agencies are also common.
- ***Threat to life and property***: Many communities carry out conservation under grave threat to their lives from those engaged in illegal timber trade, poaching and so on. In some situations conservation continues despite no support in such circumstances from the government or any other agency (e.g., see case study on Dengajheri in Orissa).
- ***Increased crop depredation due to increase in wild animal populations****:* In villages like Jardhargaon in Uttarakhand, Bishnoi villages in Punjab, Buguda village in Orissa (see Orissa state chapter for details) and Khonoma in Nagaland , crop depredation by wild animals is a major problem faced by the villagers. In Buguda, villagers claim to be not able to cultivate about 60 per cent of cultivable land because of crop damage. In Jardhargaon, monkeys and wild boars cause serious damage to the crops (also see Section 6.1. on ecological limitations).
- ***Loss of livelihood opportunities****:* Youth involved in the conservation of olive ridley turtles in Rushikulya in Orissa or Kolavipaalam in Kerala need to put in their entire time in issues related to conservation. They are left with little time to engage in livelihood generation activities and turtle conservation does not earn them any livelihood. When the pressure to generate a livelihood begins to mount, this often becomes a reason for abandoning conservation activities, such as at Morjim Beach in Goa, where the initiative of the youth for protecting turtles has been overwhelmed by huge tourism-related investments and other activities.[37]

- ***Opportunity cost or other economic cost****:* In many heronries (e.g. Kokkare Bellur in Karnataka), villagers have to let go of the harvest from tamarind trees if the storks and pelicans happen to be nesting on those trees. In Khichan village in Rajasthan, villagers contribute thousands of rupees to be able to buy grains for the demoiselle cranes.

4.2 How do communities benefit from conservation?

Our analysis indicates that most communities have benefited from the conservation initiative economically, politically,[38] in terms of developmental inputs, and so on. However, with the available information it has not been possible to carry out a cost-benefit analysis to see in how many cases the benefits have outweighed the costs.

Figure 16: Benefits to the communities[39]



Note: Each CCA used in the analysis above has more than one benefit

Benefits envisaged by the communities from the CCAs include livelihood security, ecological benefits such as control of soil erosion and increased availability of water, community empowerment, social recognition, among others.

a. Long term availability of biomass

One of the most important benefits for communities is sustained availability and access to biomass that the communities require for survival. Communities are willing to face self-imposed restrictions, as this would result in regeneration of and subsequent sustained access to resources, or because they would help achieve cultural, ethical, or religious goals. This is true of almost all the examples mentioned in this directory. Women who often face the brunt of conservation most often do follow restrictions to the extent possible in the hope of eventual gain. Figure 16 shows that nearly 83 per cent of the conserving initiatives have led to long-term availability of resources.

b. Financial and employment related benefits

Economic benefits from the sale of surplus resources or other ecosystem-based activities such as eco-tourism are an important benefit for many communities. Villagers in Botha and Hiware Bazar in Maharashtra and many others have regenerated their grasslands and are now generating substantial income by selling surplus grass. In Mendha (Lekha), villagers have worked out a system by which the village institution is now in a position to provide year-round employment to the villagers, thus reducing the need to move out in search of employment. In Bhaonta-Kolyala twin villages in Rajasthan, most young men would migrate out in search of employment till a decade ago. Conservation of surrounding forests has not only ensured year-round availability of water (in this drought-prone area) but has also increased soil fertility. Agriculture is now so beneficial that the village has much less out-migration for employment.

Figure 16 shows that in 62 (52 per cent) of cases there is a direct financial benefit to the village/ community as a whole (towards village fund) and/or to a majority of the community members. About 22 (18 per cent) of the CCAs have managed to ensure some year-round employment for most people in the village. In many initiatives (not included in the 18 per cent), employment opportunities have improved but only for a few people in the community.

The following two categories of benefits do not reflect in the Figure above as they are difficult to quantify, however discussions with the conserving communities reveal that these are important benefits for the communities.

c. Social and cultural benefits

Community cohesiveness: Conservation efforts often bring the community together for a common cause or are a result of communities coming together for some other cause. A more informed, organised and empowered community could work towards establishing more locally appropriate development processes in the village, such as systems of education, health and finance. An example of this is Hiware Bazar in Maharashtra, where the village organisation takes care of the education of meritorious village youth, the health of the village community, among other things.

On the other hand cohesiveness is one of the requisites for conservation efforts; otherwise serious problems can be created from people within the group. This is illustrated by the example of Jharbeda village in Orissa. This example however also shows that if there is determination among the community members, conservation can be achieved despite all opposition. Orissa also has many examples where women have stood against all odds to protect their forests.

Social recognition*:* Under the current development paradigm the local communities, their efforts, knowledge systems and technological innovations remain unappreciated and unrecognised. Decades of lack of recognition and endorsement has instilled a feeling of inferiority among local knowledge holders and innovators. Often the conservation efforts draw the attention of the national and global community towards the local communities, leading to social recognition of their efforts. Initiatives such as Jardhargaon, Mendha (Lekha) and Bhaonta-Kolyala have received national and global recognition. Some like Hiware Bazar and Saigata in Maharashtra have received official government awards, strengthening their resolve to continue.

Overcoming social inequities*:* Saigata village in Maharashtra has seven castes and classes, many of them socially and economically disprivileged. Forest conservation initiated by a *dalit* youth helped in bringing various castes in the village together. An equal sharing of conservation and protection responsibilities eventually led to equitable sharing of resources, thus improving the status of the downtrodden in the village. This may not be the situation in all CCAs but it shows the potential of conservation efforts in facilitating reduction in social inequities. Another example of socially disempowered sections of society gaining power because of forest conservation is Dengajheri and surrounding villages in Orissa. Here forest conservation and decisions related to the forests are largely the responsibility of the women. Consequently women, who had never travelled outside their village, have now developed the capacity to not only make decisions about the forests but also to represent the village in the Ranpur Federation (see Orissa chapter for details). The status of women is such that they also play an important role in general village level decision-making, which is traditionally a forbidden territory for women. The same has happened in a number of Chipko movement-inspired CCAs in Uttarakhand.

d. Political benefits

Changes in political dynamics reflect both the relationship of the community vis-à-vis outside agencies, including the government and the relationship between the dominant and the underprivileged sections of the community. Although not reflected in the analysis in Figure 16 many communities benefit politically from their coming together to manage and/or conserve the surrounding natural resources.

In tribal-dominated areas, where livelihoods are heavily ecosystem-dependent, there is a move towards tribal self-rule. After more than a century-old centralised rule and marginalisation by colonial and national governments, villagers are now taking control over land, water and forests, and developmental and other processes affecting their lives. In Mendha (Lekha), the movement towards self-rule started when villagers opposed unjust restrictions on forests and a process of elimination of traditional rights. The first step towards achieving self-rule was taking control over the forests and protecting, managing and using resources in a regulated manner. Community forestry efforts in Orissa are often of a similar nature.

Starting a conservation initiative often means greater interaction with the people and processes from outside the village. Making themselves familiar with these processes involves building local capacities. Whenever communities have started village corpus funds, micro-credit schemes, etc., they have had to learn systems of accounting and dealing with banks. Because of a more equal interaction with the government departments and officials, villagers are better informed about various government programmes and their impacts on their lives. Many empowered village representatives involved with conservation have been able to participate in national policy dialogues. Some have even travelled to international forums to share their experiences and expresses their views. Establishing local institutions and participating in their day-to-day running as also establishing and implementing rules and regulations enhances the administration

capacity of the villagers. It appears that *vis-a vis* outsiders, conserving communities have gained greater political and negotiation power. However, within the community whether such political empowerment has spread equally is difficult to say with this level of information. There are some examples in this directory such as Makku in Uttarakhand and Dengajhari and other villages in Orissa and elsewhere, where women seem to have gained greater decision-making power, but this cannot be extrapolated to all examples.

4.3 How do CCAs benefit wildlife and biodiversity?

As explained in Section 1.2b very few of the areas documented here have been subjected to scientific assessments to understand exactly how the CCA initiative has benefited habitats and species. Some studies by wildlife scientists or NGOs show clear ecological benefits, e.g. plant biodiversity conservation in Jardhargaon (Uttarakhand) or increase in nesting Pelican numbers in Kokare Bellur. In the absence of such studies elsewhere, ecological impacts could only be judged based on visual impressions and interactions with local people. For example, in Nagaland it is in general easy to come across forested areas (over 80 per cent of the state has forest cover) but very difficult to come across signs of birds or mammals. Exceptions to this rule were the community protected areas where one frequently encountered signs of various species and saw and heard many birds. In Khonoma, where hunting is completely banned, birds and signs of other animals were very common. 600ha of regenerated village forests of Tokpa Kabui village of Churachandpur district, in the adjacent state of Manipur provide a critical refuge for many endangered birds, including blyth's tragopan, grey sibia, beautiful sibia, grey peacock pheasant, rufous-necked hornbill and white-naped yuhina. Villagers also report sighting other rare species, including the spotted linsang, tiger, leopard, wild dog, stump-tailed macaque and Asiatic black bear. Villagers in Shankarghola are protecting the endangered golden langur, and fresh reports from Meghalaya show that other communities are also involved in protection of the hoolock gibbon there (see Meghalaya chapter for details). Another (somewhat ironic) indication of increase in wildlife in many CCAs is the increase in crop or livestock damage in areas surrounding the CCAs. The table below gives some examples from the Directory where ecological benefits can be seen.

Table 2: Positive ecological impacts of CCAs in India[40]

No.	Type of initiative	Result	Examples[41]
1	Traditional protection of religiously and culturally important sites and new wildlife reserves	Protection, often total, of forests, grasslands, tanks and other ecosystems and habitats resulting in absolute protection to all species and their habitats	Chusana Island in Gujarat, Aravanchal Kavu in Kerala, Khonoma Nature Reserve and Sendenyu in Nagaland
2	Traditional or religious protection of sacred species	Absolute protection to a certain species, but often with less thought about their habitat or the other species in the area	Khichan in Rajasthan, Uppalapadu in Andhra Pradesh, Abohar in Punjab, Buguda in Orissa
3	Traditional and recent initiatives towards sustainable use practices for habitats, including sacred sites where some regulated use may be allowed but protection of wild animals is also one of the primary objectives.	The area is used but wild plant and animal species are consciously protected. Protection usually not restricted to any particular species	Ajeevali in Maharashtra, Mangalajodi in Orissa, Veerapuram in Andhra Pradesh, Bhaonta-Kolyala in Rajasthan, Behroonguda in Andhra Pradesh, Ashtamudi lake in Kerala, Doddabail in Karnataka, Balukhand-Konark sanctuary and Kodbahal in Orissa, Loktak lake in Manipur
4	Recent initiatives towards protection of threatened species	Revival or protection of threatened populations of wild animals. Threatened species such as golden langur, Blyth's tragopan, Hoolock gibbon, Olive Ridley turtle, etc. So far no examples of special protection of large herbivores like elephants or carnivores like tigers have been encountered in such kind of initiatives	Olive ridley protection in Iringal and surrounding villages at Kolavipaalam in Kerala and Purunabandha and other villages at Rushikulya in Orissa, Blyth's tragopan protection in Khonoma, Chizami and other areas in Nagaland, Shankarghola in Assam

5	Recent initiatives to conserve and/or regulated use relatively intact ecosystems	Habitat conservation. Protection efforts are generic, not directed at any particular species or habitat needs, and like all the other categories in this table, not necessarily informed by present-day conservation priorities. However, these do provide reduced threat situations. Sometimes larger herbivores and carnivores also benefit from such initiatives	Mendha (Lekha) in Maharashtra, Suva in Andhra Pradesh, Dengajhari and Jhardeda in Orissa, Kailadevi and Kishori in Rajasthan, Chittrangudi and, Longwood Shola in Tamil Nadu, Gursikaran forests in UP, Makku Van Panchayat in Uttarakhand
6	Recent initiatives to revive degraded habitats and sustainably use them and protecting wild species therein	Some of these are regeneration initiatives with the objective of reviving wild species as much as overcoming resource scarcities while others were initiated mainly for resource enhancement but have now seen revival of many other wild flora and fauna species. These do provide a better habitat and reduced threat to wildlife.	Shankarghola and Chakrashila in Assam, Jardhargaon, Nahinkala and Lohathal in Uttarakhand, Satara-Tukum, Belgata, Charoti and Saigata in Maharashtra, Thaing sacred grove in Meghalaya, Binjgiri Hills in Orissa
7	Examples where water and soil quality has improved and impact of natural disasters such as floods, landslides, droughts, cyclones, etc. has been reduced	Improved status of soil and water, and reduction in situations of droughts, floods, etc.	Binjiri Hills and Budhikhamari in Orissa, Bhaonta-Kolyala and Kishori in Rajasthan, Melaghar in Tripura, Dakhyat and Lohathal in Uttarakhand

In Gadchiroli district of Maharashtra, Udaipur district in Rajasthan, Uttarakhand and other areas, conserving communities have managed to contain encroachment of forest areas for agricultural purposes. In Jardhargaon, Saigata, and Bhaonta-Kolyala, wild animals have returned to the conserved village forests after decades. Many endangered birds such as the spotted pelican and the great Indian bustard as well as animals like the blackbuck survive today because of the protection given to them by the local villagers. Almost all CCAs are conserving habitats which support wildlife populations. In Orissa, the entire Ranpur range is under protection from different villages. The overall result is that, compared to the completely bare hillsides in the surrounding area, this entire range is well forested. In Dengajheri, in the same state the villagers spoke about elephants visiting their forests. It was very clear that the quality of forests was much better than those outside the range where there was no community conservation. It appears that as the corridors are getting destroyed and migratory routes blocked, regenerated forests under CFM become good habitats for elephants to move into. This is an observation that still needs to be ascertained and scientifically established.

It is important to note that the quality of ecosystems and resources is not merely controlled by the forces within the communities. Several factors beyond the control of the conserving communities have a direct impact on the conserved area. For example, in Satara Tukum in Maharashtra the forest development corporation (FDCM) (see case study for details) is carrying out clear-felling in good patches of forests immediately adjoining the conserved area. This has led to human population dependent on the cleared forests diverting their pressure to the forests protected by Satara Tukum. Also this means that fauna species from elsewhere come to the protected patch for shelter, increasing the human-wildlife conflicts. The demand of the villagers that the surrounding forests be included under JFM has not yet been accepted.

An attempt has been made in Figure 17 to understand the impacts of CCAs documented in this Directory. This analysis is based on very broad indicators involving personal observations, local interviews, and views and observations of NGOs or government agencies about the particular site.

Figure 17: Ecological impacts of CCAs

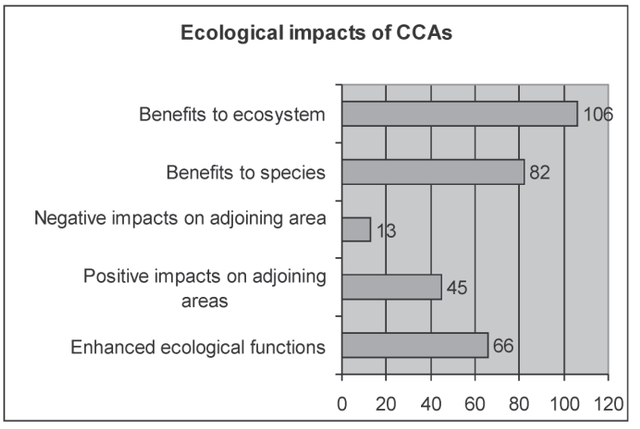


Figure 17 indicates that in 106 (88 per cent) cases documented here, there appears to have been an enhancement or maintenance of an ecosystem, indicating a potential benefit to many wild plants and animals. In 82 (63 per cent) of the cases, some specific species have benefited, and in 66 (55 per cent) cases there has been an improvement in the water or soil situation or a reduction in landslides, droughts, etc. In 45 cases (38 per cent) there has been a positive impact on the adjoining area, mainly by inspiring neighbours to initiate conservation activities and sometimes by people meeting their own requirements from the regenerated resources. In 13 (11 per cent) of the cases, respondents report that conservation efforts in the area have meant an increased pressure on resources in the surrounding area.

Box 9

Why CCAs are important for conservation

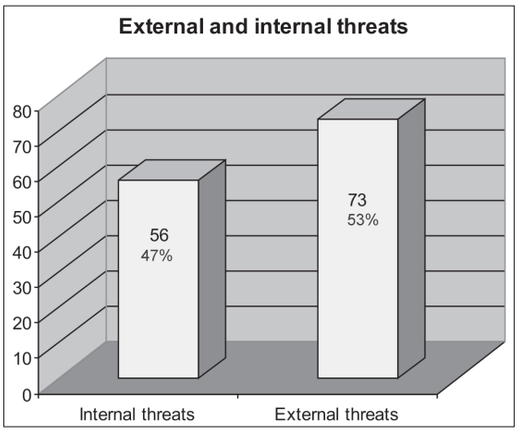
- They protect habitats and species which are otherwise threatened (including some globally threatened species).
- They have significant ecological, cultural and traditional knowledge-related values.
- The traditional or new management systems (institutions and organizations), while being important in the social sense, are also important from the context of conservation.
- They help maintain essential ecosystem functions such as water security, controlling soil erosion, working as cyclone barriers, protection of gene pools and so on.
- Conservation is often a part of normal livelihood or cultural activities, through existing systems and structures, thus reducing external financial inputs.
- While usually not large in size, CCAs can be connected and could be a focus for natural forest and landscape restoration as well as for landscape management, as in the case of the *van panchayats* between Nanda Devi National Park and Askot Wildife Sanctuary in Uttarakhand.[42]
- They help synergise links between agricultural biodiversity and wildlife, providing larger landscape-level integration.
- The sheer number (and, by implication, the area) of CCAs found across the country is of importance. They would mostly classify as protected areas, though few have formal recognition.
- They help provide corridors and linkages for animal and gene movement.
- They are a key point of entry for linking rural livelihoods to conservation.
- They provide critical lessons for better management of government-established and managed PAs, especially in integrating conservation and livelihoods and in resolving disputes.
- They may provide crucial elements and resources for mitigating and adapting to climate change.

5. Major threats and challenges faced by CCAs

CCAs all across the country are faced with numerous internal and external threats. Many of these threats have their roots in the national and global context within which we all exist today. The model of 'development' that our societies, economies and polities are governed by mandates maximum use of resources in minimum time. This is a model where costs and benefits are weighed only in financial terms, directly contradicting the spirit and principles of sustainability or nature conservation, a model that believes in absolute preservation of nature in small islands and maximum extraction for human use everywhere else. It is therefore not surprising that the efforts of the communities based in regulated usage along with conservation are viewed with suspicion and scepticism. This prevents them from getting social, administrative and legal recognition. Lack of recognition in turn intensifies the existing internal and external threats or makes it difficult to deal with them.

In the following analysis the threats faced by the communities have been divided into two broad heads, those internal to the community and external, including those which manifest within the communities but are a result of external factors:

Figure 18: CCAs threatened by internal and external factors



5.1. What are the internal threats faced by CCAs?

Although internal social inequities, conflicts, political rivalries, and so on exist in some form or the other in most CCAs documented, about 47 per cent (56 out of 120 cases analysed) seem to be in a situation where they could impact the success of the initiative. Below are given some such factors that have an influence on a CCA and can threaten its existence:

a. Traditional social inequities: Communities are often highly stratified with many decisions made by the dominant sections of society (men, large landowners, 'upper' castes) without considering their impacts on the less privileged (women, landless, 'lower' castes). Such disparities in decision-making can create local dissatisfaction and affect the long-term sustainability of the initiative (also see Section 6.2 on social limitations).

b. Demographic changes: Human and livestock populations have increased manifold in several areas. Due to this (and a number of other reasons) the habitats have degraded and the total available resource base has shrunk. This leads to conflicts with others as also to over-exploitation of resources that communities are sometimes not able to curb on their own.

c. Reduced availability of resources*:* In some places previously sustainable levels of resource use may now be causing over-exploitation, as a number of extraneous circumstances may have led to the decline in the extent or abundance of these resources. This is the situation, for instance, with traditional hunting of wild animals where the populations of these species have declined due to various factors emanating within and outside the community.

d. High cost of conservation*:* In most circumstances the costs mentioned in Section 4.1 are borne by the community. Communities sometimes find it difficult to deal with issues such as investment in time and labour, paying salaries for village forest guards, conflicts with other communities, human-wildlife conflicts, dealing with powerful outside offenders, unable to earn livelihoods and so on. If they do not receive support at these critical times then the initiative itself comes under threat.

5.2 What are the external threats faced by CCAs?

a. Lack of legal backing and tenurial security: There is no comprehensive government policy to support CCAs. Additionally, few of the initiatives mentioned above have a status *vis-a-vis* statutory law, other than in Nagaland (also see Section 8 for legal status of CCAs). Many CCAs are on lands owned by the government, over which the community does not have ownership or recognised access rights. The government can decide to change the land-use or lease the land for any other purpose without consulting or even informing the conserving communities. This can in some situations seriously threaten a CCA. For example:

- Saigata village faced a strange situation in the late 1990s when they stopped outsiders from entering their forests. They were not only questioned by the trespassers about their authority to protect forests, but the FD officials asserted that the villagers had no legal authority to conserve the forest. They argued with the FD that they were merely fulfilling their obligation as citizens of this country by protecting the forests.
- Because of a lack of recognition, government agencies often do not support the communities involved in conservation activities. Communities are left to fight their own battles. For example, in some villages in Orissa when women started protecting the forests and apprehended the offenders, the forest officials did not come to help. This discouraged and disheartened the protecting groups, as the offenders also got a clear message that the villagers were not backed by the government.
- On the other hand, when the forests have regenerated or protected rivers have fish in them because of community efforts, the government agencies then sometimes contract these out for harvest and revenue-generation, and the efforts of the community are not recognised.

b. Inappropriate or no government support: CCAs that contain commercially valuable resources (e.g., timber, fauna, minerals) are often encroached upon or threatened by commercial users, land grabbers, resource traffickers or individual community members.

A lack of support to deal with the above kinds of situations, negative intervention or influence by government agencies or policies, and indifference towards CCAs have been found to be major reasons for discouraging communities in many of the documented CCAs. Some such situations are described below:

- In some CCAs, socially sensitive government officers have used various government schemes and policies for initiating CCAs or supporting them at critical junctures. However, such initiatives hinge delicately on the continued presence of this particular officer (or group of officers) for a certain duration. When the officer is transferred out, the next one may not have the same social sensitivity, and this can be very detrimental for the initiative.
- Even when well-intentioned, when government policies to support CCAs are implemented, they are based on straitjacketed approaches, often taking over key community functions. They may also establish uniform and parallel institutional bodies based on representative politics to replace the existing institutions, without taking into account local peculiarities. More often than not this angers and upsets the concerned communities as they prefer facilitation or improvement of the existing institutions or working out new site-specific institutions in consultation with the local people. There are numerous examples cited in this compilation—CFM initiatives in Orissa, CCAs in Kailadevi in Rajasthan—where imposition of new institutions has led to the breakdown of otherwise well-functioning initiatives (see Section 7.7 on external intervention; See also Section 8.1 (i) on the imitations of legal provisions relating to CCAs).

c. External development projects and processes

Many CCAs are faced with detrimental developmental and market pressures. Often the community initiative itself is a response to such threats (see section 2.2 above), but many times these pressures could undermine the efforts of the conserving communities.

- A 30-year mining lease was given in the early 2000s in forests protected by women near Jardhargaon (Uttarakhand). In Halkar village (Karnataka), the government leased out the forests protected by the villagers for commercial timber extraction.
- With industrialisation being put on the fast track in Orissa, many CCAs are under threat. In 2005, the forest lands and other common lands were leased for open-cast coal mining at Raijharan in Orissa. These forests are densely covered with sal forests. Four villages—Raijharan, Nandijhor, Goalgadia and Similisahi—have been protecting and managing the forests for the last 15 years. These include villages which are under the government-sponsored joint forest management scheme.

- The turtle conservation effort in Kolavipaalam in Kerala is threatened by commercial extraction of sand by powerful people from outside the community. The turtle mass-nesting sites and community efforts to protect these sites are threatened by port development and large-scale commercial fishing activities in Orissa. In Morjim village in Goa, the effort at protection of the turtle nesting site fizzled out as the youth involved in protection activities were eventually drawn into the highly lucrative tourism business. Owning a beach shack and supporting construction of hotels for the tourist was much more economically and socially sustainable than opposing large-scale tourism in order to protect turtles. Lack of help in being able to draw positive links between economic growth and turtle conservation led to a complete collapse of the initiative.[43]

d. Smuggling and poaching*:* Communities like Dengajheri in Orissa are constantly under threat from the timber smugglers, while in Shankarghola in Assam the villagers have to be very vigilant against animal poachers. The situation is particularly difficult in areas where forests support valuable species of flora and fauna such as medicinal plants, mammals, teak and other trees.

e. Attitudes of others: Attitudes of conservationists and government agencies towards some ecological issues can sometimes be a major stumbling block in resolving some issues related to CCAs. For instance, the official attitude that shifting cultivation is necessarily harmful in all situations may differ substantially from that of the local population, and its imposition would affect local management practices and autonomy.

Often it is difficult to distinguish between the internal and the external threats, particularly when situations have manifested within a community as a result of external influences. For example:

f. Breakdown of traditional institutions and knowledge: Traditional institutions and knowledge systems have eroded to a great extent because of a number of reasons, including colonial or centralised administration and politics. This has weakened communities' abilities to manage their own environment. This often makes them dependent on constant external facilitation and inputs.

g. The education system: The education system does not emphasise or even acknowledge the value of local natural resources, culture and traditional knowledge. This results in a disconnect between the semi-educated village youth and the village and its life. Little traditional knowledge passes on to the newer generation and their interaction with the surrounding environment ends up becoming indifferent or negative. The youth often find local values irrelevant in the face of changing socio-economic scenarios and severe livelihood pressures.

h. Changing value systems and aspirations: Community values, motivations and organisations are constantly faced with contradictory values and influences such as national and international markets along with inherent inequities within them and powerful commercial forces. Intrusions by dominant religions often have serious impacts on local value systems and traditional conservation practices (especially among indigenous/tribal communities). Local institutions have to be very strong to be able to face up to these challenges. Additionally, market forces have deeply penetrated local economies, increasing local material aspirations and individualism, thus further weakening traditional value systems.

i. National and sub-national party politics: Party politics often enters villages in India in perverse ways, completely politicising local institutions and creating divisions and conflicts with the villages. The local concerns and issues in such circumstances take lower importance over the 'larger' matters of the concerned political party. In many cases extraordinary powers get divested to a handful of party supporters, who use hooliganism to create fear. This impacts conservation processes adversely. If such people are engaged in breaking the rules of the community, the community has little power to stop them. In some villages like Mendha (Lekha) and Hiware Bazar, villagers have shown their strength by keeping such politics out of their villages.

j. Global market forces: Global economic policies and market forces make it difficult for communities to establish and maintain local and decentralised economic systems and markets, affecting their financial sustainability.

6. Main limitations of CCAs

CCAs have their own limitations which need to be understood and resolved.

6.1. What are the ecological limitations?

Human-wildlife conflicts: In Jardhargaon, villagers are very proud of their efforts. The wild animals can now be seen in the village after many years. However, this has also meant increased incidents of crop and fruit depredation (as mentioned in Section 4.1). Such situations exist in many

CCAs, where increasing populations of birds and mammals have been leading to crop damage or livestock losses. Such conflicts become particularly serious in sites where the surrounding habitat is completely degraded, making the area conserved by the communities the only refuge for wildlife. In a few CCAs, villagers are beginning to wonder whether they should seek a reopening of regulated hunting of some species such as wild boar in order to resolve this problem. So far, few communities have been able to resolve this issue, particularly crop damage.

In the recent times some organisations have been trying to focus on this issues, particularly in government protected areas. Experiences of these organisations could be of use to CCAs as well. For example the Snow Leopard Conservancy in Hemis National Park in Ladakh[44] has initiated a programme aimed at helping local people in reducing damage to livestock caused by the snow leopard and help them in getting adequate and timely compensation for the incurred damages.

Protection of large carnivores and non-utility elements of biological diversity: In all the efforts documented so far, there were just a few examples where animals covering a large range or big carnivores are being protected by the communities, (such as elephants in Ranpur in Orissa, hoolock gibbons in Meghalaya or lions in some villages around Gir National Park in Gujarat). In many areas where stretches of forests are being protected, the presence of big carnivores such as tigers and leopards is reported, but there are very few examples where areas are being protected specifically for these species.

Many conservationists believe that community conservation may not always address the issue of overall biodiversity conservation, as species that are not in use or are undesirable to the community may not be given attention. However, only detailed ecological studies can substantiate or invalidate this argument.

Lack of monitoring and evaluation: There are very few community conservation efforts that are regularly monitored to assess their social or ecological impacts. This is particularly important because a large number of CCAs have regulated use as their main management strategy. It is important that studies are carried out to understand the impacts of resource extraction on the habitat and the species therein. This could help in communities establishing processes and levels of extraction that would be economically viable and ecologically less damaging. Also important is to help them establish internal monitoring systems.

Lack of baseline information: It is clear that there is a need to carry out detailed assessment of how conservation initiatives have benefited the ecosystem and various species. In most of the cases not even a basic inventory of the flora and fauna found in these areas is available. In many CCAs, youth have expressed an interest in developing such inventories or being part of the biodiversity studies. Such local human resources and expertise should be used for the benefit of the area. Detailed oral histories, especially of elders, would also provide an invaluable source of information.

Forest fires: Forest fires are a common annual phenomenon in many Indian forests. Local communities often do not consider annual forest fires detrimental to the health of the forest ecosystems, claiming that the forests have acclimatized to these fires. Some ecologists may not agree but there are not enough studies to suggest the validity of either points of view, or to indicate optimum levels of fire in different ecosystems.

Impacts on the surrounding area: It is often claimed that the local community may be conserving a small patch, but this is at the expense of added or diverted pressure to some other surrounding areas. Can this then be called sustainable management of resources? A situation like this could increase the existing conflicts or create new conflicts among two neighbouring communities or with the official agency in-charge of the area to which the use has now been diverted. Figure 17 on ecological impact shows that in 13 out of 120 documented sites, the conserving community has exerted a negative pressure on the surrounding forests. Studies of areas where such impacts have not been recorded and those where the initiative has actually led to the betterment of the surrounding areas need to be carried out, to get a better idea of where the balance lines.

6.2. What are the social limitations?

Local inequities: As mentioned in Section 1.3(a), it is quite clear from the documented examples that communities themselves are often highly stratified. Assuming that devolving power to the 'community' will necessarily lead to just and sustainable ecological and social processes can be a serious mistake.[45] In many community initiatives (such as Saigata) this issue has been tackled carefully and efforts have been made to ensure equal participation from all sections of the society. On the other hand, there are many examples where decisions regarding conservation

and protection of resources are taken by those sections of the society that are powerful (men, big landowners, 'upper-caste' communities) and do not depend heavily on the concerned resources for livelihood.[46]

After communities take a decision to conserve an area, people have to either manage within the limited available resources or travel greater distances to collect the required biomass. In most cases, it is the women who have to bear the brunt of this situation, as collection of fodder and fuelwood is essentially their responsibility. The situation is especially serious in women-headed households where the women have to leave small children and other family responsibilities and spend a major part of the day collecting biomass. The pressure becomes very high if the major source of income for the family is sale of headloads (fuelwood for sale carried on the head as bundles) collected from the surrounding areas.[47] For example, in male-dominated societies like Rajasthan, where protection efforts have been initiated mainly by men, women's needs are often not taken into account. Women are expected to meet biomass requirements without entering the forests. If the decision about conservation is taken by dominant sections of the community without consulting others who may be more dependent on the resources (artisans, headloaders, pastoralists etc.), the less dominant communities suffer more due to the restrictions.

Such disparities can have serious implication on the success of the initiative itself. As has been mentioned by people in Dhani Panch Mauza in Orissa, protection responsibility often means a higher cost for the poor, as they have to forgo their daily income when fulfilling the protection responsibilities or attending village meetings. On the other hand, the rich have the option of employing others to go patrolling on their behalf. This raises concerns of both social justice and sustainability of the conservation initiative. Such efforts may appear successful in the short run but may not sustain themselves in the long run due to growing dissatisfaction among the suppressed sections.

It is in situations like these that the role of an external agency often gains importance, as such agencies can help resolve some of the inequities which community members may find too difficult to resolve themselves. However, unless done with extreme care, this can also cause sudden disruption of local power structures, which may cause strong resentments (also see Section 7.7 on role of an outsider).

Limited capacity: Although there are examples where community members manage their own finances, manage ecosystems and even carry out ecological monitoring and evaluation, this is not always possible. In many instances, community members depend heavily on outsiders for many administrative skills. On the other hand, government officials working in an area rarely understand or are sympathetic towards such needs of the people. For decentralised conservation efforts to succeed, capacity-building through intensive training and reorientation programmes for all actors at all stages becomes imperative.

Capacity-building programmes need to orient forest officials to the social face of conservation and officials of other departments to issues of conservation, sensitising them to the needs and aspirations of the local communities, developing capacities to play the role of sensitive co-managers and extension officers, and devising mechanisms for making information available to the local communities. These programmes also need to sensitise local communities to the larger picture of conservation needs and to overcome the traditional distrust of the government agencies. They should sensitise NGOs to the need for a combination of livelihood security and biodiversity conservation, opening up a debate on the model of development and conservation to be followed in the country; and devise ways and means of working together in a cooperative environment. Several NGOs are now involved in such efforts.

Slow progress: Community conservation is a social process and has to progress taking into account various circumstances and issues. This limits the speed of these efforts. In order to make CCAs a success, implementing agencies need to work at a pace that communities are comfortable with and are able to deal with. In 1999 the chief minister of Orissa made an announcement that all villages in Orissa should form JFM Committees to manage their surrounding resources within a short period. This announcement clearly indicates a lack of understanding of the ground realities. Many communities no longer have the capacity to handle these responsibilities. Such devolutionary efforts often only mean transfer of power from faraway political strongholds to local political strongholds. Such short-sighted announcements only lead to officials establishing forest protection committees on paper, without much change on the ground.

Community conservation is more likely to succeed when the entire community is empowered; has a capacity to take informed decisions; and has the legal, economic, political, and social support structure in place. Creating conducive environment for local empowerment will often need serious social reforms and all-round capacity-building, which requires patience and perseverance from all relevant actors.

7. Key issues and lessons[48]

7.1. Security of tenure

In nearly all the cases mentioned in this directory, it has been found that a sense of belonging or custodianship towards the area, resources or species being conserved is one of the most important factors in the decision of a community to start and carry on conservation efforts. Security of tenure of the land being conserved, or the confidence that they could continue with their initiative irrespective of the legal ownership of the land, is key to a successful community initiative. This sense of belonging or security develops over a period of time through constant consumptive, economic, cultural and religious associations and interaction with these resources. Therefore continued access to the resource and security of tenure are key to a sense of responsibility towards the resource among local communities. Analysis of some CCA initiatives which did not succeed also indicates that lack of tenure was often a major reason for the failure. This is not to imply that security of tenure will necessarily lead towards conservation, but rather that such security would increase chances of initiating CCAs where they do not exist and strengthening the ones that do.

On the other hand the conservation effort itself strengthens a sense of security by increasing the confidence among the communities about exercising their authority over the conserved land and resources. In this directory there are many examples where people have gained *de facto* control even when they do not have legal rights. Conservation efforts have thus given the villagers a confidence about demanding legal security of tenure over the area that they have a strong sense of belonging to, whether or not they own it.

7.2. Site-specific and decentralised management

It is becoming increasingly clear that uniform and straitjacketed models of development and conservation are not sustainable. As is clear from the preceding discussion, community initiatives are decentralised, site-specific and varied in their objectives and approaches. This is in contrast to most government efforts, which have largely been centralised, top-down and working under uniform legal and management prescriptions, not taking site peculiarities into account, though many officials have tried breaking through the mould to design locally adapted initiatives (see Section 5.2 on inappropriate or inadequate government support). However, making laws and policies flexible as well as firm and strong against misuse of the flexibility is a tricky question, and will involve serious debates and explorations.

One way of building in greater flexibility into the PA system would be to expand the number of categories of protected or conservation areas, to include a range of different ecological and socio-economic situations and governance types. The site-specific planning strategy (for zoning of PAs and others) for these areas (specially the ones where human settlements exist) could be then done based on participatory research with the local communities.

Such a paradigm shift is increasingly being accepted in international forums such as IUCN-International Union for the Conservation of Nature, and the Convention on Biological Diversity (CBD). One key aspect of this is the addition of the governance dimension, reorganising that all kinds of PAs can be managed by different kinds of actors, not only by governments. The PA type as per the governance categorisation and governance-type matrix could thus look like table 3 below (examples are not added here as they have already been given in table 2).

Table 3: Different governance types for IUCN categories of PAs.[49]

Governance type (across) PA category (down)	Government-managed PAs	Co-managed PAs (jointly managed by communities, government and/or other concerned agencies)	Private PAs (conservation on privately owned lands and resources)	CCAs (Examples as shown in table 2)
I Strict Nature Reserve and Wilderness Area				
II National Park (ecosystem protection; protection of cultural values)				
III Natural Monument				
IV Habitat/Species Management				
V Protected Landscape/ Seascape				
VI Managed Resource				

A protected area management and governance model as given in this matrix would be able to provide support and recognition to a vast array of conservation arrangements, including CCAs.

In India we still do not have any clear criteria to decide what category a PA should be assigned: a national park, a sanctuary, a community reserve, a conservation reserve or a tiger reserve (and if one goes beyond the WLPA, then any of several other conservation categories; See Section 8). This causes ambiguity about the management objectives and practices to be followed for these PAs. It is therefore imperative that PAs are established and categorised after some level of ecological and socio-economic research, and with specific objectives. Understanding and assessing various community institutional arrangements, customary or new conservation rules, and systems of natural resource management followed by different conserving communities can give important leads in formulating such a flexible and locale-specific policy framework.

In terms of site-specific policy space, lessons can be learnt from Nepal, where under a common national law some areas are declared conservation areas. Each conservation area has a separate set of specific rules and regulations for its management.[50] While identifying the objectives, the ecological importance of inviolate zones (with no or minimal human use) will of course have to be considered. However, the process of identification of such zones could itself be participatory as also the conservation practices that will need to be followed in these zones. The importance of completely inviolate areas has been recognised for generations in community systems of management, as shown in examples in table 1.

7.3. Coordinated action and support

Conservation of resources by communities is a part of livelihood insurance and is linked with other social dynamics. Conservation initiatives can lead to other social reforms in the village, e.g., equity, empowerment, etc. On the other hand other social processes such as efforts towards generating empowerment may lead to initiation of conservation. Conservation, therefore, cannot be seen in isolation from other social, economic and political processes within the community. However the government and NGOs working in an area do not necessarily operate with this view. Local development and conservation activities are highly compartmentalised, with each line agency focusing on its own area of work, sometimes conflicting with or contradicting that of the other line agencies. Often, while the conservation agency is trying to discourage goat-rearing in an area, the animal husbandry department tries to promote goats. This is also true of NGOs working in local areas.

Most government and civil society agencies have now realised that formation of people's saving groups at village level is a useful way of mobilising communities, and achieving conservation or rural development objectives. However, there are many examples where not less than six agencies (including NGOs) operate different saving groups in the same village, thus not only spreading the resources thin but also dividing the community to achieve their own agenda. There needs to be much greater coordination amongst such agencies.

A fine example of holistic development is that of Mendha (Lekha) village in Maharashtra. Here conservation efforts have also meant, among other things, achieving local self-rule, managing their water resources, establishment of a grain bank for the villagers, working towards ecologically and socially sensitive education for village youth, and ensuring employment for everyone in the village. In order to reduce excessive dependence on forests for firewood, villagers have managed to create alternative sources of fuel in the village by encouraging various line agencies to pool their resources.

In many wildlife and forest areas, authorities can overcome the problem of inadequate resources, especially for the provision of ecologically sensitive livelihood inputs to local communities, by pooling together resources of different line agencies. Financial constraints are often cited as important reasons for not supporting a community effort on the ground or for discontinuing a JFM programme once the external funds have run out. For example, in Amravati District of Maharashtra, an enterprising official put all the line agency budgets together, and managed to generate adequate resources for ecologically sensitive development inputs for villagers in/around the Melghat Tiger Reserve.[51] But this was an individual effort, and without a formal institutionalised mechanism, such initiatives have remained personalised and short-lived. In recent times an initiative for ecological development and conservation of Chilika Lagoon has been tried with involvement of all local and political agencies.[52] Community empowerment coupled with strong policy directives can help resolve this problem.

7.4. A landscape approach

The previous point leads us to the fact that areas conserved for biodiversity do not exist in isolation and are impacted by various social and political forces and land-use practices in the surrounding areas. Allowing resource-intensive activities in the surrounding areas could put more pressure on the biodiversity of the area to be protected (as is clear from the activities of the FDCM at Satara Tukum in Maharashtra), or act in contradiction to conservation objectives.

It is extremely important to orient regional planning towards the ecological and cultural dimensions of an area, including community conservation efforts. A community's wish to conserve a certain area needs to be respected and reflected in the regional planning. Some community efforts have very strongly indicated the need for a landscape approach towards conservation. For example, the villages located in the basin of the Arvari river in Alwar district, Rajasthan, have been conserving the catchment forests for over two decades, resulting in the seasonal Arvari river becoming perennial again. These villagers have formed an 'Arvari Sansad' (Arvari Parliament), which aims to be the primary decision-making body for the entire basin. This is based on the principle that a holistic landscape approach will need to be taken for the conservation and use of the catchment. Members of the Sansad believe that decisions made by individual villages are often restricted to the interests of their own villages and may not adequately take care of the eco-region as a whole. Similarly, in Orissa and Uttarakhand, CCAs are found in clusters and groups, sometimes taking mountain ranges as units.

7.5. Governance and decision-making

Good governance is increasingly being seen as an important factor in ensuring the success of any conservation effort. An IUCN policy brief states that 'governance is about power, relationships and accountability. It thus has major influence on the achievement of management objectives, the sharing of relevant responsibilities, rights, costs and benefits, and the generation and sustenance of community, political and financial support for wise and sustainable use.'[53] International debate has brought up the factors mentioned in the box below as crucial for ensuring 'good' governance.

Box 10

Principles of good governance of protected areas

Governance involves interactions among structures, processes, traditions and knowledge systems that determine how power and responsibility are exercised, how decisions are taken, and how citizens and other stakeholders have their say. It is a concept that applies at all levels in the field of protected areas—site-level, national, regional and global.

Principles of good governance of PAs in general include *legitimacy and voice, accountability, performance, fairness, and direction*. These principles need to be applied keeping in mind the following:

a. Recognition of diverse knowledge systems;
b. Openness, transparency, and accountability in decision making;
c. Inclusive leadership;
d. Mobilizing support from diverse interests, from within the community; and
e. Sharing authority and resources and devolving/decentralizing decision-–making authority and resources where appropriate

Source: G. Borrini-Feyerabend, A. Kothari and G. Oviedo, *Indigenous and Local Communities and Protected Areas: Towards Equity and Enhanced Conservation*. (Gland, Switzerland and Cambridge, UK, IUCN, 2004).

The CCAs documented in this directory throw up the following two important sets of factors for good governance and long-term success:

Transparency, openness, and accountability: A transparent and democratic process of decision-making leads towards a more successful effort and long-term sustainability than situations where decisions are taken by a small minority through non-transparent means. The emphasis on equal representation of all sections of society in information sharing and subsequent decision-making is one of the unique features of many successful initiatives. For example in Mendha (Lekha), all decisions are taken by consensus, after frequent discussions are carried out on all aspects of the issue. Consensus-based decision-making is used in many CCAs. Besides, utilisation of community funds or funds coming from various external programmes is often a serious source of discontent within a community. Most successful community initiatives therefore have an open system of

accounting, and accounts are regularly disclosed to the village assembly (and not only to a few representatives) and expenditure explained. Where this does not happen, the efforts face hurdles and may break down.

Constant dialogue and informed decisions: Lack of information and awareness is often cited as a serious limitation by many communities, who seek help from outsiders in increasing their experience and awareness levels. Being equipped with adequate and impartial information is a critical factor in the success of CCAs. In many cases this has been made possible by constant interaction with outsiders and regular discussions within the village (for example the study circles in Mendha (Lekha) village in Maharashtra). Such interactions and information make people more conscious and aware, which in turn helps them in taking informed decisions.

In India there are rarely any consultations with the local villagers on any new schemes or changes of policies. For communities to have a stronger sense of belonging with their resources and the rules governing them, it is important that regular dialogues are established with them. Open and transparent public hearings or referendums on any intended new provisions or changes in policies need to be carried out before a final decision is taken. Regularity of dialogue is important in building the capacity of communities to be able to make an informed decision.

In recent times, some conservation organisations have attempted to resolve issues related to conservation of big carnivores because of such dialogues and consultations. Organisations like Samrakshan in Meghalaya, Nature Conservation Foundation (NCF) in Ladakh and Arunachal Pradesh, Snow Leopard Conservancy in Ladakh, World Wide Fund for India (WWF) in Arunachal Pradesh, Salim Ali Centre for Ornithology and Nature (SACON) in Nagaland, Vasundhara and Foundation for Ecological Security in Orissa and numerous others have initiated such consultative processes with the local communities to conserve wildlife and have been getting encouraging and positive results.

7.6. Institution building and local institutions

In implementing decentralised conservation policies, it is important that while entrusting the village community with the responsibility of resource management and protection, time and effort is also spent in building institutions and capacities of those institutions to handle such responsibilities.

Despite the success of Satara Tukum in achieving forest conservation, a meeting with the *gram sabha* revealed that there was serious discontent among the villagers about the functioning of the forest protection committee (FPC). Many villagers did not attend the meeting of the committee and were not sure whether the funds were being utilised appropriately. In some CCAs such as Saigata in Maharasthra, the initiative seems to be sustained entirely on the efforts of one or a few individuals. Although they are well respected and command the support of the entire village, there is no institution to take charge in their absence. On the other hand, in many examples in Uttarakhand, Nagaland, Rajasthan and Orissa, much attention has been paid towards developing local institutions that will sustain the initiative. This illustrates the importance that must be placed on the process of developing and strengthening local institutions if the objectives are to be achieved efficiently and in a sustained manner.

In Khonoma in Nagaland, a Khonoma Nature Conservation and Tragopan Sanctuary Trust (KNCTS) has been established under the village council to manage the sanctuary. The village council has worked out detailed terms of reference and rules and regulations regarding the management of the sanctuary. In Dengajheri in Orissa, the functioning of the women looking after issues of forest protection appeared to be extremely informal. However, so far Dengajheri does not face issues of fund transfers and resource allocation. Once these issues become important, a need for a more organised yet transparent system is likely to be felt.

7.7. The role of the outsider

i) Do CCAs need external support?

In many CCAs (though definitely not all) villagers have indicated and often demanded that management or conservation should be a joint activity of the communities and the government officials or NGOs. Communities often realise the difficulty of managing natural resources on their own, especially given the internal and external social dynamics and political and commercial pressures. As Devaji Tofa of Mendha (Lekha) village in Maharasthra says, ‘However autonomous a decision-making process in a village may be, a village in these times cannot be completely independent of the world outside.’

Carrying on with the effort by themselves has not been an easy task for the villagers (see Section 4.1 on costs to communities). A great amount of effort and time is spent by the villagers in protection and patrolling of the forests. This is at the cost of wages that they would have earned, opportunities for which are otherwise few and far between. Because of their remote location and lack of awareness and knowledge, villagers are not in a position to find out about any beneficiary schemes that may be available from the government. Remoteness of the area means that there are few other employment opportunities. There is no existing system by which such information can easily reach the villagers. Villagers, therefore, often express a need for outside agencies to help them in exploring employment opportunities, and also guide them towards a sustainable conservation effort.

In Rushikulya in Orissa, or Tuefema, Khonoma, Ghosu and other areas in Nagaland, communities have requested NGOs and government agencies for developing a support mechanism which will help them in a sustained manner. This could include help in creating an eco-tourism model or other sources of income for the local youth, helping with inventorising local biodiversity and related knowledge, helping to create effective benefit-sharing models such that villagers benefit from the use of their knowledge, etc. In Nagaland, where the land is under the control of the local communities and forests are still abundant, the local people request support in developing management plans for sustainable harvest of resources for income generation from areas which are not wildlife reserves.

ii) What kind of intervention do CCAs not need?

The national and state policy environments within which CCAs are located have a great influence on their success and failure. For example, despite a widespread community forestry movement in Orissa there is still no state-level policy to facilitate or support these initiatives. The closest that the state government comes to supporting them is by implementing JFM scheme in these areas, which, as explained below, are not always successful, and often even counter-productive.

In Buldhana district in Maharashtra, successful JFM was initiated in some villages by a forest officer. Subsequently some parts of these jointly managed forests came under the newly established Gyanganga Wildlife Sanctuary, bringing with it the restrictive provisions of the Wild Life (Protection) Act (WLPA), applicable for a PA. Local people's efforts at conservation and the existing local institutions were discounted and became officially defunct. This created a serious conflict situation. This initiative had the potential of becoming the country's first jointly managed PA, if only wildlife authorities had taken advantage of the existing cordial relationship between the people and forest officials. However, the straitjacketed use of the WLPA brought the initiative to the verge of breakdown.

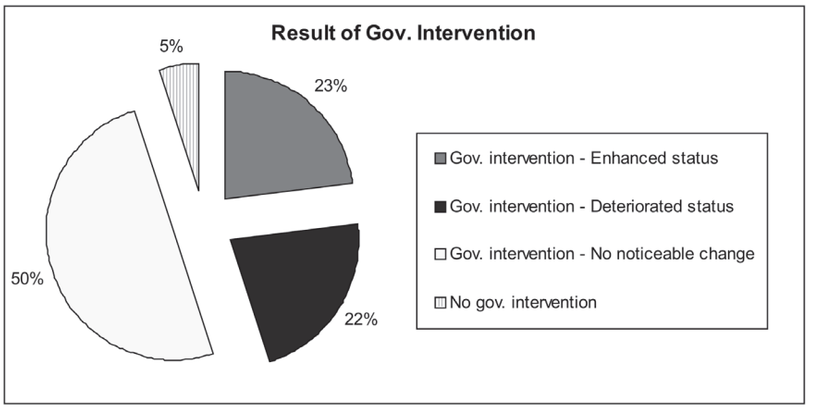
Similarly, in Kailadevi Sanctuary of Rajasthan, local people had forest protection committees much before the area was declared a PA. Many years after the declaration of the sanctuary, the FD began implementing the official ecodevelopment scheme.[54] The existing FPCs were co-opted to be the ecodevelopment committees (EDCs). After half a decade of ecodevelopment the scenario has completely changed. Whereas in the past these FPCs had numerous meetings on village and forest conservation issues, now many months pass before a single meeting takes place, mainly because of unavailability of the forest official, whose presence is mandatory for an EDC meeting. Ecodevelopment also came with funded projects and plans—community participation in conservation is therefore now more to avail the financial and other opportunities rather than a community feeling and/or concern for degrading natural resources as was the case earlier.[55]

There are numerous examples of community forest management in Orissa where JFM was implemented in areas where communities were already managing their resources. In some cases (subject to the interest level and social sensitivity of the implementing officer) JFM provided the support the communities needed. However, in most cases it resulted in breaking down existing systems. JFM did not recognise the existing local institutions, systems of management or existing local rules and regulations. Under JFM new institutions and management systems had to be framed which often had little acceptance by the local people. As opposed to the entire village making decisions, under JFM decisions were made by a few selected individuals along with the forest staff concerned. This left ample scope for non-transparent financial dealings and corruption, consequently encouraging distrust and politicisation of the entire initiative.[56]

Similarly, the *van panchayat*s in Uttarakhand have been affected by imposition of the JFM scheme in the state. Kharg Karki, a village in Uttarakhand Champawat district has a VP formed in 1954. The VP was largely functioning well till JFM was introduced in 1998. Within 6 months of this the VP Sarpanch resigned due to friction with FD staff over handling of budgets. Since then the village has not been able to recover from the disruption. In another case, there was an old VP, formed

in 1945-47 covering 4 villages, which was functioning pretty well. Once JFM started in 1999, the forests were divided into 4 VPs, one for each village. As the forest area and its composition for the 4 villages is not uniform, some of the villages are left with forest patches with chir pine which is much less useful than broad-leaved species like oak. This has upset the villagers to the extent that most women do not participate in the forest management activities anymore.[57]

Figure 19: Results of government intervention in CCAs



The analysis in Figure 19 shows that in 23 per cent of cases where an intervention was made it proved useful for the CCAs, while in 22 per cent of cases it was detrimental. Whether the intervention is detrimental or not depends on the concerned government agencies and officers and the strength of the local institution.

iii. What kind of intervention and support structures do CCAs need?

An active role of the state as a partner in the management of resources is often envisaged by local communities, but on equal terms and in the capacity of a facilitator and guide rather than a ruler or policeperson. Such official intervention has to be very carefully thought out and implemented.

Based on the experience of the documented case studies and the analysis under various sections of this overview it appears that the external agencies can play an important role in the following ways:

1. Making information available to the conserving communities on a regular basis to help them take informed decisions.
2. Helping them resolve conflicts when such conflicts cannot be resolved internally or when conflicts are with powerful outsiders.
3. Helping in reducing traditional social inequities, attempting to ensure greater transparencies in local institutions, greater participation from all sections of the community, and so on.
4. Providing financial, technical, ecological, legal and any other help that may be required on a regular basis.
5. Help in establishing regular contact with outside agencies, particularly with the government agencies, to be able to resolve misunderstandings and conflicts.
6. Helping in gaining recognition, appreciation, pride and thus encouragement and support by bringing their efforts to the larger society.
7. Presently even remotely located communities are linked to markets and dependent on them to a varying degree for cash income. However, the markets with which these communities interface are often highly exploitative, and government policies often end up supporting the exploitation. Most communities need help with such interface, whether it is to do with marketing of non-timber forest produce, produce from other ecosystems, developing eco-tourism packages or any.
8. Outside agencies can help communities bring in ecological concerns more centrally into their efforts, inventorise ecological elements and local knowledge, conduct impact studies, devise systems for effective management of resources and wildlife therein, and so on.

For any agency interested in a positive intervention in a CCA, it is important to understand that any negotiations at the start of the intervention need to be done at the level of the village

or hamlet assembly/community council (involving all adult members, irrespective of caste, class, gender, etc.) or community groups, and not any representative/executive body selected by the intervening agency (although such bodies could be approached to help organise the larger meeting). Any decision-making bodies that are established need to be transparent and acceptable to all in the community. Along with a decision-making body it is important to have an open forum for discussion that will lead towards well-informed decisions by the community. External agencies could play a critical role at these discussion forums and bring in the larger perspectives often not so easily perceived by the villagers. In turn, outsiders could learn from the detailed site-specific information that the local people have.

It is also important to note that CCAs need decentralised decision-making systems but also a decentralised support and facilitation system, along with a central (state and national) framework (including legal and policy regimes) that facilitates such a system. Such support structures have organically emerged in many states or sub-state levels, like the CFM federation in Ranpur block of Orissa, Chakhesang People's Organisation in Phek District of Nagaland, CFM Federations in Udaipur District of Rajasthan facilitated by an NGO called Seva Mandir, and so on. In areas where such structures do not yet exist, but where there is a potential, the government or NGOs could provide need-based support.

In areas where there is currently no possibility of such systems developing organically, intervening agencies may need to create such forums with complete participation of the local people and taking into account understanding local dynamics and politics. The existing government institutions and spaces such as the State Biodiversity Boards (SBBs) can be explored for this. Such a forum, if created, should be well represented by government line agencies, non-government agencies, individuals associated with the initiative, and members of the concerned community. It is important that this forum:

a. Gains an understanding of the local systems in operation in the community conservation sites in the area.

b. Carries out an independent assessment of the strengths, weaknesses, needs, and limitations of these initiatives.

c. Creates a mechanism for regular interaction and information/experience sharing.

d. Encourages and supports the community to overcome its limitations, constraints and weaknesses, appropriately taking into account local sensitivities.

e. Organises capacity building programmes whenever necessary.

f. Helps communities monitor the impacts of their activities.

g. Helps communities create an appropriate and non-exploitative market link.

While doing all of this the forum should be careful about not creating a dependence on itself.

7.8. Role of local leadership

Considering that a large amount of the local community's time must go into earning a livelihood, it is sometimes difficult to sustain the fervour for protection activities, especially if there are no immediate threats. In circumstances such as these, an individual or a group of individuals from within the community plays an extremely important role in motivating the community, carrying out important tasks and guiding the entire initiative. Often the initiative itself is a result of mobilisation by such social leaders. In Mendha (Lekha) (Maharashtra), Devaji Tofa, along with a group of elders from the village, has played that role; in Saigata (Maharashtra) a *dalit* youth, Surbhan Khobragade, who initiated the effort about 35 years ago, continues to play that role. In Jardhargaon (Uttarakhand), Vijay Jardhari has motivated and inspired his villagers towards forest protection as well as protecting the diversity of seeds. In Satara Tukum (Maharashtra), although the initiative was started by the forest department, the village youth soon took on the responsibility of forest protection. The leadership and motivation here is provided by these youth. Similarly, in CCAs across India local social leaders are playing an important role.

Sometimes there appears to be a heavy dependence on these leaders, with no one to take over in their absence. In some areas efforts are being made towards including the youth in the village processes. In developing a decentralised conservation policy it is important that efforts are invested in developing or creating circumstances for such leadership within the community to continue and elements of the same to be passed on to the next rung of leadership. Often such leaders have to pay an enormous personal price to play the required role, a phenomenon that can at times be a

hurdle towards a smooth transition to the second line of leadership. It is important to bear in mind that such leaders, working largely for the social cause, cannot be replaced by leadership emerging out of financial, political, and other selfish motives.

7.9. Integration of conservation and livelihoods

In nearly all CCAs, a strong link between conservation and local livelihoods emerges. Local communities necessarily bring in elements of their livelihoods into the equation. In a few cases they may decide to completely forego any direct livelihood benefits (e.g., Khonoma). In most cases, however (and given other favourable factors), they will tend to integrate conservation and livelihoods, deriving substantial and subsistence ecological benefits (e.g., Dengajheri), or considerable direct extractive benefits (e.g. Satara Tukum, Saigata, Mendha (Lekha), and others). This is an important lesson to keep in mind while formulating participatory conservation plans for government-managed PAs.

Community initiatives have often also integrated the conservation of both 'wild' and 'domesticated' biodiversity. Indeed, their stress on both indicates that the conventional divide between them is somewhat artificial, and that communities tend to look at them as part of a continuum from predominantly wild to semi-wild, and semi-domesticated to predominantly domesticated. Several traditional practices of optimising this range of biodiversity (such as home gardens in south and north-east India) are part of management systems in CCAs. In villages like Jardhargaon and Nahinkala in Uttarakhand, farmers who are involved in forest conservation are also reviving a range of agro-biodiverse practices, including trying out several hundred varieties/races of rice, beans and other crops. (This also reinforces the arguments presented in section 7.4 on why conservation needs to happen within a landscape rather than only in small, highly protected islands.)

Formal conservation planners and habitat managers would do well to build in such concerns to enable a marriage of livelihood requirements and biodiversity conservation. This is not to say that such marriages will be possible or easy to achieve in all circumstances but only to suggest that sincere efforts should be made.

Having said this, it is important to mention that a continuous monitoring and evaluation of the use of a resource and its impact on the conserved area needs to be an integral part of any conservation effort, particularly when meeting livelihood needs is one of the objectives too. This in itself may be most effective if it is participatory and transparent.

The *jungle abhyas mandal* (forest study group) in Mendha (Lekha) in Maharashtra, consisting of villagers and outside experts, was involved in assessing the impact of NTFP harvesting on the regeneration capacity of the concerned plants. Results of this study helped the villagers take various regulatory measures for extraction of major NTFPs in the village.[58]

An initiative of the Vivekananda Girijan Kalyan Kendra (VGKK) and Ashoka Trust for Research in Ecology and the Environment (ATREE), Bangalore, in Biligiri Rangaswamy Temple Sanctuary in Karnataka has helped the local tribals earn higher revenue by value-addition to the NTFP harvested by them. ATREE has also devised a mechanism for monitoring of resource extraction with the help of the local tribals.[59]

If used effectively, conservation can often become a model for biodiversity-based livelihood options. By developing models of fair trade and encouraging value addition at source, livelihood options can be increased manifold, thus further strengthening conservation efforts. One could hypothesise that if conservation becomes a strong tool for social upliftment, more and more communities would want to become part of the wildlife protection movement, rather than being hostile or indifferent to it as is the case in many PAs today.

7.10 Funding

Many successful community initiatives try to avoid receiving huge external funding. Some communities have tried to build up a corpus fund by contributions from within the community and/or through executing fines and punishments. Others have managed to get funds from the local line-agencies. Examples suggest that rather than providing large amounts of external monetary inputs specifically for conservation, it is often more useful to mobilise and re-orient already available resources by helping to pool together the budgets of various line departments. Being relatively independent in financial terms is empowering for a community. On the other hand there are numerous examples of donor-driven community conservation programmes which collapse as soon as the donor pulls out unless financial sustainability has been built in from the start.[60] There are

also examples where the funds coming under a certain programme become the most important incentive for the community to participate in conservation activities, but this may not necessarily be effective.

This is not to say that communities never need external funding, but to emphasis the importance of the manner in which and time when financial contribution is made to a community. CCAs should be able to receive funds when critically required, and in ways that the communities can themselves manage. Communities could be encouraged to develop annual plans, budgets and assessments reflecting the nature of conservation and development needs and funds required.

The need for financial sustainability is the basis for a series of innovative mechanisms now being evolved by governments, NGOs, and donors, such as trust funds and foundations.

8. Legal and policy spaces for CCAs

It is important to understand relevant provisions in Indian laws that support (or hinder) CCAs (also see Annexure 3).

8.1 What spaces are available for CCAs in Indian law?

There is no national-level policy to recognize conservation efforts by communities, though there are references to such a need in documents such as the National Wildlife Action Plan, the draft National Biodiversity Strategy and Action Plan and some others (see below for details). Neither is there a law specifically focused on providing support to CCAs. However, there are limited spaces available in some laws—limited because they do not take into account the ground reality of CCAs, their local contexts and local institutions. As far as we know, very few CCAs have yet taken support from any of the laws and policies mentioned below (except in the case of Nagaland, where the state-specific law on village councils has been used).

(i) Wild Life (Protection) Amendment Act 2003 (also see Annexures 4, 5 and 6)

envfor.nic.in/legis/wildlife/wild_act_02.pdf

Till the year 2002, the Wild Life (Protection) Act 1972 had little to encourage or mandate people's participation in conservation, or to recognise areas conserved by communities. Two new categories of protected areas were introduced into the Wild Life (Protection) Amendment Act 2003, namely community reserves and conservation reserves. Bombay Natural History Society (BNHS), Wildlife Trust of India (WTI) and Kalpavriksh had organised a workshop in 2004 to understand how the new categories could support CCAs or help communities initiate conservation efforts. Deliberations during the workshop revealed that these two provisions provide very limited support to CCAs (for detailed analysis see Annexure 3). The analysis indicated the following:

Conservation Reserves: These are meant to elicit people's opinions in declaring government-owned lands protected for wildlife conservation. This category does open up some space in the law for people's participation in wildlife conservation. Consultations with local people before declaring an area a conservation reserve is mandatory, as opposed to the situation in other protected areas such as national parks and sanctuaries. Considering that local people generally do not become aware of the changed legal status of an area even after years of it being declared a national park or a sanctuary, any consultation (even if not opinion-seeking) is a step towards some form of democratic decision-making. However, most CCAs that we have interacted with are unlikely to be happy with this category. These CCAs are on government lands but they have their own well worked-out management and regulation institutions, and a high degree of *de facto* control. It is unlikely that these well-established institutions would agree to become part of a conservation reserve where their only role in decision-making would be to advise the chief wildlife warden (CWW) of the state, who may or may not agree to the suggestions. Additionally, the conservation reserve management committee to be established under the Act mandates representatives from *panchayats* in an area rather than people actually conserving and managing the area. This could be a good category to initiate conservation in areas where it may not be happening already.

Community Reserves: These can only be declared by the government on private or community lands by the government. Therefore they can be relevant to only a few states like Nagaland, or private forest areas in the Western Ghats, or wildlife that may exist on agricultural lands such as blackbuck. It may be possible to argue that the term 'community lands' should include government lands (particularly those which are being used as common lands), and at the time of going to press, it appears that Kerala may be doing this. In general, though, it is unlikely that such a broad interpretation will be given by most states. Moreover, in its current form the Act does not

recognize existing systems and institutions of management and has a uniform prescription for the composition of the local institutions. This would straitjacket a very diverse institutional reality. Finally, there are no guidelines on how these areas are to be declared.[61] For all these reasons, community reserves is an inappropriate category for most CCAs.

ii. Wild Life Protection Amendment Act 2006

http://164.100.24.208/ls/Bills52,2006.pdf

Another amendment in the Wild Life (Protection) Act in 2006 has resulted in the setting up of a National Tiger Conservation Authority (NTCA). This was a result of the dwindling population of tigers in India. As one of the reasons for the decline is tiger population has been identified as lack of people's participation in PA and wildlife management, the Authority has been mandated to explore ways of facilitating people's participation in wildlife management. This may help in bringing about a change in the general exclusionary model of conservation, thus paving way for the recognition of CCAs in buffer zones of tiger reserves, though considerable advocacy will be needed to make this happen. The actual impacts of this amendment are yet to be seen.

iii. The Biological Diversity Act 2003[62]

envfor.nic.in/divisions/csurv/nba_act.htm
www.nbaindia.org/notification.htm

The strengths of this Act are that it encompasses all elements of biological diversity, domestic and wild, and provides for protection of all kinds of ecosystems. One of the provisions of the Biological Diversity Act 2002 includes creation of Biodiversity Management Committees (BMC) at the village level. The National Biodiversity Authority and the State Biodiversity Boards established under the Act are required to consult the local BMCs while taking decisions related to the use of biological resources and knowledge associated with such resources. This provides a space for the local communities to participate in the governance and decision-making related to biological diversity to a certain extent. The BMCs are expected to be the local institutions for the management, protection and recording of local biological diversity and it may be possible to give existing or new CCA management institutions this status. The Act also provides for the declaration of areas being conserved for agricultural or wildlife biodiversity as Biodiversity Heritage Sites (BHS).

The National Biological Diversity Rules under the BDA were formulated in 2004. The Rules failed to empower the BMCs and thus the local communities to manage, use and conserve natural ecosystems. Under the rules, the BMCs are limited to recording the local knowledge and to help the state and national boards to grant permission for the use of biological resources and knowledge associated with it in their areas. They also have a uniform institutional structure, which would be inappropriate for most CCAs. Therefore, as per these rules, the space to provide legal backing to CCAs is very limited. The rules for BHS have not yet been formulated so the category has not yet been implemented anywhere in the country.[63]

If these aspects are dealt with in the rules (as some states like Madhya Pradesh and Sikkim have done, going beyond the national rules), then BMCs and BHSs could become useful for providing legal backing to CCAs and CCA institutions.[64]

iv. Indian Forest Act 1927

envfor.nic.in/legis/forest/forest4.html

The Indian Forest Act 1927 has a provision (section 28) for declaring village forests (VF), under which the village gets powers similar to the forest department. But despite being in existence for eight decades, this provision has hardly been implemented. No village forests exist except for a few sites in Uttarakhand, Karnataka, and Mizoram. If implemented, this can be a strong category to support forest CCAs, particularly forests on government lands that are currently being conserved by the local communities. Most existing CCAs in India are not just areas under strict protection but also areas from where biomass needs are met in a regulated manner. The village forest category entails handing over government-controlled reserve forests to local villagers for conservation and sustainable use and hence suits the purpose well. Many JFM villages such as Satara Tukum and others such as Mendha (Lekha) and Saigata have been demanding that they be declared village forests. NGOs in Orissa,[65] Uttarakhand[66] and Maharashtra[67] have in fact suggested draft rules for VFs in their states,[68] which await a response from the government.

The Government of India's Steering Committee on Environment, Forests & Wildlife for the Eleventh Five-Year Plan (2007-2012), has very strongly recommended that the village forests category be used for giving legal backing to existing JFM sites as well as to other initiatives of the communities towards conservation of forests.[69]

v. Panchayat (Extension to Scheduled Areas) Act 1996

panchayat.nic.in/PESA.htm

The Panchayat (Extension to Scheduled Areas) Act 1996 (PESA) was passed in order to empower the communities that inhabit Schedule V areas (those which are largely inhabited by tribal communities and are listed in the constitution). These areas were only partially accessible to the British and therefore difficult to administer, and were called 'partially excluded'. These areas are also rich in terms of natural resources such as forests, minerals and water, and the people living in these areas are vulnerable to exploitation.

Box 11

Highlights of the provisions of PESA

This law for the first time recognized local traditional management practices and conferred a number of rights on local tribal institutions:

1. State legislation on the *panchayats* should be in consonance with the customary law, social and religious practices and traditional management practices of community resources.
2. Every *gram sabha* shall be competent to safeguard and preserve the traditions and customs of the people, their cultural identity, community resources and the customary mode of dispute resolution.
3. The *gram sabha* or the *panchayats* at the appropriate level shall be consulted before acquiring land in Schedule V Areas for development projects and before resettling or rehabilitating persons affected by such projects in Schedule V Areas; the actual planning and implementation of the projects in Schedule V Areas shall be co-ordinated at the state level.
4. Planning and management of minor water-bodies in Schedule V Areas shall be entrusted to the *panchayat* at the appropriate level.
5. The recommendations of the *gram sabha* or the *panchayats* at the appropriate level shall be made mandatory prior to grant of prospecting licenses or mining leases for minor minerals in the Scheduled Areas.
6. The prior recommendation of the *gram sabha* or the *panchayats* at the appropriate level shall be made mandatory for grant of concession for the exploration of minor minerals by auction.
7. While endowing *panchayats* in the Scheduled Areas with such powers and authority as may be necessary to enable them to function as institutions of self-government, a state legislature shall ensure that the *panchayats* at the appropriate level and the *gram sabha*s are endowed specifically with:
   (i) Ownership of minor forest produce (or what is called non-timber forest produce or NTFP),
   (ii) Power to prevent alienation of land in the Scheduled Areas and to take appropriate action to restore any unlawfully alienated land of a Scheduled Tribe;
   (iii) Power to exercise control over institutions and functionaries in all social sectors; and
   (iv) Control over local plans and resources for such plans including tribal sub-plans

Despite (or may be because of!) having some revolutionary provisions, this Act has not been implemented in most states, and where implemented has not been effective because of a number of reasons such as:

1. State governments subverting the powers provided to the *gram sabha* by diluting the provisions of the central act in their state adaptations. For example, states like Maharashtra have excluded

commercially important NTFP like *tendu patta* (leaves of *Diospyros melanoxylon*), one of the important sources of income for many communities, from the purview of local ownership.

2. Lack of clarity about the area under the jurisdiction of the *gram sabha*, particularly the issue of whether all the provisions mentioned above are applicable only to lands under the legal ownership of the village, or also government lands where customary usage, rights and interactions exist.
3. Lack of political and administrative will amongst states to implement the Act.
4. Lack of information about the provisions of the Act among the local inhabitants.
5. Limited applicability, since it is restricted only to Schedule V areas and not available in non-tribal areas, or even in states which have some tribal population but no Schedule V areas.

vi. Scheduled Tribes and Other Traditional Forest-Dwellers (Recognition of Forest Rights) Act 2006[70]

(tribal.nic.in/bill.pdf, tribal.nic.in/rules-190607.pdf)

This Act is an outcome of long-standing demands from indigenous/tribal and other forest-dwelling communities for recognition of their rights on forest lands occupied by them and resources or on which they depend for subsistence. The Act mandates establishment of such rights for tribal and forest-dependent communities.

The Act allows for a greater role and empowerment of *gram sabha*s in determining claims, managing forests they have traditionally conserved, checking processes destructive of forest-dwellers' habitats, and protecting traditional knowledge. It also allows for greater livelihood security for traditional forest-dwellers who have been unjustly denied tenure, and mandates that any displacement and relocation can only happen by consent. It provides a greater possibility of community involvement in government-managed PAs. If applied meaningfully and transparently, this Act could lead towards many forms of co-management and to greater livelihood security than is possible in current management regimes of forests, including in the national parks and sanctuaries in India.

Additionally, community forest is a category under which the local communities can protect any forest that they have been traditionally protecting and can establish locally suitable institutions, rules and regulations. This kind of flexibility is not available in other acts to the conserving communities, and could therefore be of significant use to CCAs. Unfortunately the rules notified under the Act (in January 2008) do not elaborate how to opportunalise this provision.

Weaknesses include the fact that 'encroachments' on forest lands upto December 2005 are eligible for regularization. This has given rise to possibilities of misuse by vested interests, who are reportedly inciting people to encroach even in 2007 and claim it to be pre-December 2005 occupation. Certain development projects and activities (e.g., construction of roads) for the purpose of village development have been excluded from forest clearances under the Indian Forest Conservation Act 1980[71]. This opens up a potential for misuse at some sites to allow destructive projects in forest areas. Also this Act has an unclear relationship with existing forest/wildlife laws. The institutional arrangements for enforcement of the forest management and conservation provisions of the Act are also not very clear epecially in relation to areas where the forest department has existing jurisdiction. Although the rights would now rest with the local people, there is unclear provision to assign conservation responsibilities on right-holders and *gram sabha*s.

Amongst all the new laws relevant to CCAs in India, this Act has the largest possible implications (at least for forested CCAs) and its implementation therefore needs to be closely followed.

vii. Environmental Protection Act 1986

This Act allows the declaration of stretches of ecosystems as Ecologically Sensitive Areas (ESA). Declaration of ESAs means that certain identified commercial, industrial and development activities would not be allowed in the area. There are several ESAs in the country, but none of the CCAs are covered under this category as yet.

The Act is a strong legal tool to fight against commercial and industrial pressures. However, communities know very little about this Act and how it can be used. Its relevance for CCAs has not been really tested and understood on the ground as yet.

viii. Are there any state-specific laws that can be relevant for CCAs?

There are some state specific laws and policies which are more appropriate for CCAs. For example, The Village Council Act 1978 of Nagaland is one of the strongest state legislations in the country, providing communities the right to manage their own lands. To be able to do so, the community is free to constitute any appropriate local institution. There are a number of community-owned and -declared protected areas in this state (see Nagaland state chapter and case studies from the state).

8.2. What spaces are available for CCAs in Indian policies and plans?

i. National Wildlife Action Plan (2002-2016)

projecttiger.nic.in/actionplan.htm

The National Wildlife Action Plan provides significant space for community participation in conservation, particularly in PAs. Some of these commitments include:

1. Evolving and prescribing guidelines for local community involvement in different management zones of PAs and adjacent areas. These guidelines would complement the WII guidelines for planning PA management and ecologically sound community welfare programmes.
2. Designing people's participation schemes for all PAs by focusing upon landless families so as to provide them gainful employment, particularly through NTFP.
3. Developing and implementing guidelines for providing incentives and measures for benefit-sharing among local communities.
4. Formulating schemes for conflict management, especially for loss of life and livestock and crop damage.
5. Providing a range of incentives to conserve wildlife in different landscapes across different land and water uses: rewards and public honour for commendable conservation work and actions, granting of biomass and water resource rights for personal consumption for communities that have helped protect or restore wildlife habitats, employment in local conservation works, financial rewards and incentives to protect sacred groves, share in penalties extracted from poachers, share in tourism revenues, and incentives to move away from ecologically ill-advised activities.
6. Encouraging people to help protect and manage wildlife habitats outside PAs (including community-conserved forests, wetlands, grasslands and coastal areas).

All these action points have been mentioned with a time frame in the Plan. However, more than five years after the plan came into existence little effort has been made towards its implementation. As described above, the legal tools to achieve such implementation remain weak or undeveloped.

ii. National Forest Policy 1988

http://envfor.nic.in/divisions/fp/nfp.pdf

This policy deals with conservation and management of forests, afforestation and with the rules governing people's access to government-owned forests and their products. This policy, for the first time after independence, placed greater importance on using local forest resources to meet local people's needs rather than the industrial needs. It was under this that the government resolution on JFM was passed in 1990. Since then millions of hectares of forests outside PAs have been brought under JFM, aimed at regenerating degraded forests with the participation of local communities and sharing the benefits accruing from timber harvests from these areas with the local communities. JFM has been a failure in some states and sites while it has been successful in others, depending on the state policies and the on-site methods of implementation.

The policy insists on the involvement of local people in the management of forests. Moreover, the need for their access to the forests and resources on which their livelihoods depend has been recognized. However, the policy has not been adequately translated into law till recently; hence many of its progressive provisions remain unimplemented. It is to be seen whether the new Forest Rights Act (see Section 8.1.vi above) would help achieve this.

iii. Final Report of the Steering Committee on Environment and Forest Sector, 11th 5 Year Plan (2007-2011), March 2007.

www.planningcommission.nic.in/about us/committee/strgrp11/str11_6.htm

The draft 11th Five-Year plan based on the recommendations of the Steering Committee on Environment and Forest Sector :

'CCAs (such as sacred groves, heronries and wintering wetlands, catchment forests, turtle nesting sites, pastures for wild herbivores, etc) exist in a wide spectrum of legal regimes ranging from government owned lands (owned/controlled by forest department, revenue department, irrigation dept. or others) to community/panchayat/tribal council/clan lands, as well as private owned lands. Such CCAs may not necessarily be officially notified but should still be eligible for financial and other kinds of support as an incentive for community-led conservation practices. Most critically, while there are many forest-based CCAs, there are also several CCAs that are in grassland, montane, coastal and freshwater ecosystems. Support to such CCAs will ensure coverage to relatively neglected ecosystems and taking the focus of conservation attention beyond forests. It is proposed that separate budgetary support may be made available to such initiatives, while considering an appropriate legal status for them as available in the Wild Life Act (Community Reserves), Biological Diversity Act (Heritage Sites), ST and Other Forest Dwellers (Recognition of Forest Rights) Act (community conserved forests), and Environment Protection Act (ecosensitive areas), without imposing changes in the institutional arrangements that communities have developed for managing them. The MoEF has commissioned a Directory of CCAs[72] and an initial prioritisation from this may be used for providing funding support to CCAs that appear to be conserving critically threatened wildlife or ecosystems, or are in other ways important for wildlife and biodiversity.'

If taken into account and implemented effectively, this could mean substantial attention and support for CCAs in the next five years.

Box 12

The National Biodiversity Strategy and Action Plan (NBSAP)

The process of drafting India's National Biodiversity Strategy and Action Plan (NBSAP) was started in the year 2000. Prepared in a highly participatory manner, over 50,000 people have participated in the preparation of the plan. This plan was submitted as the final technical report to the Ministry of Environment and Forests (MoEF), Government of India, by the Technical Coordinator in 2004. The plan has not been accepted by the government. What the final plan would be is quite unclear at this stage. However, the Final Technical Report recognises CCAs and emphasises legal, administrative and all other kinds of support to these areas.

Source: Kalpavriksh and Technical and Policy Core Group (TPCG), *Securing India's Future: Final Technical Report of the National Biodiversity Strategy and Action Plan (NBSAP)*. Prepared by Technical and Policy Core Group, Delhi/ Pune, Kalpavriksh, 2005

8.3. International context and support for Community Conserved Areas[73]

Recognition of the existence and importance of community conserved areas (CCAs) has been rather recent, both in national and international circles. But it has also rapidly occupied central focus, largely due to two key international events in 2003-04: the World Parks Congress (WPC) in September 2003, and the 7th Conference of Parties of the CBD in February 2004. The discussions, decisions, and outputs of these events have firmly established the role of community-based approaches to protected area management and conservation, and in particular the role of CCAs in achieving biodiversity conservation.

1. The 5th WPC, organised in Durban in September 2003 by the World Conservation Union (IUCN), was the biggest-ever gathering of conservationists, with over 5000 participants. Amongst its major outputs were the Durban Accord and Action Plan, the Message to the CBD, and over thirty recommendations on specific topics. All these strongly stressed the need to centrally involve indigenous peoples and local communities in conservation, including respecting their customary and territorial rights, and their right to a central role in decision-making. The biggest breakthrough was the recognition of CCAs as a valid and important form of conservation. The Durban Action Plan, with a specific recommendation on CCAs, highlighted the need to incorporate and support CCAs as part of national PA systems. (see www.iucn.org/themes/wcpa/wpc2003, for copies of these documents)
2. The 7th Conference of Parties to the CBD, held in Kuala Lumpur in February 2004, had 'protected areas' as one of its main topics. Since the CBD is a legally binding instrument, its outputs are

of great significance for all countries. One of its main outputs was a detailed and ambitious Programme of Work (POW) on PAs. A crucial element of the POW related to 'Governance, Participation, Equity, and Benefit-sharing' explicitly urges countries to move towards participatory conservation with recognition of indigenous/local community rights. As in the case of the WPC, the POW also made a major breakthrough in committing countries to identify, recognise, and support CCAs (see www.biodiv.org, to download the POW).

3. The World Conservation Congress of IUCN, held in Bangkok in November 2004, re-affirmed the outputs of the WPC Durban, and a specific recommendation on CCAs was adopted.
4. The first marine protected areas congress, held in Geelong, Australia, in October 2005, reinforced the message from the WPC Durban, with specific reference to marine sites.

In all the above processes, a key role was played by the IUCN Strategic Direction on Governance, Communities, Equity and Livelihoods (TILCEPA) formerly known as the Theme on Indigenous and Local Communities, Equity, and Protected Areas. TILCEPA is a working group of two commissions of the World Conservation Union (IUCN), the World Commission on Protected Areas (WCPA) and the Commission on Environmental, Economic, and Social Policy (CEESP). TILCEPA coordinated the Communities and Equity cross-cutting theme at the WPC and the Marine Parks Congress, both of which included several case studies and analytical inputs on CCAs. Of great significance was its role in facilitating the participation of community representatives from CCA sites from different parts of the world. TILCEPA members were also a part of an expert group set up by the CBD Secretariat, to make inputs to the draft Programme of Work for discussion at the Kuala Lumpur COP. It is because of this involvement that a separate section on 'Governance, Participation, Equity, and Benefit-sharing' was added. This section included specific action points on CCAs.

The secretariat of TILCEPA has since its inception been housed in Kalpavriksh, with one of its members being the co-chair. The information and learning generated by Kalpavriksh's work on CCAs in India and other countries of South Asia was used as a base for TILCEPA's inputs to the WPC and the CBD Conference of Parties. This included some specific case studies that were generated or expanded during the work on the CCA Directory, and key lessons that emerged from the work on various CCA examples. It also included drafting a Policy Brief 'CCAs: A Bold Frontier for Conservation',[74] and a note on 'How Can We Support CCAs?', published by TILCEPA for circulation to delegates to the CBD Conference of Parties.

In 2006, a global initiative was started by TILCEPA to support and promote CCAs. The initiative seeks to deepen the understanding of the CCA phenomenon with respect to varying historical/regional contexts; to identify field-based crucial initiatives where CCAs can be safeguarded, enabled, strengthened and/or promoted in practice; and to support consequent national, regional and international policy, in particular through the CBD Programme of Work on Protected Areas and the Millennium Development Goal follow up mechanisms. Also TILCEPA is putting together a global picture of the current state of national legislation and policy, regarding CCAs in different countries.[75] A special issue of the magazine *PARKS* on CCAs was produced in 2006.[76]

The India CCA Directory is likely to be the first nationwide survey of CCAs, and has therefore become an example for other countries to learn from and generate their own national surveys. Such a process would help to implement the outputs and decisions of the above-mentioned international events.

9. Conclusion and way ahead

In these times when biological diversity is under grave threat globally and nationally, and economic and development policies are aimed at maximum profit with little regard for nature or natural resources, conservation efforts of local communities gain immense significance. The case studies presented in this Directory indicate that a few communities in India have been able to resolve some of the dilemmas facing conservation although many still need to be resolved. This is not to say that all local communities everywhere are involved in conservation but that given the right kind of facilitating environment there is an immense potential for local communities to become the biggest allies in conservation, as indeed many of them have been at various points in history.

Unfortunately, till recently the potential of these initiatives in achieving conservation has remained seriously underutilised in formal conservation programmes. Although most individual CCAs still remain unrecognised, the term CCAs is beginning to find place in conservation debates, discourses, and policy statements nationally and internationally. Some factors that have contributed to their recognition in recent times include:

- A more vocal demand for recognition by the conserving communities themselves, and by grassroots organisations working with them, such as Vasundhara and RCDC in Orissa, Kashtakari Sangathana and Vrikshmitra in Maharashtra, and Seva and Viksat in Gujarat.
- Efforts by NGOs and individuals to promote and facilitate local community action for conservation, including the Nature Conservation Foundation, World Wide Fund for Nature - India, Wildlife Trust of India, Samrakshan, Ashoka Trust for Research on Ecology and Environment, Foundation for Ecological Security, Kalpavriksh and others, and researchers from institutions such as Salim Ali Centre for Ornithology and Nature Conservation, and Wildlife Institute of India.
- Documentation and popularisation through write-ups, news reports and presentations on CCAs at national and international forums by organisations such as Kalpavriksh, Centre for Science and Environment and others.
- Extension of legal and other assistance to CCAs by the above-mentioned NGOs and lobbying for greater governmental and legal support for such initiatives by the above-mentioned organisations and many others. As a result, the Wild Life (Protection) Amendment Act 2002 incorporated two new types of protected areas: Community Reserves and Conservation Reserves. The 11th Five-Year Plan has put CCAs squarly in its ambit, and the Wildlife Action Plan talks about recognition of CCAs.
- International lobbying with the help of international networks and NGOs such as TILCEPA, CEESP, WPC 2004, CBD and many others.

However, this recognition has not yet translated itself into an actual policy on the ground, or into legal, political, or administrative recognition and support. This lack of recognition in the context of the fast-track process of globalization and industrialization, changing value systems and aspirations, and fast-changing demographic and socio-economic profiles has led to serious threats to many CCAs. Communities need much internal strengthening and external support to be able to deal with such threats. Effective support could come in some of the following ways.

Greater recognition and support

- Documenting and bringing out more such examples and their role in conservation.
- Developing more detailed maps using GIS, possibly through a series of site-specific workshops with the local communities to seek their inputs. We hope that these maps would be used by the concerned communities for the effective management of the conserved sites.
- Maintaining and updating the existing database on CCAs.
- Continuing to lobby for recognition, and effective legal, administrative and political support of CCAs.
- Creating national, state or sub-state systems and/or institutions for continuous support, guidance and monitoring of CCAs. This could include support and facilitation of regional cooperation and the building of coalitions/federations among CCAs or newer bodies similar to those of State Wildlife Advisory Boards constituted under Wild Life Protection Act.
- Reducing costs of conservation by helping communities resolve conflicts with powerful offenders, particularly those from outside the community, providing critical financial and other support.
- Supporting local institutions, systems, rules and regulations, and giving such rules and regulations the status of statutory provisions.
- Helping to strengthen local institutions and facilitating greater equity and transparency in their decision-making process.
- Formulation of management plans for conserved resources and species, a need often expressed by the communities.
- Facilitating the adaptation of appropriate ecologically friendly technologies for enhancing their livelihoods, and where appropriate, linkages with consumers and sensitive markets in order to generate resources. This includes developing fair and equitable models of eco-tourism. Such interventions should however be carried out with a strong precaution that new technologies and markets can also cause disruption and damage, if not carefully controlled!
- Action to tackle the critical threats and challenges facing these initiatives, including those emanating from the communities themselves, such as inequities in decision-making and benefit-sharing, and those emanating from external forces such as unsustainable 'development' and commercialization.

Technical support related to ecological, social, and economic issues

- Conducting some detailed studies on the ecological and other aspect of CCAs to help them establish their role in conservation. Such studies will also help communities resolve issues related to specific species and their needs, and impacts of extraction of resources on biodiversity. Such studies would also help communities formulate management plans for their sites, helping them to regulate use and manage ecosystems more effectively. Often community members themselves would be interested in carrying out such studies with technical help and guidance from outside experts.
- Training in appropriate resource/wildlife management, monitoring techniques, basic accounting, marketing, management and leadership skills.
- Help in reducing human-wildlife conflicts, particularly to deal with damage to crops, livestock, and property. Communities usually do not want to take retaliatory action in such cases, but unless urgent supportive measures are considered by governments and NGOs, their tolerance levels may be crossed if the damage increases.
- Conducting awareness and training programmes for communities on the importance of biodiversity conservation in the national and global context, gender and social equity, and local governance issues.
- Supporting youth (leadership) programmes, and other local conservation groups and initiatives.
- Providing social recognition and awards to exemplary CCA initiatives.

Legal and policy measures

- Bringing about changes in existing policies and laws to further facilitate and enable community-based approaches, and, meanwhile, preparing clearer guidelines to maximize the available spaces in these policies and laws. This includes amendment of the community reserves provision of the Wild Life Act to encompass community-conserved government lands as also to empower a diversity of community institutions. Among the critical changes/strengthening needed is in the area of tenurial rights and responsibilities of local communities over natural resources.
- Incorporating of community-based approaches into relevant conservation schemes and programmes, including through the orientation of staff implementing these programmes.
- Through a consultative process, developing and finalising guidelines for legally and otherwise supporting CCAs where they exist, and facilitating their replication in other areas.

A question that needs to be addressed is whether national policies relating to natural resources can be built around the kind of a pace and diversity as reflected by CCAs? If yes, how? If the pace needs to be changed, what are the factors that need urgent attention? Should a greater role as an extension officer by the government agencies be considered? Villagers often do not seem to have the time or the resources to carry the initiative out on their own or to sustain it beyond a point. Situations are often more complex than may appear in this overview. At the same time, communities must be credited for having resolved important issues, such as encroachments, destructive commercial exploitation of resources, over-exploitation of resources, and so on. Therefore it is important to stress the fact that these efforts despite their limitations are viewed as positive processes. Obstacles faced should not be viewed as failures but as constraints, which can be solved within the concerned social and ecological context. Such obstacles and constraints should also not be used as an excuse to not provide CCAs the recognition and support that they deserve. This may take longer than normal 'project or programme cycles', yet may prove more sustainable in the long run.

One of the most critical lessons we learn from CCAs is that areas important for biodiversity conservation are often also important for the survival and livelihood security of traditional communities. The issue of people within and around official protected areas has plagued conservationists for decades. Increasingly there is recognition that livelihoods will need to be integrated without compromising the existence of ecosystems and species. Many CCAs provide valuable insights into how this can be done. It is also important to realise, however, that all of these initiatives cannot be extrapolated to other areas without appropriate changes. In order to arrive at a participatory conservation system in the country, it is crucial to understand the strengths and limitations of such initiatives and evolve workable models for a particular site. One important path towards wildlife conservation is to first meet people's most critical survival needs, like water and biomass, and tie up biodiversity imperatives with these. To be able to do this effectively, an area will have to be looked at as part of a larger landscape and planned for through

fair and transparent participatory processes, taking into account commercial development, local livelihoods and conservation.

No single agency is capable of saving India's biodiversity including its wildlife. The FD, even if highly motivated, has simply too few resources, manpower and knowledge. Local communities often find themselves helpless in the face of powerful internal and outside forces, while most NGOs are too small to handle the complex and enormous problems that natural habitats face. So the solution is to combine the strengths of each of these…and to help each other to tackle weaknesses.

Endnotes

[1] Many thanks to Ashish Kothari, Tejaswini Apte, Seema Bhatt, Sharmila Deo, and Aparna Watve for their valuable inputs and critical comments. Also thanks to Saili Palande for helping in preparing the database tables and generating pie charts and bar charts, and Persis Taraporewala and Erica Taraporewala for help at various stages.

[2] V. Saberwal, M. Rangarajan, and A. Kothari, *People, Parks and Wildlife: Towards Coexistence* (New Delhi, Orient Longman, 2001).

[3] Areas designated by the government under specific laws for protection of wildlife.

[4] M.D.S. Chandran, 'Review of Sacred Groves in Kodagu District of Karnataka (South India): A Socio-historical study by M.A. Kalam', *South Indian Studies*, 3, Jan-June 1997.

[5] U.M. Chandrashekhara, and S. Shankar, 'Structure and functions of sacred groves: case studies in Kerala', in P.S. Ramakrishnan, K.G. Saxena and U.M. Chandrashekhara (eds), *Conserving the Sacred for Biodiversity Management* (New Delhi, Oxford and IBH Publishing Co. Pvt. Ltd., 1998).

[6] K. Das and K.C. Malhotra, 'Sacred Groves Among the Tribes of India: A Literature Survey of Ethnographic Monographs' (Integrated Rural Development of Weaker Sections in India, Semiliguda, Mimeo., 1998).

[7] M. Gadgil, 'Traditional conservation practices', in A.N. William (ed.), *Encyclopedia of Environment Biology*, Volume 3, (California, Academic Press, 1995).

[8] M. Gadgil and R. Guha, *This Fissured Land: An Ecological History of India* (Delhi, Oxford University Press, 1992);

M. Gadgil and V.D. Vartak, 'Sacred Groves of Western Ghats of India', *Economic Botany* (1976), 30: 152-160.

[9] In A. Kothari, N. Singh, and S. Suri, (eds.), *People and Protected Areas: Towards Participatory Conservation in India* (New Delhi, Sage Publications, 1996).

[10] A. Godbole, A. Watve, S. Prabhu, and J. Sarnaik, 'Role of sacred groves in conservation with local people's participation: A case study from Ratnagiri District, Maharashtra', in Ramakrishnan et al. (eds), *Conserving the Sacred for Biodiversity Management*. (as above)

[11] Y. Gokhale, 'Management of *Kans* in the Western Ghats of Karnataka', in U. Shaanker, R. Ganeshaiah, K.N. Bawa and K.S. Bawa (eds), *Forest Genetic Resources: Status, Threats and Conservation Strategies* (Delhi, Oxford and IBH Publishing Co. Pvt. Ltd, 2001).

[12] M.A. Kalam, *Sacred Groves in Kodagu District of Karnataka*, Pondy Paper on Social Sciences (French Institute, Pondicherry, 2001).

[13] C.G. Kushalappa and S.A. Bhagwat, 'Sacred Groves: Biodiversity, Threats and Conservation',in U. Shaanker et al. (eds), *Forest Genetic Resources*. (as above)

[14] Areas protected for wildlife under the Indian Wild Life (Protection) Act 1972, mainly national parks and wildlife sanctuaries.

[15] *Van panchayats* (VP) or the executive village committees for management of forests were established by the British in 1931 and a large number of these continue to manage their forests effectively even today (for more details see Uttarakhand chapter).

[16] A Hindu festival celebrated as the victory of good over evil, mostly by bursting crackers and lighting earthen lamps.

[17] Forest patches of near-natural vegetation dedicated to ancestral spirits/deities, and protected on the basis of religious beliefs.

[18] This is similar to an internationally used definition of CCAs see, www.tilcepa.org.

[19] A. Kothari, N. Pathak, and F. Vania, *Where Communities Care: Community-based Wildlife and Ecosystem Management in South Asia* (Kalpavriksh, Pune and International Institute of Environment and Development, London, 2000).

[20] Which may or may not be recognized by the national legal system.

[21] See Annexure 1 for the tabular database used for analysis in this section.

[22] A scheme of the Government of Maharashtra inspired by the work of Anna Hazare, where villages are given financial awards for following the principles of Adarsh Gaon (model village). These principles include *Kulhad Band* (felling ban), *Charai Band* (ban on free grazing), *Nasha Band* (ban on alcohol), *Nas Band* (family planning), and *Shramdaan* (volunteering labour, time and effort for social good).

[23] A movement started by legendary social worker Vinoba Bhave in 1951 aimed at equitable distribution of land and resources. As part of this movement many large land–holders gave up their land for the sake of landless. This movement also encouraged the villages to consider their village land as common property so that resources could be shared equitably among all members.

[24] www.wwfindia.org

[25] www.samrakshan.org

[26] Joint Forest Management is a country–wide programme of the forest department aimed at regeneration of degraded forests with the help of the local communities. The programme envisages that the benefits from all kinds of harvests in such forests would be shared with the involved community.

[27] A very good example is from Kalakad Mundanthurai Tiger Reserve (KMTR) in Tamil Nadu or Periyar National Park in Kerala, where, despite the inherent limitations of the ecodevelopment programme, the team of officials have gone beyond their mandate to involve local people in the protection of the PA and ensure that people benefit from the jointly envisaged activities under the programme. The efforts of the ecodevelopment team have been so successful that those involved with poaching and timber felling are now strengthening the hands of the government in protection against such activities. Women around Periyar have responded to these initiatives by voluntarily patrolling the forests on a daily basis. These are not examples from CCAs but have been mentioned to illustrate the important role that sensitive government officials can play in mobilising communities for the cause of conservation.

[28] Over the last 15 years or more JFM has spread ofver several million hectares. However, while it has been very successful in many places, the programme suffers from a number of deficiencies:the power-sharing between the FD and villagers remains poor, benefits to communities have often been inequitably shared, corruption is often very high, and in places traditional institutions of management have been displaced by JFM committees imposed from above.

[29] Entitlements from the forests to daily biomass needs for the people residing in and around forest areas (under government jurisdiction).

[30] Meeting daily biomass needs for personal consumption.

[31] There are many examples across the country where representative bodies have been set up by external agencies for conservation with little interaction, consent or acceptance of the local communities. However, we have not taken into account such examples as CCAs so they would not figure in this analysis.

[32] This section on international debates on whether CCAs are PAs is adapted from a note prepared by Ashish Kothari, based on inputs from Grazia Borrini-Feyerabend, Hanna Jaireth, Gonzalo Oviedo, Adrian Phillips, and Marshall Murphree. It was written for The IUCN Theme on Indigenous Peoples, Local Communities, Equity and Protected Areas. Contact: ashishkothari@vsnl.com, gbf@cenesta.org, or tilcepa@vsnl.net.

[33] In Kothari et al. (eds), *People and Protected Areas* (As above)

[34] Note prepared by Neema Pathak, Seema Bhatt, Tasneem Huzefa, and Ashish Kothari, with inputs from Gonzalo Oviedo and Grazia Borrini-Feyerabend, on behalf of the IUCN CEESP-WCPA Theme on Indigenous and Local Communities, Equity, and Protected Areas (TILCEPA). Kalpavriksh, Pune (Kalpavriksh@vsnl.net) and Cenesta (cenesta@cenesta.org), Iran.

[35] See case study sections for the relevant states for details on the case studies mentioned here.

[36] C. Leisher, P. van Beukering and L.M. Scherl, *Nature's Investment Bank: How Marine Protected Areas Contribute to Poverty Reduction.* (Arlington, USA, The Nature Conservancy, 2007)

Policy Matters 15: Conservation and Human Rights. Magazine of the IUCN Commission on Environmental, Economic, and Social Policy. July 2007. http://www.iucn.org/themes/ceesp/publications/publications.htm

M. Lockwood, G. Worboys, and A. Kothari, (eds), *Managing Protected Areas: A Global Guide.* (London, IUCN, Gland and Earthscan, 2006)

M. Colchester, (Conservation policy and indigenous peoples) *Environment Science and Policy,* 7: 145-153 (2004).

[37] R. Kutty, 'Community-based Conservation of Sea Turtle Nesting Sites in India: Some Case Studies', in K. Shankar and B.C. Choudhury (eds), *Marine Turtles of the Indian Subcontinent* (Dehradun, Government of India-UNDP and Wildlife Institute of India, 2006).

[38] Political benefits entail the self-empowerment of communities, including the power to negotiate terms with government and non-government agencies.

[39] Examples with more than one benefit have been mentioned in all relevant benefit fields in Figure 16

[40] Adapted from a similar table in Kothari et al., *Where Communities Care* (As above)

[41] This is not an exhaustive list of examples, but only some randomly selected ones.

[42] Foundation for Ecological Security, *A Biodiversity and strategy input document: The Gori River Basin Western Himalaya*, Prepared under the National Strategy and Action Plan, India. Submitted to the Ministry of Environment and Forests, New Delhi (2003). Kalpavriksh and Technical and Policy Core Group (TPCG), *Securing India's Future: Final Technical Report of the National Biodiversity Strategy and Action Plan (NBSAP)*. Prepared by Technical and Policy Core Group, Delhi/Pune, Kalpavriksh, 2005.

[43] R. Kutty, 'Community-based Conservation of Sea Turtle Nesting Sites in India' (As above)

[44] R. Jackson, and R. Wangchuk, 'A Community-based Approach to Mitigating Livestock Depredation by Snow Leopards', *Human Dimensions of Wildlife* (2004), 9: 307-15.

[45] M. Sarin, with L. Ray, M.S. Raju, M. Chatterjee, N. Banerjee and S. Hiremath, *Who is Gaining? Who is Losing? Gender and Equity Concerns in Joint Forest Management,* (New Delhi, Gender and Equity Sub-Group, National Support Group for JFM, Society for Promotion of Wasteland Development, 1996).

[46] For more details on social stratification and its implication on conservation efforts see A. Kothari, F. Vania, P. Das, K. Christopher and S. Jha (eds), *Building Bridges for Conservation: Towards Joint Management of India's Protected Areas* (New Delhi, Indian Institute of Public Administration, 1996); N. Pathak, Joint Forest Management and Gender: Women's Participation and Benefit-sharing in JFM in India', A report prepared for ADITHI, a women's organisation in Patna, Bihar (2000).

[47] As above

[48] These key issues and lessons are based on the analysis in the previous sections as well as other work and past experience of Kalpavriksh, including:

A. Kothari et al., *Where Communities Care* (As above)

While this Directory was being compiled, a number of other reports were written and /or published, which were to some extent based on the learnings from the Directory. These include:

A. Kothari and N. Pathak, *Protected Areas, Community Based Conservation and Decentralisation: Lessons from India,* A Report Prepared for the Ecosystems, Protected Areas, and People Project (EPP) of the IUCN World Commission on Protected Areas (through the IUCN Regional Protected Areas Programme, Asia) (2006).

[49] This table has been adapted from a more detailed table in G. Borrini-Feyerabend, A. Kothari and G. Oviedo, *Indigenous and Local Communities and Protected Areas: Towards Equity and Enhanced Conservation*. (Gland, Switzerland and Cambridge, UK, IUCN, 2004).

[50] A. Kothari et al., *Where Communities Care* (As above)

[51] P. Pardeshi, 'Conserving Maharashtra's Biodiversity through Ecodevelopment', in A. Kothari et al. (eds), *People and Protected Areas* (As above)

[52] A. Kothari and N. Pathak, *Protected Areas, Community Based Conservation and Decentralisation.* (As above)

[53] CMWG and TILCEPA, 'A Policy Briefing note on Governance of Natural Resources–the Key to a Just World that Values and Conserves Nature'. For details see www.tilcepa.org or contact Grazia Borrini-Fereyabend at gbf@cenesta.org.

[54] A Government of India scheme, funded in this case by the Global Environment Facility, meant for diverting human pressures from a PA by providing alternative sources of livelihood.

[55] D. Priya, 'The Politics of Participatory Conservation - the case of the Kailadevi Wildlife Sanctuary, Rajasthan'. G. Shahabuddin and M Rangarajan (eds), *Making Conservation Work* (New Delhi, Permanent Black, 2007)

[56] R. Panigrahi, 'Democratisation of Forest Governance: Myths and Realities (An analysis of implications of democratized forest policies and processes in Orissa, India)' Paper presented at the eleventh Biennial Conference for the International Association for the Study of Common Property, 19-23rd June 2006, Bali, Indonesia (Vasundhara, Bhubaneshwar, R. 1996).

[57] M. Sarin, 'Empowering and Disempowering of Forest Women in Uttarakhand, India', *Gender, Technology and Development Journal* (2001), 5 (3).

[58] N. Pathak and V. Gour-Broome, *Tribal Self-Rule and Natural Resource Management: Community Based Conservation at Mendha-Lekha, Maharashtra, India* (Kalpavriksh, Pune and International Institute of Environment and Development, London, 2000).

[59] ATREE, *An Integrated Approach to Management of Tropical Forests for Non-Timber Forest Products. Annual Report for Biodiversity Conservation Network* (Bangalore, Ashoka Trust for Research in Ecology and the Environment, 1999).

[60] A. Kothari et al., *Where Communities Care*. (As above)

[61] Kalpavriksh has drafted a set of guidelines for the declaration of Community Reserves. These guidelines were circulated for comments by MoEF to the state governments in 2005, but subsequent action is unclear.

[62] A detailed critique was made in a letter related to the concerns regarding Biological Diversity Rules 2004, addressed to National Biodiversity Authority and Shri Thiru A. Raja, Minister of Environment and Forests. Written by Ashish Kothari, Kalpavriksh, Pune; P.V. Satheesh, Deccan Development Society and AP Coalition in Defence of Diversity, Hyderabad; Utkarsh Ghate, RANWA, Pune; and Madhu Sarin, Chandigarh. Dated 6th June 2004. Contact: Kanchi Kohli at kanchikohli@gmail.com.

[63] Kalpavriksh has formulated draft guidelines for Biodiversity Heritage Sites and submitted to National Biodiversity Authority for consideration, in 2006.

[64] For regular update on the implementation of the Biodiversity Act, see http://groups.yahoo.com/group/bioDWatch.

[65] 'Orissa Village Forest (Amendments) Rules, 2007 (A Draft). A Civil Society Organisation's Initiative'. For details contact Abhishek Pratap at vasundharanr@satyam.net.in

[66] For more details, contact Tarun Joshi, Sainyon Ka Sangathana, Nagari Gaon, Post Bhavali, Dist. Nainital 263132, Uttarakhand. Tel. 05942-220714/220255.

[67] For details contact Mohan Hirabai Hiralal at mohanhh@gmail.com

[68] Contact Mohan Hirabai Hiralal (As above).

[69] Planning Commission, *Final report of the Steering Committee on Environment, Forests & Wildlife for the Eleventh Five Year Plan (2007-2012)* (Planning Commission, Government of India, March 2007).

[70] Also see Kalpavriksh's note 'Scheduled Tribes and Other Traditional Forest-Dwellers (Recognition of Forest Rights) Act 2006: Critical amendments, clear rules, and assessment period needed. Kalpavriksh Position and Recommendations', March, 2007. For more details see www.kalpavriksh.org or contact Neema Pathak at the editorial address.

[71] Which prohibits diversion of forests for non forestry purposes without central government clearance.

[72] Reference to this Directory.

[73] Information contributed by Ashish Kothari with inputs from Tasneem Balasinorwala, Kalpavriksh, Pune.

[74] See www.iucn.org/themes/ceesp/Wkg_grp/TILCEPA/CCA%20Briefing%20Note.pdf.

[75] See http://www.iucn.org/themes/ceesp/CCAlegislations.htm.

[76] See www.iucn.org/themes/wcpa/pubs/parks.htm#parks161.