

Decentralised Governance and Natural Resource Management in India¹

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INTRODUCTION: THE TWIN CRISES

India, like many other countries of the world, faces a twin crisis of breakdown, one of the political governance structures, and the other of its ecological framework. Central and state governments are simply not delivering what they promise or should be capable of, to the extent that the number of government personnel (especially at 'higher' levels) and the amount of public work the government does, appear to be inversely proportional! As for the environment, we all know what we are facing, as forests, topsoil, surface and groundwater, air, and all the other basic resources we survive upon, are getting more and more degraded and over-exploited.

Unfortunately, these two have been viewed in isolation from each other, and never the twain do meet. Political governance and related issues such as the ability of people to control their own lives and defend their basic human rights, have been the focus of political scientists, social activists, human rights advocates. Ecological issues, on the other hand, have been central to the work of that rather amorphous group called 'environmentalists'. The two have rarely got together, and in fact in some arenas, as for instance the conflict between wildlife conservation and people's rights to survival resources in wildlife habitats, they have fought.

This is unfortunate indeed, because both kinds of breakdown have common roots, and both will be reversed only if the ecological and the political are brought together. Both are the result of several decades of over-dependence on centralised structures of governance and management, taking away the power and ability of local communities in villages and residents' associations in cities, to manage their own surrounds. To an extent before colonial times, but in particular during the British rule, and thereafter in so-called Independent India, governments have repeatedly assumed the dominant role in the provision of basic services and the management of natural resources. Alienated from their own resource base, villagers across the country have increasingly viewed forests, waterbodies, and wildlife as *sarkari*, open for unregulated exploitation and beyond their own reach to manage. Urban citizens in turn, reliant on technologies that bring them needed resources from distant lands and waters, and governance structures that are only too happy to oblige them, do not even see the connections between their lifestyles and environmental degradation.

¹ Text for the R.S. Dubashi Memorial Lecture, University of Pune, 16 February, 2000. This presentation is based on collaborative research and activist work done with other members of Kalpavriksh. In particular, it builds upon an earlier joint piece written with Neema Pathak, and on research work done by several individuals including Neema, Swati Shresth, Jaishree Suryanarayanan, Pradeep Malhotra, Farhad Vania, and Priya Das. Most important, however, it is based on the remarkable work done by the villagers, NGOs, and officials involved in the various initiatives described herein, who are too numerous to name here.

SIGNS OF HOPE: RESOLVING THE TWIN CRISES TOGETHER

Yet, out of this scenario of desperation and gloom, are emerging bright *diyas* of hope. Tired of waiting for unresponsive or corrupt government structures, or appalled at the destruction wrought by warped and elitist 'developmental' projects, people's movements are mushrooming in so many parts of India that it is difficult to keep track. Consider the following:

- ◆ Hundreds, possibly thousands, of village communities are regenerating their forests and taking over management; Decentralised water harvesting systems have made a strong comeback and posed a challenge to big dams, including in the driest of India's lands;
- ◆ Organic and sustainable farming systems are beginning to show that chemical, poison-laden Green Revolution technologies are not inevitable to grow adequate food;
- ◆ Urban residents' associations are beginning to demonstrate the success of waste recycling, roof-top water harvesting, and other elements that make them less of a parasite than they currently are; and
- ◆ The importance of biological and cultural diversity is being articulated again.

Communities are even rediscovering that they can manage social conflicts, crime, health, education, and other aspects largely by themselves, perhaps with help extended by NGOs or sensitive government officials.

In all of the above, what is crucial is the sense of control over ones' lives and destinies, the fact that people are beginning to reduce their dependence on centralised political and bureaucratic structures. There are critical lessons in this for all of us.

SOME EXAMPLES

It would at this stage be useful to provide some examples of the above trend. These are not of course representative of the enormous complexity of people's responses across the country, but they give an indication of the direction in which we could head.

◆ **Jardhargaon** is a typical village in the Himalayan foothills of Tehri Garhwal district, Uttar Pradesh. About twenty years ago, faced with serious fuel/fodder/water shortages, residents took charge of protection and management of the slopes above their village. Today, their regenerated forests are providing them with their basic needs. Moreover, these forests now harbour significant wildlife and biodiversity; professional botanists have shown them to be amongst the most diverse in this region. Jardhargaon's farmers are also getting increasingly disillusioned by the short-term lures of chemical-intensive farming, and are switching back to some traditional practices and reviving their traditional seed diversity. Some of them have started the "Beej Bachao Andolan", and through *padayatras* to the remote villages of their region, have collected several hundred varieties of seeds lost elsewhere in the region (upto 250 of rice, 170 of rajma and others). Finally, the village is also maintaining its own equitable system of irrigation, in which *koolwalas* appointed by the residents guard the canals and ensure that no-one misuses or over-uses the water. Jardhargaon has also fought off attempts, by outside forces, to start mining on some of its slopes.

◆ **Mendha (Lekha)** is a small Gond tribal village in Gadchiroli district of Maharashtra. Interaction with government officials had in earlier decades only meant exploitation or extortion. Slowly the forests in the vicinity of the village were also taken over and access to them restricted. On the other hand the government itself started extracting commercial

timber, gave permission to the paper industry to extract bamboo, and awarded contracts to outsiders to extract non-wood forest produce. In the 1970s, Mendha (Lekha)'s villagers participated in the massive and successful tribal movement against the Bhopalpatnam-Ichhampalli dams, which would have submerged their homes and forests. Subsequently, with the help of a local NGO, Vrikshamitra, the villagers organised themselves under the motto *Dilli Bambai hamari sarkar, hamare gaon mein ham hein sarkar* ("our representatives form the government in Delhi and Bombay, we *are* the government in our village"). Subsequently the villagers formed a Village Forest Protection Committee to protect and manage the surrounding forests, and forced a stop to commercial and destructive practices by both locals and outsiders (including the government and the paper mill). The village has explored various avenues for employment, and has ensured year round jobs for all residents. Today the *gram sabha* of the village is so strong that any programme, government or non-government, can only be implemented after discussions with and permission from the villagers. Biogas, fisheries, irrigation, sustainable forestry, handicrafts, and other such activities are now commonplace here. A unique feature is *abhyas gats*, loose study circles initiated by the villagers but also containing outside experts, that help in keeping the people well-informed and aid in doing participatory research on matters of importance to the village.

◆ **Bhaonta-Kolyala** are villages in Alwar district of Rajasthan. A decade ago water availability in the villages had greatly reduced. Forest resources, which were critically important for the majority of the pastoral community residing here, were disappearing. Out-migration from the villages in search of jobs was very high. With the help of an NGO, Tarun Bharat Sangh, the villages revived their traditional system of water storage called *johads*, recreated its *gram sabha*, and started protecting a large patch of nearby forest which was recognised to form the catchment of the local rivers and reservoirs. That was a decade back. Today Bhaonta-Kolyala and many hundred villages in this region have turned this water-deficit area into a water-surplus one, and seasonal streams into perennial ones. Triple cropping can now be done in some areas. People have largely stopped migrating out for employment. Destructive mining, being allowed by the government, has been stopped in dozens of places. In most of these villages, decisions about the management of natural resources are taken at the village level, with little governmental input. In early 1999, Bhaonta-Kolyala and other villages of the Arvari (a local river) catchment have formed an Arvari Sansad (parliament), as a decision-making forum for not just natural resource management, but also for inter-village disputes and other socio-political issues. This *sansad* has decided to declare the Arvari catchment as 'people's protected area'. Interestingly, it has also decided to ban the commercial cultivation of sugarcane, chillies, and rice, recognising that the available water sources would not be able to sustain such crops in the long run.

◆ **Kailadevi Wildlife Sanctuary** in Rajasthan, the buffer zone of the Ranthambhor Tiger Reserve, contains many small villages. For years, the Gujjars, Meenas, and other resident communities were not aware what living inside a sanctuary meant, except occasional harassment by the sanctuary staff, and a constant fear of being displaced. What they knew, however, was that something needed to be done to stop the rapid decline of forests in their surrounds as the fodder for their cattle was getting increasingly scarce. This decline was a result of their own unregulated activities but also largely due to the activities of outsiders (such as miners, and huge livestock herds of migratory graziers) over which they had little control. They got together and formed Forest Protection Committees to regulate forest use activities. They fought off outside forces, including in one instance risking armed assault. Today the forests around these villages are regenerating remarkably well. These initiatives have won them the goodwill of the Forest Department and other government agencies, which

are now helping them to tackle serious shortages of water and providing other developmental inputs.

◆ **Saigata** is a multi-caste, multi-religion, tribal-nontribal village in Chandrapur district of Maharashtra. About twenty years ago the village realised that forests in their vicinity had completely degraded. People were struggling for day to day fuelwood and fodder requirements, increasingly having to purchase them in the market. Under the leadership of a Dalit youth Suryabhan Khobragade, the entire village united to revive its forests. Twenty years later the village has a full-fledged forest and uses it in what appears to be a sustainable manner. Sustainable development inputs have also been focused upon.

◆ In the **Biligiri Ranganaswamy Temple Sanctuary**, Karnataka, the Vivekanand Girijan Kalyana Kendra has worked for two decades with Soliga tribals. It has combined traditional and modern practices in securing better health, helped the tribals to process medicinal plants and obtain better returns for them through cooperatives, set up educational institutions for their children which combine traditional oral learning with the conventional ABC teaching, and started bridging the enormous gulf between the people and the Forest Department in the management of the forests and wildlife.

◆ There are many other examples that can be cited from other parts of India. One of the most famous is that of **Ralegan Siddhi**, in Maharashtra. Under the guidance of Anna Hazare, a resident who had served in the army, this village has undergone a remarkable transformation from a drought-prone, severely food deficient settlement to a food-exporting, lush green one which boasts of schools and training facilities, computer and media centre, and other facilities built with money put in mostly by the villagers themselves. Families that had earlier migrated to towns and cities, have come and settled back here. Then there is **Sukhomajri** village in Haryana, which underwent a transformation with the aid of watershed development, afforestation, and careful management of its natural resources. There are many more that have shown resourcefulness in harnessing alternative energy sources, decentralised water harvesting, sustainable fisheries and aquaculture, organic and natural farming, diversified horticulture and animal husbandry, weaving and other handicrafts, and so on. At **Anandwan**, Chandrapur district, Maharashtra, the Amtes (earlier Baba, now his son Vikas) have shown that a fully self-sufficient community can be designed over 350 acres... able to take care of its food, clothing, shelter, energy, craft, and industrial product needs. Their model is all the more amazing, because it has primarily involved leprosy patients and handicapped people, the kind that our society has unfortunately shunned.

◆ Another kind of trend, equally significant, is of people's resistance to destructive development, to forces that threaten their livelihood and natural resources. The struggles against deforestation, mining, and dams, mentioned in the cases of Jardhargaon, Mendha (Lekha), Alwar, and others above, are examples. But this resistance goes far beyond individual projects and villages. Perhaps one of the most remarkable is the movement of traditional and small-scale fisherfolk, under the banner of the **National Fishworkers' Forum**. For well over a decade and half now, these fisherfolk have protested the Indian Government's repeated attempts to invite large-scale commercial trawling into our marine waters. Through national strikes in which millions have participated, innovative campaigns in the seas and all the way to Parliament, legal action, and various other strategies, they have managed to keep at bay the technologies and companies that would have stripped our marine

areas like locusts, as they have stripped virtually all other marine areas of the world. They have also protested the violations of environmental regulations such as the Coastal Regulation Zone rules, arguing that ecological conservation and fisherfolk's livelihoods are two sides of the same coin. NFF members have joined and supported movements such as the **Chilka Bachao Andolan**, launched by local fisherfolk against commercial prawn cultivation. Many of these movements are united in a series of networks, such as the Bharat Jan Andolan, National Alliance of People's Movements, and the Jan Vikas Andolan, through which they gain mutual strength and fight for people-oriented planning and developmental alternatives.

LESSONS FOR A MORE DEMOCRATIC, DECENTRALISED GOVERNANCE

The initiatives described above, and several dozen others like them, point to a drastically different system of governance than the one in place today. Given below are some elements of this new system:

The key is diversity, site-specificity: No single policy, law, or programme is suitable for the incredible diversity of ecological, social, and cultural conditions that India presents. It has been a mistake to assume that the same governance pattern that will work in the caste-ridden society of Bihar will work in the more egalitarian tribal cultures of central India, or vice versa; equally, that the same management structures will work effectively in both coastal ecosystems as in forests. One major difference between community initiatives and the official efforts at natural resource management is precisely this: the former are decentralised, site-specific and varied in their objectives and approaches, while the latter have largely been centralised, top-down and often working under uniform policy framework and guidelines. Centralised decision-making, far removed from local realities, rarely takes into account local concerns and conditions. In Mendha (Lekha), villagers wanted no forestry operations in their forests as they prefer a diverse forest to monocultures, but it took them years to get the government to agree.

Livelihoods = biodiversity: The contention that communities are not interested in protecting biodiversity is negated in Mendha (Lekha), Jardhargaon, Bhaonta-Kolyala, and several other villages of the country. Conventionally, official Joint Forest Management (JFM) has favoured the harvesting of timber and the sharing of sale proceeds, but several communities have argued that the more important benefit of JFM is a continuous supply of non-timber forest products². This argument translates into the conservation of biologically diverse forests rather than mere plantations of single tree species. Local community arguments against industrial aquaculture, or commercial fisheries, have similar grounds and implications. Conservation planners and habitat managers could well build in such concerns to enable a marriage of livelihood requirements and biodiversity conservation.

The process must be transparent and participatory: One of the important reasons which leads to the success of any process is transparency and democracy in decision-making. At Mendha (Lekha), emphasis on equal representation of all sections of society in information-sharing and subsequent decision-making is a salient feature. No-one gets a chance to complain that they did not get a chance. In many other initiatives mentioned above, the

² See, for instance, Poffenberger, M. and McGean, B. (eds). 1996. *Village Voices and Forest Choices*. Oxford University Press, New Delhi.

village level institutions are not based on partial representation but on the full participation of members from each family in the village (though inequities continue, as pointed out below). Financial transactions are open to scrutiny, and in are under the continuous gaze of villagers. All this also ensures that power is not concentrated, or blatantly misused. Such an open and transparent system of functioning at every level of governance, if adopted officially, could help avoid many conflicts arising from information and power being cornered by a few powerful sections.

Providing a sense of control, ownership: As mentioned in the introduction, alienation from one's surrounds is a major reason for the mismanagement or neglect of resources. In each of the above initiatives, the community has achieved substantial *de facto* control, and thereby a strong sense of identity and empowerment. So though Jardhargaon does not legally own the forests it protects, its villagers will rush to stop forest fires, poachers, and wood thieves. Mendha (Lekha) villagers have been able to overcome the problems of encroachments, indiscriminate exploitation by outsiders, over-exploitation, etc. mainly because of a sense of belonging and a realisation of the stakes involved in the conservation of these forests.

However, the limits of *de facto* control, in the absence of legal powers, are also visible. In Bhaonta-Kolyala, for instance, felling of trees inside the community-protected forest, by neighbouring villagers, continues to be a problem. In Jardhargaon, some members of the village itself indulge in violations, and getting them to pay the community-imposed fines has become more and more difficult. The availability of forums such as formal courts and the police, which have greater legal power than village institutions, allows some villagers and outsiders to disregard community-made rules.

There is therefore a strong need for some form of legal or statutory authority to be given to village-level institutions, and for long-term tenurial security over the natural resources which they are managing (see Box 1 below for legal possibilities). These would have to be balanced by responsibilities, to ensure social equity, ecological sustainability, and appropriate livelihood options (otherwise situations such as some part of the north-east India will result, in which communities with full control over forests are selling them off to industrialists, with the active help of state governments).

Box 1: What Means of Legal Empowerment Exist?

Changes are necessary in current laws and policies governing natural resource management, to enable full participation of communities. However, even in current legislation, some options are available:

- ◆ In the case of forests, declaring them as Village Forests under the Indian Forest Act (an option rarely exercised in India);
- ◆ In the case of several states who have Gramdan Acts, declaring them *gramdan* villages;
- ◆ Using the provisions of the Panchayat-related constitutional amendment and subsequent enactments. In particular, the Panchayat (Extension to Scheduled Areas) Act is a powerful tool for providing statutory authority and power to local tribal communities. (see Box 2 below).
- ◆ Using the provisions of the proposed Biological Diversity Act, which give greater voice for village level institutions in decisions regarding the conservation and use of biological resources. In the case of wildlife habitats protected by people, using the proposed amendments in the Wild Life (Protection) Act, in particular the new categories of Conservation Reserves and Community Reserves. Both these categories envisage the active participation and control of local communities.

Building on local knowledge, institutions: Development and conservation activities have often failed when they introduce alien concepts and institutional structures into communities. The above examples suggest that any sustainable model must be able to integrate, and build upon, those aspects of local community knowledge and traditional institutions that are relevant. These are not static entities; communities themselves are continuously innovating in order to respond to changing conditions. The above initiatives, for instance, show a range of institutional structures, some of them traditional (*gram sabha, panchayat*), some more recent (*van suraksha samiti, abhyas gat*), some exclusively village-initiated, some spurred by NGO or government initiatives. Again, flexibility and site-specificity are critical.

Joining customary and statutory law: One risk of providing statutory powers to village level institutions is that there may be an imposition of rules from outside, which do not necessarily match the customary or community-made rules. This has happened, for instance, with uniform rules imposed in Joint Forest Management areas, some of which have undermined the more creative and site-relevant rules and institutions made by communities themselves. There is a very strong tradition of customary law, handling natural resources, in many parts of India; this has become sidelined or corrupted by the imposition of formal national or state law. A truly decentralised governance system would have to be sensitive to customary law, a rather diverse, site-specific set of rules, mostly unwritten. Of course, customary rules can also be exploitative (ecologically and socially), and may need to be balanced by enlightened statutory law.

Box 2: The Panchayat Legislation

Possibly the most significant legal measure of the 1990s has been the 73rd amendment to the constitution, authorising much greater powers to panchayat institutions. In particular, the follow-up law relating to predominantly tribal areas, the Panchayat (Extension to Scheduled Areas) Act (PESA), 1996, has several positive elements of empowerment. This Act gives substantial (though by no means comprehensive) decision-making and implementation powers to the village level institutions. It confers ownership rights to non-timber forest produce (NTFP) to the tribals. State governments are, however, interpreting these provisions in their own convenient ways; in Maharashtra, for instance, *tendu patta* and bamboo have been kept off the list of NTFP, presumably because the State earns substantial revenue from them. Such discriminatory provisions need to be challenged.

PESA envisages the officially elected *panchayat* or *gram sabha* as the first level institution. In case of Mendha (Lekha) and Bhaonta-Kolyala, the *gram sabha* is currently powerful and widely recognised, but there could be a situation of conflict or struggle for power between it and the official *panchayat* (consisting of elected representatives of several villages). Moreover, it is unclear in this Act, whether NTFP ownership and other matters of jurisdiction of the local community extend to government lands such as Reserved Forests and protected areas. Finally, the element of collective village responsibility for the long-term sustainability of natural resources, and for aspects like wildlife conservation, have not been built into the legislation, and need to be incorporated into subsidiary rules or guidelines. The Act is fairly new and there has been little work towards its implementation at the ground level, therefore its actual impact is yet to be seen.

Is community control and management adequate? Even if statutory and tenurial security is given to communities, will they be able to adequately conserve and manage natural resources? Mendha (Lekha) villagers have demanded to be included in the formal Joint Forest Management scheme of the government, a demand that has also come from several

other such community efforts in the country. This indicates that communities often do realise the difficulty of managing natural resources on their own, especially given internal and external social inequities, and powerful political and commercial forces. An active role of the state as a partner, especially to provide protection against exploitative outsiders, is often expected by these communities. But they insist that the partnership be on equal terms, and that the state undertake support and guidance rather than a policing and ruling. However, to be able to do this, government agencies will have to overcome a great deal of distrust that exists among the people because of a bitter history of interaction.

The role of outsiders: In most of the above-mentioned initiatives, while the local community has been the most important actor, there has been a critical role played by one or more external interventionists. Exceptions are Jardhargaon and Saigata, where the forest protection, agro-biodiversity revival, and irrigation system are initiatives entirely of the local community. However, even in case of Jardhargaon, the involvement of some of the village members with the Chipko movement and contacts with relevant NGOs and officials outside has been crucial.

In today's age of globalisation and communications, the notion of a completely self-generated and self-sustained community initiative is romantic, but untrue. This is not surprising, nor necessarily a critical comment on the ability of the local community. Rather, it points to what could be an important element in more equitable and sustainable natural resource management: the need for synergistic linkages from the local community to the national and international levels. These linkages are especially important where local communities, or sections within them, are fighting against serious injustices (traditional or new). As pointed out below (*Need for balanced information*), external interventions are also needed to fill local gaps in the knowledge.

Letting the right hand know what the left one is doing: At the level of a village, conservation and developmental activities are closely intertwined. This may be why community initiatives are multi-faceted, covering water, forests, social injustices, crop production, and myriad other things together. Conservation of resources is a part of livelihood insurance, and linked with other social dynamics. No one process can be seen in isolation of others. But while a community views all the developmental, land use, cultural, and other processes as linked with each other, the government is organised in a highly compartmentalised manner, with different line agencies handling different aspects of governance. Very often these line agencies do not coordinate with each other, or worse, work at cross-purposes. In addition, the resources with these agencies get dispersed and hardly lead to the benefits that they are intended at.

An example from Mendha (Lekha) village indicates that if the basic decision-making unit is the local community, this problem can be overcome. People in Mendha (Lekha) have each government agency that its actions in the village should not be isolated from those of other agencies. The result is a coordinated plan for providing biogas plants, bathrooms, and toilets to the entire community. Community-based integration can also help to overcome artificial resource constraints that individual agencies or community groups face, as the resources of various agencies can be pooled together. There are examples of similar coordination being done by individual government officials (e.g. by the CEO of Melghat region of Maharashtra, Praveen Pardeshi, in the early 1990s), but these often collapse when the individuals get

transferred. Community empowerment would be the key to even such initiatives by officials or NGOs.

Who decides, who benefits? At all levels of decision-making, the question which is most critical to answer is: who has the right to participate? Who are, for want of a better word, the main 'stakeholders'? The above mentioned examples indicate that, if adequately taken into account, the local communities often have greater stakes and reasons for natural forest conservation than the rest of the society. Thus there is a need to distinguish between 'primary' and 'secondary' stakeholders, based on certain criteria³. Some important criteria could be:

- Cost (material, monetary, and non-material) paid for conservation;
- Extent and nature of dependence on the resource in question;
- Length of time of this dependence;
- Responsibility towards conservation in terms of resources and efforts; and
- Proximity to resource sought to be conserved.

In all the cases mentioned above, most villagers fit in the category of primary stakeholders. In some areas, such as Kailadevi, the Forest Department would, along with the villagers, be primary stakeholders. The industry, government agencies other than the one directly responsible for the resource, and other villages, all become secondary stakeholders.

Right to balanced information: The power to take decisions is of little use in the absence of an understanding of the implications of these decisions. In Mendha (Lekha) and Saigata, villagers realised the importance being informed before taking decisions. They have evolved a system of exchange of information with outsiders through group meetings and discussions, what they locally call *abhyas gats* or study circles. Through such interaction, they had become aware of the long-term damages of commercial exploitation of forests even though the immediate gains were very high. Through the same interactions the villagers have also been able solve complicated issues such as illegal extraction of resources, encroachments, etc. with which the forest officials in many areas are still struggling. In Jardhargaon village, information from both within and outside, garnered by the Beej Bachao Andolan and the *van suraksha samiti*, was crucial in initiating the switch back to traditional seeds and agro-practices. Unfortunately there does not yet exist a widespread system to provide such information to the villagers. People often are not even aware of developmental or any other schemes and plans envisaged for their areas. Officials and other outside experts could bring in the larger perspectives not so easily perceived by the villagers given their limited experiences and access to outside information. In turn they could learn from the detailed site-specific information that the local people have.

Need for continuous and participatory monitoring: No initiative is perfect, and none can predict all the impacts that it will have. There is therefore a need for continuous monitoring and evaluation, both by the actors themselves and by independent agencies. These processes will be most effective if they are participatory and transparent. Results of such monitoring will be used by the local managers in continuous modifications and evolution of resource management strategies. An example of this is the NTFP monitoring being carried out by the *Jungle Abhyas Mandal* in Mendha (Lekha), in which both villagers and outside members are

³ See Kothari, A., Anuradha, R.V., and Pathak, N. 1998. *Community-Based Conservation: Issues and Prospects*. In Kothari, A., Pathak, N., Anuradha, R.V., and Taneja, B. (eds.). 1998. *Communities and Conservation: Natural Resource Management in South and Central Asia*. UNESCO and Sage Publications, New Delhi.

involved. However, in both community-based initiatives and government led ones, this aspect is usually weakly developed.

Changing the overall developmental path: Since all the above process are so closely linked, changes in one can lead to serious impacts on the other, often contradicting each others' objectives. For example the mining policy and the conservation policy may be contradictory; in turn, both may be conflicting with the panchayat related laws. Apart from integration at the local level, therefore, there is a need for regional and national land and water use planning, formation of alternative developmental paths and projects, and so on. These should be built on the local level planning that is done by communities with other agencies. And while it is possible for village clusters to do larger level planning (e.g. in the Arvari Sansad example given above), there is here a clear role for the State, in facilitating the local, regional, and national interaction needed for such a large-scale exercise.

Tackling internal inequities: Many local communities are ridden with internal inequities, of caste, class, gender, and so on. These can be significant deterrents to natural resource conservation and management or any other democratic process; in turn, conservation can sometimes exacerbate such inequities⁴. There are many examples where local communities have tackled this problem on their own (for instance, the egalitarian principles on which Jardhagaon 's irrigation and grass-cutting practices are based, or the relative equity in decision-making that Saigatha and Mendha (Lekha) have been able to achieve). But there are probably many more cases where this has not happened. Even in the above examples, instances of inequities persist, such as the inability of the Balai (a scheduled caste) in Bhaonta-Kolyala to ensure land security for themselves, and the disprivileges that women face in most of these communities.

Decentralised governance and management of natural resources will have to tackle this issue as much as any of the others mentioned above, for empowerment cannot be restricted to a section of the local community. Along with ensuring the ecological sustainability of their own activities and resisting destructive forces from outside, this is perhaps the single most important challenge facing community-based natural resource management.

CONCLUSION

I have sketched above only a line drawing of the trends towards community management of their resources and lives. The reality is much richer, more complex, and with more shades of grey, than is possible to depict within the space of a few pages.

By no means are these signs of hope as yet adequate to challenge the destructive paths of 'development' and centralised governance that India has taken for several decades. Nor are they yet strong enough to face up to the juggernaut of globalisation, privatisation, and consumerism that successive governments have unleashed on India in the 1990s. But they do show that there are alternatives, that if only we were to focus on them rather than on the seductive promise of mega-projects and nuclear technologies, than we would emerge a much stronger nation, capable of living well into the new millenium without the threat of political or ecological collapse.

⁴ See, for instance: Sarin, M. et.al. 1998. Gender and Equity Concerns in Joint Forest Management. In Kothari et.al. 1998 *op.cit.* (in footnote 3 above); and Raju, G. 1998. Institutional Structures for Community Based Conservation. In Kothari et.al. 1998 *op.cit.* (in footnote 3 above).

Would you like to know more about these and other initiatives?

Several organisations are working on these kinds of initiatives. Kalpavriksh is also currently putting together a Directory of Community Conserved Areas in India. Lokayan is coordinating a multi-volume series called Seeds of Hope, encompassing such initiatives in conservation, agriculture, education, technology, human rights, and other fields. Regular reporting is carried in Centre for Science and Environment's fortnightly magazine *Down to Earth*.

The following publications will be available soon, for those wanting more detailed information on some of the above mentioned initiatives:

- Kothari, Ashish, Pathak, Neema, and Vania, Farhad. 1999. *Where Communities Care: Community Based Wildlife and Ecosystem Management in South Asia*. Kalpavriksh, Pune, and International Institute of Environment and Development, London.
- Pathak, Neema and Gour-Broome, Vivek. 2000. *Village Empowerment and Management of Natural Resources: the Case of Mendha (Lekha), Maharashtra, India*. Kalpavriksh, New Delhi/Pune and International Institute of Environment and Development, London.
- Suryanarayanan, J. and Malhotra, P., with Semwal, R. and Nautiyal, S. 2000 *Regenerating Forests, Traditional Irrigation, and Agro-biodiversity: Community-Based Conservation in Jardhargaon, Uttar Pradesh, India*. Kalpavriksh, New Delhi/Pune and International Institute of Environment and Development, London.
- Shresth, S., with Shridhar Devidas. 1999. *Forest Revival and Traditional Water Harvesting: Community Based Conservation at Bhaonta-Kolyala, Rajasthan, India*. Kalpavriksh, New Delhi and International Institute of Environment and Development, London.

Kalpavriksh is also organising a monthly series of talks and presentations, entitled Signs of Hope, in Pune and Delhi. This series brings in people working at grassroots levels, on conservation, alternative development, and other such initiatives, for open interaction with audiences in these cities.

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