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Tigers, people and participation—where conservation and livelihoods go hand in hand

Ashish Kothari and Neema Pathak

"We are sharing power with the communities, and becoming stronger in the process". These words of a forest official kept ringing in our heads as we headed out of Periyar Tiger Reserve in Kerala, after a brief but eye-opening visit. Over the four days we were there, we had seen living proof of the success that a participatory approach could bring, and the transformation that can be achieved by a small dedicated group of people.

Till about five years back, Periyar was faced with the same conflicts that plague most other wildlife protected areas in India. Relations between the Reserve officials and local rural communities were tense, to say the least. At least a hundred cases of illegal activi-

ties were registered every year against the villagers, large scale smuggling of sandalwood and poaching of wild animals was a common occurrence. As one of India's premier tiger reserves, it had a substantial budget, and a much larger staff than many less privileged protected areas... yet these were not adequate to stop the illegal activities. Conversely, people who had lived in the area for decades and had a customary claim to its resources for their livelihoods, faced a constant battle to get access to such resources because of wildlife and forest laws. Their alienation from the forest was undoubtedly partly responsible

"We are sharing power with the communities, and becoming stronger in the process"

for their participation in poaching and wood theft.

That was five years back. Today, forest officials are greeted with smiles and warmth in many of the villages, cases of poaching have dwindled to a trickle, the communities seem to have much more secure livelihoods, and one does not get the sense of tension that is so palpable in many other protected areas. What explains this transformation? And is it here to stay, or is the change short-lived?



Picture 1. Periyar Tiger Reserve is one of the few protected areas in India where a participatory approach is being tried with full commitment, breaking out of the mould of 'guns and guards' conservation. (Courtesy Ashish Kothari)

Eco-development and ecotourism

In the late 1990s, using the opportunity provided to them by a GEF-funded Eco-development Project, a set of officials set about on a series of unique steps. They held dialogues with the villages, and offered to help in solving some of their pressing problems. One of these was the severe indebtedness that the villagers had got into, with traders and moneylenders. This was partly a result of poor returns from their main agricultural crop, pepper. A major part of the profits from the sale

of pepper, which was being sold at exorbitant prices in the markets outside, was being cornered by middlemen. Small landholdings and small returns were forcing farmers to convert most of their land to pepper with little or no land left for growing food, increasing the dependence on the market for food. Starting with villages like Mannakudy and Paliyakkudy, the department helped to pay off the debts, and eliminate the middlemen. Villagers were then encouraged to channel some of the increased remuneration to a Community Development Fund, through the formation of Eco-development Committees (EDCs). This Fund could then be used to pay off further outstanding debts, and to provide loans to poorer households to invest in seeds or other agricultural inputs. This also reduced dependence on illegal extraction of forest produce for income generation among the villagers.

To the eco-development staff it was clear, however, that income from such measures would not be adequate. In particular, officials realised that to off-set the income from "illegal" activities such as fuel wood sale, poaching, and so on, there was a need for some viable alternatives. In discussion with the villagers, the idea of using some of the revenues from Periyar tourists, was hit upon. As one of India's most visited tiger reserves, Periyar gets about 400,000 tourists per year, and till the late 1990s all the resulting income was being cornered by private or state tourism agencies, resorts, and shops in the nearby town

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The eco-development team identified different groups of villagers dependent on the Reserve's resources: a group dependent on extraction and sale of cinnamon bark, another group engaged in sandalwood and animal poaching, groups relying on the forests for grazing, others dependent on forests for firewood. In addition there were daily wage forest watchers for whom the government no longer had enough money to pay salaries. For a start, officials offered to drop legal cases filed against those who agreed to participate in the eco-development activities. This broke down the smuggling and poaching network. Those who were earlier involved in illegal trade, knew the trade routes and people involved, hence their expertise proved extremely useful in anti-poaching activities.

After many deliberations with these groups, user group based eco-development committees were established. Specific zones were identified from where fuelwood could be collected and cattle could be grazed. A shop was established in Kumili town, where fresh chemical-free milk from these villages could be sold.

Prior to the eco-development programme the tourists would mainly come for a boat ride in the Periyar Lake. Detailed community based tourism programmes were worked out, the staff contacted the hotels in Kumili, and requested them to include forest treks in the tourist itinerary. Aware of the negative impacts of large-scale tourism, it was decided to strictly monitor and control the number of tourists entering the PA. Also tourist activities are deliberately kept to the tourism zone. The forest treks include a one night and two days programme for

those interested in wildlife, handled by the ex-poachers eco-development committee. Also taken out are morning and evening walks for a small group of people through a part of the forests. These treks are managed by the ex-cinnamon bark collectors and tribal trekkers. The members of the eco-development committee take turns for night patrolling of forests. The EDCs also handle a small shop near the Tiger Reserve gate, where they sell T-shirts and material produced by villagers, and hire out binoculars.

The income generated through the above activities, goes into the accounts of the respective eco-development committees, from where each member of the committee receives a monthly salary as well as maintenance and other costs. For the daily wage forest watchers, the state government is able to provide only 12 days salary; the rest of the salary comes from the eco-development committee's account. This way the Department has been able to retain a few dozen staff that would otherwise have had to be laid off.

Interestingly the areas where treks are taken to or where the tourist activities are concentrated are also areas which are amongst those most prone to smuggling and poaching. According to the Reserve officials, involvement of local villagers in the protection activities has freed some staff to move towards the Tamil Nadu border, which remains a threatened and open boundary.

Our discussions with the villagers revealed that the overall income of the villagers after the initiation of the eco-development was less than from smuggling and other illegal activities before. Yet the standard of living today seemed better, where women felt dignified, men were not forever on the

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Swamy Ayyappan Poonkavana Punarudharana or EDC (the name Lord Ayyappan Forest Regeneration Committee is after a local deity— Ayyappan— for whose worship large numbers of pilgrims come to Sabarimala temple located within the Tiger Reserve every year).

This EDC was created to handle two of the pilgrimage routes through Periyar to the intensely visited holy spot at Sabarimala. This EDC provides alternative fuel source, waste management, and other conservation-oriented facilities to the pilgrims, who were earlier rather destructive in their use of the forest they were walking through.



Picture 2. Patrolling team of the Vasant Sena (women's forest conservation force), which sends out 5-6 women every day to monitor activities in the forest. (Courtesy Ashish Kothari)

The people respond

Three-four years into the initiative, forest officials got a pleasant surprise when, on 24th November 2002, a group of women from nearby villages started patrolling the forests. They formed a "Vasant Sena" (which literally means the "Spring Army" but here signifies the army of women), with 6 women volunteering to go on patrol every day, on rotation. They also began to maintain records of the flora and fauna they came across along with any illegal activities, if any. A year later, when the 100-plus women of the Vasant Sena met on 24th November 2003, they had kept up the vigil every day for 365 days.

At this celebration of the first anniversary of this unique initiative, they discussed how to continue the patrolling, how they would sustain themselves, what sort of relations they

wanted with the Forest Department. When asked what motivated the effort, the simple response was: "we do this for our children...if the forest does not survive how we will?" Officials, who were wondering if the initiative was taken to garner some funds from the government, are now convinced that it has nothing to do with the monetary or material considerations. When asked what they expected from the Forest Department the women said "only that you remain the friends that you have been". The past history of tension and frequent harassment was probably still fresh in their memory, and it was the end of this that seemed to matter more than money. Nevertheless, to honour

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and encourage the initiative, the department has provided a raincoat, cap, and backpack to each woman, for use during the patrolling.

The quiet transformation in Periyar is manifest not only in the better relations amongst officials and villagers, and en-

"when we were poaching it took us days to find one gaur, now that we are taking the tourist around we find them everywhere!" The Reserve officials also assert that wildlife has significantly benefited

hanced livelihood opportunities, but also in the social arena. Reportedly, indebtedness to money lenders and heavy alcohol consumption among men had in the past led many women to turn to prostitution in the tourist town of Kumili,

and the men to various 'criminal' actions. The availability of more dignified opportunities in the last few years had allowed people to move away from such demeaning activities.

Another powerful example of how the initiative has helped create a stake in conservation, was recounted to us by two people from the *adivasi* (original settlers or Tribals) settlements. They spoke of how some social activists had come to them in the recent past, trying to incite them into encroaching into the Tiger Reserve as a legitimate *adivasi* claim on land. In both cases the villagers had refused, saying that they would continue to demand more land from the government, but would not grab forest land for the purpose.

How has this initiative affected the ecosystem and the wildlife therein? Our conversation with the members of the eco-development committees indicated that there has been substantial increase in the wild animal popula-

tions. As one trekker mentioned "when we were poaching it took us days to find one gaur, now that we are taking the tourist around we find them everywhere!" The Reserve officials also assert that wildlife has significantly benefited.

Can the initiative last?

So what has made this transformation take place, when in many other parts of India, eco-development initiatives have been either dismal failures or at best inconsequential? It is not possible to provide simple answers to this, and perhaps there are many intangible factors that will never be discernible. One factor may be the generally high level of social mobilisation in Kerala compared to most other states of India...

and maybe also the higher level of literacy. The successful recipe of the Vasant Sena certainly seems to include such ingredients. But one of the biggest reasons seems to have been a set of highly motivated, innovative, and above all, democratically-inclined forest officials. This group of people could come

...a set of highly motivated, innovative, and democratically-inclined forest officials... a team...with constant discussions and deliberations, regular experimentation, improvement through feedback... open... sensitive... not afraid to try bold ways of achieving local support ...

together because the eco-development plan provided for an ecologist, an economist, a sociologist and forest officials to form a team. This group eventually became a small study circle with constant discussions and deliberations, regular experimentation, and improvement through feedback. They were open enough to try anything that would work. They were sensitive to the

people around them. In their relations with the villagers, we found them more like social activist NGO representatives than government officials... or rather, like what government officials should be! They had the interests of wildlife conservation squarely in their sights, and often engaged themselves in lengthy discussions on impacts of people's participation on wildlife, yet they were not afraid to try bold ways of achieving local support and of putting people's needs also as a central focus. One example stuck in our minds. Aware that the *adivasis* were dependent on fish from the Periyar Lake within the reserve, but also that such fishing may be considered to be 'illegal', they continued to permit fishing. They simply stated that the Tribals catch the exotic fish species that had entered the reservoir from an adjacent private estate. The argument could then be made that this activity was good for the indigenous species threatened by exotics (the wildlife law permits activities that are for the benefit of wildlife)! Indeed, the argument is doubly valid, for not only does this help to reduce exotic populations, but it also provides a continuing stake amongst the villagers to protect the reserve.

But, we asked, is access to livelihood resources are not established as rights, are they not subject to the whims and fancies of the Reserve's officials? The eco-development officers agreed, and said that one step towards this was the codification of such access to resources within the eco-development micro-plans. The next would be to include the provision of this access in the management plan of the reserve. They also agreed that the basic premise of eco-development as promoted in the GEF project, of securing conservation through reducing the 'pressures' of local people on the forest, was par-

tially faulty... An equally, if not more, important focus should be on promoting the positive relations of these people with the forest, including their traditional knowledge and practices of sustainability. Finally, they expressed a clear preference for involving local communities in the management of the Reserve, going beyond the current eco-development model of providing biomass and livelihood needs. Interestingly, they felt that there was no need to relocate the one village that was inside the Periyar Sanctuary, asserting that its presence was not only non-detrimental to conservation objectives, but actually supportive since it helped to check illegal activities by outsiders...

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Picture 3. Community based tourism at Periyar has helped generate livelihoods for local tribal people, and created a greater stake for conservation. (Courtesy Ashish Kothari)

Our next concern was: how would this initiative be sustained? The GEF project was drawing to a close in early 2004, what would happen after that? What if resources dry up, but even more than this, what if the current set of officials is transferred? This was a concern also voiced by villagers, and by officials, who did not want to see five years of hard effort coming to naught if the Reserve came under an insensitive set of officials. And so the Periyar team embarked on another innovative step, the formation of a Periyar Foundation (see Box 1 for details). This auto-

nous agency was set up in late 2004 by the state government, and has both government officials and community members in decision-making positions. This is an interesting and important experiment to watch, for other protected areas in India to learn from. It follows an earlier important step towards greater sustainability, the formation of a Confederation of Eco-development Committees, in early 2002. This Confederation enables greater collective power, exchange of experience, and conflict resolution.

Box 1. Achievements of participatory approach at Periyar Tiger Reserve and creation of the Periyar Foundation

Source: Promod Krishnan, Field Director, Periyar Tiger Reserve, Kerala, India, July 2005.

The India Eco Development Project, funded by the World Bank and the Global Environment Facility was implemented in the Tiger Reserve from 1996 onwards. The basic objective of the project was to reduce the impact of local people on forests by providing alternate and sustainable employment and involves them in forest protection activities. The project ended on 30.06.2004, after a period of seven years. Some of the achievements of this project in Periyar Tiger Reserve were:

- a. the protection of forests in Periyar Tiger Reserve improved significantly with substantial reduction in illegal cutting of trees, poaching, firewood collection, etc.;
- b. employment opportunities created to the tune of around 1, 00,000 man days, benefiting mostly the Tribals;
- c. community based ecotourism programmes generating around Rs 60,00,000 annually and providing direct employment to more than 500 tribal families;
- d. more than 2000 families participating in Sabarimala pilgrim season business and earning a decent livelihood;
- e. the state Government saving around 10 million rupees annually for the management of Periyar Tiger Reserve through the voluntary involvement of local people in forest protection.

In order to sustain these achievements beyond the life of the existing project, a public Trust named Periyar Foundation was established in 2004. The main objective of the Foundation is to support Periyar Tiger Reserve management in biodiversity conservation and community development activities with a landscape perspective. Being an autonomous organisation, the Foundation has the operational flexibility of a good Non Governmental Organization while getting the support from the Government.

Some important features of the Foundation are:

- it is a Government owned public Trust;
- the foundation works through a Governing Body (Chaired by Forest Minister, Kerala and Field Director, Project Tiger is the Executive Director) and an Executive committee;
- the Foundation also has public representation, as it includes members such as a local Member of Parliament, the Presidents of District Panchayats (local political body), members of the EDC, scientists and others;
- the Foundation has hired professionals in the field of ecology, sociology, economics, education and

others to undertake various activities;

- the Foundation is free to mobilize independent, local, regional, national and international resources;
- the Foundation is levying an Eco-development Surcharge from visitors to the Reserve (Rs.100 from foreigners and Rs10 from Indians).

Some activities carried out by the Foundation so far:

- improvement of the local Primary Health Care Centre located in the tribal settlement;
- upgrade of the basic amenities at 38 village *Anganavadis* (play schools) around the Reserve;
- adoption of three tribal schools around the Reserve;
- lead of the Clean Periyar Tiger Reserve Campaign and supply of waste bins to Kumili town;
- five research programmes conducted in the Reserve;
- 25 capacity building/ training programmes for staff and EDC members;
- accessed funds from Tourism Department (Rs.15, 00,000) to improve tourism facilities in the Reserve;
- sustained various eco-development activities in PTR.

We recommend that this remarkable effort is followed up with other measures, such as:

- finding diverse livelihood opportunities (there is currently too much dependence on pepper and ecotourism) including through the re-orientation of rural development programmes;
- facilitating greater community take-over of tourism which is currently in the hands of private or government tour operators;
- providing additional land to *adivasis* as close to the current settlements as possible;
- involving communities in the management of the Tiger Reserve;
- establishing clear rights to essential resources;
- respecting and utilising traditional knowledge in conservation; and
- addressing inequalities in the distribution of benefits amongst different EDCs and village groups, some of which have been pointed out by NGOs like Equations.

Eventually, the process needs to enter even more fundamental issues, which help re-establish community-based and

-controlled natural resource management, and reverse the historical alienation that has taken place between

adivasis and forests. There is also a need to search for alternative models of education, health, and employment that build on the skills and traditions of the communities themselves, and that help reconnect them to nature rather than alienate them further. There is already thinking towards many of these issues in the team at Periyar. The current initiative is a very good start, and it needs such vision and courage to tread further down the path of transformation.

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Ashish Kothari (ashishkothari@vsnl.com) and **Neema Pathak** (natrails@vsnl.com) are members of Kalpavriksh – Environmental Action Group, TGER and TILCEPA—the IUCN Theme on Indigenous/Local Communities, Equity, and Protected Areas, which is a joint Theme of The Commission on Environmental, Economic and Social Policy, and of the World Commission on Protected Areas. Ashish is actually the TILCEPA Co-chair.