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FOUNDATION FOR ECOLOGICAL SECURITY



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Our Mission

As 'ecological security' is the foundation for sustainable and equitable development, we are committed to strengthening, reviving or restoring, where necessary, the process of ecological succession and the conservation of land, forest and water resources in the country.

To this end we:

Work towards the ecological restoration and conservation of land and water resources, in conserving the uplands and other eco-fragile, degraded and marginalized zones of the country and to set in place the processes of co-ordinated human effort and governance to achieve this objective.

Undertake any such work either directly, or with and through a range of democratic village institutions, their federal bodies, and Civil Society Organisations as are in our opinion, set up through initiatives that are ecologically enlightened and sustainable as well as socially and economically equitable;

Strive to ensure the ecological integrity of all such efforts by working, as far as possible, with entire landscapes, and with all the interrelated communities within it, through a range of arrangements on their land and aquatic resources including Commons, Public or Private;

Work for and promote stability of the ecosystems through the protection and restoration of biological diversity, including the diversity of species, age diversity, genetic variability as well as that of structural composition;

Collaborate with Panchayati Raj and other democratic village institutions, as well as appropriate Civil Society Organisations, in their effort to contribute towards our objectives, and provide technical and financial assistance to them.



Our Organisation

Registered under the Societies Registration Act XXI, 1860, the Foundation for Ecological Security was set up in 2001 to increase and strengthen the processes of ecological restoration by working across local, national and regional landscapes over various contiguous ecosystems, including different categories of land, and most importantly with a variety of community institutions.

To achieve this purpose in a complex and diverse environment as is prevalent today, FES endeavours to be an organisation that is imaginative, versatile, innovative and one which accelerates the process of people's participation in ecological restoration of the country. The Foundation looks beyond the human dimension and encompasses the much broader ecological concerns required to ensure the security of the natural processes that human, plant and animal communities, including myriad micro-organisms, depend on.

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Our Approach

While Nature functions as a fairly independent system and could perhaps rejuvenate and reach an equally good state in the long run, we assist the villages in bringing in a semblance of care and nurturing, and informing the decision making on the threshold indicators that we are aware of and alive to.

A

pocalyptic as it may sound, human society today is faced with an ecological crisis of its own making, the consequences of which would not only be borne by our future generations but would also drastically alter our lives in the immediate future. The planet is faced with an unprecedented mass extinction of floral and faunal species, sea levels are rising and many credible scientific and research institutes clearly link, and with good reason, the increase in temperatures, the many severe storms and flooding to uncontrolled ecological destruction, perilous and unregulated industrialization and runaway consumption by our globally-connected and market-driven society.

Closer home in India, the receding glaciers, shrinking cover of natural forests, the rapid loss of biodiversity, the falling groundwater levels, inter annual variations in rainfall, rising temperatures and falling agricultural productivity point to the disturbing health of our ecosystems as if bordering the tipping point, if not well past it. In recent years, the failing health of our ecosystems is palpably felt in both urban and rural areas, ominously bringing home the point that consequences of such gross neglect would have to be borne alike by man and beast, rich and poor, cities and villages.

Central to this malaise are two basic fallacies perpetuated by human society: firstly, an infallible belief of its dominion over nature and secondly, the promise of economic growth offering a brighter future. As we move towards fixing environmental problems, increasingly with an overdrive of economic solutions, we lose sight of a larger truth that economy and human society are but subsets of the environment. Amidst this we are surrounded by a confounded din of reductionistic thinking that sensationalises obscurant findings, and desensitises and detracts the remains of a conscientious society that lives in reverence to nature. At a local level such a paradigm

may be likened to the legendary Trojan horse, subsuming free societies and relegating nature to the position of a raw material.

While reasons for pessimism are aplenty, we see the role of our organisation in:

- centre-staging an ecological agenda in an economically dominated world view,
- reorienting development with a conservation and social justice perspective and
- presenting local visions and voices at local and global levels.

Within an overarching domain of 'Ecosystems, Governance and Livelihoods', so far, our efforts have been more tangibly focused upon the conservation and restoration of forests and other common lands at a landscape level through local self governance institutions and their federating processes. Through our body of work on ecological restoration

we seek to bring to the fore the invaluable role that forests play in maintaining ecological health as well as providing critical support to agriculture, animal husbandry and other rural livelihoods. By strengthening institutions for collective action around the commons we seek to build spaces that enable the poor and marginal groups to engage with dominant sections on an equal footing. The principles agreed upon for the governance of the commons rarely remain restricted to the commons alone and spill over into other areas of rural life. Building on the existing ecological, social and economic realities of the area, we assist communities in designing appropriate regional landuse plans that embody principles of ecological well being, social justice and economic viability.

In order to facilitate dialogue amongst diverse interest groups and build the capacities of local communities to take informed decisions on the status of their natural surroundings and patterns of extraction we are bringing together interested individuals, representatives of villages, *Panchayats* and civil society organisations, academia and government functionaries so that a better stewardship of the area emerges.

Considering the magnitude and level of degradation and deprivation in other areas, the need for approaching remedial action through a diverse range of strategies and at various levels, the scope to inform and learn from

others' experiences and coalesce to build public opinion, we also join hands with like minded organisations in supporting critical initiatives in the country to undertake studies, disseminate information, and dialogue on the conservation agenda. Considering the scale at which government machinery operates and the opportunity to reach to larger tracts and influence positive action we also assist the government by conducting training programmes for their staff, drawing perspective plans and natural resource management plans, and designing illustrations for programmatic and policy action.

Our experiences on the ground give us vital and valuable insights into the working of the rural mind, their views on conservation and development, the complexity of conservation action at local and regional levels, and their perception of public policy. We build on these insights to influence policies on

conservation, landuse, and governance and impress upon policy makers the compelling and immediate need for pursuing a development agenda that is firmly grounded on Ecological Security.

Ecological Restoration

In the varied ecological settings we are located in, from the mixed deciduous forests of eastern India, to the xeric and shrub forests of the Deccan Plateau, the grasslands of the Malwa region in central India, the dry deciduous forests of the Aravalli hill range in western and north India, to the western Himalayas, we work with community institutions and their federating bodies to restore the biomass productivity, improve the moisture regimes and protect biodiversity on thousands of hectares of forests and other common lands.

In our approach to ecological restoration we work in parallel on a number of processes, even as we engage with community institutions on understanding their patterns of use and access to their natural surroundings, we build information on the lay of the land, the hydro-geology of the area, species diversity, the availability and extraction of biomass and water, and the ecological history of the area. The information is used to build a dialogue with and importantly within the community culminating in the



While social mobilisation has led to regenerating forest cover on large tracts of lands, succession allowed only some dominant species to benefit from protection, necessitating measures to improve biodiversity.

development of an appropriate ecological restoration plan.

Management decisions begin by determining which areas are to be protected, and which are to be left open for alternate landuse options, and deciding suitable soil and moisture conservation measures. Simple and cost effective measures to prevent soil erosion and improve moisture regimes aid in the process of regeneration, and where necessary natural regeneration is assisted through seeding and the planting of indigenous tree and grass species that suit the stages of succession and other edapho-climatic parameters.

Where the efforts take hold, the returns are almost immediate in terms of an increased availability of biomass, improved soil and moisture regimes, and where the geo-hydrology supports recharge, an increase in the water table and an associated increase in the area under cropping. Over a period of time sustained efforts in protection have been linked to better farm productivity, an improvement in the health of livestock and increased availability of

forest produce. Efforts in conservation have led to the reappearance of many native plant species, and an increase in the floral diversity in the areas under protection.

While efforts on the conservation of biomass are bearing fruit and are visible on vast stretches of land in all locations, we are gradually progressing towards identifying species that are critical to the area and are beginning to reappear, and gearing up the communities to make special efforts in protecting them and their habitats. On the other hand we are also stepping up dialogue within the rural communities to bring balance between the availability and the usage of biomass and water resources and check incompatible landuse practices as well as bring discussion around equitable distribution of resources. We have initiated studies to inventory the biological wealth of the Protected Areas in a few project locations to highlight their significance and gradually progress towards integrating them in the larger landuse and natural resource management plans of the area.

As we continue our efforts in restoring the stability of ecosystems, we are increasingly alarmed by the growing disconnect both in the policy mindset and popular perception in viewing forests and farming systems together. Without getting into the possible explanations for such an outcome, we seek to surface the critical value that forests and common lands play in maintaining the vitality of agriculture and thereby, of rural livelihoods. In order to further the thinking on deeply entrenched positions, such as the effects of grazing, fires and human association on forest flora and fauna, we have initiated collaborations with like minded organisations in finding working solutions that would have the least damage on ecosystems and livelihoods. Moreover, as important findings in the field of conservation ecology rarely make inroads into the widespread and conventional efforts on natural resource management, we are taking steps to disseminate information that could blend lessons learnt in conservation disciplines with practices in natural resource management.

For most indigenous communities, plants, animals and other natural features are of totemic significance. Restoring forests is not just about saving valued species but also their identity and culture.

Institutions in Local Self Governance

The gradual erosion of the traditional community institutions that managed the village forests, grazing lands and tanks has meant that any effort to restore the degraded lands needs to be accompanied by action that strengthens and revives local and collective stewardship of the natural surroundings. Central to our work on ecological restoration is the endeavour to understand local community institutions, revive collective action and strengthen tenure arrangements over forests and other common lands in favour of communities. Based upon the administrative category that the land falls under, we work with Village Forest Management and Protection Committees, Grazing Land Committees, Tree Growers' Cooperatives, *Gramya Jungle Committees*, *Van Panchayats* and *Panchayats*.

The central tenets of our work in strengthening village institutions in the governance of natural surroundings are:



- Improving the democratic behaviour of both traditional and emerging institutions so as to check their parochial and patriarchal interests and make them more inclusive and representative.
- Nesting various forms of village institutions for management of natural resources under the constitutionally enshrined umbrella institution of *Panchayats* as well as work directly with *Panchayats* and their subcommittees, to strengthen the lowest tier of governance.
- Facilitating institutional arrangements that enable transactions within and across hamlets and user groups that share resources and have overlapping or competing interests so as to check injudicious exploitation of resources as well as provide equal access to benefits.
- Bringing together the representatives of village institutions, civil society representatives, academia and government functionaries to build better stewardship of the area and its natural surroundings and take informed choices for judicious landuse.

Working with Tree Growers' Cooperatives since 1986, we were instrumental in arranging for better tenure arrangements by way of lease of revenue wastelands in favour of village institutions in seven states that we operate in, providing secure footing for better management of common lands. With new policy initiatives and the initiation of Joint Forest Management arrangements and watershed development programmes, the range of institutions that we worked with expanded and we could extend decades of experience in crafting and strengthening village institutions around common property resources, common lands in particular, to the new form of institutions. The introduction of *Hariyali* guidelines reinforced our views and experiences of working with *Gram Sabhas* and subcommittees of *Panchayats* on the need for integrating the management and governance of natural resources within the fold of *Panchayats*.

As we continue to work with village level institutions and work towards the restoration of degraded forests lands, revenue wastelands, *Panchayat* grazing lands, etc. in a contiguous manner, we feel the need for

more formal arrangements where village institutions formed under various programmes irrespective of their departmental patronage are dovetailed within the ambit of *Panchayats*. While this would bring more legitimacy of the village level efforts due to the constitutional status of *Panchayats*, it would also provide an opportunity to bring more accountability of the *Panchayat* to its constituent villages. Such efforts would also need to be complemented by enabling a wide set of transactional arrangements within and between villages for sharing both rights and responsibilities in providing for and appropriating from the natural surroundings.

In assisting communities to take steps for a better stewardship of the area, we are bringing together interested individuals, representatives of civil society, academia, political parties and government functionaries on common platforms. Such platforms are also aimed at promoting interdisciplinarity in generating options, coherence in taking action and shared but differential responsibilities in stewardship. While local communities with their competing interests would need to determine local landuse, we are

instrumental in synthesising and putting in local idiom the body of knowledge spread across different agencies, such that the communities and their representatives can take informed action. As the academia and other research bodies engage with local level issues and help generate viable options for action, the government functionaries must enhance their roles to drawing up conducive programmes and administering regulatory functions.

Central to our work on ecological restoration is the endeavour to understand local community institutions, revive collective action and strengthen tenure arrangements over forests and other common lands in favour of communities.

Conservation and Livelihoods

Speaking from two ends of the spectrum, advocates of conservation argue for weaning away of the rural poor from their dependence on forests, whereas the groups advocating human rights view forests as a significant and irreplaceable right to livelihood. While there is a need to minimize or restrict human impact in several eco-sensitive regions inhabited by critically threatened species, in several other forest areas conservation and livelihoods can be complementary goals where the rural communities by their very position are best placed to be partners in conservation.



Whether commons and farmlands need to be converted into bio-diesel plantations is an issue that needs to be debated. Local communities would stand to benefit more if research were directed at modifying rural stoves and motors to run on bio-diesel, encouraging local consumption and control over resources.

In a country as vast and complex as India it is desirable to take a pluralistic view of forests as there is considerable scope to diagnose issues at specific locations and arrive at prescriptions with either environmental or social or twin priorities.

On a different plane, the discussion around managing forests in India is gradually moving away from a timber perspective to that of poverty alleviation and rights of local people over forestland and produce. Located as we are in severely degraded landscapes with considerable human presence, we are often posed with challenges of whether the conservation of forests and natural resources is contributing to poverty alleviation. On the flip side, in our efforts to strengthen village institutions to safeguard forests, it is also becoming increasingly evident that the resilience of such institutions in conserving forests is also determined by the economic condition of the local people, in a way giving rise to another set of questions of whether poverty alleviation can contribute to conservation.

In such a scenario, our approach towards conservation

and livelihoods is:

- Protecting forests for their biodiversity, biomass and hydrological functions which are also of critical value to the farming systems.
- Locating forests and natural resources within the larger ecological, social and economic landscape so that conservation is determined by the local context where ecological restoration, social mobilisation and poverty alleviation measures are multitudinal strategies aimed at conservation and improving local livelihoods.

Where our efforts on ecological restoration take hold, the returns are almost immediate in terms of an increased availability of biomass, improved soil and moisture regimes, and where the geo-hydrology supports recharge, an increase in the water table and an associated increase in the area under cropping. In parallel, our efforts on strengthening village level institutions in the governance of natural surroundings also significantly contribute to the improvement of livelihoods, where people seen conventionally as wage earners become equal partners

and determinants in conservation. Besides benefiting directly from the improved availability and access in terms of fodder and firewood, or palpably sensing equality in terms of low or no pricing for such produce, the restoration of forests and grazing lands as commons is akin to land redistribution to the poor.

In economically deprived areas, efforts aimed at protecting forests are also being complemented with efforts to improve the farm based incomes of the local poor such that their poverty does not lead them to exploit the very forests and natural resources that they are safeguarding. In some locations, considering the cash starved nature of their economies and the opportunities emerging from improved agricultural productivity and animal husbandry, we are promoting initiatives that can add value and access markets.

As forests tend to be displaced by other landuse options primarily for the direct economic benefits that

such choices offer, we would, on the one hand, focus our efforts to highlight the value of forest ecosystems in the viability of farming systems and, on the other hand search for ecologically suitable options that would add to local incomes. As most of the contemporary initiatives on livelihood promotion do not take into account the threshold limits of ecosystems and suggest an exploitative trend that is untenable in the long run, in our search for suitable livelihood initiatives we would strive to highlight the principles and practices of designing natural resource based livelihood options that are ecologically sound and economically rewarding.

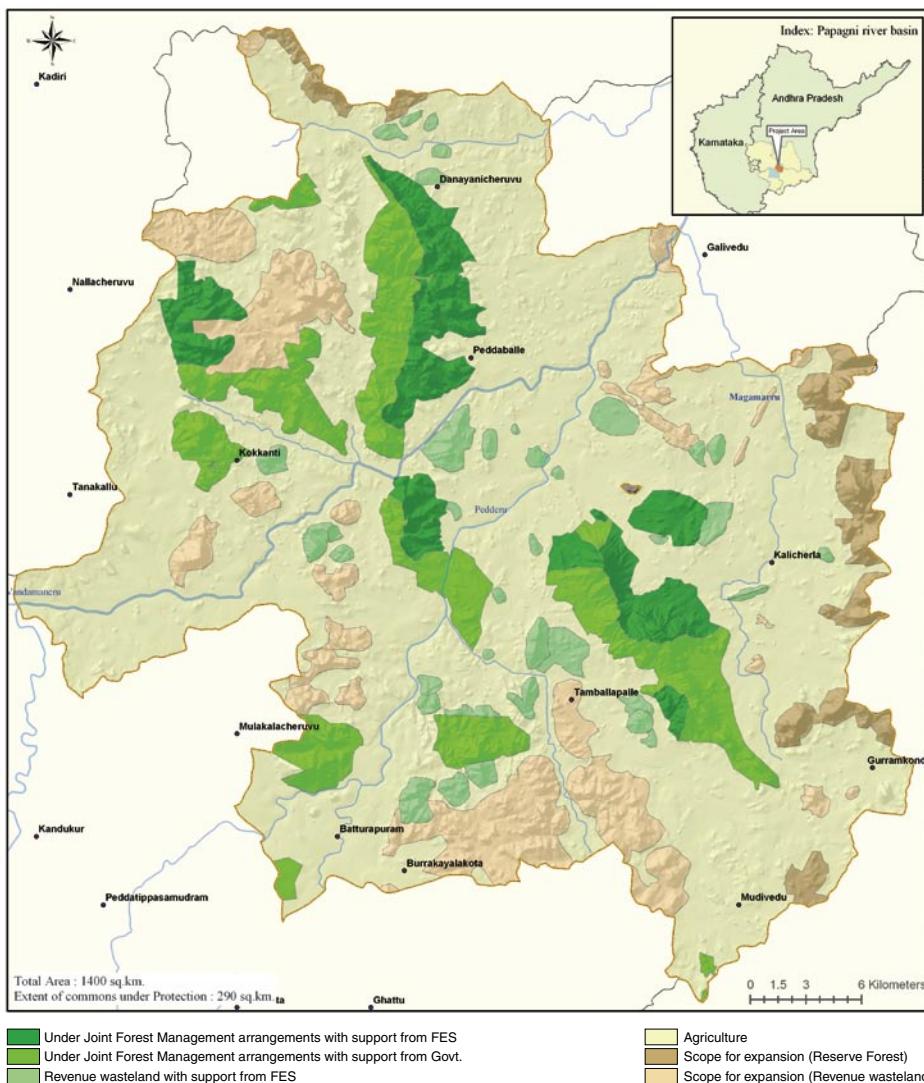
Efforts at Landscape Level

Nature draws her own boundaries. Mountain ranges, rivers, deserts and the seas harbour within their boundaries a variety of ecosystems, which are closely linked to one

Conservation of forests would benefit from a landscape level perspective. Assigning preservation, conservation and exploitation objectives to different parts of the landscape would preserve natural heritage and meet subsistence and market needs.



**Commons Protected by Local Communities
FES Project Area: Madanapalle, AP**



A map to show the extent and contiguity of common lands under protection, also highlights the need to work at such scales to realise both the full potential of the ecological services that forests provide as well as bring together communities around discussions on who is gaining and who is losing.

another and nurture unique and diverse life forms. As administrative considerations find expression in a new mosaic of boundaries and an array of departments, developmental efforts aimed at improving a given area tend to be fragmented approaches often working at cross purposes, giving rise to a new set of complexities and failing to leverage action necessary for the development of the whole area. Moreover, customary norms of protection, access and exchange from the natural environment by rural communities are seldom bound by administrative ordains which do not necessarily take into cognisance the lay of the land and the customary landuse practices. Hydro-geological characteristics, the spread of forests,

grazing lands and drains across habitations and categories of land administered by different arms of the governments, necessitate institutional arrangements that span across habitations and departmental domains. Efforts to arrest and reverse degradation therefore need to be undertaken at an appropriate scale, determined by ecological considerations and alive to the communal norms for use and access.

By working on uplands, along a river basin or a range of hills and with every community inhabiting the contiguous stretch through appropriate tenure arrangements, we bring large tracts of forests and other common lands under a protection regime. By working at such scales along the hill ranges and undulating terrain these protected landscapes help maintain the quality and regularity of water supply and nutrients to the farming systems. By choosing to work in areas that have large stretches of public land that is customarily held as commons and in areas adjacent to reserve forests, we strive to provide additional habitats for a variety of life forms and improve the ecological services to the dependent local communities.

Beginning at habitation level, we progress towards working with conglomerates of villages that share common ranges of forest hills, grazing lands or watercourses. Besides benefiting from the varied ecological services that only efforts at such scales offer, the landscape level approach offers scope to arrive at arrangements where preservation and conservation of natural endowments are conceivable, and where dialogue between those who conserve and those who exploit is possible.

Our Progress

In every location we work towards improving the local stewardship of natural resources.

Work on contiguous patches of land provides both an opportunity to work comprehensively at a scale that conservation action demands, as well as adds complexity in building a common vision amongst its constituencies.

We began by implementing the Tree Growers' Cooperative Project that sought to engage rural communities through Tree Growers' Cooperatives, in regenerating 40 hectare plots of leased revenue wastelands to meet their firewood and fodder needs. Through experience we came to appreciate that we had set a limited mandate for ourselves,

and one that restricted the much-needed effort in ecological restoration of the degraded and threatened landscapes in the uplands of our country. Successful as we were in creating woodlots and efficient cooperatives, the proclivity of such an institutional template to merchandise the produce and make monetary surpluses tended to exclude the poor who depended on such lands for their basic sustenance and also engineered processes that were not conducive to the ecological restoration of the area. Besides, the limited agenda of working with cooperatives and revenue wastelands could not seize upon the emerging opportunities under Joint Forest Management programmes, Watershed Development programmes and the 73rd Amendment to the Constitution.

We expanded our work to include the existing and emerging forms of community institutions and address degradation on *Panchayat*, forest and revenue categories of lands in a contiguous area defined by ecological considerations. By strengthening the inter-linkages

Marking the beginning of the planting season, representatives from several community institutions walk through the forests to plant saplings and use the occasion to reaffirm their bonds with the forest.



Progress Update 2005-06

Measures to boost Eco-restoration

- Till March 2006, 80,000 hectares of land was under collective management by community institutions. Soil and moisture conservation activities and plantation measures were undertaken on 33,731 hectares of land, with 8,932 hectares of land under natural regeneration.
- 10,895 hectares of revenue wastelands have been leased to community institutions. In addition to this we are also assisting the community institutions in protection and improved management of 6,159 hectares of grazing lands, 8,383 hectares of *Van Panchayat* lands, and 1,351 hectares of Gramya Jungle lands in Orissa. Communities through Joint Forest Management arrangements are regenerating 14,183 hectares of forestland.
- Work on building an information base on parameters such as hydrology, biomass, biodiversity and energy through representative studies in each location continues. Collaborative studies were undertaken to understand the status of surface and ground water availability in the project locations in Andhra Pradesh and Karnataka. Similarly, studies were also undertaken in Orissa, Rajasthan, and Madhya Pradesh to improve our understanding on the changing patterns and politics of water use.
- The Foundation and the World Agro-Forestry Centre began to work together on issues of land degradation and soil fertility. The action is aimed at deepening our understanding of the flow of nutrients across different components of an ecosystem besides developing insights at viewing soils as a living organism.
- The initiative on developing 'A Time Series Atlas of Key Natural Resource Parameters for FES Project States' begun last year was taken further. A comprehensive atlas was developed for the project area in Karnataka, that besides mapping the changes also includes a detailed analysis explaining these changes.
- The Government of Orissa has accorded permissions to undertake studies in the Satkosia Gorge Wildlife Sanctuary as a result of which we made assessments of the biomass and biodiversity of the sanctuary, which indicated very high levels of both.



Developing Institutional Capacities

- Community institutions include 540 Tree Growers' Cooperatives, 167 Village Forest Protection Committees, 41 Grazing Land Development Committees, 49 *Panchayati Raj* Institutions, 92 Village Committees, 40 Gramya Jungle Committees, and 64 *Van Panchayats*, taking the total number of village institutions associated with to 993.
- The work in Chintamani, Karnataka and Udaipur, Rajasthan towards linking local community institutions with *Panchayats* and the efforts to activate the *Panchayat* sub-committees besides improving the capacities of the *Panchayats'* members is being further enriched by building organic linkages with representatives of civil society, academia and government functionaries to sustain the efforts in integrating natural resource management and governance within the fold of *Panchayats*.
- A mapping initiative in project locations gives a comprehensive picture of areas that are under community protection (with our assistance and otherwise), the scale and impact of the protection measures, the areas presently not under protection and which need to be brought under protection to optimise the conservation effort.
- FES teams and community institutions in Madhya Pradesh, Orissa, Rajasthan, Gujarat and Andhra Pradesh were effective in leveraging development funds from a number of government programmes and schemes. Over Rs. 140 million was leveraged for implementation of activities aimed at increasing the water availability, improving soil-moisture conservation and for other complementary activities.
- In every location that we work regional forums comprising representatives of village institutions have emerged. Defined by proximity, social affiliations or common resources, such regional forums meet at periodic intervals to discuss issues of common concern, represent their views to government and organise campaigns or agricultural fairs.

between the various production systems through our work on ecological restoration we have begun to bring entire landscapes under a suitable conservation regime. In each location over 100 community institutions covering a total of over 1,00,000 rural households are actively involved in protecting and managing over 80,000 hectares of forests and other common lands.

Agreements have been signed with state governments for lease of revenue wastelands at a nominal lease fee to community institutions associated with the Foundation. Encouraged by the sustained effort in conservation and sustainable management of the leased lands by the community institutions, several state governments have increased the lease period from an initial ten and fifteen years to fifty and ninety-nine years and from the earlier forty hectares of revenue wastelands to all the wastelands that fall within the administrative boundary of the village.

State and District Level Coordination Committees

comprising Secretaries and senior officials of relevant departments have been set up to share progress and ensure smooth implementation of project activities. Government agencies at various levels have begun to recognize and appreciate our experiences and we are collaborating with the state and district administrations in several project states assisting them in drawing up strategies and plans for implementation of several developmental initiatives including the National Rural Employment Guarantee Programme.

Learning Processes

Our work in diverse ecological settings and the economic, social and political environment in each of these locations demands from us a culture of openness to learn from the communities we associate with, from the experiences of peer organisations across the world and from our own experiences.

Discussions between village representatives and project personnel on designing a water harvesting structure challenge both local and outside opinions for its relevance, suitability, cost effectiveness and the ability of the local owners to maintain it.



In our interactions with communities we see ourselves as partners learning from them and working together to evolve conservation strategies best suited to their region. In two decades of working on ecological restoration through community institutions we have succeeded in building a rich body of knowledge on building common property institutions around forests and other natural resources.

Collaborations

With the Ashoka Trust for Research in Ecology and Environment (ATREE), Bangalore to assess the potential and present rates of extraction of groundwater in the Papagni River Basin.

With ATREE on assessing the impact of fire and grazing on regeneration in reserve forest areas in the Madanapalle project area.

Understanding 'Water Sales in the Papagni Basin' in Karnataka in collaboration with Dr. Somanathan from the Indian Statistical Institute.

Multi-location studies with International Water Management Institute (IWMI) on issues related to water use.

Documenting fodder species, traditional silvicultural and grazing practices and the use of indigenous flora in veterinary medicine in collaboration with ANTHRA in our Madanapalle project.

With the World Agro-forestry Center on mapping soil-fertility and mapping the flow of nutrients across different components of the landscape in project areas in Rajasthan.

With the Munnarakunnu Trust on ex-situ conservation of the floral bio-diversity of the Western Ghats.

With Kalpvriksh in publishing the Protected Area Update newsletter

In addition to encouraging a culture of heuristic learning, we continue to strengthen our learning through a strong internal capacity building process. Over the year our capacity building cell designed and conducted a series of training programmes on concepts, approaches and technicalities in ecological restoration. The loose knit social-institutional group of the organisation also drew from the experiences of staff members across all locations and deliberated upon the challenges that working on conservation issues at a landscape level throws up.

Besides participating in training programmes that are

offered by other institutions, we have also been involved in designing and conducting training programmes for other agencies in several locations. Aimed at driving in dimensions of conservation and common property resources into the mainstream efforts on natural resource management, we see such programmes as opportunities for scaling up our efforts.

We work in collaboration with other agencies to gain a better understanding and bring value to the ongoing efforts on conservation in the country. We see these joint initiatives as an opportunity to bring the learning and experiences of these agencies into our work and at the same time allowing them to benefit from the body of knowledge that we have built over the past two decades through our efforts on ecological restoration in a variety of geographical settings. Some of the areas of collaborative search include Forests and water linkages; Drylands and land degradation; People and Protected areas; Restoration Ecology in critical habitats, Meso level institutions; and Social Ecosystems and Institutional infrastructure. We also assist other organisations in spatial information analysis from a database that we continue to build over the past decade.

Mapping Community Efforts in Conservation

On-ground assessments combined with studies using satellite imageries and other monitoring tools undertaken by us over the past few years validate the positive impact that community based conservation efforts have had on the landscape. Not only has the vegetation cover improved considerably in the protected areas but the efforts have also paid off in terms of an improvement in the groundwater table, farm productivity and the area under cropping.

We believe that community led conservation efforts do play a vital role in improving the vegetation and biodiversity on forest and other common lands and contribute significantly to efforts in improving and maintaining the forests of the country. The lack of sufficient data and information of such efforts has meant that the importance of these initiatives in securing the ecological foundations of the country are little known and appreciated. While the state of forests in the country is assessed periodically, the extent of forest and other common lands protected by the communities are not known. We feel that exercises in mapping the forest and other common lands protected by the local communities has the potential to reveal the

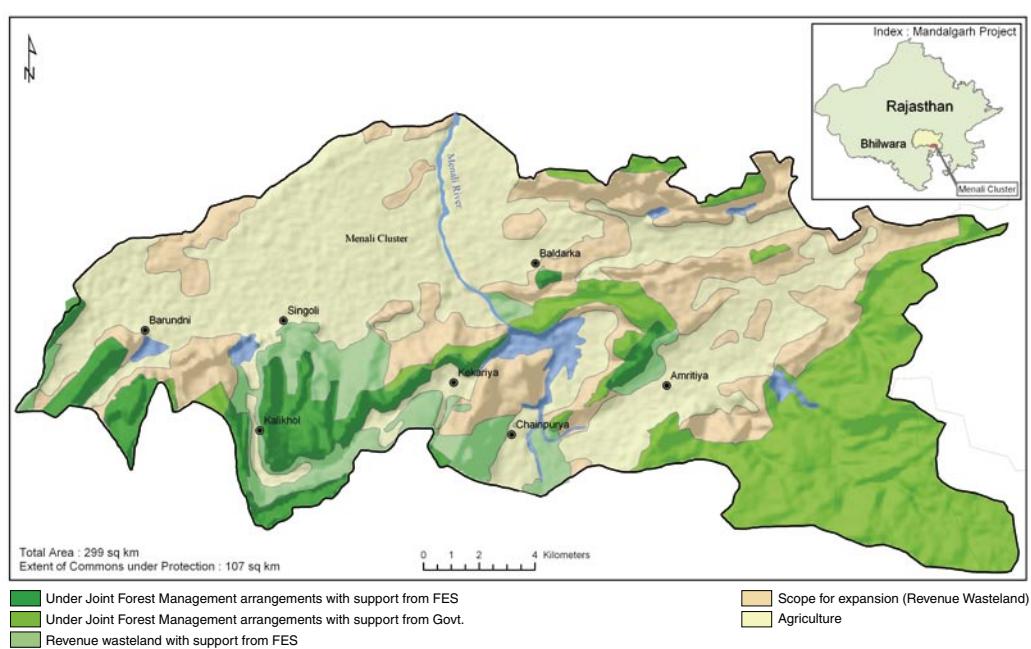


Mapping the lay of the land and their natural surroundings, representatives of several villages articulate patterns of use, access, and which areas require greater efforts in protection, expanding their horizons from the immediate village boundaries to protecting ranges of forest that lie beyond.

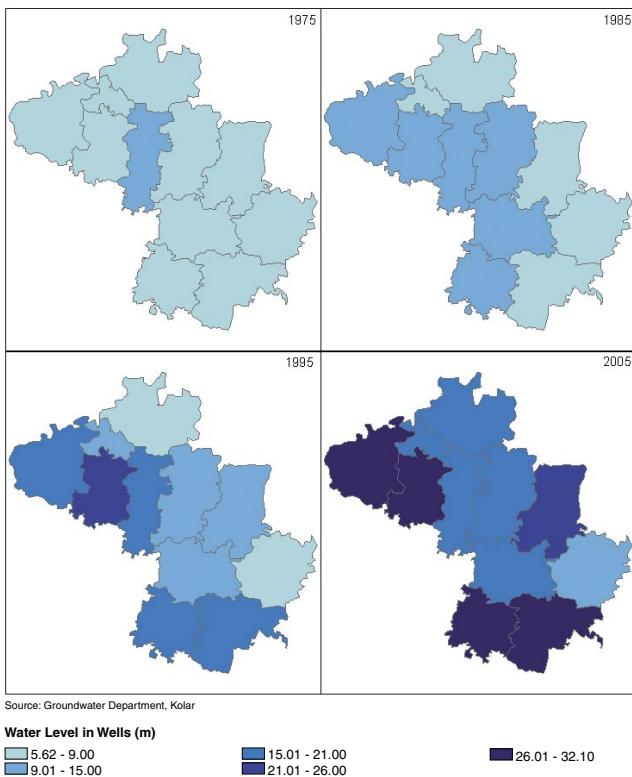
effectiveness of such efforts and could lend critical support and recognition for the role played by communities in protecting and conserving forests and biodiversity.

We began mapping the lands being protected by communities in our project areas in Andhra Pradesh, Rajasthan and Madhya Pradesh by undertaking intensive field surveys and marking sites protected by communities on

Commons Protected by Local Communities FES Project Area: Mandalgarh, Bhilwara District (Rajasthan)



Average Water Levels in Wells (metres below ground surface) from 1975 - 2005: Kolar District, Karnataka



Maps showing changes in groundwater levels over a period of three decades reveal a dramatic fall in groundwater levels. Information on this and other similar parameters are being shared with district officials and community representatives with an aim to stimulate debate and discussion leading to well informed policy decisions.

their accord, with assistance from the Foundation, and with support from the Forest Department and other organisations. The information and data so collected was integrated on a GIS platform and the exercise revealed that the communities were protecting considerable areas in the region. Moreover, the exercise also helped identify the areas that had been excluded from the protection initiative providing ground for discussions on how these unprotected lands can be brought under an appropriate conservation regime. Findings from the exercise are being shared with the communities and the local administration. By widely sharing the outcomes of these exercises we hope to convince other agencies and the government of the need to undertake the exercise in the

entire country, strengthening the case for recognition and support for community based conservation.

Interaction on Policy

With ecological well being and social justice being the basic tenets that guide our action, we seek to influence policy on highlighting the true value of forests as providers of clean and regular supply of water; the need to nest various forms of village institutions around natural resource management within the umbrella of *Panchayats*; the need to enhance the discussion on watershed development to include issues such as unregulated exploitation of resources developed under the programmes as well as compensate for the environmental services provided by the uplands; and highlight the role of common lands for their value in augmenting biomass and biodiversity and meeting critical requirements of the poor and women.

In the various locations in which we work we are in discussion with the respective state governments in enabling a more conducive policy environment. In Rajasthan the Forest Department expressed its willingness to consider amendments in the state Joint Forest Management resolution, which would accommodate the multiplicity of users and use regimes that span administrative boundaries. In Kolar, Karnataka, the Zilla Parishad agreed to incorporate the natural resource management plans submitted by the *Panchayats* within the plan allocations of the district.

With ecological well being and social justice being the tenets that guide our action, we seek to influence policy on highlighting the true value of forests as providers of clean and regular supply of water; and the role of common lands in augmenting biomass and biodiversity

In Madhya Pradesh, we consider it necessary that the government reconsiders its decision to roll back its previous policy of having a statutory natural resource committee, making it now a voluntary decision at the *gram sabha* (the 4th tier of *Panchayati Raj* institution) level. In Orissa, the government agreed to reduce the fee for leasing revenue wastelands to village institutions enabling the villages to bring larger tracts of land under forest cover. In Gujarat, convinced by the efforts of the local communities the government has agreed to renew the lease of revenue wastelands by another period of ten years. In Andhra Pradesh, Terms of Reference has been approved by the Forest Department allowing us to work



Visits by senior government officials play an important role in building the confidence of local communities on the tenure arrangements and the ability of community institutions to govern common lands, besides shaping government supported development programmes to suit local requirements.



under the Community Forest Management arrangements on forestlands in Chittoor district and similar approvals are awaited for Anantapur district.

In our efforts to highlight and build a debate on issues concerning ecological security amongst civil society we have commissioned films, organised a series of talks by eminent persons and campaigned for inclusion of drinking water as a fundamental right in our Constitution. At a local level we continue to be associated with other networks in enriching and learning from the ongoing discussion concerning conservation and decentralization of governance as well as bring out regular newsletters that are circulated amongst *Panchayats*, village institutions and government functionaries. We have also collaborated with other organisations in furthering the dialogue on 'Conservation and Livelihoods' and the 'Future of Conservation' in India so as to better understand the different views and arrive at meeting points.

Projects Overview

The importance of natural resources in the rural economy can hardly be overemphasized in our country where a bulk of the rural populace continues to depend on forestry, animal husbandry and agriculture for their livelihoods. We strive towards a future where local communities determine and move towards desirable landuse based upon principles of conservation and social justice.

B

y choice we work in upland areas, which are the head reaches of our river systems and are marked by ecological degradation, a preponderance of common lands and inhabited by economically deprived rural communities. By building on the traditional institutions that govern village life and the customary use regimes in such settings and enabling better tenure arrangements on public lands which they perceive as common, and by working in contiguous patches, we improve the biomass productivity and hydrological regimes of the area.

By working on processes of ecological restoration and improving the character of local self governance which by their very nature are process oriented, we have built a strong constituency of village communities that have brought ranges of hills under better vegetative cover and evolved institutional spaces within and across villages for dialogue and resolve. While there are many reasons for the communities to take pride in their action and perseverance, the scale of our work with fifty to hundred villages in each location presents unique opportunities to raise the level of discussion on decentralized governance of natural resources in India.

The foundations laid by the institutions offer scope for enhancing the discussion to regulating injudicious landuse practices which are incompatible with the area but are being prompted by enticing markets and an inability of the social systems to check individual profit undertaken at the expense of collective good. The regional forums that have evolved over the years offer scope to translate some of the policies into practice, or in fact, shape them to suit local conditions or throw up issues that require policy action. Moreover, as efforts on improvement of the productivity of land or the availability of water tend to

offer disproportionate benefits to the landed as well as the communities in the valleys, there is considerable scope for the village and inter-village institutions to arrive at arrangements that would benefit the poor and compensate for the environmental services offered by the uplands.

In such a scenario, while we would progress towards building and sharing experiences on the deeper issues of social justice that our efforts on ecological restoration throw up, we would also grow to understand and evolve institutional templates necessary at the level of landscapes, the scale necessary to conceive efforts aimed at stability of ecosystems. While the trajectory of ecological, social and economic realities would determine our immediate efforts in each location, our efforts in the next three to four years across different locations would be guided by the following directions:

- Surfacing the criticality of forests and other common lands and locating their inter-linkages with the associated production systems, thereby highlighting the value of forests and the necessity for conservation action in local landuse.
- Setting out pilot level landuse planning in different ecological, economic and social settings and addressing the biomass and water scarcities for meeting the consumptive and non-consumptive needs of village communities.
- Engaging on issues concerning the conservation and judicious use of their natural surroundings and on matters pertaining to 'who is gaining and who is losing' by strengthening platforms for discussion at a village and inter-village level and by including government functionaries, academia and larger civil society.
- Strengthening the tenure arrangements over forest and other common lands in favour of communities, which are based on recognition of customary users where use regimes span areas protected by other villages.
- Establishing institutional design principles and mechanisms that provide spaces for the poor and women, and generate ecologically sound and economically rewarding livelihood options to improve incomes of the economically vulnerable sections of the community.
- Developing linkages between village level institutions and the umbrella institution of *Panchayats* and integration of natural resources management plans by *Panchayats*.

Our Project Areas

Project Districts

Source: Earthsat



Forest Ecosystems



Natural features transgress manmade boundaries and necessitate a perspective that discerns the movement of water, nutrients, life forms and energy across the natural and production systems.

A majority of India's tribal communities inhabit the upland and forest dominated landscapes that form a horizontal stretch across the country from the southern parts of the Aravalli hill range to the Chotanagpur plateau. Cultivating small farms usually located on the lower slopes and foothills and which are typically low in productivity, the tribal communities have a strong link with the forests which play a critical role in their day to day lives, providing food, timber, fuelwood, medicine and various non-timber forest products (NTFPs) both for consumption and sale.

Governance is largely the domain of bodies such as

the *Adivasi Samaj* comprising elders and other influential persons from the community. The use and access to natural resources is not necessarily determined by the larger institution but left to the discretion of individual habitations which, based upon the availability of different kinds of forest produce in various locations and their needs, have evolved a multi-layered system of access and exchange.

Colonisation and the state ownership of forests and other natural resources, which continued in independent India, brought about an upheaval in tribal societies and their way of life. The loss of access coupled with widespread degradation of forests has led to the unraveling of the forest-agriculture link that sustained the tribal economy. The availability of forest foods has declined considerably and many have altogether disappeared; the loss of vegetation cover in the uplands has led to widespread erosion of the farms below. The associated loss of food security and incomes has led to abject poverty amongst the tribal households,

In spite of several policies that recognise their rights over forests and land as well as a policy of positive discrimination, the tribal communities find themselves progressively alienated from forests, rivers and other natural resources that are not just a source of sustenance and livelihood but are also central to their culture and identity.

The Joint Forest Management programme provides some amount of tenurial security and incentive to the local communities to participate in forest protection and restoration activities. The *Panchayati Raj* (Extension to Scheduled Areas) Act 1996 is another critical piece of legislation, the implementation of which holds out the promise of empowering the tribal communities and transferring all powers for governance and decision making into their hands.

Over the years we have succeeded in assisting community institutions in protecting and restoring a few thousand hectares of forestlands in the project areas in Udaipur, Dahod, Angul and Dhenkanal. We have also



While some biodiversity rich and ecologically fragile regions need to be protected as strict nature reserves, in most areas there is a need to include local communities in conservation action.

made concerted efforts to convince the Forest Departments to effect necessary changes in the guidelines of the Joint Forest Management programme to make it more inclusive and also strengthen tenure in favour of the community. We are also working to strengthen the natural resource based livelihoods of the tribal communities.

We subscribe to the view that in many natural environments that are being modified by human activity there is scope for conservation and livelihoods to be linked and benefit from each other. An approach that seeks to restore the health of the ecosystems and the services they provide combined with efforts to strengthen on and off-farm incomes can, we believe, safeguard forests as well as reduce poverty in several pockets of the country.

Dahod, Gujarat

Fact File

Project Districts: Panchmahal and Dahod

Forest Types: Dry Deciduous, Tropical Thorn Forest, Scrub Forest

River Basin: Vallai, Kali and Khan

Village Institutions: 70

Area under Protection: 5,589 hectares

Total Households: 11,150

2004



The 250 households of Khodwa village that are effectively protecting the 750 hectares of grassland (vidi) for the past three years under JFM arrangements, collectively harvested grass and received as each households' share an amount of grass worth about Rs. 3000.

The project area is located in the Vallai River basin in Panchmahal district, and the Khan and Kali River basins in Dahod district. The topography of the region is largely undulating with

low hills dominating the landscape. The forestlands are the predominant category of land in the region, and the dry deciduous forests once widespread across the area are largely degraded. Minuscule landholdings, poor farm productivity and increasing frequency of drought has led to a total collapse of the livelihood and coping mechanisms of the tribal community across the region leaving them little choice other than to migrate. We began working in the area in 1998 and are presently associated with 70 community institutions that protect and manage around 5,600 hectares of land.

As forestlands cover a significant portion of the landscape, we work through Joint Forest Management arrangements to strengthen the community efforts on conservation. We seek to strengthen livelihoods and income opportunities of the tribal community by working to



Fodder available locally saves hard earned cash.

Update 2005-06

2006



Protecting forestlands since 2002, the people of Motikyar and other villages must eventually engage with communities from neighbouring Rajasthan who in the past may have enjoyed access to the forests but are at present seen as a threat to the protection initiative.

improve farm productivity, increasing availability of surface water, while simultaneously seeking to revive efforts in collective action around the forests. We are also working to strengthen the nascent federation of community institutions and see them evolving into a body that plays an active role in shaping the developmental processes in the region.

In an area where the economy, both cash and non-cash of an average tribal household is paltry and places a majority of the populace well below the poverty line and where the priority is to earn to survive,

we are faced with the challenge of evolving conservation strategies that factor in migration, and weave in measures that would strengthen farming systems and ensure food and livelihood security. We view the NREGA as an opportunity that would allow us to address these issues. Another vital aspect that we have begun to work on is to locate forest conservation under the ambit of the *Panchayat*, though the provisions of the *Panchayati Raj (Extension to Scheduled Areas) Act, 1996* that is applicable to the region.

- Regeneration activities were undertaken on 228 hectares of common lands. Over a 1,00,000 saplings of local tree species were planted and nearly 1,000 kilograms of seeds of 18 tree species were dibbled. Soil and moisture conservation measures were implemented in 144 hectares of common lands.
- Efforts to expand the conservation initiative in Santrampur were continued and discussions begun with six more revenue villages comprising 30 habitations in the region. Eight of the nine revenue villages in the region have received the *Adhikar Patras* and preparations to assist them in developing micro-plans are already underway.
- The nascent federation of village institutions provided a platform for interactions of existing village institutions with new institutions on collective processes and mechanisms for safeguarding the forestlands and common lands and also to hasten the registration of Forest Development Cooperative Societies (FDCS) and in securing permissions (*Adhikar Patra*) to protect forestlands.
- Getting recognition for the effective regulation of grazing on forestlands and common lands, the federation of nine revenue villages deliberated on the provisions of the National Rural Employment Guarantee Act (NREGA) and has initiated discussions with district administration to make effective use of the provisions to improve their natural resource-base.

Udaipur, Rajasthan

Fact File

Project District: Udaipur

Forest Types: Dry Deciduous, Tropical Thorn Forest, Scrub Forest

River Basin: Mansi and Wakal

Village Institutions: 26

Area under Protection: 2,910 hectares

Total Households: 3,377

2002



Strict protection of the common lands by the residents of Chitrawas yielded fodder, which would be worth Rs. 1.4 million in the neighbouring market. Having harvested as much as they needed, they decided to share the grass with their neighbouring communities.

The project area in Udaipur falls in the catchments of the Mansi and Wakal Rivers; a portion of the project area also falls in the catchments of the Sei and Som Rivers. Falling in the

southern part of the Aravallis, the terrain is hilly with the narrow valleys being used for farming. The hill ranges that were once thickly forested have lost much of their forest cover; and the few forests that remain are an indication of the once rich biodiversity of the region. We began working in the largely tribal dominated area in 1999 and are presently associated with 26 institutions that protect and govern around 3,000 hectares of forest and revenue lands.

We primarily work with Village Forest Protection and Management Committees (VFPMC) formed under Joint Forest Management (JFM) arrangements. Complex use regimes that go beyond administrative boundaries have traditionally determined the norms for use and access to forests and forest produce. By including the traditional users as *hakdars* (right holders) in the VFPMC we have sought to reduce



Acceptance of project initiatives and personnel do not stop at project activities.

Update 2005-06

2006



In a bid to bring back the bamboo lost from their forests, the people of Chitrawas have during this season planted over 10,000 bamboo rhizomes along with other indigenous species in the forestlands they have been protecting since 2002.

the incidence of conflict as well as prevent the exclusion of genuine user groups. The state forest department expressed its willingness to consider amendments to the state JFM resolution, which would accommodate the multiplicity of users and use regimes spanning administrative boundaries.

The loss of forest cover, decline in availability of forest produce, soil erosion due to excessive run-off, the associated decline in farm productivity, and the need for cash incomes has had an adverse effect on the tribal populace. This necessitates measures to address the widespread poverty and reduce the excessive and often destructive dependence of the

local community on the remaining forests.

We see our efforts in conservation progressing to communities protecting and regenerating degraded forests, including those adjacent to the two protected areas (PAs) that fall in the district, gradually bringing the entire landscape within an appropriate conservation regime. Plans are being drawn up to undertake representative studies within the protected areas to help us understand the successional stages and species associations prevalent in the region to enable us to evolve better eco-restoration plans. On the institutional front we are faced with the challenge of working to increase the participation of the habitations in the functioning of the *Panchayats*, nesting the several programmatic institutions within the fold of the *Panchayat* besides bringing forest and natural resource governance onto their agenda.

- Soil and moisture conservation measures coupled with efforts in regeneration were undertaken on over 600 hectares of common lands. Three village level nurseries were raised during the year to meet the planting requirements of the season. Sowing of grass seeds and tree seeds were done along the trenches, which increased their survival.
- Eight village institutions were formed to undertake restoration activities upon their forest, pasture and revenue waste lands. Eleven new women's groups were also formed during the year taking the total number of women groups to 35. The women's groups have emerged as a vibrant platform decisively influencing the decision making process in the larger community institutions such as the VFPMCs and the Grazing Land Development Committees.
- In order to strengthen livelihoods and increase farm productivity, work on farm bunding, developing organic manure, improving water availability for critical irrigation needs, setting up kitchen gardens, biogas plants and construction of smokeless *chulhas* (stoves) was undertaken.
- The team also undertook implementation of natural resource based livelihood activities under a World Food Programme (WFP) project through the forest department. An amount of Rs. 0.17 million was leveraged and spent in 18 habitations.
- The team has actively participated in meetings of the Rajasthan Prakritik Sansadhan Prabandhan Manch, a state level forum of non-government organisations. Jointly organised by a number of organisations working on natural resource management in the state, the Manch works to influence state policy on forests.

Angul, Orissa

Fact File

Project Districts: Angul and Dhenkanal

Forest Types: Moist Deciduous, Dry Deciduous, Scrub Forest

River Basin: Mahanadi and Brahmani

Village Institutions: 169

Area under Protection: 14,933 hectares

Total Households: 12,372

Each household extracts 13.5 quintal of fencing material from the forests almost every year to protect their fields from being grazed by livestock. Steps taken by 14 contiguous villages to strictly enforce the agreed upon norms of regulating grazing has led to a decline in damage caused to crops and also significantly reduced the amount of fencing material extracted from the forests.

1998



The project area is located in Angul and Dhenkanal districts in central Orissa. The terrain is undulating and several small streams and rivulets flow across the area eventually draining into the

Mahanadi and the Brahmani, the two main river systems of the region that straddle the project area. Nearly 1,500 of the 3,500 habitations in the two districts are located in and around forest areas. Revenue wastelands, which in Orissa also include revenue forests, form the largest land category within the village boundaries. We began working in the area in 1987 and are presently associated with 169 community institutions that protect and govern nearly 15,000 hectares of common lands.

We work with communities to strengthen their protection efforts on *gramya jungle* and other degraded common lands. The soil and moisture conservation measures in the uplands have led to an increase in the availability of water which, in turn, has led to an increase in the area under cultivation as well as improved farm productivity. We have begun to engage with periphery



Using local folklore to hold street corner campaigns to stop forest fires.

Update 2005-06

2006



Protection on a chunk of revenue wasteland was initiated in Nabkishorepur in 1997. Initially restricted to only the revenue wasteland, the protection initiative has grown to include all the common lands in the village.

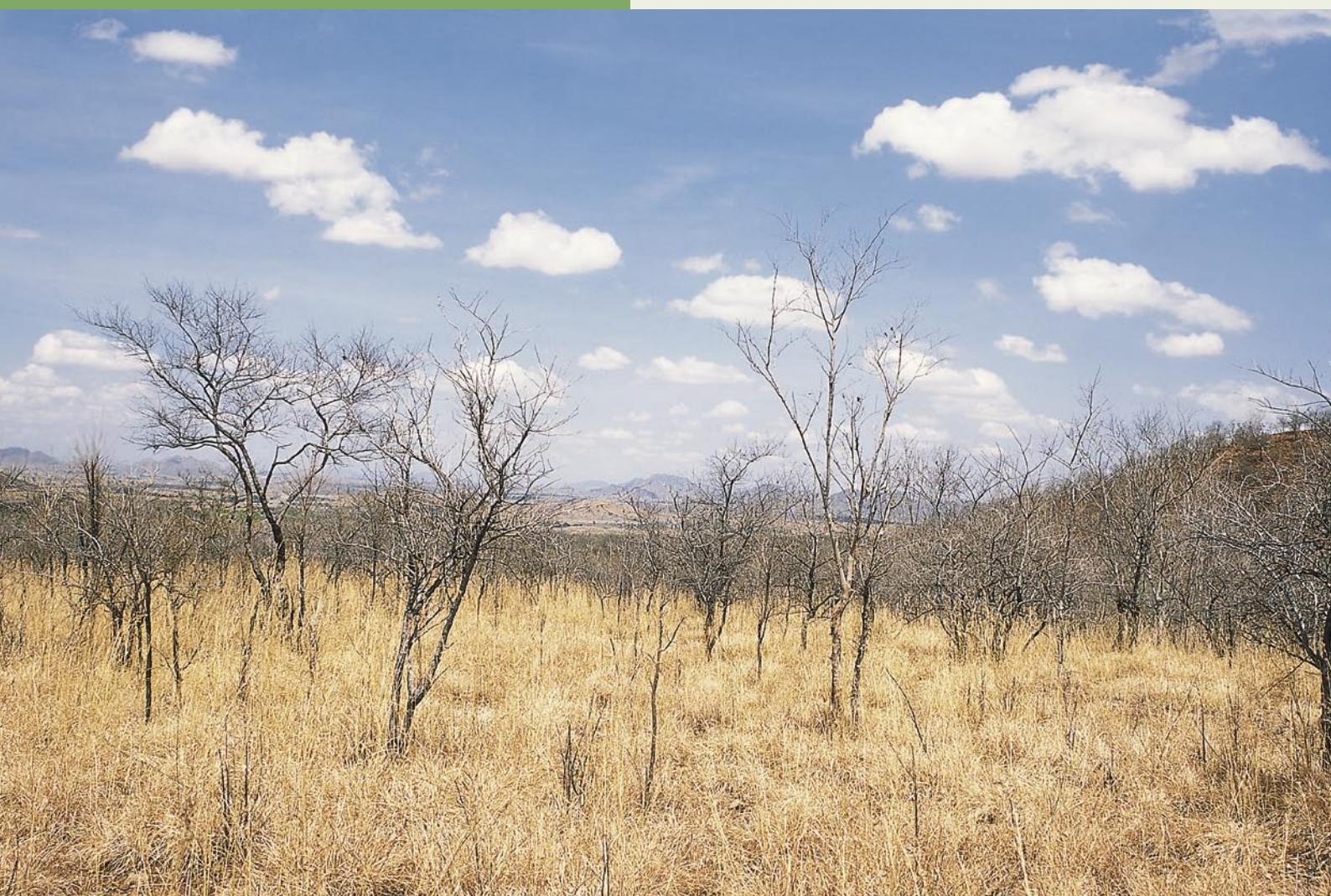
villages around the Satkosia Gorge Wildlife Sanctuary in order to elicit community participation to strengthen the efforts of the Forest Department in the conservation of the protected area. In our work in the Athmallik region, characterized by the presence of a strong community-led initiative in forest protection, we work to assist the communities in documentation of their oral norms for forest conservation and management, and help bring to the surface concerns and discussions on issues such as the extraction of minor forest produce, and the effects of fire and grazing.

By identifying and engaging local women and men in discussions

on the developmental issues of the region and knowledge of their natural surroundings, we are aiming to strengthen the conservation ethic that drove the communities to initiate efforts in forest protection in the past. At another level, we need to step up the initiative to partake in the conservation of the Satkosia Gorge Wildlife Sanctuary by evolving innovative measures where communities perceive themselves as custodians in conservation.

- Re-vegetation activities were undertaken in 220 hectares of land, nearly 1,00,000 saplings of native species were planted on degraded common lands. Soil and moisture conservation activities were taken up in 204 hectares of land.
- We began working with 11 villages that lie in the periphery of the Satkosia Gorge Wild Life Sanctuary with an aim to conserve and improve the biodiversity of the sanctuary as well as elevate the communities to a custodian status.
- A *krushak mela* (agricultural fair) was organised during the year. Attended by around 3,500 participants, stalls were put up by village institutions, civil society organisations and government departments to encourage exchange and learning on various agricultural practices from across the area. The mela provided participants with an opportunity to deliberate on themes such as forests and agriculture linkages, and conservation and livelihoods.
- A study to estimate the biomass and biodiversity was undertaken in the Satkosia Gorge Wildlife Sanctuary, which revealed that the sanctuary harbours very rich biodiversity and, while the biomass availability is high, there is a need to engage with adjoining villages to evolve mechanisms to reduce their dependence for biomass on the sanctuary and develop an alternative resource base.
- To create a forum of like-minded individuals and institutions to deliberate on issues pertaining to the sanctuary, a two-day consultation workshop was organised. The workshop aimed at deliberating on a wide range of issues from co-management to animal depredation and problems of livestock grazing in the sanctuary.

Dryland Ecosystems



With scanty rainfall and high evaporation rates the deciduous forests and scrub jungles of the drylands are appropriate systems to convert nutrients into biomass and reduce the run-off of water and soil, the critical components of rainfed production systems.

A large, bold, white capital letter 'D' is centered within a solid green square.

Drylands cover almost 50% of the country's geographical area and are characterized by low average annual rainfall ranging between 300 mm to 800 mm and the presence of dry deciduous, thorny and scrub forests. The drylands harbour some of the best 'grasslands' of the country which provide a habitat for a variety of birds, mammals and reptiles. They are also home to over 40% of our population, a majority of whom are agro-pastoral communities. Contrary to popular perceptions, the semi-arid drylands produce upto 42% of our foodgrain and are vital to the food security of our nation.

The social and political neglect of the drylands can only be surpassed by the erroneous ways in which we have sought to address the problems faced by these areas by

promoting an irrigation driven intensive form of agriculture that runs counter to the mixed rainfed farming systems prevalent in most dryland regions. To deal with the risks posed by a dry and water scarce environment, dryland communities have adopted diversified livelihood practices. In addition to rainfed farming supported by innovative and unique water harvesting systems, many dryland communities are also involved in livestock rearing which plays a significant role in maintaining the fertility of their fragile farms and also supplements the incomes earned from agriculture. The entire system hinges on the presence of common lands, which allow the communities, especially the small and marginal households among them, to maintain their livestock by providing fodder and pasture.

With most of the lands that were hitherto common properties coming under state custody and going outside the domain of the traditional community institutions, the common lands and especially the lands categorized as revenue wastelands came to be regarded as open access lands. Large areas of these have been either legally transferred to become private holdings or are illegally encroached upon. The erosion of the older institutional mechanisms has led to a decline not just in the extent of the common lands but also to the collapse of other forms

of collective action such as the maintenance of tanks and community wells. In a situation where the collective is able to exercise little influence over an individual's decisions and with the emergence of a world view that promotes the pursuit of private profit over public good, many dryland farmers have gone into cultivating water intensive crops and have resorted to extracting groundwater at an untenable rate.

The answer to the challenge posed by the deteriorating situation in our dryland regions seems to lie in our developing a better understanding and appreciation of the forest-water-livestock-agriculture linkages that at one time formed the backbone of the dryland economy and looking for ways in which these broken linkages can be restored. While reverting to the earlier systems of governance may no longer be possible or even desirable, we need to borrow the best from the earlier systems and re-adapt these to suit the present situation. We work in the dryland regions of Andhra Pradesh, Karnataka, Rajasthan, Madhya Pradesh and Gujarat. Our work in these areas over the past decade and more has been to revive and strengthen the process of collective action aimed at restoring the health of the commons through appropriate conservation measures.

Rather than changing the nature of dryland agriculture through intensive irrigation and technologies, we would do well to strengthen and re-adapt the traditional drivers of dryland ecosystems to face the challenges from threats such as climate change.



Madanapalle, Andhra Pradesh

Fact File

Project Districts: Chittoor and Anantapur

Forest Types: Dry Deciduous, Tropical Thorn Forest, Scrub Forest

River Basin: Papagni

Village Institutions: 174

Area under Protection: 10,539 hectares

Total Households: 7,866

Over 2,000 government functionaries from across Chittoor district attended training programmes conducted by the team to assist the district administration in scaling up the Comprehensive Land Development Programme, also providing opportunities to influence thoughts on conservation.

1993



Our project area in Andhra Pradesh is located in the lower catchments of Papagni River basin and forms a contiguous area spread across north-western parts of Chittoor and south-eastern

parts of Anantapur districts. The area is characterized by broken hill ranges most of which fall under the forestlands category, with revenue wastelands and farmlands located on the lower slopes and valleys. The region has lost much of its forest cover in recent decades and many of the hills are presently barren and degraded. We began working in the region a decade and half ago and are presently associated with over 174 community institutions protecting and managing over 10,000 hectares of revenue wastelands and forestlands.

Over the years the community institutions have formed federations that meet on a regular basis to discuss and debate on a variety of issues including the demarcation of boundaries, mechanisms to prevent illegal felling and sale of firewood, and curb instances of wildfire and prevent their spread. An exercise in mapping the extent of revenue wastelands



Small farm ponds help improve soil moisture regime and farm productivity.

Update 2005-06

2006



In 1992 the people of Chennappagaripalle were among the first in the region to initiate efforts in conservation. Twelve neighbouring villages have joined them since, bringing the entire Yerraonda Hills and the Mothukumala Reserve Forests under an effective protection regime.

and forestlands revealed that nearly 60% of these are under community protection, most of which also form a contiguous block. With much of the upper reaches being protected, we are seeking to further strengthen the conservation efforts by working to improve the soil-moisture regimes and biomass on the mid-slopes. Once forested these mid-slopes have been turned into farms and are cultivated by small and marginal farmers. The improved productivity as well as increased availability of biomass from the mid-slopes is expected to reduce the pressure on the regenerating

forests on the upper slopes as well as strengthen the livelihoods of the poor.

We have assisted the district administration in implementing the Comprehensive Land Development Programme, and are working similarly in the planning and implementation of the National Rural Employment Guarantee Programme. We see these as opportunities to place efforts in ecological restoration at the core of initiatives in natural resource management, landuse planning and poverty reduction. We are simultaneously moving towards building a discussion within the communities on regulating the extraction, flow and sale of biomass in the area, and initiating a dialogue between the upstream and downstream habitations on evolving appropriate water-use regimes.

- Revegetation measures were implemented on 450 hectares of land across 57 villages in Chittoor and Anantapur district.
- We were approached by the District Administration to implement the Food Assurance Programme in collaboration with the *Panchayati Raj* department in 40 hamlets of Chittoor district. Under the initiative, 345 farm ponds were constructed to ensure availability of water and improve the soil-moisture regime on the mid-slope lands. In order to scale up the project we assisted the District Administration of Chittoor in building the capacities of the government staff in planning and implementation of the Comprehensive Land Development Project (CLDP).
- Sustained efforts in conservation have led to an increase in the fodder and water security for livestock in the region. The improvement in the health of livestock has also enabled most of the households to turn to dairying as an additional source of income and livelihood.
- Findings from a study conducted in the Sadhukonda Reserve Forest in collaboration with ATREE reveal that there is negligible population in the recruitment class, suggesting that the regeneration in these areas are adversely affected by fire and/or grazing. The findings have been used to draw up fresh strategies to strengthen the conservation effort.
- The study on documenting the ethno-veterinary practices in the project region undertaken in collaboration with ANTHRA, Hyderabad was completed. The study revealed that the loss or decline in the availability of several wild medicinal plants and herbs, among other reasons, could be directly linked to the decline in the number of traditional healers.

Chintamani, Karnataka

Fact File

Project District: Kolar

Forest Types: Dry Deciduous, Tropical Thorn Forest, Scrub Forest

River Basin: Papagni

Village Institutions: 103

Area under Protection: 5,255 hectares

Total Households: 7,774

The preference for water intensive crops has led to a growing dependence on groundwater to meet irrigation needs. For the district as a whole the average water level in the wells was 6m in 1975, which dropped to 22m in 2005. This is equivalent to an average yearly drop of half a meter.

2002



Our project area in Karnataka is located in the upper catchments of the Papagni river basin in the north-eastern part of Kolar district. Boulder strewn hills largely bereft of vegetation and

which mostly fall in the forestland category, with grazing lands, revenue wastelands and small farms in the lower slopes and valleys, characterise the landscape. The numerous tanks that dot the landscape have silted up over the years affecting availability of water for irrigation and for livestock in the summer months. While we began working in the district much earlier, we moved into these dryland areas in 1998 and are presently associated with 103 community institutions that collectively protect and govern 5,000 hectares of *gomal* (grazing) lands and forestlands.

While we work on forestlands through Joint Forest Management arrangements, taking advantage of the provision in the Karnataka *Panchayati Raj* Act that allows the formation of such sub-committees, we work with habitation level natural resource management sub-committees on restoring the grazing



Controlling wild fires is not uncommon when village institutions are strong in their resolve.

Update 2005-06



2006

Determined efforts by the people of Sajjupalli since 2002 to control grazing and prevent fires have enabled a slow but steady recovery of the vegetation cover in a landscape dominated by barren hills and boulders.

lands. We work towards empowering the habitation level sub-committees enabling them to evolve their plans for natural resource conservation and governance and ensure that these are accepted and incorporated into the development plans of the *Panchayats*. The challenge has been to work with the *Panchayats* and make them more receptive to the aspirations and needs of the habitations, especially to include the latter in the *Panchayat* level governing and planning processes.

While on the one hand we seek to strengthen the role of *Panchayats* in natural resource conservation and governance by working for

the recognition of the habitation level sub-committees as a statutory committee, we are on the other hand working to nest all institutions formed at various levels and through various schemes and programmes under the umbrella of the *Panchayats*. A platform is also being created where local communities, academia, citizen's groups, peer organisations and government officials come together, discuss concerns and deliberate on action to be taken to address landscape level conservation issues, even drawing competing groups and interests into these discussions.

- Revegetation measures were undertaken on 145 hectares of common lands across 27 villages and soil and moisture conservation activities undertaken on around 100 hectares of land.
- In the aftermath of the *Panchayat* elections in February 2005, the team involved itself in facilitating the reconstitution of the natural resource conservation and management sub-committees. Thirty-two sub-committees were reconstituted across seven panchayats.
- Four training and capacity building programmes for *Panchayat* and sub-committee members, as well as local level government officials were held during the year.
- An exercise to map and analyse changes in Kolar district over three decades was undertaken. Data on several parameters was analysed. Interesting inferences regarding cropping patterns, groundwater and landuse have come up. The outcome of the study is being shared with the district and block level officials as well as the communities to facilitate necessary discussions and decisions on the same.
- In order to better comprehend the water use and exploitation in the region, a study was undertaken to map the pattern of extraction and sale of water for irrigation purposes.
- The federation of community institutions met on several occasions to discuss their concerns on issues such as forest fires, illegal cutting in the areas under protection, and stone quarrying in these areas. Four habitations with the support of their *Panchayats* were successful in stopping the stone quarrying underway in the areas under protection.

Bhilwara, Rajasthan

Fact File

Project Districts: Ajmer, Jaipur and Bhilwara
Forest Types: Dry Deciduous, Tropical Thorn Forest, Scrub Forest
River Basin: Mej, Menali and Lilri
Village Institutions: 231
Area under Protection: 23,413 hectares
Total Households: 30,410

Implementation of a watershed project in Lilri village helped increase annual gross household incomes for the landless from Rs. 13,000 in 1997 to Rs. 40,000 in 2005, from livestock and new wage opportunities. Incomes of small and marginal farmers have gone up from Rs. 20,000 to Rs. 55,000 from animal husbandry and vegetable growing.



Located in the south-eastern part of Rajasthan, our project area is spread across Bhilwara district and parts of Ajmer district. The topography is largely undulating, most of which falls

under the revenue wasteland and grazing land categories. Changing landuse patterns in the recent past have resulted in the loss of vegetative cover and over-exploitation of groundwater, putting under stress the viability of the rainfed farming-animal husbandry linked livelihoods. We began working in the region in 1995 and are presently associated with 231 community institutions that protect and manage over 23,000 hectares of common land comprising revenue wastelands, grazing lands and forestlands that are located within the geo-hydrological context of watersheds.

Results over the years have shown that better management of the uplands on a landscape level has had a manifold effect on farming and livestock production systems. Improved protection, and soil and moisture conservation measures where necessary in the



Water harvesting structures constructed using locally available material can also be technically sound and inexpensive

Update 2005-06



Natural regeneration enabled by strict protection has led to the reappearance of several floral species in the common land being protected by the people of Damangatti since 1997.

uplands have led to improved groundwater recharge, an increase in the availability of surface water for irrigation and for livestock, improved farm productivity, health of livestock and an increase in milk production. While the community institutions play a crucial role in ensuring collective action at the habitation or village level, the federation of community institutions that has emerged plays a role in determining collective choice arrangements at the landscape level, and is an interface between the communities, elected representatives and government officials articulating the concerns and development needs of the community.

While the results in restoration through collective action are encouraging, the challenge lies in ensuring that these efforts are sustained and that communities across the landscape appreciate the inter-linkages between the various production systems and the benefits that flow to them from these. On the one hand we are working to strengthen the collectives and help them build a knowledge base to enable sound decision making, and on the other hand we are setting up a cadre of local persons who we expect would play a critical role in shaping the developmental processes of the region, irrespective of our continued presence.

- Soil and moisture conservation measures were implemented on over 1,499 hectares of land with regeneration activities being implemented on 1,297 hectares. Seventeen water harvesting structures were constructed.
- Seven new community institutions were formed, and efforts made to review and revisit the institutional processes in several of the older community institutions with specific focus on evolving mechanisms for the judicious use of natural resources.
- Federations of community institutions came together on several occasions to discuss issues such as the implementation of watershed development programmes, removal of encroachments from common lands, groundwater exploitation and leveraging of government funds to address the acute drinking water scarcity.
- A diagnostic surveillance of land degradation has been initiated in collaboration with the World Agro Forestry Centre. An exercise in analysis of the soils in areas protected by communities was undertaken to improve our understanding of the soil condition, the changes due to land degradation and the health of soils in the areas being protected.
- Community institutions in 15 villages were successful in leveraging Rs 35.45 lakhs from their *Panchayats* and the Irrigation Department for the construction and deepening of their tanks, water harvesting structures and for the installation of lift irrigation.
- The team conducted a training programme on issues related to grazing land development for 23 volunteers of the Rajiv Gandhi Foundation working in areas of Karauli, Jaipur and Pali.

Agar, Madhya Pradesh

Fact File

Project District: Shajapur

Forest Types: Dry Deciduous, Tropical Thorn Forest, Scrub Forest

River Basin: Lakhundar

Village Institutions: 45

Area under Protection: 4,477 hectares

Total Households: 3,233

2002



Instead of veering off from our core areas of work, we are engaging with other organisations to explore possibilities of implementing complementary activities to address issues of poverty along with our work on protection and regeneration of common lands. **BASIX** has initiated a project on micro financing aimed at improving incomes.

T

he project area is located in the Lakhundar river basin in Shajapur district.

An undulating topography with small hills in the backdrop characterises the region. Revenue wastelands

that make up a bulk of the common lands have been declining steadily as more and more land is brought under cultivation, either through legal transfer or through encroachment. Forestlands comprise only one percent of the total geographical area of the region. We began working in the Lakhundar river basin in 1997 and are presently associated with forty-five community institutions that govern and manage around 4,500 hectares of common land.

Over the years the work on regeneration has improved the vegetation cover on the common lands; the increased availability of fodder can also be linked to improved animal husbandry and thereby an increase in milk production. Moreover, with a geo-hydrology that supports recharge, the work on soil and moisture conservation has also led to an increase in the availability of water, improved the soil-moisture regime



Cow dung being packed as fuel cakes point both at firewood scarcity as well as reduced manure availability for the farms.

Update 2005-06

2006



Undertaking restoration efforts in a region that lost most of its forest cover decades ago poses many challenges. While it may take several years of sustained protection before the people of Chak see the lost forest cover return, protection of common lands has already led to improved recharge in the downstream wells.

of the farmlands, and led to farmers bringing under cultivation lands that were otherwise left fallow. The federations of community institutions have successfully negotiated with migratory herders to develop mutually acceptable transit routes for the latter, and also with the state and district administrations to effectively leverage development funds for the region.

The increased availability of water has brought about its own challenges and one of our tasks has been to assist the community institutions and their representative federations in evolving coherent

landuse and water use regimes. While efforts in this direction have been somewhat weakened due to the rollback in policy, making the previously statutory natural resource committee a voluntary decision at the *gram sabha* (the fourth tier of *Panchayati Raj* institutions) level, we feel that the while the formation of the sub-committee can be voluntary, the very function of managing the natural resources should become a mandatory function of the *gram sabha*.

- Six hundred kilograms of seeds of twelve species of trees, shrubs and grasses were dibbled to assist regeneration in 434 hectares of common land.
- Soil and moisture conservation measures were implemented on 350 hectares. Nineteen water harvesting structures were constructed.
- In a study undertaken to understand the linkages between livestock and water, it was revealed that the increased availability of water along with improved status of the grazing lands has allowed poorer households to invest in livestock and diversify their source of livelihoods and income.
- Twelve biogas plants were constructed in an effort to reduce extraction of fuel wood from common lands and reduce use of cow dung as fuel.
- Over Rs. 1.2 million were sourced from the government to implement a number of activities that community institutions had planned to undertake as part of their protection and regeneration effort and to strengthen complementary efforts.
- A self help group was assisted in accessing a bank loan of Rs 0.3 million which was used to purchase a food processing machine and rent out an unused government building. Simultaneously, the District Collector sanctioned a project to the group for supply of nutritious food to 92 Anganwadi Centres (crèches) in the district. The venture has enabled the members to pay back Rs. 60,000 to the bank besides taking home Rs. 500 per member per month.
- We were invited to participate in the State Biodiversity Conservation Programme. The State Biodiversity Board requested that the team assist in preparing biodiversity registers at the *Panchayat* level and in the training programmes organised by the board.

Anand, Gujarat

Fact File

Project Districts: Anand, Kheda, Panchmahals and Vadodara

Forest Types: Dry Deciduous, Tropical Thorn Forest, Scrub Forest

River Basin: Mahi

Village Institutions: 72

Area under Protection: 1,825 hectares

Total Households: 19,091

Community led efforts in eco-restoration since 1991 on 25 hectares of common land in Namnar village of Panchmahals district result in sequestration of 700 metric tonnes of carbon each year. We work with 72 community institutions that collectively protect around 2,000 hectares of common lands in the project region.

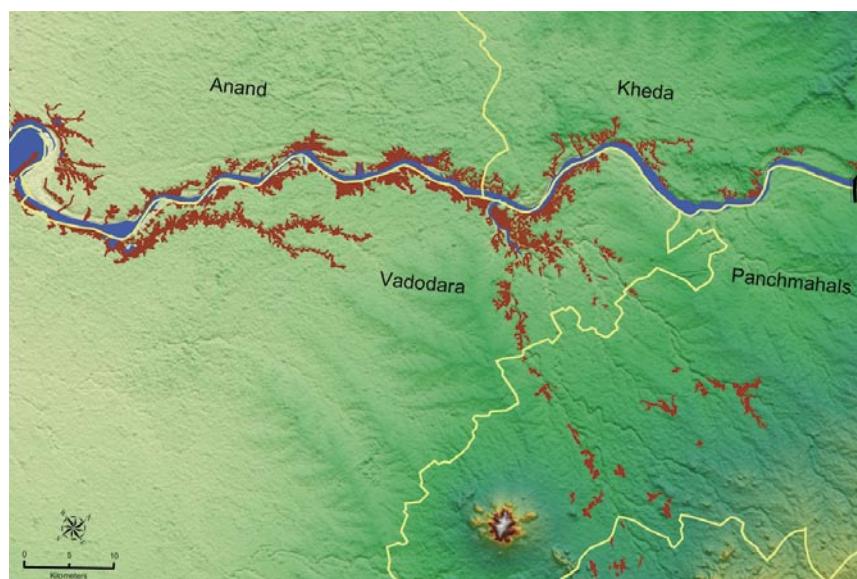
2001



The project area is spread across four districts of Anand, Kheda, Panchmahal and Vadodara. The project area is located along both the banks of the River Mahi and also includes a

coastal stretch characterised by the presence of highly alkaline mudflats. The riverbanks are highly eroded and deep ravines feature all along a 115 kilometre stretch of the river covering 107 villages. Commons comprise 33% of the lands along the riverbanks and the widespread deforestation of these lands has rendered large stretches of the riverbank barren. We began working in the area in 1986 and are presently associated with 72 community institutions that protect 1,825 hectares of common lands.

The vegetation that came up along the coast acted as a windbreaker, stopping the salt laden winds from blowing further inwards, protecting and enabling the reclamation of precious farmland. Revegetation efforts undertaken in a few villages along the river bank helped stop the headward movement of the ravines preventing further soil erosion. This became starkly evident during the



Nineteen thousand hectares of ravine land (in red) along the Mahi river could be reclaimed (see images above) making it productive as well as preventing its spread.

2006



Exercises in assessing biodiversity in the revenue wastelands under protection in Khorwad since 1997 reveal a dramatic recovery of many species. The number of floral species has gone up from a dozen to over 70.

floods that affected large parts of Anand and Kheda districts in July 2005. Areas along the river bank where the vegetation cover was still relatively intact suffered less from the massive soil erosion that took place in areas that were barren.

We believe that eco-restoration efforts undertaken all along the river bank perhaps offers the best chance to prevent ravine formation on commons and farmlands, and prevent the associated economic loss and displacement of the communities living along the river banks. In an area dominated by commercial farming and where a significant section of the community is not directly dependent on the commons, the challenge lies

in designing appropriate institution templates that can overcome these handicaps and at the same time ensure that the small section of the populace that is directly dependent on the commons are not further marginalised. Additionally, we also face the challenge of building concerted community action at the landscape level to arrest the spread of the ravines.

- The team has over this period initiated a preliminary socio-economic survey in the 107-river bank villages and is in the process of identifying partners for initiating work along the river. Initiatives in arresting the spread of ravines have been initiated in six villages, planning meetings have been held with the communities in all the villages and initial activities are underway in three of these.
- The team was actively involved in the relief operations that were undertaken in the aftermath of the floods that affected central Gujarat in July 2005. The floods, which further worsened the soil erosion and accelerated the spread of ravines, lent momentum to the team's efforts to protect the river bank and impress upon the government machinery the urgent need to address the issue.
- Efforts to include and empower user groups especially from the poor and marginal communities that were earlier inadvertently excluded from membership of the Tree Growers' Cooperatives were continued. The process was further strengthened through the formation of user groups which were assisted in articulating their views as well as in taking management positions in the cooperative institutions.
- The DRDA in Vadodara asked the team to facilitate the planning process for 11 villages under the *Hariyali* guidelines. This was done and the plans that were drawn up by the communities were submitted to the *Taluka Panchayat* for further action.

Mountain Ecosystems



Many mountain communities live in remote high altitude areas. While there is a typically deep penetration of the market with regard to trade in valuable but contraband plant and animal species, only a few of the more accessible village communities are integrated into relatively mainstream economies.



The arc shaped Himalayas cover six countries. The span of the mountain range in India itself is huge, covering ten states entirely and a portion of two other states. The Himalayan glaciers are the source of many of the sub-continental rivers and it is believed that 40% of the planet's population is dependent on water from the Himalayan glaciers. Scientists monitoring the Himalayas report a rapid melting of the glaciers in recent years holding out the spectre of a potential disaster for the hundreds of thousands of people in the plains of India, Pakistan and Bangladesh who rely on the glacial rivers to fulfill their drinking water, irrigation, and

industrial requirements. The mountains themselves harbour a variety of ecosystems that range from the tropical in the lower reaches to cold deserts in the higher altitudes making it a repository of unique forms of flora and fauna.

In recognition of the critical importance of the Himalayas, we focus on the Himalayan mountain systems for greater efforts and involvement. We have been working in parts of the western Himalayas, in the Gori River Valley in northeastern Kumaon since 1992. In such a setting we have focused mainly on strengthening the *Van Panchayats* (Village Forest Councils) and assisted them in enhancing their efforts in forest protection. Restoration activities include the implementation of soil and moisture conservation measures, and the planting and seeding of indigenous forest species. We have also explored innovative ways and means to strengthen and revive the natural resource based livelihoods and deter the community from over-exploiting the forests and biodiversity of the region. The move by the state government to convert the traditional *Van Panchayats* that were created in the early 1900s into Joint Forest Management committees has raised concerns within the community on dilution of their stake and rights on the *Van Panchayat* forests.

With the project in the Gori River Basin set to come to a close, we are consolidating the lessons learned and experiences of the past fifteen years to inform the new initiatives being planned in other parts of the Himalaya region. Preliminary surveys are being undertaken in Himachal Pradesh and in the north-eastern states of India, and discussions are underway with the state governments to explore how the Foundation could involve itself in contributing to the ongoing conservation efforts across the Himalayan region.



protecting 55,813 hectares of such land in the valley.

- The soil and moisture conservation, planting, seeding and natural regeneration activities formed the bulk of the work of the project. Besides planting grass and hedgerows, about 34 tonnes of seed was dibbled, and about 16 lakh trees were planted. 172 village nurseries were set up, with as many trained nursery-persons, and saplings of 126 forest species were raised in their nurseries for planting in the *Van Panchayat* forests at a range of altitudes.
- During the project period, the team assisted in setting up 22 watermills and reviving many in disrepair, further strengthening the arrangements of common property management in the area. A multi-function watermill to express oil and card wool in addition to milling grain has also been set up to cater to at least four adjoining villages.
- In the high altitude areas, where the air pressure is low, bringing water to a boiling point at lower temperatures is difficult, thereby greatly extending cooking time and increased use of fuelwood. The team worked towards promoting energy conservation devices like pressure cookers and fuel-efficient water and room heaters at subsidised costs.
- Lost with the closure of the trade routes to China in the 60's, the project has worked towards re-establishing herds of 22 yaks and 52 yak-cow hybrids in the Gori valley.
- Under the National Biodiversity Strategy and Action Plan initiative, a comprehensive biodiversity log and strategy input document was prepared, which is probably the most in-depth documentation of the flora and fauna of the area.

Achievements in the last fifteen years

- By March 2006 the project had worked in 88 villages, starting with the high alpine villages and working down to those low in the sub-tropical valley. Roughly two thirds of all the villages have *Van Panchayats* in the Gori river basin.
- A longstanding arrangement of the *Van Panchayats* exists in Uttarakhand. The project has not only been able to work towards bringing the soyaam/benaap lands under the fold of the existing *Van Panchayats* but also has influenced the government to form new *Van Panchayats*, bringing into its fold the civil soyaam lands in 28 villages. The project supported the communities in

Financial Statements



Auditors' Report

We have audited the attached Balance Sheet of Foundation for Ecological Security as at 31st March, 2006 and also the Income and Expenditure Account for the year ended on that date hereto. These financial statements are the responsibility of the management of the Society. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material mis-statement. An audit includes examining on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

Further, we report that:

- (i) We have obtained all information and explanations, which to the best of our knowledge and belief were necessary for the purposes of our audit;
- (ii) In our opinion, proper books of account have been maintained by the Society, so far as appears from our examination of those books;
- (iii) The Balance Sheet and the Income & Expenditure Account dealt with by this report are in agreement with the books of account;
- (iv) The Balance Sheet and Income and Expenditure Account dealt with by this report comply with the accounting standards applicable to the Society;
- (v) In our opinion and to the best of our information and according to the explanations given to us, the said accounts give a true and fair view in conformity with the accounting principles generally accepted in India:
 - (a) In the case of Balance Sheet, of the state of affairs of the Society as at 31st March, 2006 and
 - (b) In the case of the Income and Expenditure Account, of the excess of Income over Expenditure of the Society for the year ended on that date.

As required by the Rule no. 13.7 of the Society, we further report that:

- (i) No personal expenses of Officers and members of the Governing Board, except for those payable as per the terms of the appointment/agreement or authorised by the rules and regulations of the Society, have been charged in the books of accounts,
- (ii) The transactions of the Society are not in contravention of the constitution of the Society, its rules and regulations,
- (iii) The Board of Governors has been properly constituted in accordance with the covenants of Society's rules and regulations.

For C.C.Chokshi & Co.
Chartered Accountants

H.P. Shah

Partner

Membership No. 33331

Camp: Anand
Date: 20.07.2006

Balance Sheet

(As at March 31, 2006)

	Sch.	2006	2005
		Rs	Rs
SOURCES OF FUNDS			
CORPUS FUND	1	130,283,274	122,162,693
RESERVES AND SURPLUS	2	65,769,627	62,728,159
PROJECT & OTHER FUNDS	3	121,890,931	168,637,924
	TOTAL	317,943,832	353,528,776
APPLICATION OF FUNDS			
FIXED ASSETS	4		
Gross Block		42,391,818	40,532,205
Less: Depreciation		23,132,234	19,806,364
		19,259,584	20,725,841
CURRENT ASSETS, LOANS AND ADVANCES			
Inventories	5	229,891	324,488
Cash and Bank Balances	6	290,832,805	279,849,611
Other Current Assets	7	6,209,266	47,216,185
Loans and Advances	8	7,705,731	8,542,082
		304,977,693	335,932,366
Less: Current Liabilities & Provisions	9	6,293,445	3,129,431
		298,684,248	332,802,935
NET CURRENT ASSETS			
	TOTAL	317,943,832	353,528,776
Significant Accounting Policies	11		
Notes on Accounts	12		

As per our attached report of even date

Amrita Patel
Chairman

Place : Anand
Date : 20.07.2006

For C.C. Chokshi & Co.
Chartered Accountants

H.P.Shah
Partner

Place : Anand
Date : 15.07.2006

Jagdeesh Rao
Executive Director

Schedules and Notes on Accounts can be made available on request

Income and Expenditure Account

(For the Year ended March 31, 2006)

	Sch.	2006 Rs.	2005 Rs.
INCOME			
Fund Received:			
– For Projects		60,967,862	82,602,487
– Others		<u>14,227,468</u>	<u>84,378</u>
Interest and Other Receipts	10		
Receipts on Study, Survey and Training		75,195,330	82,686,865
Total		1,424,588	947,745
		3,832,036	2,112,269
		80,451,954	85,746,879
EXPENDITURE			
A. STRENGTHENING COMMUNITY BASED INSTITUTIONS AND NATURAL RESOURCES			
Planning and Survey		709,821	195,767
Formation and Strengthening of Community based Institutions		494,873	370,488
Soil and Water conservation measures		11,255,282	12,454,345
Revegetation measures		5,496,541	4,648,208
Measures to sustain livelihoods		4,103,520	2,356,747
Energy conservation activities		404,609	294,484
Capacity building activities at village level		1,768,211	1,045,939
Managerial assistance		<u>14,944,713</u>	<u>16,081,737</u>
		39,177,570	37,447,715
B. SUPPORT SERVICES			
I. CAPACITY BUILDING			
Survey and Planning for new projects		730,235	911,930
Capacity building of staff members		2,363,505	2,643,522
Promotional activities and Advocacy		2,835,371	2,801,057
Documentation, Studies and Dissemination		<u>1,824,201</u>	<u>2,288,223</u>
		7,753,312	8,644,732
II. ADMINISTRATION AND RECURRING EXPENSES			
Staff salaries and benefits		21,118,671	20,666,758
Travel and conveyance		424,818	436,172
Professional fees and Consultancy charges		805,578	592,834
Motor vehicle running and maintenance		245,425	154,611
Rent, Rates, Taxes and Electricity charges		1,431,389	1,314,440
Communication expenses		1,063,276	922,410
Printing and Stationery		414,889	359,798
Computer maintenance		715,657	636,803
General repairs and maintenance		408,817	442,451
Insurance premium		451,762	427,792
Statutory Audit Fees and expenses		175,904	239,744
Miscellaneous expenses		<u>811,588</u>	<u>510,997</u>
		28,067,774	26,704,810
C. Expenses on Other Funds		74,998,656	72,797,257
D. Expenses on Studies, Survey and Training		13,821,589	238
		2,583,009	1,987,031
		91,403,254	74,784,526
Depreciation (Sch. 4 Column G)		3,845,097	3,387,748
Less: Profit on sale of Assets		<u>24,298</u>	<u>22,472</u>
		3,820,799	3,365,276
Less: Adjusted against Capital Fund (Ref. Sch.2.A)		<u>3,820,799</u>	<u>3,365,276</u>
		—	—
Total		91,403,254	74,784,526
Excess of (Expenditure)/Income over Income/Expenditure		(10,951,300)	10,962,353
Fund Transferred from (previous year to) Projects Account (Sch.3.B)		13,279,893	10,530,784
Fund Transferred to Other Funds (Sch.3.C)		408,688	84,152
Balance of Excess of Income over Expenditure carried to Balance Sheet		1,919,905	347,417
Significant Accounting Policies	11		
Notes on Accounts	12		

As per our attached report of even date

Place : Anand
Date : 20.07.2006

For C.C. Chokshi & Co.
Chartered Accountants
H.P.Shah
Partner

Place : Anand
Date : 15.07.2006

Amrita Patel
Chairman

Jagdeesh Rao
Executive Director

Schedules and Notes on Accounts can be made available at request

Projectwise Income and Expenditure Account

(FOR THE YEAR ENDED MARCH 31, 2006)

SCHEDULE 3.1 : PROJECTS

Rs.

Projects	INCOME			EXPENDITURE			Non Recurring Expenses during the year	Transferred to Corpus Fund	Balance As on 31.03.2006					
	Opening Balance As on 1.4.2005	Fund received during the year	Interest and Other Income	Total Income during the year	Community Based Institutions	Support Service Capacity Building Expenses								
A	B	C	D	(C+D)	E	F	G	H	(F+G+H)	(E-I)	J	K	L	M
A. INDIAN CONTRIBUTION														
I Tree Growers' Co-op. Project	4,458,296	39,797,975	53,500	39,851,475	16,853,554	5,436,818	18,406,505	40,696,877	(845,402)	1,061,564	—	2,551,330		
II Dairying and Natural Resource Management Project (NDDB)*	6,827,711	11,400,000	111,954	11,511,954	10,686,105	1,449,615	6,474,334	18,610,054	(7,098,100)	129,310	—	(399,699)		
III Ecological Security and Livelihoods Project (TSWT)	11,855,976	—	583,811	583,811	3,597,454	251,306	1,485,971	5,334,731	(4,750,920)	130,000	—	6,975,056		
IV Social Mobilisation and Natural Resources Management Project (UNDP-GOI)	442,987	2,492,704	—	2,492,704	2,125,134	23,460	366,343	2,514,937	(22,233)	135,783	—	284,971		
V Watershed Development Project (NABARD)	—	301,433	—	301,433	268,378	—	1,316	269,694	31,739	—	—	31,739		
VI Watershed Development Project (Sunerra Kal)	—	4,563,000	1,636	4,564,636	3,543,809	32,558	613,627	4,189,994	374,642	248,138	—	126,504		
VII River Bank Stabilisation – (UNOPS- GEF/SGP)	—	516,805	—	516,805	83,538	2,799	339	86,676	430,129	—	—	430,129		
Total "A"	23,584,970	59,071,917	750,901	59,822,818	37,157,972	7,196,556	27,348,435	71,702,963	(11,880,145)	1,704,795	—	10,000,030		
B. FOREIGN CONTRIBUTION														
I Conservation and Livelihoods Project (BHC)*	—	335,405	—	335,405	553,213	48,125	14,363	615,701	(280,296)	—	—	(280,296)		
II Panchayats and Natural Resource Management Project (BHC)*	—	1,560,540	—	1,560,540	1,466,385	508,631	704,976	2,679,992	(1,119,452)	251,547	—	(1,370,999)		
Total "B"	—	1,895,945	—	1,895,945	2,019,598	556,756	719,339	3,295,693	(1,399,748)	251,547	—	(1,651,295)		
GRAND TOTAL (A+B)	23,584,970	60,967,862	750,901	61,718,763	39,177,570	7,753,312	28,067,774	74,998,656	(13,279,893)	1,956,342	—	8,348,735		
Previous Year	13,887,700	82,602,487	725,554	83,328,041	37,447,715	8,644,732	26,704,810	72,797,257	10,530,784	803,610	29,904	23,584,970		

* Claims submitted for reimbursement



Income and Expenditure Account

(FOR THE YEAR ENDED MARCH 31, 2006)

SCHEDULE 3.2 : OTHER FUNDS

Rs.

	Other Funds	INCOME						Excess of Income/ Expenditure over Expenditure/Income for the year (E-F)	Non Recurring Expenses during the year (B+G-H)	Balance As on 31.03.2006 (B+G-H)
		B	C	D	E	F	G			
A. INDIAN CONTRIBUTION										
I	Flood Relief Operation (Sir Doraji Tata Trust & Others Agencies)	—	14,112,860	—	14,112,860	13,690,360	422,500	422,500	—	—
Total "A"		—	14,112,860	—	14,112,860	13,690,360	422,500	422,500	—	—
B. FOREIGN CONTRIBUTION										
Donations	84,152	114,608	2,809	117,417	131,229	(13,812)	—	70,340		
Total "B"	84,152	114,608	2,809	117,417	131,229	(13,812)		70,340		
GRAND TOTAL (A+B)	84,152	14,227,468	2,809	14,230,277	13,821,589	408,688	422,500	70,340		
Previous Year	—	84,378	12	84,390	238	84,152		84,152		

Acknowledgement

We thank the Government of India, the Department of Land Resources, Ministry of Rural Development, Department of Economic Affairs in the Ministry of Finance and the Ministry of Environment and Forests, New Delhi. We acknowledge the support and extend our thanks to the State Governments of Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Orissa, Rajasthan and Uttaranchal.

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