



FOUNDATION FOR ECOLOGICAL SECURITY

ANNUAL
REPORT
2011-2012



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COVER: Fruiting bodies of the Croaline or Yellow Staghorn Fungi (*Calocera Spp*)

Fungi are the largest, and possibly oldest, living organisms on Earth. As natural recyclers, constantly maintaining carbon budgets and ensuring nutrient recycling and soil formation, saprophytic fungi are essential to the functioning and regeneration of forests throughout the world. This *Annual Report* captures the spirit of the monsoon, also a time when fungi thrive most.

Cover Photo: Arpit Deomurari



Our Mission

“As ‘ecological security’ is the foundation of sustainable and equitable development, the Foundation for Ecological Security (FES) is 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 FES:

WORKS towards the ecological restoration and conservation of land and water resources in the uplands and other eco-fragile, degraded and marginalised zones of the country, and, to set in place the processes of co-ordinated human effort and governance to this end and provide relief to the poor, in particular;

WORKS either directly, or with and through a range of democratic village institutions, their federal bodies, and civil society organisations, set up through initiatives that are ecologically sustainable, socially and economically equitable;

ENSURES the ecological integrity of all efforts by working, as far as possible, with entire landscapes and with all the inter-related communities within it, through a range of arrangements on their land and aquatic resources, whether Commons, Public or Private;

WORKS for and promotes 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;

COLLABORATES with Panchayat Raj and other democratic village institutions, as well as appropriate civil society organisations, in their efforts to fulfil the objectives of the society, and to provide technical and financial assistance to them.

Board of Governors

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Samar Singh

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Nitin Desai

Deepak Tikku

Mahendra Vyas

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Representatives of

National Dairy Development Board (NDDB)

National Bank for Agriculture and Rural Development (NABARD)

Jagdeesh Rao

(Ex-officio Member Secretary)



Our Organisation

Registered under the Societies Registration Act XXI 1860, the Foundation for Ecological Security was set up in 2001 to reinforce the massive and critical task of ecological restoration in the country.

The central character of our efforts lie in intertwining principles of nature conservation and local self-governance in order to accelerate efforts on ecological restoration, as well as improve the living conditions of the poor. By working on systemic issues that can bring about a multiplier change, we look forward to a future where the local communities determine and move towards desirable land use practice based on principles of conservation and social justice.

Safeguarding the Commons in Rajasthan

The Policy Outline

Through the Policy on Commons, the Rajasthan Government aims to: promote community institutions for decentralised governance of natural resources; protect and conserve common lands; ensure equitable access for all sections of society and the poor in particular; ensure sustainable use of environmental resources; restore ecological balance; and develop a database of available category-wise common lands and its present land use.

Enabling Government Orders

>> 1st October, 2010: State-level Committee on Commons formed.

>> 23rd November, 2010: A Drafting Committee to prepare a Draft policy on Commons constituted by the Committee.

>> 9th March, 2011: Two orders issued enabling Panchayats to evict all encroachments on grazing lands and channel MGNREGA funds for their development.

>> 24th March, 2011: Following the Supreme Court judgement, the Panchayati Raj Department directed the Chief Executive Officers of the Zilla Parishads to ensure removal of encroachments on grazing lands and Orans (sacred groves).

>> 26th March, 2011: Orders for undertaking grazing land development under the MGNREGA issued by the Rural Development Department.

>> 25th April, 2011: Ban on the issue of No Objection Certificates for the allocation, regularisation, undertaking mining and similar activities on the grazing lands; and also allocation and regularisation of encroachments on these lands by the Revenue Department.

>> 9th June, 2011: Order for demarcation of the lands falling under Gram Panchayat used for common purposes such as grazing lands, common ponds and their catchment areas, playgrounds, etc. issued by the Chief Secretary.

Campaign for the Commons

The Government of Rajasthan is the first State Government in the country to have drafted a Policy underlining the significance and need to restore and manage the Commons. While the Policy was being drafted, the Supreme Court judgement in January 2011, which directed all State Governments to remove encroachments on common lands and restore them to Panchayats and Gram Sabhas, enabled the Government to issue orders to facilitate the process of securing the Commons by demarcating boundaries of all Panchayat lands. All community-purpose lands that are registered in revenue records as gauchar, community ponds along with their catchments, playing grounds, etc., are to be surveyed and their boundaries demarcated. Further, in order to help translate these orders into programmatic action, the Government issued 'Operational Guidelines on the implementation of grazing land development under MGNREGA' facilitating the utilisation of funds available under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) for improving the productivity of common lands through Panchayats. FES is widely known for its work on Commons across rural India, and was therefore made a member of the State-level Committee set up to formulate the policy and contribute to the drafting of the operational guidelines for restoring the Commons.



Launch of the Commons Campaign

In order to seek the opinions of elected representatives of Panchayats and other members of civil society, the Department of Rural Development and Panchayati Raj, Government of Rajasthan and FES co-organised a State-level Orientation Workshop on the Commons, on September 29, 2011, at Jaipur. The announcement of the draft policy for public





FES signs an MoU with the Government of Rajasthan to assist in restoring the Commons.

consultation was also combined with the launching of *Shamlat Abhiyan*, a Campaign for Commons. During the workshop, a Memorandum of Understanding (MoU) was signed between the Government of Rajasthan and FES, where FES agreed to support the Government in undertaking the Campaign for the Commons, and assist in conducting training programmes to enhance the understanding on policies and operationalisation of programmes on Commons and result in widespread action across Panchayats. The MoU paved the way for more concerted and collaborated efforts between FES and the Government of Rajasthan to operationalise the policy and undertake the Campaign in the State.

Speaking at the workshop, Shri Bharat Singh, Hon'ble Minister for Rural Development and Panchayati Raj, Government of Rajasthan, emphasised that for the policy changes to be effective, representatives of local self-government institutions would have to be willing to take some difficult decisions that may not be popular, but are important, if the Commons are to be secured.

The Government Officials, District Collectors, Divisional Commissioners, Chief Executive Officers of Zilla Parishads, people's representatives from district, block and panchayat levels, welcomed the State Government's move to secure the Commons and the people's representatives presented a case for MGNREGS funds to be invested in securing common lands.



“The Government of India is trying to put in place institutional arrangements and mechanisms to promote policy development and stakeholder engagement on sustainable management of Commons. ”

Dr. Manmohan Singh
Prime Minister, Government of India

12th Delhi Sustainable Development Summit
2nd February, 2012



Prof. Elinor Ostrom
(August 7, 1933 - June 12, 2012)

“I am glad to see the incredible progress being made and I know there is still a lot to be done. ”

Prof. Elinor Ostrom
Nobel Laureate In Economic Sciences (2009)
on being informed about the developments
in Rajasthan and Andhra Pradesh



Cornerstones

Land, water and food security are the most important issues in public policy discussion in India today, so any debate on ‘development and inclusive growth’ within the country would have to address these fundamental issues. Policy and programmatic measures in coming years must inevitably be directed at promoting judicious land use, good governance and better economic opportunity.

Two important trends pointed towards strengthening village infrastructure can be seen in planning processes at the national level today. Firstly, devolution of planning and implementation to districts, blocks and Panchayats along with enabling architecture; secondly, increased public expenditure for improvement in agriculture and rural livelihoods. The drawback being that while considerable funds are being made available and there is intent to devolve and decentralise, more often than not, the capacities at the district level and below are weak and short-sighted.

We work towards centre-staging ecological agenda alongside priorities of economic growth, reorienting progress from the standpoint of conservation and social justice, and presenting local visions and voices at both local and global levels. Working from a systems perspective, our efforts are aimed at three fundamental dimensions (and their interfaces) of rural life:

- **Ecological Restoration:** Conserving nature, and restoring and managing natural resources, such as local biodiversity and hydrological and nutrient cycles.
- **Local Governance:** Enhancing self-governing capacity, inclusion, participation and collective decision-making, and strengthening institutions.
- **Livelihoods:** Securing livelihoods dependent on natural resources, and highlighting the threshold limits of the given agro-ecological system so as to assist communities in determining consumption levels within the ecological capacity of the area.





Ecological Restoration

We believe that in rural livelihood systems, infrastructure must be understood in terms of soil, water, nutrients, biomass, and biodiversity – all of which are fundamental to the viability of farming systems.

Most of our efforts are concentrated in the dryland regions of the country characterised by land degradation, depletion of biomass and biodiversity, and lowered groundwater levels. In such landscapes, we map and build a profile of what lies on the surface and what lies below – such as species diversity, soil quality, geology, surface water availability and flows, and groundwater availability.

The landscapes we work on are as diverse as scrub lands, tidal mudflats, dense forests, ravines, grasslands, farm fields and water bodies. An essential part of our approach is to aid all local village communities in planning for conservation action: such as drawing up plans to improve soil and moisture regimes and create a micro-climate conducive to vegetative growth.

By taking advantage of the subtropical climate and the abundance of rootstock in each region, we promote natural regeneration. Engaging with all the communities in the area, we assist in designing plans for soil and moisture conservation to help improve groundwater levels, biomass productivity, biodiversity and vegetative growth. We also engage communities in exploring means and mechanisms to control indiscriminate use of natural resources, and protection of native plant species and habitats where these have resurfaced due to conservation efforts. We collaborate with other agencies both to scale up operations as well as to lend coherence to conservation action plans over larger areas.

Typically, such conservation measures have resulted in marked improvements in groundwater levels, biomass productivity and biodiversity – leading thereon to increased crop productivity, double cropping, fodder and water availability.

The Larger Trend

- > Restore forests, grasslands and wetlands to serve critical ecological functions that sustain local livelihoods.
- > Close in on ecological measures for adapting to growing climate variability.
- > Highlight the value of birds, insects, amphibians, reptiles, etc. in maintaining the robustness of agriculture and forest ecosystems.
- > Build bridges between conservation sciences and conventional approaches in natural resource management.
- > Share knowledge on both the potential and judicious use of biomass, biodiversity and water resources with local communities.
- > Build information systems capturing information on fauna and flora and make them easily accessible to a wide audience, and create a larger constituency for conservation.





Community Institutions

Community institutions compare favourably with State and market-run institutions not only in terms of efficiency, but especially on grounds of equity and sustainability. Community institutions ensure that the rural poor get access to a share in Common Pool Resources by establishing a code of locally-agreed behaviour – a code that both encourages positive action and keeps individual exploitation in check.

We work with a variety of village-level institutional forms such as the Village Forest Management and Protection Committees, Grazing Land Development Committees, or Tree Growers' Cooperatives, and assist local communities that are best positioned to restore and manage them in the long term.

To foster collective action on safeguarding natural resources, we build on existing community-level practices. We bring together habitations that lie in contiguity on the basis of natural affiliations, which then evolve into larger institutional associations that go beyond habitations.

We go on to build local and regional platforms which bring together members of village institutions, civil society representatives, academia and government functionaries, thus helping to build a larger stewardship that is better equipped to make informed choices on judicious land-use in the area.

The most appropriate institutions, however, for governance of natural resources are the Panchayats since they are constitutionally recognised and enjoy custodial rights over natural resources. We have found that by nesting user-based institutions under the larger umbrella of the Panchayats, it becomes possible to draw on the strengths of both kinds of institutional arrangements – the smaller committees for their effective role in executing activities at the habitation level, and the larger Panchayats for deciding on issues that cut across habitations.

The Larger Trend

- > Energise institutions such as water users or forest protection associations that are designed around common pool resources.
- > Nest user institutions within Panchayats so as to gain from the constitutional mandate that Panchayats enjoy. Further devolve the Panchayats' decision-making powers on natural resources to habitation-level Gram Sabhas.
- > Build on the capacities of the Panchayats' representatives to plan and implement programmes.
- > Conceive groundwater as a common pool resource, and arrive at institutional arrangements on water rights based on hydrology and equity considerations.
- > Search for institutional options that can segregate merchandising and conservation objectives. Screen operative mechanisms such that the poor do not get dispossessed but rather, are insulated from market uncertainties.





Enhancing Livelihoods

Changes wrought on ecosystems have contributed to substantial gains in economic development – but much of these gains have been achieved at the cost of widespread degradation of ecosystem services, and escalation of poverty for large sections of the population.

A long-standing debate is between those who argue, on the one hand, that the conservation of nature is a value that needs to be pursued even at the expense of human livelihoods, while others contend that access to natural resources is integral to the basic right to livelihood.

FES addresses both issues without pitting the one against the other. In a context where farming systems are linked inextricably with nature and natural resources, our stand is that conservation and securing local livelihoods go hand-in-hand. At the same time, there cannot be any single prescription for all maladies.

Most contemporary initiatives on livelihood promotion do not take into account the threshold limits of ecosystems and instead push for an exploitative trend that is obviously untenable in the long run. FES, however, strives to highlight the threshold limits of the given agro-ecological system so as to aid communities in determining consumption levels within the ecological capacity of the area. In other words, our work revolves around highlighting natural resource-based livelihood options that are ecologically sound and economically rewarding.

Our effort is also to leverage government programmes to add value to farm-based activities and improve access to markets, thereby augmenting household incomes. At the same time, we emphasise institutional mechanisms that make the community central to the decision-making process. Pro-poor institutional arrangements, in terms of rules of use and sharing of benefits, strengthen the livelihoods of the marginalised sections and, to an extent, empower them politically.

The Larger Trend

- Facilitate development of a well-informed vision at the Panchayat level
 - a perspective plan which focuses on reviving the ecological balance, improving productivity of the farming systems and tilting governance to benefit the poor and deprived.
- Cultivate a set of local volunteers to take on the stewardship of the area, enabling better representation and voicing of the interests of local communities.
- Assist local communities in developing a cadre of skilled persons from within to take advantage of government and other programmes aimed at strengthening livelihoods and incomes.
- Engage actively with implementation of MGNREGA, that is, leverage its focus on creating durable assets for the community through investments in the local natural resource base, and its potential to strengthen democratic decentralisation.





Courtesy of Mark Kazman

Our Approach

FES works through local self-governance institutions to promote the judicious management of natural resources. Pursuing greater democratisation in institutions of local self-governance, we partner with a large and robust constituency of village communities that are committed to restoring ecosystems and landscapes, and to crafting suitable institutional spaces which safeguard the interests of the poor.

In various parts of the country, alongside community institutions, FES joins hands with civil society, academia, local elected representatives and government functionaries on a common platform to promote informed stewardship and concerted action towards restoring ecological health. FES also leverages funds available under Rural Employment Guarantee Programmes and channels their effective utilisation to restore degraded landscapes and revitalise local self-governance institutions.

Given its presence at various levels of governance – from villages and districts to the state and national level – FES is well poised to voice local concerns on regional, national and global platforms. Over the last few years, we have made a significant jump in outreach by expanding field operations to more villages, and setting in place yet more institutions for community-based natural resource management and governance. Its strong field-level presence and contributions towards policy and programmatic action on Commons have opened up new opportunities for enhancing our role and scope of activities, from implementation to conducting training programmes, undertaking studies and influencing policy.

Feet firmly on the ground, FES also aids fellow NGOs, Panchayats and government officials in expanding their work, furthering thinking by undertaking studies, and lastly, influencing policy so as to replicate its work on ecological security. FES will espouse the cause of nature and natural resources for their better governance and improved bio-physical well-being with continuing enthusiasm, thereby providing better economic opportunities to rural populations.



Forests in a Landscape

For about 37% of India's rural population (that is, about 300 million people), forests and common lands are veritable treasure houses, supplying fodder, fuel wood, timber, food, medicines, and water, for both people and animals. The collection of Non Timber Forest Produce (NTFP) is a major source of forest income in rural India: an estimated 11.8 million people across the country are involved in head-loading firewood, mainly as a source of daily income.

After agriculture, forests – covering almost 24% of the overall landmass of 329 million hectares – represent the second largest land use in India. But the area under natural forests (not taking into account area under plantations) has been shrinking by an alarming 1.5-2.7% each year!

Forests and other Commons need to be maintained for the ecological functions and services they provide, the biodiversity they harbour, and to absorb harmful greenhouse gases. Key ecological functions such as improved transfer of nutrients, longer periods of water flows and retention of moisture, better pollination and pest control, directly help improve farm productivity and incomes.

As forests and streams cut across habitations, so do groundwater aquifers and the birds and insects that help pollinate crops and control pests. The grazing lands that a village frequents could fall within the area of neighbouring villages; social relationships and economic transactions are also not confined to habitations but traverse borders with other villages.

In every location where we are present, we work with all communities inhabiting contiguous stretches along a watercourse or hill-range. We highlight the importance of systemic drivers such as soil, moisture, nutrients, biomass and biodiversity between forests/other common lands and associated production systems in the landscape (such as agriculture, livestock-keeping and fisheries).

The spread of natural resources and production systems and the social and economic interactions of inhabitants with forests, land and water, call for a broader view where forests must be seen as a part of the larger landscape. Locating forests and other Commons within a larger ecological, social and economic setting offers scope to institute arrangements, which balance the interests of preservation, conservation and exploitation of natural endowments.

Current development efforts tend to be fragmented and at times work at cross-purposes. There is a need for umbrella institutional arrangements at the Block level that span across administrative and sectoral domains and build on customary means of use and access.

The Larger Trend

- > Reorient forest policies so that provision of water is the fundamental conservation objective of management and governance of forests.
- > Increase forest cover on non-forest government lands, such as revenue 'wastelands', to take the pressure off existing forests to meet human needs.
- > Arrive at regulatory arrangements where collective decisions on optimal land use determine or guide decisions of individual landowners.
- > Conceive a common administrative apparatus, such as a Department of Natural Resources, to bring together development programmes aimed at improved forest cover, viable farming systems and stable groundwater.
- > Recognise forums of village communities, civil society groups, academia, government officials and interested citizens to manage landscape-level issues.



Farming and Farming Systems

Future demands of food grains in India – estimated at 280 million tonnes by 2020 – would require a step up in the growth rate of food production with rain-fed agriculture contributing at least 40% of the increased demand.

Rain-fed areas are spread over 200 million hectares, constituting 62% of the geographical area in the country. Spanning several agro-ecological regions, agro-climatic conditions and farming systems, these areas also have the largest concentration of poverty and backwardness. By choice, we work in areas where agriculture and livestock production is predominantly rain-fed in nature.

Conditioned to scarcities and the vagaries of nature, rain-fed agriculture and rain-fed livelihoods exhibit strong elements of resilience. The most striking feature of rain-fed farming is the diversity of agricultural activities, with possibility of over 34 crops being cultivated in a year – compared to four or five under irrigated conditions. A larger variety of livestock species are generally raised as well.

However, the last few decades of predominant attention to intensification of agriculture through high-yielding varieties has left rain-fed agriculture suffering in the shadow of the Green Revolution. It has brought about significant changes in cropping patterns, reduced the number of crops – even eliminating some significant traditional varieties – boosted use of fertilisers and pesticides to inordinate levels, depleted groundwater and damaged soil health. It has brought in a considerable reliance on systems and technologies that are not necessarily compatible with agro-ecological considerations.

Our work with land, water and people is therefore governed by a deep understanding of inter-relationships – inter-relationships between natural and human systems, between different ecosystems within a landscape, and between different elements within an ecosystem, as also the inter-linkages between Commons, livestock and agriculture.

Our efforts focus on strengthening systemic drivers (such as soil, moisture, nutrients, pollinators and biodiversity) and the natural inter-linkages between various elements of the farming system instead of looking at them in isolation. Since natural processes are cyclical in nature, our objective is to strengthen such processes rather than focus on the linear progression of individual elements.

Parallelly, we aid village communities in strengthening community institutions for local self-governance and to catalyse collective action. In this way, we aim to add to the resilience of both rural landscapes and people's endeavours.

The Larger Trend

- > Underline the value of natural resources in serving ecological functions that sustain agriculture, also highlight the contribution of pollinators and predators in maintaining its robustness.
- > Relocate the focus on livestock from “milk, cattle and irrigated fodder” to include wool and meat from small ruminants, and criticality of agricultural residue and fodder from common lands.
- > Shift the obsession from wheat and paddy to millets, coarse cereals and other local varieties and promote decentralised collection and distribution of food.
- > Position groundwater as a common pool resource and devise institutional mechanisms that check its mindless extraction and provide equal access to the resource.
- > Act on adapting to climate change by building on the centuries of experiences of facing droughts, floods, and vagaries of nature.



Working with Panchayats

In the last five years, factors helping create an environment favourable to ecological restoration have been: a welcome trend in national planning towards decentralisation of development schemes; increased availability of public funds for village-level development; a better appreciation of the strengths of decentralised natural resource management; and a perceptible openness on the part of the Government to partner with credible civil society organisations.

With its constitutional backing and mandate of universal franchise, the Panchayat is ideally positioned to develop effective natural resource management plans, manage local natural resources, and optimise benefits for both the environment and for rural livelihoods.

While user groups, such as Tree Growers' Cooperatives, Gramya Jungle Committees, Grazing Land Development Committees and Watershed Development Committees, are better organised to manage natural resources at the habitation-level, these institutions, nested under the overall governance framework of the Panchayat, help deepen the democratic functioning of the Panchayats.

Experiences from implementing the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) and watershed development programmes have surfaced the lack of attention to strengthening village-level institutions. 'Institutional deficiency' is cited as one of the most important reasons for ineffective programme planning, implementation and monitoring, and inadequate outcomes of rural development schemes.

In all the areas that we are present, we assist Panchayats and habitations to express their visions of local development collectively and coherently draw up structured action plans, and craft appropriate institutional arrangements based on customary resource-use regimes and resource boundaries. We assist in the creation of cadres of volunteers and technically-trained para-workers from the community to assist Panchayats and other village institutions in drawing up ecologically sustainable and socially equitable development plans, as also to implement government and other ongoing programmes.

We promote multi-actor platforms of community representatives, government personnel, NGOs and interested citizens at the level of Blocks or Talukas to collectively examine and steer issues related to judicious use of natural resources. We have recently set up pilot 'information and service hubs' to make information easily accessible to communities to take informed decisions on natural resource management.

The Larger Trend

- Streamline interactions between Panchayats and user/village institutions to help draw long-term plans for the development of natural resources, recognise customary practices of land use, and ensure security of tenure.
- Strengthen Panchayats and equip them to make informed decisions based on principles of conservation, equity and economic opportunity.
- Reinforce overall good governance mechanisms (democratic principles, transparency, accountability and non-partisanship and space for the poor) at the Panchayat-level enabling them to handle public funds responsibly.
- Work within the legal framework to mainstream natural resource governance in Panchayats through Natural Resource Management/Biodiversity Management/Production Committees at the village and Panchayat level. Improve the functioning of such committees such that they are not reduced to menial functions and instead help in the local governance of natural resources.



Tenure over Common Lands

In certain areas of the country, ambiguity in tenure arrangements over Common Pool Resources ranks high on the list of primary causes of ecological degradation. Whereas secure tenure over resources ensures sustained commitment to their conservation, and incentivises investment and increases productivity.

Secure tenure has to be viewed as both a prerequisite to, and an outcome of, collective action. Collective decisions must arrive at regulatory arrangements to monitor and check injudicious trends in land use. Given that rural India is ruled by hierarchies, most advantages tend to be seized or cornered by the powerful and the moneyed. Therefore, efforts towards establishing a secure tenure must be made an integral part of the larger process of building democratic institutions for governance of resources. With considerable public expenditure going in to lands adjoining villages, more often than not customary Commons, clarifying tenure over common land and access to resources could result in creating durable assets as well in making public expenditure more purposeful.

The need for collective action is all the more imperative since over the last half century, there has been a decline of as much as 31-55% in the area of common lands – lands which are repositories of biodiversity, which ensure water and nutrient flows, and add resilience to farming systems. This alarming decline can be attributed to a variety of factors: the erosion of local institutions, a vastly growing populace, fragmentation of landholdings, environmental degradation, the absence of an enabling policy framework and, of course, insecure tenure.

We are continuously involved in efforts to secure rights of access and ownership over resources for user-based institutions at the village-level. We have entered into Memorandums of Understanding (MoUs) with some State Governments to lease revenue wastelands to communities on a long-term basis. In areas adjoining forests, our effort is to implement provisions of the Forest Rights Act to obtain tenure arrangements over both common and private lands in favour of the community. We continue to engage with Governments on Joint Forest Management (JFM) arrangements so as to improve community tenure over forest produce and land.

Where communities have obtained tenure over common lands, there has been an overall improvement in vegetative cover and groundwater levels (where supported by favourable geological features) leading to benefits such as increase in the level of biomass as well as in fodder for cattle and small ruminants, and area under double cropping.

The Larger Trend

- Influence State Governments to evolve policies for the improved governance of Commons with favourable land tenure, institutional design and programme architecture as key tenets of the policy.
- Campaign for the Commons such that village communities identify, map, restore and manage Commons. Invest in technologies both for mapping and claiming the Commons.
- Facilitate formation and evolution of village institutions around the Commons and assist in obtaining secure tenure for common lands.
- Build capacity of village institutions and their collectives to interpret existing policy and procedures. Further the discussions and decision-making to ensure the representation of the poor and women.
- Facilitate efforts of local communities to build local and regional platforms, which bring together members of village institutions, civil society representatives, academia and government functionaries to take stewardship of the natural wealth of the area.



Energising MGNREGA

In the rural context, livelihoods can be made sustainable when a systems approach is adopted and inter-linkages nurtured between various ecosystems and elements within those systems. The National Rural Employment Guarantee Act or NREGA (later named after Mahatma Gandhi) opens the way to work in this direction by allocating funds on a long-term basis for soil and moisture conservation, re-vegetation and natural resource management in general.

A rights-based Act, with provisions for minimum wages, labour-intensive work, and equal pay for both men and women, MGNREGA is a step towards distributive justice. By making the Panchayats the principle institution in implementing the Act, it also helps in improving their democratic character and revitalising the local decision-making process.

The Act makes considerable opportunities and funding available for natural resource management to Panchayats, which are designated the main planning and implementing agency. In the year 2011-12, about three-fourth of the funds spent in India on MGNREGA were spent on restoring degraded natural resources on common lands.

Such a huge financial investment needs to be backed by institutional investments as well. Management and governance of common lands needs to be devolved to Gram Sabhas/Panchayats, and appropriate tenure arrangements made, so that constituent village communities could benefit from accessing produce from the Commons.

We assist Panchayats align their visions for development with those of MGNREGA, and collaborate with like-minded organisations and decision-makers for better implementation of the Act.

At the village-level, *chetna yatras* or awareness drives, popular media and information kiosks, generate wider understanding of the Act's provisions and the community's rights under the Act. We also help build a group of local resource persons who can assume stewardship of the area, assist in planning and implementation, and help the community access its rights under MGNREGA.

We help establish transparent systems for democratic decision-making and effective implementation and monitoring of the programme through social audit procedures, such as vigilance committees and payment mechanisms.

The Larger Trend

- Advocate for appropriate institutional investments and alongside the huge financial investment under MGNREGS. Combined together with rights over common land and produce, the right to employment can create durable assets, both as biophysical resources and as institutional regimes.
- Build the capacity of Panchayats and other village institutions to prepare perspective-based plans, provide technical support for participatory and transparent implementation, and introduce monitoring systems for better governance of natural resources.
- Improve livelihoods through the creation of productive assets and sustained opportunities for guaranteed employment, to alleviate poverty and reduce distress migration.
- Reinforce the village-government interface by involving all concerned agencies, research bodies, civil society organisations and village institutions so as to collectively plan the management of natural resources.
- Supplement the Rajiv Gandhi Soochna Kendras with information on subjects like biodiversity, geo-hydrology and landscape perspectives.



Strategic Overview

In human dominated landscapes, FES connects nature, natural resources and rural livelihoods, and is known for its strengths as an organisation involved in field-level implementation across diverse ecological and social geographies. The key distinguishing features of our work are:

- › An interdisciplinary approach through community action on landscape management. We bring together important ecological and social-institutional dimensions in the management of natural resources, which is often missing in typical watershed management programmes. We place equal emphasis on ecological well-being, social justice, and access to economic opportunity and the unique spaces that such an interconnected worldview offers.
- › Collaborating with, and strengthening village institutions (Gram Sabha and Panchayati Raj) with a tilt towards the marginalised communities. Within villages, we work towards the inclusion of all men and women in gaining access to common resources as well as management decisions.
- › Nesting the various forms of village institutions promoted by the government and others as subsets of Panchayats, and in turn, assisting in strengthening Panchayats. Institutions with merchandising objectives remain accountable to institutions that embody governance as a larger role.
- › Learning, particularly through various intra-organisational forums for exchange, sharing, nurturing skills and ideas, and promoting new roles. We also work with government departments, academe and practitioner organisations, enhancing mutual capacities.
- › Bringing to surface ‘Commons’ as a critical governance paradigm in the interest of local communities and for the management of natural resources.
- › Pursuing Memorandums of Understanding (MoUs) with Governments regarding access to land for village communities, and arranging district/state level coordination committees, which provide space for influencing policies and designing programmes.





Building Capacities

FES has considerable experience in building capacities of representatives of village institutions, Panchayats, government and non-government officials, who can steer development processes at the village level in areas of local governance and stewardship of natural resources.

From our experiences of implementing large scale programmes with grassroots-level institutions, we see the need to assist communities and local self-governance institutions in shaping and translating their visions of local development and filling the gaps in knowledge, leadership and skills. FES therefore conceived the setting up of *Prakriti Karyashala* or rural colleges. The *Karyashala* would conduct a range of capacity-building programmes for Panchayat representatives, government officials, non-government functionaries and rural communities in order to help build local stewardship and to promote analytical temperament for improved natural resource management in general, and the governance of Commons in particular.

With a focus on good governance and ecologically-sound natural resource management, the curriculum of *Prakriti Karyashala* aims to address the need for long-term planning, combining scientific knowledge and idiomatic knowledge, and making local governance a more inclusive and engaging process. The *Karyashala* would instill heuristic learning as its method of learning and strive to become a centre for the exchange of ideas and experiences among communities. The modules are designed around subjects like ecological restoration measures, evolving rules and regulations for local self governance, and planning for natural resource management.

The *Karyashala* is currently offering programmes to Village Forest Committees being revived along forest fringes in Rajasthan and Odisha, to village institutions integrating MGNREGA and managing Commons in Rajasthan and Andhra Pradesh, and on watershed associations planning to monitor hydrological changes and craft usage regulations in Andhra Pradesh.



Dimpal Kumar

In order to assist communities in shaping their visions of local development, and to meet the growing demand from MGNREGS and other programmes, we initiated *Prakriti Karyashala* or rural colleges in Rajasthan and Andhra Pradesh. The *Karyashala* will conduct a range of capacity-building programmes with a focus on good governance and ecologically-sound natural resource management, and help build local stewardship, knowledge and skills.

Studies and Documentation

FES undertakes studies to help locate its work in the larger context and designs pursuits that are both grounded and technically rigorous, while providing a sound basis for influencing policy. The studies are designed to engage local communities in search of suitable solutions and build on their knowledge for informed community-level action for ecological restoration, natural resource management and institution building. A comprehensive framework has also been developed to study ecological, social and economic issues in representative locations and to monitor changes over a period of time in order to upgrade the effectiveness of our work at the village and landscape level.

The broad range of thematic areas covered includes:

- > Analysing human-nature interactions in diverse social, economic and ecological settings using the socio-ecological systems framework;
- > Understanding and analysing institutional arrangements for local governance of natural resources;
- > Building economic evidence of common pool resources and common property regimes in general and their significance for different production systems, in particular;
- > Monitoring ecological health including biomass, water and energy audits to assist communities in their conservation efforts, and capturing longitudinal changes with biophysical and institutional interventions;
- > Areas of critical ecological importance (sanctuaries, wildlife habitats) to understand ecological processes and aid evolution of conservation plans;
- > Spatial and non-spatial analysis of socio-economic-ecological databases to capture longitudinal changes over time and capture development trends;
- > Assessing impacts of climate change on various natural and production systems as well as understanding institutional processes of adapting to vagaries of nature.



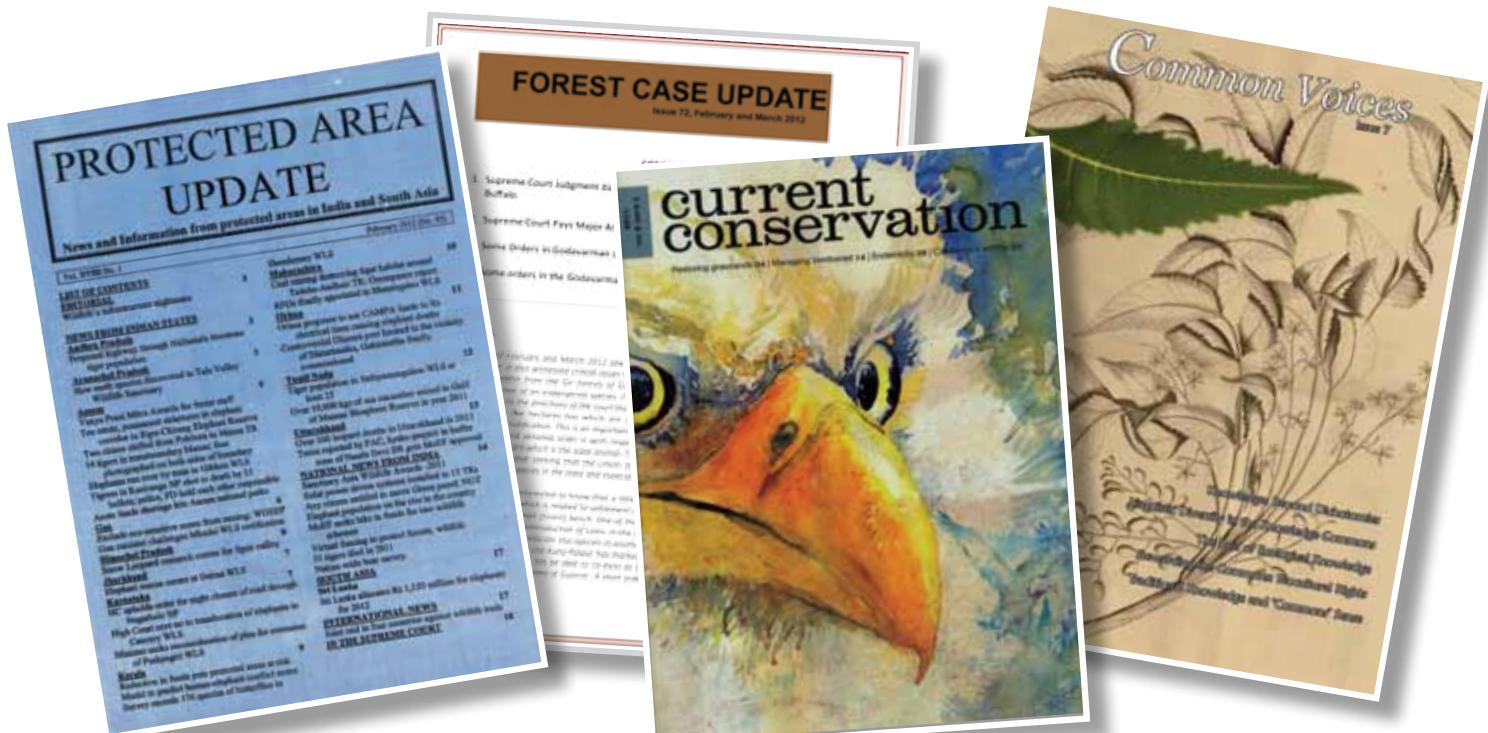
Documentation

- » **Macro-invertebrate Survey & Dragonfly Inventory:** In collaboration with TERI University, India, and Rutgers University, USA, a study was undertaken to assess the presence or absence of macro-invertebrates, specifically dragonflies, in water bodies. This study, conducted in villages around Madanapalle (Andhra Pradesh), Angul (Odisha) and Bhilwara (Rajasthan), points out that absence of dissolved oxygen, substrate vegetation and presence of pollutants have a direct bearing on the presence and diversity of macro-invertebrates. The populations and diversity of macro-invertebrates are greatly influenced by the quality of water, implying that these are good biological indicators of watershed health. Besides adding another interesting layer to the Ecological Monitoring framework developed within FES, this exercise would assist communities to monitor and address the health of water bodies in a simple and cost-effective manner.
- » **Conservation of Sloth Bear (*Melursus ursinus*):** A study was undertaken to assess the population status of the Sloth Bear and its habitat quality in four forest reserves – Kumbhalgarh Wildlife Sanctuary and Phulwari-ki-Nal Wildlife Sanctuary in Udaipur, Balaram-Ambaji Wildlife Sanctuary of Banaskantha and Vijaynagar Reserve Forest of Sabarkantha. Besides assessing the populations, the threats faced by this species were also examined and conservation plans were drawn.
- » **Studying Poverty, Agricultural Risks and Coping Strategies (SPARCS):** Undertaken in collaboration with the University of Michigan, Ann Arbor, USA, a study was initiated in 100 villages covering the states of Rajasthan, Andhra Pradesh and Odisha in order to enhance our understanding of risks in agricultural systems induced by vagaries of nature, which in current times are exacerbated by climate change. The study highlights the relevance of local coping practices and the role of institutions in developing climate-resilient strategies in agricultural systems.
- » **Livestock and Commons: Policy Perspectives for Rainfed Regions of India:** To highlight issues of grazing-based livestock systems in dryland and rainfed regions, a policy paper was developed with support from South Asia Pro Poor Livestock Policy Program and FAO. The policy paper is based on an extensive study undertaken in rainfed regions and with critical inputs from partners of the Rainfed Livestock Network. The paper highlights the dependence of grazing-based livestock production systems on common pool resources and the interface of livestock-commons-agriculture in strengthening the resilience of rural production systems.
- » **Commons Story:** The study, undertaken in 100 villages covering 3,000 households to understand the dependence of rural households on common pool land and water resources, has been further updated based on comments and suggestions from a panel of reviewers. The revised report also provides analysis of district and state level dependence across different social and economic groups. A list of questions and variables have also been identified for further analysis to understand the role of institutions and factors governing it, and how improved governance of Commons impacts rural livelihoods and ecological conditions.
- » **Legal Reviews of Acts related to Common Pool Resources:** Conducted in collaboration with the Enviro Legal Defence Firm (ELDF), New Delhi, for the states of Jharkhand and Chhattisgarh, the Acts and Policies concerning Forest Commons, pastures and water domains are being reviewed to identify gaps and make suggestions for possible modifications. These reviews add to the list of reviews conducted in the states of Rajasthan, Madhya Pradesh, Andhra Pradesh, Odisha, Karnataka and Gujarat, which were completed last year.

Networking and Collaborations

We continue to collaborate with several practitioner and academic bodies engaged in ecological restoration, community institutions and rural livelihoods towards furthering our understanding, representing a common view and expanding the horizons of our work.

- > We partner with the Dakshin Foundation to publish *Common Voices*, a newsletter on Commons, and *Current Conservation*, the conservation magazine which highlights cutting edge research and on-the-ground initiatives and experiences relating to the Commons and conservation.
- > With Kalpvriksh we bring out the *Protected Area Update*, a bi-monthly containing news and information from protected areas in India and South Asia, and *Forest Case Update*, an information dissemination service for forest and wildlife cases in the Supreme Court and the National Green Tribunal.
- > In collaboration with Collective Action and Property Rights (CAPRI), we seek to advance common interests on collective action and property rights of communities through developing effective advocacy, communication, and training materials.
- > We collaborate with different universities: Washington University, St. Louis, to study subjects related to systems dynamics, energy conservation, coupled human and natural systems; Clemson University, USA, on hydrological studies; University of Michigan, Ann Arbor, and University of Illinois, Urbana-Champaign, and Indiana University, Bloomington, on forest resource institutions and climate change.
- > We continue to collaborate with Collectives for Integrated Livelihood Initiatives (CInI) in employing a Geographic Information System (GIS) to develop a knowledge base on districts of Central India.
- > We anchor the Rainfed Livestock Network (RLN), a consortium of NGOs which works to highlight issues related to livestock rearers in rainfed areas of India. We are also a member of the Revitalization of Rainfed Agricultural Network.
- > We are a member of the International Land Coalition (ILC) as a part of our endeavour to promote secure and equitable rights over land for the poor through advocacy, dialogue, knowledge-sharing and capacity-building. We continue to be a member of the UN Economic and Social Council (UNECOSOC). As a member of the consortium on 'Future of Conservation', we collaborate and work with several like-minded organisations, such as Kalpvriksh, Nature Conservation Foundation, Samrakshan Trust, Wildlife Trust of India, and WWF - India. We are also a member of the Indigenous and Community Conserved Areas (ICCA) Consortium which strives to bring to light the criticality of biodiversity-rich natural or modified ecosystems voluntarily conserved by indigenous peoples and local communities.



Spatial Information

With a capability of providing an interconnected view of fairly large areas, spatial technologies hold great promise in integrating and analysing a variety of thematic data, and assisting in periodic monitoring of spatial and temporal changes, which helps in developing a strategic perspective for conservation and management of natural resources. Spatial analysis techniques, supplemented with integration of a range of information, help us monitor, map and model changes for supporting decisions on development action.

Spatial representation not only helps us focus on inter-linkages between various components of rural systems, but also helps establish a dialogue, linking the knowledge of local communities and science. Over time, the collection of periodic information has helped establish the impact of conservation action (or the lack of it) on factors such as water availability, soil quality, biomass and biodiversity. Bringing to fore aspects and inter-linkages that are otherwise not readily reckonable, spatial representation enables various actors to comprehend complex information and design plans.

We have a well-equipped Geographic Information System (GIS) and Remote Sensing Facility, which has developed comprehensive databases on various parameters, such as demography, natural resources, social, economic, infrastructure and biodiversity, for most parts of the country. Our aim is to build up information from various sources; synthesise the information on various development trends and present it on a spatial and temporal scale, thus offering valuable information on an interactive platform for the end-user. Atlases capturing spatial trends of the districts of Angul, Dhenkanal, Koraput, Anantapur, Chittoor, Udaipur and Bhilwara have assisted respective local administrations for planning and development.

We have used geospatial technologies to prepare a database on rain-fed regions of India. Based on a gamut of variables, both ecological and socio-economic, we have identified various characteristics of rain-fed areas and are trying to analyse their key features. With our database, we endeavour to provide a tool that would enable decision-makers to evolve strategies based on a better understanding of the dynamics of rain-fed production systems, the ecological conditions and diversity they represent, and the ways in which they contribute to livelihoods and economies of rural households.

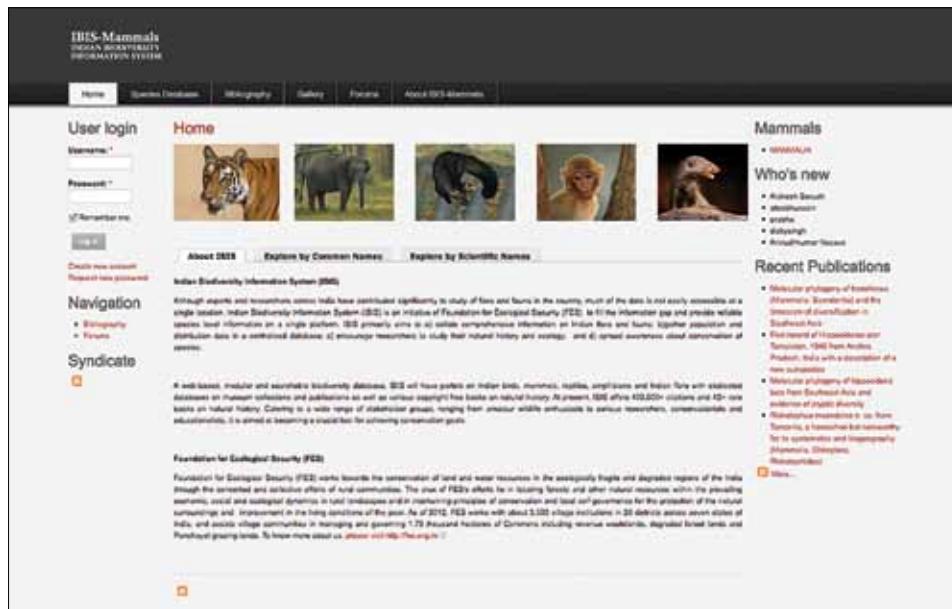
Madhya Pradesh – Distribution of Mapped Community Conserved Areas (CCAs)



16 districts were covered in Madhya Pradesh for documenting 25 CCA initiatives. Out of these 25, 21 are of Forest conservation, the remainder being species-centric, with two on Blackbuck, one on Turtle, and one on Peacock conservation. In many of the initiatives, efforts of the communities have been formalised, mainly as Van Suraksha Samitis, which are institutions of Joint Forest Management supported by the Forest Department.

Indian Biodiversity Information System (IBIS)

www.indianbiodiversity.org



A web-based modular and searchable species-level database, IBIS-Mammals provides public participatory and peer-reviewed species profiles readily accessible in user-friendly formats at a single platform.

Conservation science involves dealing with masses of information on status and degradation of ecosystems and natural resources, and prioritising environmental analysis and conservation strategies. A key deterrent in the field of conservation science has been the lack of adequate and authentic information that is readily accessible in user-friendly formats at a single location.

Indian Biodiversity Information System (IBIS) is an initiative launched by FES to fill this information gap and provide reliable species-level information on a single user-friendly platform. Catering to a wide range of stakeholder groups, ranging from amateur wildlife enthusiasts to serious researchers, conservationists and educationists, IBIS aims at becoming a crucial tool for achieving conservation goals in the subcontinent.

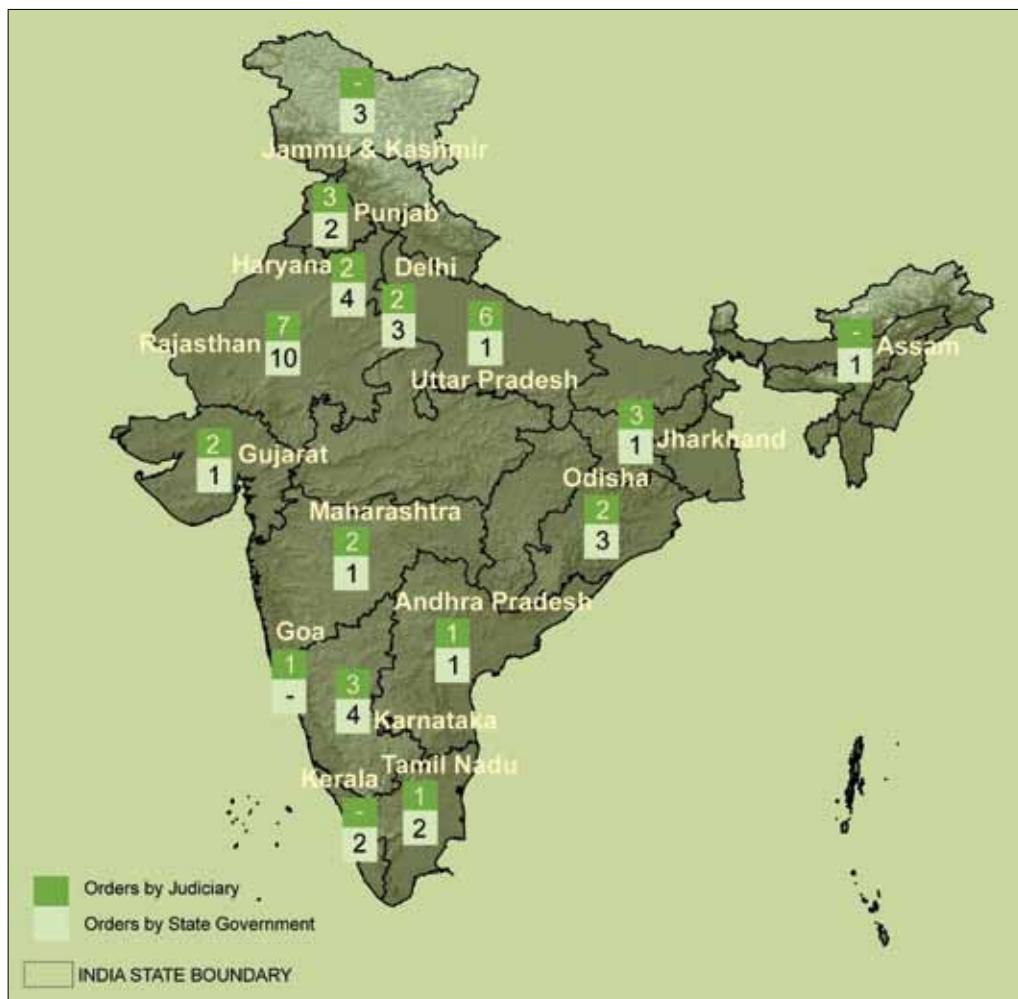
In 2010, FES successfully launched AVIS – The Avian Information System, a web-based portal which acts as an en masse to the detailed information on thousands of bird species belonging to various regions of India. It is one of the highly rated birding websites in the world (www.birdingtop500.com).

IBIS-Mammals is the second in a series of web portals envisaged under IBIS. It is a web-based information system comprising scientific species-level information on 423 species of Indian mammals. The portal hosts approximately 75,000 museum records of mammal in India, supplemented by maps of all museum records as geo-spatial layers, overlaid on Distribution Maps. It provides status, distribution, habitat, bibliography, book excerpts and other mammal-related information on a single platform, aiding in accessing information to help conservation.

IBIS (www.indianbiodiversity.org) will soon come up with similar portals on reptiles, amphibians and flora, by collaborating with individuals, organisations, researchers and scholars across India.

The success of the initiative lies in the manner in which the various interactive tools and rich data serve the goals of research, conservation and education. We hope that the various modules and tools provided for public participation will encourage the involvement of different user groups from universities and research institutes.

Interaction on Policy: The Commons Initiative



Following the Supreme Court judgment of January 2011 directing the Governments on the protection of common lands and restoration of their management rights to Panchayats, as of March 2012, several High Courts and State Governments have also given about 30 orders and 30 judgements related to the conservation and protection of Commons across the country.

Commons in India have been continuously projected as ‘wastelands’ and diverted for biofuel cultivation, corporate contract farming and industrial zones. To challenge the growing threats that Commons face from their reallocation, over exploitation and encroachment, FES launched the ‘Commons Initiative’ in 2009. It aims to build strategic collaborations and bring together practitioners, decision-makers and scholars for a long-term campaign that would influence policy and programmatic action on Commons in India.

In wake of the Supreme Court Judgment of January 2011, which directed State Governments to draw up schemes to evict encroachments on common lands and restore them to Panchayats and Gram Sabhas, FES filed an Intervening Application, offering assistance to the Court and Governments in matters concerning the Commons. The Application has been allowed and the matter is pending with the Chief Justice of India. Following the apex court’s direction, 29 judiciary pronouncements and 29 government orders on Commons have been issued by various High Courts and State Governments. The developments across the country are captured on a blog at <http://claimfor-commons.blogspot.com>.

Similarly, as a member of the working group on ‘Natural Resources Management and Rainfed Farming’, and the sub-group on ‘Institutions and Commons’, assisting the Planning Commission for the 12th Five Year Plan preparation, FES highlighted the need for policy and programmatic action in governing and managing the Commons.

We have been working closely with Governments of Rajasthan, Andhra Pradesh and Karnataka to influence policy and programmatic action on Commons. Rajasthan is the first state in the country to have drafted a Common Land Policy, and FES played a critical role in analysing the provisions on Commons and in assisting the drafting of the policy. Considering that the policy could be better implemented with a matching programme, we assisted the Government of Rajasthan in designing 'Operational Guidelines on the implementation of grazing land development under MGNREGA', which is under implementation by the State Government and the Panchayats. In order to assist the State Government in spreading awareness about the policy and programme on Commons, FES executed a Memorandum of Understanding (MoU) with the Government of Rajasthan and launched a Campaign for Commons - *Shamlat Abhiyan*. Under the campaign, FES is conducting workshops with local communities, government officials and fellow NGOs to create awareness on the policy and programmes on Commons. FES is also involved in spreading awareness on the policies and programmes on Commons to rural communities in Rajasthan.

In Andhra Pradesh, together with partner NGOs advocating the need to improve tenure of common lands, FES has been building on the pilot initiative of restoring Commons by leveraging MGNREGS. Considering the results of the pilot initiative, the Government is actively considering scaling of the programme from its present two districts to an additional ten districts, as well as drafting a policy on Commons.

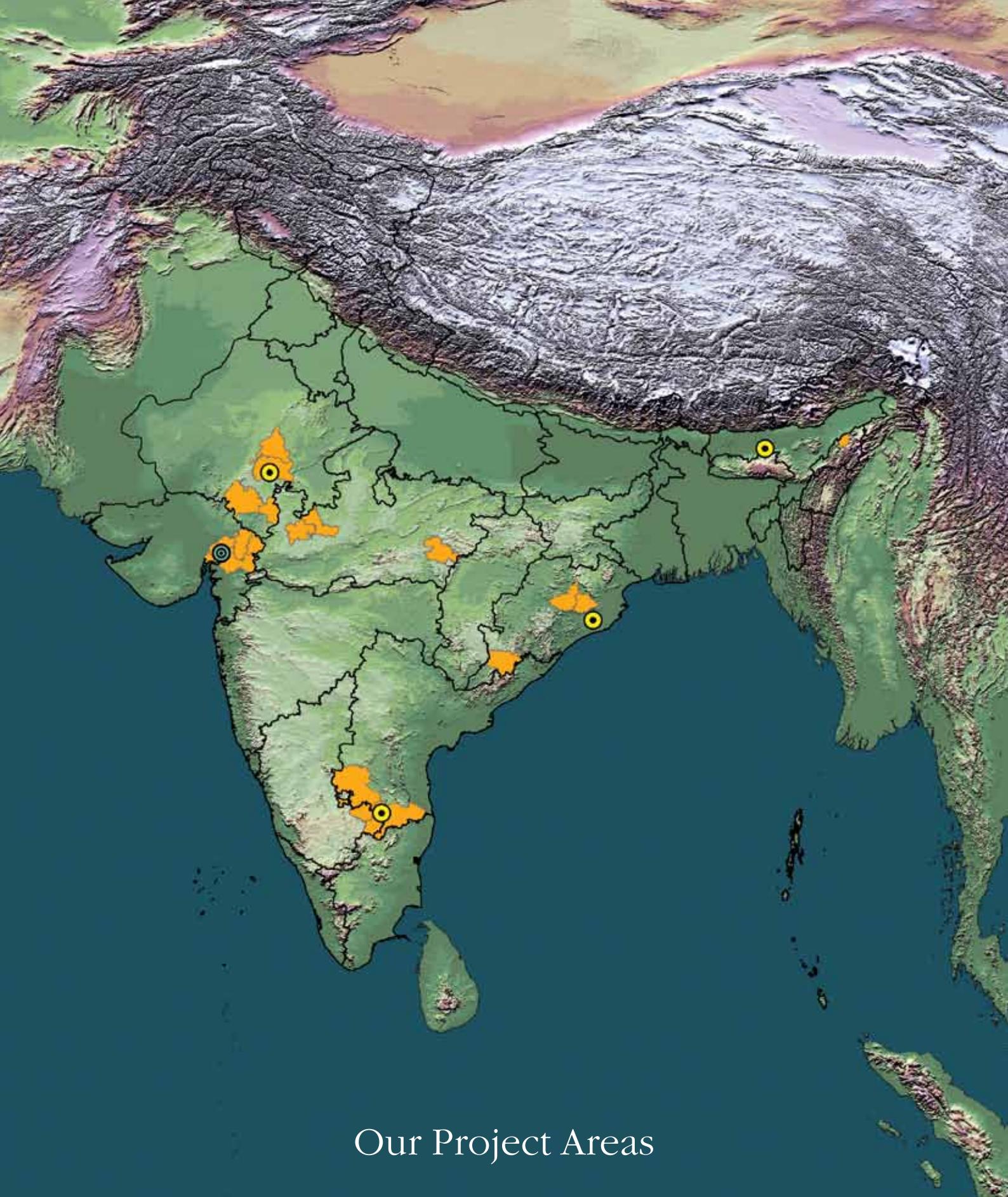
In Karnataka, the Lok Adalat observed the environmental situation in the district to be grave, with an acute shortage of water, and degradation of commons and forestlands. In its order to the District Administration to formulate an extensive restoration plan for the Commons, the Lok Adalat advised that assistance to restore the natural resources could be sought from FES. FES is assisting the District Administrations of Kolar and Chikkaballapur in preparing a comprehensive plan for the Commons.

Considering that the Supreme Court has given directions, the Governments – both at the Centre and (some) State level – and the Planning Commission are evincing concern and moving towards policy and programmatic level decisions for better governance and management of Commons, we are advocating the framing of a 'Model Common Lands Bill' at the National level, which could serve as an enabling direction to State Governments. The fundamental tenets of such a 'Model Common Lands Bill' are the devolution of management and governance of common lands to hamlet-level Gram Sabhas, and nesting them within Panchayats, appropriate tenure arrangements with such institutions and a programmatic approach such that annual plans are drawn from long-term action plans. By tethering the MGNREGA with the fundamental tenets of such a 'Model Common Lands Bill' the institutional investment that is currently insufficient alongside the financial investment through MGNREGA could be filled. The right to employment and right over resources combined together could have a significant impact in creating durable assets, both as biophysical resources and as institutional regimes.



Sudheer Kumar

Last February, Prof. Ostrom interacted with the village communities at one of our project locations in Chintamani and learnt with great interest the growth of their institution and the various rules and regulations in conserving their local forest. She also met the District Collector of the water-stressed Chikkaballapur district and shared her international experience of communities involved in shaping institutions for managing ground and surface water.



Our Project Areas

■ FES PROJECT DISTRICT

○ REGIONAL OFFICE

◎ COORDINATION OFFICE

Our Presence

As of March 2012, we are working with **1.5 million persons and 3,306 village institutions in 28 districts across 8 States**. These village institutions manage and govern a total of **170,786** hectares of revenue wastelands, degraded forestlands and Panchayat grazing lands as Commons.

In our pursuit of restoring degraded landscapes, we have gained experience in locating common lands in larger farming systems and in crafting institutional designs for conserving common and forest lands, and have helped hone local stewardship for conservation of natural resources.

While different strategies guide us in bio-geographically and socio-economically distinct locations, the broad organisational strategies are:

- Reviving the criticality of forests and other common lands, and locating inter-linkages with associated production systems – thereby highlighting the value of forests and the necessity for conservation action.
- Establishing institutional design principles and mechanisms that provide spaces for the poor and enable village communities to access, share and conserve common lands.
- Developing linkages between village-level institutions and the umbrella institution of Panchayats, and integration of natural resource management plans by Panchayats.
- Strengthening platforms for discussion at village and inter-village levels by inviting government functionaries, academia and larger civil society to jointly deliberate on issues of conservation and use of natural surroundings for meeting the consumptive and non-consumptive needs of village communities.
- Undertaking pilot-level land use planning in diverse ecological and socio-economic settings and addressing biomass and water scarcities to present illustrations for block and district level land use planning.
- Assessing impacts of climate change on various natural and production systems, and introducing mitigation and adaptation measures in ongoing practices.



RAJASTHAN

FACT FILE

River Basin: Mej, Menali, Khari, Lili, Jhakham, Erav of Mahi, Siwana, Gir of Chambal; Mansi, Wakal, Sei

Forest Types: Tropical Dry Deciduous and Dry Thorn; Tropical Dry Deciduous, Grasslands; Tropical Dry Deciduous

Threatened Species: Great Indian Bustard, Long-billed Vulture; Rusty-spotted Cat, Four-horned Antelope, Lesser Florican, Fat-tailed Gecko; Aravalli Red Spurfowl, White-naped Tit, *Compimophora wightii*, *Sterculia urens*

Principal Crops: Jowar, groundnut, pulses, wheat, gram; Maize, sorghum, paddy, cotton, sugarcane; Wheat, maize, barley, sugarcane

% of Common Lands other than Forest Lands: 52.2; 15.02; 64.52

% of Forest Cover: 3.42; 29.33; 23.21

% of Population Living Below Poverty Line: 32; 39.36; 55

% of Scheduled Castes/Scheduled Tribes: 23; 67.26; 54

Year in which FES Initiated Work: 1995; 2005; 2000

Total Common Land under Protection (ha): 25,671; 3,716; 4,906

Total Lives Touched: 247,668; 34,145; 99,861

Village Institutions Associated with: 329; 136; 267

Funding Agencies: Omidyar Network, Jamsetji Tata Trust, NABARD-IGWDP, NABARD-WDF, Govt. of Rajasthan, ITC-Rural Development Trust, ITC-MGNREGS, District Rural Development Agency - Bhilwara, UNDP-Small Grant Programme, Grow-Trees, Rufford Foundation, Fondation Ensemble

■ Bhilwara ■ Pratapgarh ■ Udaipur

Our work in Rajasthan is spread across the central and southern parts of the State. The central districts of Bhilwara and Ajmer, adjoining the Aravalis, are primarily inhabited by agro-pastoral communities, and the southern forested areas of Vindhyan and Aravali ranges, in Udaipur and Pratapgarh, are dominated by tribal communities.

In a State where the backbone of the rural economy is its rich livestock population, the Commons are crucial for meeting fodder, fuel and water requirements. Revenue lands are often used as open access resources resulting in over-exploitation and illegal encroachments, and grazing lands suffer from weak institutional arrangements. Degradation of forests threatens the overall health of natural resources in the area and adds to the concern of the tribal communities, for whom the forest is an important source of food, fibre and medicine.

In such a context, we work towards the restoration of degraded common lands and forestlands, the security of livelihoods by strengthening mixed farming systems, and the strengthening of institutions for local governance to ensure that the development of the region is ecologically sound and socially just.

The central districts of Bhilwara and Ajmer face seasonal scarcity of fodder and water. Our efforts to strengthen institutional mechanisms and augment natural regeneration processes on common lands have considerably increased the availability of fodder, surface and sub-surface water and improved the health of livestock.

In Udaipur and Pratapgarh, we assist tribal communities in understanding the provisions of the Forest Rights Act and securing community rights on forest Commons. We work with committees of Joint Forest Management to strengthen community-led protection and management of forestlands by building on existing customary patterns of access and use. We also assist communities in improving their farming practices and the resilience of their farming systems.

Rajasthan is the first State in the country to have drafted a Common Land Policy and FES played a critical role in preparing the draft as well as in developing Operational Guidelines for restoring grazing lands by leveraging MGNREGS funds. We also entered into a Memorandum of Understanding (MoU) with the Rajasthan Government in September 2011 for providing assistance in restoring Commons and in undertaking a Campaign for the Commons across the State. Under the banner of *Shamlat Abhiyan*, we initiated a state-level campaign for creating awareness around Commons and for supporting collective action by the communities in protecting and restoring their village Commons.

Update 2011-2012



S S Singh

2002



S S Singh

2006



Vibhav Bhaitia

2012

Protecting their leased land, villagers of Barundni have inspired eight other village institutions to initiate similar protection over 780 hectares of common land. This has proved significant in strengthening livestock systems and reducing risks of fodder scarcity. The income the villages generate from the sale of fodder from the Commons is being used to undertake other village development activities.

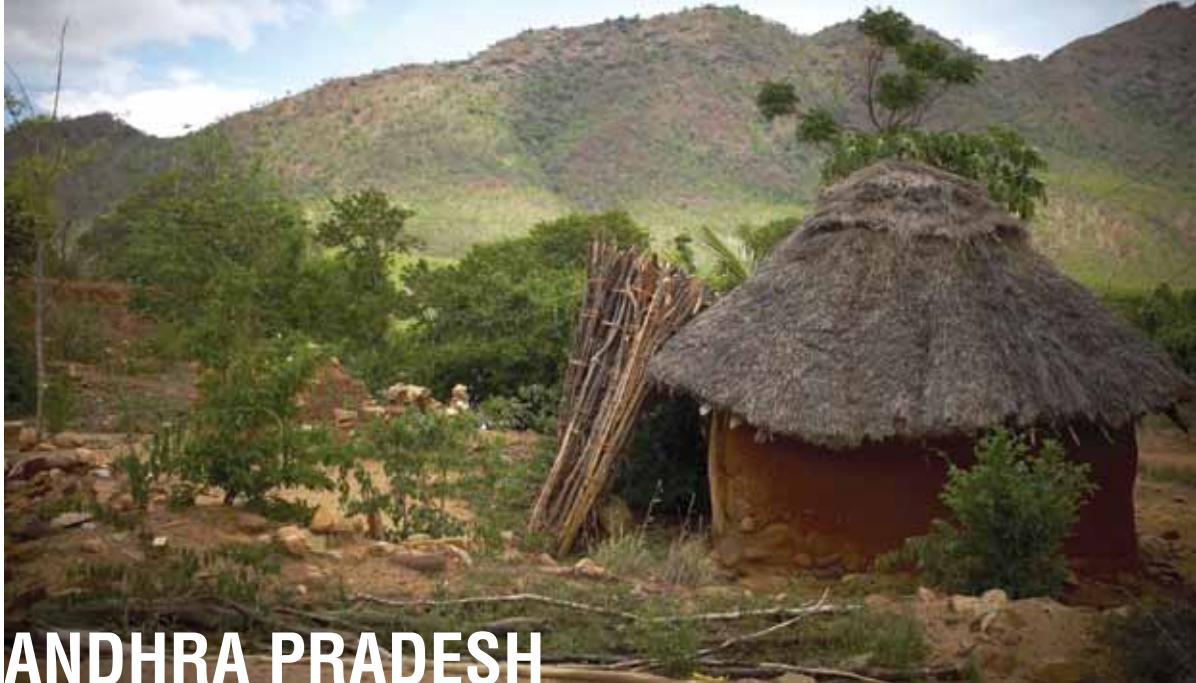
> 24 village institutions have been organised in the districts of Bhilwara, Pratapgarh and Udaipur for protection of common lands during the year, taking the total reach to 381,674 people in 732 village institutions. A total area of 34,239 hectares of common land has also been brought under community management with 1,911 hectares being added during the year.

> 90,414 saplings were planted, and around 1,966 kg of seeds of indigenous species of trees, shrubs and grasses were sown on 252 hectares of community-managed common lands, forestlands and grazing lands.

> To build the capacities of the representatives of Panchayati Raj Institutions, we made efforts through the Prakriti Karyashala (a rural college initiated by FES) on issues for claiming **community rights on common lands** and on strengthening institutional arrangements for governance. 400 rural volunteers were capacitated to assist Panchayats and 349 para-workers were trained to assist in implementation of ecological restoration activities under MGNREGS.

> 36 representatives from the Udaipur and Pratapgarh project areas were provided intensive training on the use of **information technology for improved local self-governance** with the assistance of the Swiss Agency for Development and Cooperation (SDC) and Kutch Nav Nirman Abhiyan. Studies and surveys were undertaken on the distribution and monitoring of the Grey Jungle Fowl in the Aravallis of Southern Rajasthan; another study was undertaken on the distribution, population, habitat needs and threats faced by Sloth Bear in Kumbhalgarh and Phulwari Wildlife Sanctuaries of Rajasthan.

> As part of '**Shamlat Abhiyan, the Campaign for Commons**', we have conducted awareness creating workshops for Panchayati Raj Institute representatives and community leaders, the media and legal fraternity on the issues of Commons across Rajasthan.



Courtesy of Mark Kalzman

ANDHRA PRADESH

FACT FILE

River Basin: Papagni

Forest Types: Mixed Dry Deciduous, Tropical Thorn, Scrub

Threatened Species: Yellow-throated Bulbul, Starred Tortoise, *Chloroxylon swietenia*, *Anogeissus latifolia*

Principal Crops: Paddy, chillies, groundnut, mango

% of Common Lands other than Forest Lands: 30.29

% of Forest Cover: 8.24

% of Population Living Below Poverty Line: 58

% of Scheduled Castes/Scheduled Tribes: 20

Year in which FES Initiated Work: 1991

Total Common Land under Protection (ha): 14,864

Total Lives Touched: 60,845

Village Institutions Associated with: 233

Funding Agencies: Omidyar Network, Jamsetji Tata Trust, NABARD Distress Districts Programme, Government of Andhra Pradesh, NABARD RSO Programme, NABARD-TDF, Grow-Trees, NABARD Community Managed Hydrological Monitoring and Water Management Programme

In Andhra Pradesh, we work in the southern districts of Chittoor and Anantapur of the Rayalseema region, which is at the tri-junction of the Deccan Plateau, the Eastern Ghats and Western Ghats. Traversed by River Papagni, the region is characterised by broken hill ranges, scrub forests on the ridges, with valleys and slopes speckled with irrigation tanks. The region is prone to drought as it falls in the rain shadow region of the Southern Deccan Plateau.

A significant part of this landscape is under Common Pool Resources. Depending on the administrative category of the land, village institutions such as the Van Samrakshana Samitis and Tree Growers' Mutually Aided Cooperative Societies, govern the Commons in the area.

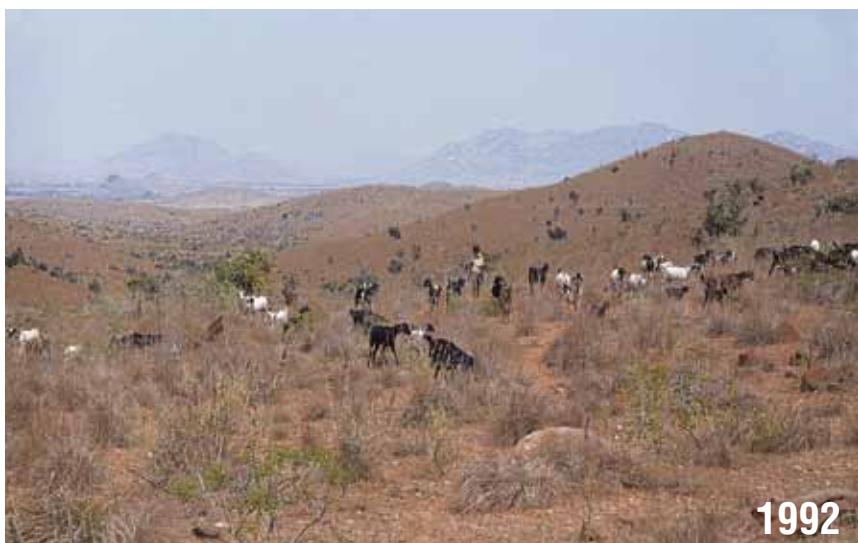
Degraded Commons, depleted water resources and distress due to drought conditions are the critical issues that largely affect the livelihoods of people in the area. In such a scenario, arranging tenure on land in favour of village communities, strengthening local institutions and adopting measures for ecological restoration have formed the essence of our work in the region. The consequent increase in the availability of fodder and improved flow of seepage streams has reinforced collective action by the local residents.

In a region prone to drought and agricultural distress, our efforts are to generate discussion on the present and future demand of biomass and water, and highlight unsustainable extraction levels so as to encourage the community to undertake conservation action. In this direction, a guild of rural volunteers are assisting the village institutions in exploring viable options of strengthening their farming systems and livelihoods, and in setting an agenda that is rooted in conservation.

Together with the Anantha Paryavarana Parirakshana Samithi (APPS), a network of NGOs, we facilitated the restoration of 50,000 hectares of common lands in Anantapur and Chittoor districts by leveraging funds from MGNREGS. Following our concerted efforts, the government has issued orders to the Collectors of Chittoor and Anantapur to facilitate the entry of Commons into the Prohibitory Order Book (POB) in both the districts so as to prevent their diversion to other land uses.

Considering the positive results of restoration of Commons, the government is contemplating to scale up the restoration of Commons, leveraging NREGA from the existing two to twelve districts, and is planning to constitute a State Level Committee for evolving a draft policy on common lands for the State.

Update 2011-2012



> We reached out to **60,845 people** across 233 habitations and have restored 14,864 common lands in Chittoor and Anantapur districts. During the year, in collaboration with Anantha Paryavarana Parirakshana Samithi (APPS) and as a Resource Support Organisation of NABARD, we reached out to 131,177 people across 432 habitations, bringing 22,498 hectares of common land under community protection.



> **1.2 lakh saplings** were raised of 11 different indigenous forest species selected in conjunction with the community members. 36,000 seedlings of forest tree species and about 30,000 agave suckers were planted on 89 hectares common lands, and 20,023 seedlings of indigenous tree species were planted on 58 hectares farmlands.



> **59 rural volunteers** were capacitated to support village institutions in protecting and managing common lands. A group of 50 para-workers were also trained in soil and water conservation measures, to help the watershed development committees in the preparation of micro-plans.

> As a **Resource Support Organisation of NABARD**, we helped 14 NGOs in Chittoor and Anantapur districts in upscaling watershed development activities to bring together communities and their institutions in restoring their degraded natural surroundings.

> In another collaborative effort with NABARD we support communities in 2,000 villages spread **across 16 districts** in strengthening institutional processes and deliberations on **judicious use of land and water** by taking steps to regularly monitor hydrological changes.

> As a part of the **Conservation Action Plans**, parameters like floral and faunal diversity, water, soil, insect predators and pollinators were monitored and recorded. The information analysed was presented posters for wider dissemination and for eliciting action plans from communities of the watersheds.

The demand for firewood, by hoteliers, schools and local households, has increased pressure on common lands. To tackle this issue, energy conservation measures were initiated in collaboration with Non-conventional Energy Development Corporation of Andhra Pradesh. Besides construction of biogas plants, the installation of *bhattis* (improved commercial scale stoves), helped halve local firewood consumption.



Courtesy of Mark Kalzman

KARNATAKA

FACT FILE

River Basin: Papagni

Forest Types: Tropical Dry Deciduous, Tropical Thorn, Scrub

Threatened Species: Yellow-throated Bulbul, Starred Tortoise, Red Sand Boa, Kolar Leaf-nosed Bat, *Wrightia tinctoria*, *Shorea roxburghii*

Principal Crops: Ragi, paddy, maize, oilseed, pulses

% of Common Lands other than Forest Lands: 47.92

% of Forest Cover: 6.18

% of Population Living Below Poverty Line: 23

% of Scheduled Castes/Scheduled Tribes: 29

Year in which FES Initiated Work: 1998

Total Common Land under Protection (ha): 10,674

Total Lives Touched: 106,494

Village Institutions Associated with: 240

Funding Agencies: Omidyar Network, Jamsetji Tata Trust, NABARD-WDF, Arghyam Trust, Grow-Trees

In Karnataka, our work spreads across the upper catchments of the Papagni River and two of its feeder streams in the districts of Kolar and Chikkaballapur. The terrain is characterised by boulder-strewn hills that support scrub forest, grazing lands, wetlands and agricultural lands, although the indigenous vegetation in the area has been largely replaced by invasive Lantana shrubs and Eucalyptus plantations.

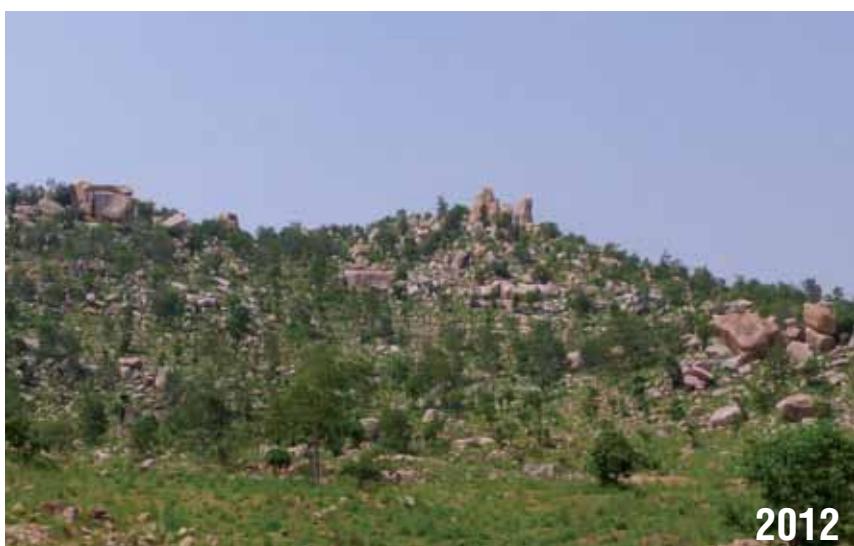
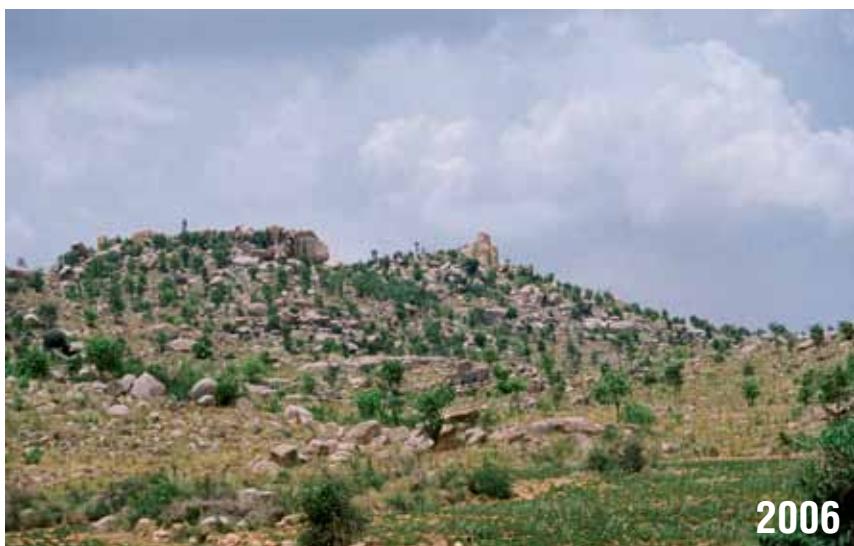
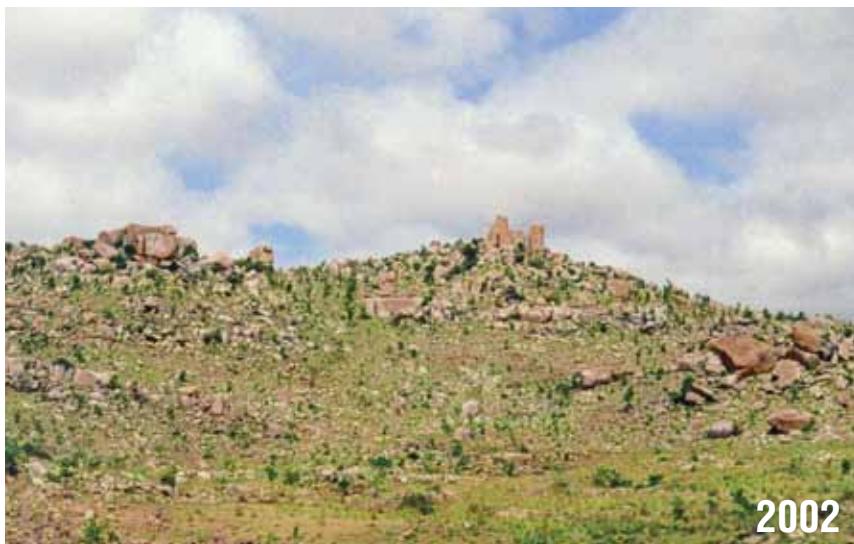
Karnataka has been proactively engaged in strengthening decentralization and the functioning of Panchayats. Gram Panchayats, who have been vested with custodial responsibilities to manage common lands, are best suited to work with *Gomala* (grazing) lands. We support Panchayats in preparing village-perspective plans and in leveraging funds from various government programmes for natural resource management, especially MGNREGS. We work towards nesting hamlet level sub-committees on governance of natural resources within the fold of Panchayats, so as to situate natural resource management within the ambit of overall governance plans of the village, as well as to help entrust more powers and responsibilities to the hamlet.

Working together with Gram Panchayats, we are involved in developing an understanding on their design and functioning in response to implementation of programmes, and in identifying gaps in delivery mechanisms and the areas for enhancing capacities of the elected representatives. Being undertaken in collaboration with Arghyam, the findings and recommendations shall be shared with the State administration.

Owing to the decreasing forest cover, surface-run off has increased resulting in the silting of tanks, and the unrestrained spread of tube-wells has depleted groundwater. In order to help address the situation, we build and share knowledge on the overall water availability in the region through hydro-geological studies and water audits, and promote water-efficient agricultural practices. We encourage dialogue within the community on current water-use patterns and encourage institutional mechanisms to regulate the use of water and other natural resources.

During a hearing on the affidavit filed by the district administration of Kolar on the issue of solid waste management, the High Court of Karnataka asked the district administration to seek assistance from FES for preparing a comprehensive plan for the development of Commons, both common lands and water bodies across the district. Taking forward our efforts for preparing such a plan, we are holding consultations with the district administration in Kolar and Chikkaballapur for assisting 150 Panchayats for better governance of Commons.

Update 2011-2012



In a rather daunting boulder-strewn landscape, determined efforts by the people of Sajjupalli to control grazing and prevent fires have enabled a steady recovery of the vegetation and an increase in biodiversity and improved water levels. In what seems as barrenness, the local people reported several sightings of bear, jungle cats and hyenas, and recorded the presence of threatened floral species and medical plants.

> We continue to work with 106,494 people of 240 village institutions and 10,674 hectares of community-managed common land in the districts of Kolar and Chikkaballapur.

> 37,370 saplings of indigenous species were planted on 211 hectares of common land and farmland. 696 kilograms of indigenous fodder seeds of three varieties from Hessarghatta Research station were attained and distributed to 177 farmers in the region.

> Soil and water conservation and revegetation measures were carried out over 1,245 hectares of common lands and farmlands, under NABARD-supported watershed development projects and MGNREGS activities.

> 167 rural volunteers were exposed to some of the most effective Panchayats in Mysore, Udupi, Dakshin and Uttar Kannada districts to understand the innovative work done by Panchayats in the areas of natural resource management, gender, health, employment and traditional enterprise. Panchayat members were aided to visit the Kerala Institute of Local Administration (KILA), Thrissur, to understand the functioning of Panchayati Raj Institutions in Kerala.

> A cadre of 23 para-workers was trained on watershed measures and sustainable agricultural practices. The team supported 446 families in improving their marginal farmlands by undertaking activities aimed at improving their soil fertility and productivity.

> Dr. Elinor Ostrom visited the project area to understand the situation of Commons and interact with village communities and Panchayat representatives. In meetings with the District administration, she shared her views on village institutions managing ground water in other parts of the world.

> We have facilitated the setting up of a Gramin Mahithi Seva Kendra (GMSK) in Chikkaballapur district. The District Commissioner inaugurated the information centre, which aims to provide information on various Government schemes at the village level.



Courtesy of Mark Kaltzman

ODISHA

FACT FILE

River Basin: Mahanadi, Brahmini; Kolab

Forest Types: Tropical Dry and Moist Deciduous, Bamboo Brakes and Scrub; Tropical Moist Deciduous

Threatened Species: Tiger, Elephant, Gharial, Barringtonia acutangula (Hinjal), Entada phaseoloides (Gila); Elephant, Themedaxicola, Strobilanthes jeyporensis

Principal Crops: Paddy, maize, ragi, gram, oilseeds; Paddy, maize, ragi, wheat, pulses, niger, sugarcane, potato

% of Common Lands other than Forest Lands: 19.11; 42.91

% of Forest Cover: 37.06; 19.05

% of Population Living Below Poverty Line: 61; 84

% of Scheduled Castes/Scheduled Tribes: 29; 63

Year in which FES Initiated Work: 1987; 2008

Total Common Land under Protection (ha): 26,060; 11,312

Total Lives Touched: 149,157; 41,821

Village Institutions Associated with: 212; 132

Funding Agencies: Omidyar Network, Jamsetji Tata Trust, NABARD-WDF, NABARD-Backward Block Development Programme, Grow-Trees, Concern Worldwide, Government of Odisha

■ Angul ■ Koraput

In the districts of Angul and Dhenkanal in central Odisha, we work in undulating landscapes covered by dense forests, which are home to a wide diversity of flora and fauna. In Southern Odisha, we work in Koraput district, which is characterised by highland plateaus, hills of Eastern Ghats, moist deciduous forests. The customary regulations for use of the forest, land and water resources that exist in the region signify the communities' relationship with these forests. Unfortunately, the forests in this region have faced widespread degradation in the last few decades.

The recent spread of industrial development has not only resulted in faster degradation of natural surroundings in the region, but has also widened the disparity between the affluent and the poor. Our efforts are directed towards strengthening farming systems and securing rural livelihoods by fortifying linkages between land, water, forests and agriculture. We support institutions like Gramya Jungle Committees, Joint Forest Management Committees, Cooperatives and Regional Federations, which are engaged in enhancing the vegetative cover and democratising the use of village commons.

In order to address the devastating effects of soil erosion and water runoff in Koraput, we support communities in increasing the vegetative cover on the uplands. We also assist them in framing rules and regulations for the protection of their forest Commons and help regulate the flow of water and nutrients so as to fortify their subsistence agriculture in the lower reaches of the hills. In Angul, we assist communities in undertaking measures aimed at ecological restoration along with activities that develop and strengthen livelihood options that are ecologically sound.

We assist seven partner organisations in five districts in energising MGNREGA where village institutions are strengthened and are made capable of leveraging resources through the Panchayats for work at landscape level. Our interactions with Department of Panchayati Raj and State Institute of Rural Development (SIRD), Government of Odisha, helped energise these processes.

With the enactment of the Forest Rights Act, 2006, we began encouraging communities to submit claims for recognition of their community forests. We work with the Odisha Jungle Manch (OJM), a federation of about 12,000 villages, to secure community entitlements under the Act. Our association with OJM covers 389 habitations of three districts, where communities have been assisted to claim rights over customarily protected forestlands, and so far community claims of 41 habitations have been accepted.

Update 2011-2012



1998



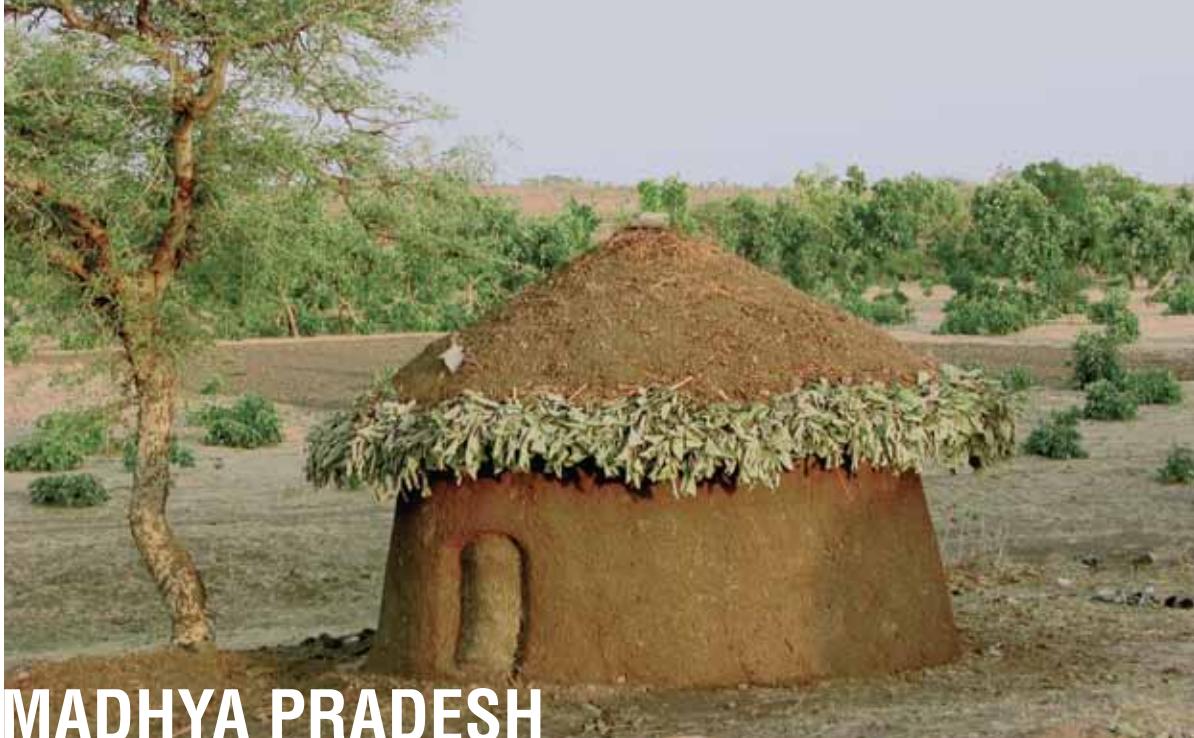
2006



2012

In tribal areas, Commons and forests contribute directly to the food security and diet diversity of the poor households, especially during the stress periods. In Odisha, although 58 species of forest produce are collected seasonally, only five species find their way to the market. During periods of scarcity in the summer months, tubers collected from the forest are the single source of food.

- > In 344 villages, we work with 190,978 people and assist village institutions in the protection and restoration of around 37,372 hectares of common land. Additionally, in collaboration with 7 partner organisations in 5 districts, we continue to reach out to 76 habitations where 13,188 hectares of common land have been brought under community management.
- > We assisted the Odisha Jungle Manch (OJM) in filing **claims of community rights** over 2,575 hectares forestlands, benefiting 187,755 people.
- > Appropriate **soil and water conservation** measures and revegetation measures were undertaken, with 32,500 saplings of local species planted on 865 hectares of common and farm land during the year.
- > 119 rural volunteers and 54 para-workers were trained to sustain village institutions and strengthen management and governance of common lands. We also initiated capacity-building programmes for members of Village Forest Committees of 580 villages under Odisha Forestry Sector Development Project for **preparing micro plans** to help manage forestlands.
- > A compendium on **government circulars** and orders on MGNREGA from 2006 to 2011 has been compiled and widely, circulated among collaborating partners, government officials, CSO groups, teams, universities, etc.
- > A Concept note on '**Energizing MGNREGA**', for better landscape planning and management leveraging MGNREGS has been prepared for wide circulation. It highlights ecologically sound opportunities for employment and also summarizes key operational issues and experiences gathered through the implementation of MGNREGA activities by various partners in Odisha.
- > The 62nd issue of *Sabuja Barta*, a quarterly newsletter addressing rural and farming issues, was published for the 16th year in a row.



MADHYA PRADESH

FACT FILE

River Basin: Gaur, Balai, Banjar of Narmada; Lakhundar, Garhganga, Kalisindh

Forest Types: Tropical Moist Deciduous; Tropical Dry Deciduous, Scrub

Threatened Species: Tiger, Swamp Deer, Green Avadavat, Vultures (*Gyps bengalensis*, *Gyps tenuirostris*), *Sterculia urens*, *Terminalia arjuna*; Indian Wolf, Striped Hyena, *Adina cordifolia*, *Dolichandrone falcata*

Principal Crops: Paddy, minor millets, maize, wheat, red gram, lentil, niger, mustard; Wheat, jowar, bajra, gram, millet, maize, pulses, til, cotton, soybean

% of Common Lands other than Forest Lands: 13.40; 33.94

% of Forest Cover: 48.86; 0.48

% of Population Living Below Poverty Line: 56; 42

% of Scheduled Castes/Scheduled Tribes: 66; 30

Year in which FES Initiated Work: 2006; 1996

Total Common Land under Protection (ha): 4,174; 8,672

Total Lives Touched: 37,395; 35,828

Village Institutions Associated with: 129; 63

Funding Agencies: Omidyar Network, Royal Bank of Scotland, Sir Dorabji Tata Trust, ICRISAT, Sunehra Kal-ITC, Grow-Trees

■ Mandla ■ Agar

Our work in Madhya Pradesh spreads across villages in Malwa and Mahakaushal regions in the western and eastern parts of the State. The Malwa region is characterised by undulating landscape with staggered small hillocks and narrow valleys and is predominantly inhabited by communities dependent on agriculture and livestock for their livelihood. Common lands constitute about 25% of the land area of the region and cater to the fodder and grazing needs of the many livestock-dependent local communities. The manure, which would have been valuable to build the organic matter content of the highly impoverished soils, is used as cooking fuel in an area characterised by negligent tree cover (*photo above*).

Our efforts in the Shajapur district of Malwa region have been directed towards improving the vegetation on common lands and the productivity of private lands through watershed development programmes and energy conservation measures. Another key aspect of our work is in building dialogue on water conservation and in developing and strengthening transparent water-sharing arrangements between groups in a village and among habitations.

In the Mahakaushal region, we work in the district of Mandla, which falls in the biodiversity-rich zone of Kanha National Park, nestled in the Satpura ranges. Though gifted with vast tracts of forests and natural resources, Mandla is one of the most backward districts in Madhya Pradesh, inhabited by tribal communities (mostly Gonds and Baigas), a large percentage of which are known to be living below poverty line. Elements that cripple the region are low productivity of farmlands, degradation of forests and high frequency of migration. Our interventions in the region are aimed at improvement of livelihood options that reduce the dependence of the communities on forests for firewood and forest produce.

By developing detailed geo-hydrological profiles of watershed areas of Shajapur, we are able to improve our understanding on aquifer boundaries and the impact of recharge interventions on groundwater. Such information is being shared with village communities and Panchayati Raj Institutions to facilitate restoration activities in a larger region through the implementation of government-supported watershed development programmes.

While perspective planning exercises in Mandla have helped in developing local visions for restoration and conservation of natural resources, our efforts are aimed at strengthening capacities of village volunteers and federations across villages who could help steer and ground activities aimed at restoring commons and degraded forestlands, and at improving tribal livelihoods in an ecologically sound manner.

Update 2011-2012



2003

Kumar Rupam



2006

D.P.Singh



2012

Dibyendu Mondal

Various studies document the contributions from Commons to village economies. Besides flow of benefits to farming systems and animal husbandry in terms of food, fodder and timber, there are ecological benefits in terms of resource conservation, recharge of ground water and sustainability of agro-ecological systems. Interventions on Commons in the Ladwan watershed resulted in an increase of water levels in 63 of 83 wells.

- > 12,846 hectares of common land is being protected by village institutions through 192 habitations across 4 districts, reaching 73,223 people. In association with Joint Forest Management Institutions in the **buffer areas of Kanha National Park**, an additional 1,000 hectares of forestland is being protected.
- > Eco-restoration measures were carried out in 66 hectares of common and private lands, with a total of 56,886 saplings of local species being planted during the year. With rootstock still available in these common lands, **assisted regeneration** is a key strategy to ecological restoration.
- > 94 trainings were conducted for rural volunteers and para-workers on technical and institutional aspects, which assisted in strengthening village institutions.
- > A study was carried out in the buffer zone of Kanha National Park to gain an **understanding of the pressures on forests**, its biodiversity, impact on recruitment, grazing pressure and other anthropogenic pressures.
- > In order to understand the patterns of grazing and extraction of Non Timber Forest Produce (NTFP) a study was undertaken in 42 villages of Kanha National Park. The study indicated how overgrazing as well as over-extraction of firewood has lead to loss of canopy, allowing invasive species such as *Lantana camara* to proliferate, adding to the loss of palatable grass species while acting as a hideout for wild boars, leading to crop depredation in the nearby village.
- > An **ethno-botanical inventory** with case studies on Community Conserved Areas (CCAs) around Kanha has been prepared and is being finalised for dissemination.
- > *Neelkanth*, a newsletter on the issues of community-based conservation in the region was initiated during the year, aiming at the communities as its prime readership.



GUJARAT

FACT FILE

River Basin: Mahi, Sabarmati; Valai, Bhe, Kali, Khan

Forest Types: Tropical Dry Deciduous; Dry Teak, Mixed Dry Deciduous, Grasslands, Scrub

Threatened Species: Sarus Crane, Black-necked Stork, Hyena; Lesser Florican, Sloth Bear, *Dalbergia latifolia*, *Dolichandrone falcata*

Principal Crops: Paddy, wheat, tobacco, jowar, maize, cotton; Maize, paddy, sorghum, pulses

% of Common Lands other than Forest Lands: 26; 20.45

% of Forest Cover: 5.15; 14.34

% of Population Living Below Poverty Line: 33; 59

% of Scheduled Castes/Scheduled Tribes: 22; 91

Year in which FES Initiated Work: 1986; 1997

Total Common Land under Protection (ha): 2,391; 10,977

Total Lives Touched: 185,976; 131,946

Village Institutions Associated with: 110; 297

Funding Agencies: Omidyar Network, Coastal Salinity Prevention Cell, NABARD-IGWDP, NABARD-WDF, Gujarat State Watershed Management Agency, BNP Paribas, Aga Khan Rural Support Programme - Hilton Foundation, Government of Gujarat, Grow-Trees, Cirl, Taluka Grant - Government of Gujarat, Development Support Agency of Gujarat

■ Anand ■ Dahod

Our work across the five districts of Central Gujarat covers a range of issues which pose challenges for ecological restoration in the area. Widespread ecological degradation in the form of ravines along the banks of the river Mahi, the saline mudflats in the Gulf of Khambhat, the threatened wetlands in Anand, Kheda and Vadodara districts, and the denuded central highlands in Dahod and Panchmahal districts characterise the region.

Communities with varied economic, social and cultural backgrounds inhabit these areas. While some of the district-level averages might portray a picture of prosperity, they also mask pockets of acute poverty and marginalisation present along the areas marked by acute degradation of natural resources. And even as the western parts with better irrigation boast of the highest density of tree cover at the national level, those to the east with tribal populations are severely denuded.

In Anand, Kheda and Vadodara districts, we work with Panchayats, village institutions and other key stakeholders along the ravine banks of the river Mahi for restoring vegetative cover by leveraging funds from MGNREGS. We have conceived plans with multiple stakeholders to restore the entire 100 mile stretch of the ravines along the river and are exploring imaginative options, such as eco-trails and river festivals, which would contribute to rebuilding the relationship of people with nature. In the adjoining taluka, Khambhat, we are working towards the creation of a concerned citizens' group to leverage MGNREGS and expand measures, such as the construction of vegetative barriers on tidal mudflats to reduce the effect of salt-laden winds, thereby improving farm productivity of the hinterlands.

In Dahod and Panchmahal, where a large section of population is tribal and living below the poverty line, we assist the communities in developing mechanisms to provide equal access to benefits and curb over-exploitation of natural resources. Our efforts in the region are aimed at promoting vibrant village institutions that protect and develop the surrounding degraded forestlands and include registering of community claims over forests under the Forest Rights Act.

In Panchmahal, we are working closely with trained cadre of tribal youth to assist communities in leveraging the numerous government programmes aimed at poverty alleviation and provision of agricultural inputs and services. Through a combination of interventions aimed at protecting the entire range of forests and initiatives that are directed towards strengthening local stewardship of the area, we strive to effectively build a platform of development actors, which would steer and guide a development agenda that is embedded in conservation.

Update 2011-2012



Dr. J.R. Panwar



J.V. Dhameliya



Ramesh N Patel

In Gujarat, the development of resources and value of benefits from the restoration of Commons has been monitored through the Natural Resource Accounting System (NRAS). During the period of 20 years, the valuation of different economic and ecological benefits generated from 25 hectares of common land is of an estimated value, which is nine times the initial investment of Rs. 9.60 lakh.

> **2,229 hectares of land** were added to a total of 13,368 hectares of common land under community management, by 58,886 households across 407 village institutions.

> **Soil and moisture conservation** and revegetation measures were carried out on over 172 hectares of common land on which 97,000 saplings of local species were planted, and 430 hectares of farmland of which seeding was undertaken on 65 hectares.

> **175 village volunteers** and 145 para-workers were capacitated to assist Panchayats, village institutions and village watershed committees in their efforts to safeguard Commons. Rural volunteers also assisted the District Administration in carrying out various socio-economic surveys, besides providing reviews of cases under Forest Rights Act.

> 25 training programmes were conducted for the implementation of the Integrated Watershed Management Programme in Anand and Kheda, highlighting the need for **restoration of common lands under watershed development** activities. These were collectively attended by 766 participants including community representatives and government functionaries.

> Three taluka-level planning workshops were conducted for 42 Panchayats for **developing plans under MGNREGA** to arrest ravine formations.

> **Mahi Mahotsav**, a river festival, aimed at sensitising communities for arresting ravines along the River Mahi, was organised in collaboration with Mahi Kantha Vikas Manch. A similar forum, Dariya Kantha Vikash Manch, has evolved to work on issues of salinity ingress in coastal regions of Khambhat taluka.

> Six editions of ***Mahisagar Samachar***, a newsletter for generating awareness on ravine issues, were published and shared with different stakeholders in the region.



NORTH-EASTERN REGION

In the lap of the Eastern Himalayas, lies the North-eastern region of India, which is marked by unique climatic and topographic conditions, with habitats that harbour diverse biota with very high levels of endemism. Accounting for nearly one fourth of the country's forest cover and more than a third of its biodiversity, the region forms a distinctive fraction of the Indo-Burma Biodiversity Hotspot. The forest system ranges from the tropical ecosystem in the plains to sub-tropical, temperate and alpine forest ecosystem in the hills.

Constitutionally, the governance and the ownership of natural resources in many parts of the region have been bestowed to the traditional village councils. The dependency of the communities on the forests and forest produce for their livelihood is immense. Infrastructure development is also on the rise and threatens the rich forest resources. While on the one hand, the region, with its highly diverse mosaic of ecological and cultural landscapes needs to balance conservation and an increasing consumption pattern, on the other hand, the demands from projects of infrastructure development pose challenges of a higher complexity and magnitude.

Our initiatives in the region have been strongly driven by the presence of biodiversity-rich forests and the cultural diversity of the people, as also the strong sense of local self-governance. While our experience of working with village communities on Commons and forest ecosystems in several parts of the country would be further enriched by our exposure to the traditional practices and norms of this region, they could also offer fresh insights on tackling contemporary challenges in the region.

With the intent of helping create a larger constituency for 'Communities in Conservation' in the region, we plan to support local youth who would further the thinking and spread awareness; partner with local agencies, understand the complexities and add value to local efforts; and lastly, undertake studies that help in promoting conservation and local governance in the region.

On an invitation from the Government of Nagaland, we have entered into a partnership with the Nagaland Empowerment of People through Economic Development (NEPED) and have made efforts to understand the local conservation issues and assist the communities in preparing a framework for developing 'management plans' for their Community Conserved Areas (CCA). To begin with, we joined hands with the Dikhu Green Zone Management Committee for managing the CCA in Mokokchung district, which is aimed at conservation of the fish diversity in the Dikhu River and the riparian vegetation along the river.

Update 2011-2012



Sanjay Sharma



Nimish Yed



Sanjay Sharma

In Longsa and Ungma, through meetings with the Village Councils and interactions with local people, plans for the Dikhu Green Zone Community Conserved Area (CCA) are being shaped. To address the absence of clear demarcations of the CCA boundary and further our understanding of the area, we assisted village communities in conducting mapping exercises using GPS, and collecting data on the local biodiversity and their usages.

> Having initiated operations in August 2011 in the region, we have undertaken reconnaissance surveys of the West Kameng, Tirap and Changlang districts of Arunachal Pradesh, Mokokchung, Zonheboto and Khipre districts in Nagaland and south Garo Hills in Meghalaya to gain an understanding of the issues and learn from partners in the region.

> In collaboration with NEPED, we started working with Dikhu Green Zone Management Committee and the Village Councils of Ungma and Longsha who protect about 1,500 hectares of forests. We also initiated discussions with 14 upstream villages of the Dikhu River for the protection of the riparian forests.

> In the Dikhu Green Zone, we have initiated steps to gain an understanding of the river ecology, catchment biodiversity, governance mechanisms and resource use patterns along with the community to jointly evolve a management plan for the Community Conserved Areas.

> We organised a workshop with the village councils of Ungma and Longsha, on the models of community-based conservation across the country. Visits of the community members to similar Community Conserved Areas in Arunachal Pradesh and Meghalaya were organised to provide exposure on aspects of governance. We also facilitated the mapping of the Dikhu Green Zone Community Conserved Area.

> Two fellowships were awarded under the 'Communities in Conservation' programme: one intends to detail the birdlife of the Yangouopkipi-Lokchao Wildlife Sanctuary in Manipur and compile information on the current status and distribution of the endangered Green Peafowl; and the second endeavours to make an inventory of wild species sold in the markets of Nagaland and study the presence of infectious disease and avian influenza in Amur falcon and other migrant birds in North-east India.

Financial Statements



Auditors' Report

We have audited the attached Balance Sheet of Foundation for Ecological Security (the Society) as at 31st March, 2012 and the Income and Expenditure Account for the year ended on that date attached thereto. These financial statements are the responsibility of the Society's management. 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.

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 are in compliance 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 read together with "Notes" appearing in schedule "14", 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, 2012; 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 the Society's rules and regulations.

Place: Ahmedabad

Date: 14th July, 2012

For **C.C. Chokshi & Co.**

Chartered Accountants
(Registration No. 101876W)

H.P. Shah

Partner
(Membership No. 33331)

Balance Sheet

(As at March 31, 2012)

	Sch.	2012 Rs.	2011 Rs.
SOURCES OF FUNDS			
CORPUS FUND	1	197,758,702	197,493,468
RESERVES AND SURPLUS	2	30,843,009	32,334,913
Secured Loan: Temporary Overdraft		-	170,355,370
PROGRAMME FUNDS	3	50,175,052	40,721,513
TOTAL		278,776,763	440,905,264
APPLICATION OF FUNDS			
FIXED ASSETS	4		
Gross Block		62,911,055	62,176,575
Less: Depreciation		38,670,684	35,874,549
		24,240,371	26,302,026
CURRENT ASSETS, LOANS AND ADVANCES			
Inventories	5	41303	65,183
Cash and Bank Balances	6	251,295,355	412,134,520
Other Current Assets	7	561,140	248,390
Loans and Advances	8	8,109,636	11,122,421
		260,007,434	423,570,514
Less: Current Liabilities & Provisions	9	5,471,042	8,967,276
NET CURRENT ASSETS		254,536,392	414,603,238
TOTAL		278,776,763	440,905,264
Significant Accounting Policies	13		
Notes on Accounts	14		

As per our attached report of even date

Ramaswamy R Iyer
Chairman

For C.C. Chokshi & Co.
Chartered Accountants

Place: Ahmedabad
Date: 14th July, 2012

H.P. Shah
Partner

Place: Anand
Date: 14th July, 2012

Jagdeesh Rao
Executive Director

Schedules and Notes on Accounts are posted at www.fes.org.in

Income and Expenditure Account

For The Year Ended March 31, 2012

	Sch.	Rs.	2012	2011
			Rs.	Rs.
INCOME				
Fund Received:				
- For Projects		152,739,062		137,641,171
- Others		<u>57,995</u>		<u>105,820</u>
Interest and Other Receipts	10		152,797,057	137,746,991
Income on IASC Conference Account			23,100,467	19,477,987
	Total			<u>35,418,676</u>
			175,897,524	<u>192,643,654</u>
EXPENDITURE				
A. STRENGTHENING COMMUNITY-BASED INSTITUTIONS FOR CONSERVATION OF NATURAL RESOURCES				
Planning and Survey		4,520,671		5,004,462
Formation and Strengthening of Community-based Institutions		4,946,222		1,948,483
Soil and Water Conservation Measures		12,803,703		11,660,304
Revegetation Measures		3,914,701		3,360,621
Measures to Sustain Livelihoods		13,755,524		9,422,725
Energy Conservation Activities		388,373		1,165,349
Capacity Building Activities at Village Level		14,902,075		14,623,172
Programme Assistance	11	<u>46,677,068</u>		<u>43,080,536</u>
			101,908,337	<u>90,265,652</u>
B. SUPPORT SERVICES				
I. CAPACITY BUILDING				
Survey and Planning for New Projects		3,874,062		3,350,326
Capacity Building of Staff Members		13,584,073		9,771,942
Advocacy, Commons Initiative & Campaign		17,717,315		21,644,328
Documentation, Studies and Dissemination		<u>9,218,062</u>		<u>10,140,060</u>
			44,393,512	<u>44,906,656</u>
II. ADMINISTRATION AND RECURRING EXPENSES				
Staff Salaries and Benefits	12	8,625,434		7,609,699
Travel and Conveyance		744,387		604,562
Professional Fees and Consultancy Charges		1,181,485		1,155,780
Motor Vehicle Running and Maintenance		393,109		296,700
Rent, Rates,Taxes and Electricity Charges		2,284,134		1,858,438
Communication Expenses		1,441,747		1,238,146
Printing and Stationery		564,430		510,675
Computer Maintenance		601,625		631,266
General Repairs and Maintenance		275,355		437,400
Insurance Premium		332,894		362,795
Statutory Audit Fees and Expenses		346,356		251,089
Miscellaneous Expenses		<u>1,783,637</u>		<u>1,593,462</u>
			18,574,593	<u>16,550,012</u>
C. EXPENSES FROM OTHER FUNDS	164,876,442			<u>151,722,320</u>
D. EXPENSES ON IASC CONFERENCE	102,736			<u>26,795</u>
			164,979,178	<u>151,722,320</u>
Depreciation (Sch. 4 Column G)		3,020,443		4,374,523
Loss on Sale of Assets		<u>388</u>		<u>70,287</u>
			3,020,831	<u>4,444,810</u>
Less: Adjusted against Capital Fund (Ref. Sch.2.A)		<u>3,020,831</u>		<u>4,444,810</u>
	TOTAL			
Excess of Income over Expenditure			164,979,178	<u>187,453,400</u>
Amount transferred to Projects Account (Sch. 3.A I & II)			10,918,346	<u>5,190,254</u>
Amount transferred (from)/to Other Funds Account (Sch. 3.B)			175,897,524	<u>192,643,654</u>
Balance of Excess of Income over Expenditure carried to Balance Sheet			10,465,806	<u>4,931,801</u>
Significant Accounting Policies	13		(44,741)	<u>79,025</u>
Notes on Accounts	14		497,281	<u>179,428</u>

As per our attached report of even date

Ramaswamy R Iyer
Chairman

For C.C.Chokshi & Co.
Chartered Accountants

Place: Ahmedabad
Date: 14th July, 2012

H.P. Shah
Partner

Place: Anand
Date: 14th July, 2012

Jagdeesh Rao
Executive Director

Schedules and Notes on Accounts are posted at www.fes.org.in

Schedule 3.1 Project-wise Income and Expenditure Account for the Year Ended March 31, 2012 (in Rs.)

Sr No	Particulars	Opening Balance as on 1.4.2011	Fund received/ Transferred and Refunded during the Year	Interest and Other Income	Total Income during the Year	Community-based Institutions	Capacity Building	Administration Expenses	Total Expenses Incurred during the Year	Excess of Income/ (Expenditure) over Expenditure/ (Income) incurred during the Year	Non Recurring Expenses Incurred during the Year	Balance as on 31.03.2012 (C+K-L)		
A	B	C	D	E	(D+E)	F	G	H	I	(G+H+I)	J	K	L	M
(a) INDIAN CONTRIBUTION														
Projects														
1	Jamseji Tata Trust (JTT)	11,587,860	43,927,970	469,106	44,337,076	20,002,463	7,389,009	1,846,677	29,238,149	15,158,927	141,201	26,605,566		
2	National Bank for Agriculture and Rural Development (NABARD)	574,738	10,614,947	64,201	10,679,148	8,403,585	91,374	500,639	9,823,538	855,550	44,508	1,385,780		
3	Sir Ratan Tata Trust (SRTT)	1,805,294	-	55,510	55,510	1,763,206	153,349	87,866	2,004,421	(1,948,911)	-	(143,617)		
4	ITC Sunsharia Kal	436,259	21,938,000	103,202	22,041,202	20,463,354	1,294,218	270,669	22,028,241	12,961	110,673	338,547		
5	Madhya Pradesh Rural Livelihood Project (MPRLP)	1,579	-	-	-	-	-	-	-	-	-	1,579		
6	International Food Policy Research Institute (IFPRI)	1,154,980	-	-	-	-	392,640	-	392,640	(392,640)	-	762,350		
7	Government of Gujarat & Odisha	7,393,730	3,826,078	289,737	4,115,815	8,030,089	1,800	107,732	8,139,621	(4,023,806)	-	3,369,924		
8	Sir Dorabji Tata Trust (SDTT)	1,355,916	437,000	32,861	469,861	1,275,056	-	216,598	1,491,654	(1,021,793)	-	334,123		
9	United Nations Development Programme (UNDP)	683,238	2,304,368	-	2,304,368	286,831	1,225,057	17,414	1,529,302	775,066	-	1,458,304		
10	District Rural Development Agency/District Development Agency (DRDA/DDA)	383,869	6,739,931	29,787	6,769,718	3,902,969	91,075	167,911	4,161,955	2,607,763	38,140	2,953,492		
11	National Rural Employment Guarantee Scheme (NREGS)	469,773	(398,585)	-	(398,585)	-	71,870	-	166	72,036	(470,621)	-	(848)	
12	Ind-Asia	660,572	3,361,655	-	3,361,655	2,834,236	-	18,669	2,852,905	508,750	-	1,169,322		
13	BNP Paribas	220,496	-	-	-	106,170	-	1,072	107,242	(107,242)	-	113,254		
14	International Crop Research Institute for the Semi Arid Tropics (ICRISAT)	345,854	106,250	-	106,250	437,812	-	240	438,052	(331,802)	-	14,052		
15	Coastal Area Development Program (CADP)	(153,962)	20,000	4,055	20,405	323,584	-	15,011	338,595	(134,540)	-	(288,502)		
16	The Duleep Marathi Nature Conservation Trust (DMNCT)	753,101	2,000,000	-	2,000,000	-	492,246	-	492,246	1,507,754	60,000	2,200,855		
17	Agriyam	272,034	633,791	2,422	686,213	554,655	33,000	134,895	722,550	(36,337)	-	235,697		
18	International Center for Research in Agroforestry (ICRAF)	120,000	-	-	-	-	-	-	-	-	-	120,000		
19	Collectives for Integrated Livelihood Initiatives (CINI)	-	327,907	262,964	590,871	568,677	-	21,730	590,407	464	-	464		
20	South Asia Pro Poor Livestock Policy Programme (SAPPLP)	-	800,000	-	800,000	-	698,176	-	698,176	101,824	-	101,824		
	Total 'a'	28,065,341	96,889,312	1,313,845	98,183,157	69,024,557	12,689,944	3,407,289	85,121,790	13,061,367	394,522	40,732,186		
(b) FOREIGN CONTRIBUTION														
21	Omidyar Network	2,102,663	44,848,655	1,793,113	46,641,768	19,559,527	16,678,220	7,756,138	43,993,885	2,647,883	417,184	4,333,382		
22	Concern Worldwide	1,282,201	5,646,687	6,102	5,652,789	3,761,324	1,975,496	739,116	6,475,936	(823,147)	68,656	390,398		
23	Ford Foundation	6,121,212	(213,729)	1,388	(212,341)	105,900	3,899,584	122,253	4,127,737	(4,340,078)	-	1,781,134		
24	Royal Bank of Scotland (RBS)	(83,763)	4,078,750	-	4,078,750	3,375,474	59,317	185,466	3,320,257	458,493	-	374,750		
25	Fondation Ensemble	1,260,999	-	-	-	107,537	981,722	15,923	1,105,182	(1,105,182)	-	155,817		
26	Action Aid	(9,658)	-	-	-	-	(9,658)	-	(9,658)	9,658	-	-		
27	Agakhan Rural Support Programme (AKRSP)	1,134,028	(893,821)	-	(893,821)	185,117	-	-	185,117	(1,078,938)	80,814	(25,724)		
28	Salya Special School (SSS)	-	306,800	-	306,800	9,000	196,584	4,000	209,584	97,216	-	97,216		
29	Deccan Development Society (DDS)	65,607	-	-	-	6,175	-	-	6,175	(6,175)	-	59,432		
30	Edieh Hofmeister	376,827	-	-	-	183,140	-	-	183,140	(183,140)	-	193,687		
31	GIZ India	-	700,000	-	700,000	212,826	3,516	9,432	225,774	474,226	-	474,226		
32	Weihungejilife	-	455,805	-	455,805	119,394	(2,177)	-	117,217	338,588	3,500	335,088		
33	Washington University	25,287	940,603	-	940,603	-	23,372	646	24,018	916,585	-	941,872		
34	Rufford Small Grant	286,685	-	-	-	-	1,550	-	1,550	(1,550)	-	285,135		
	Total 'b'	12,562,108	55,869,750	1,800,603	57,670,353	27,625,414	23,807,526	8,832,974	60,265,914	(2,595,561)	570,154	9,396,338		
	TOTAL A (a+b)	40,627,449	152,739,062	3,114,448	155,853,510	96,649,971	36,497,470	12,240,263	145,387,704	10,465,806	964,676	50,128,579		
B	Corpus Fund													
	Interest Income Transferred from Corpus Fund (Ref. Sch.1)													
	TOTAL B	-	-	-	19,488,738	19,488,738	5,258,366	7,896,042	6,334,330	19,488,738	-	-		
	GRAND TOTAL (A+b)	40,627,450	152,739,062	22,603,186	175,342,248	101,908,337	44,393,512	18,574,593	164,876,442	10,465,806	964,676	50,128,579		
	Previous Year's Total	40,595,830	137,641,171	19,012,950	156,654,121	90,255,652	44,906,656	16,550,012	151,722,320	4,931,801	4,900,182	40,627,449		

The Staff

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Jagdeesh Rao Puppala

PROJECT SUPPORT GROUP

Dinesh Reddy

Subrata Kumar Singh

Jashvant V Dhameliya

Rajesh Verma

Brajesh Kumar Dubey

Rahul Chaturvedi

Kiran Kumari

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Vinaya Padmanabhan

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Yogeshkumar G Patel

Ishwar T Sargara

As on March 31, 2012

Acknowledgement

We thank the Government of India, the Department of Land Resources, the Ministry of Rural Development and the Ministry of Environment and Forests, New Delhi. We thank the District Administration of Chittoor and Anantapur of Andhra Pradesh; Kolar and Chikkaballapur of Karnataka; Angul, Dhenkanal and Koraput of Odisha; Mandla, Ujjain and Shahapur of Madhya Pradesh; Udaipur, Bhilwara, Ajmer, Chittaurgarh and Pratapgarh of Rajasthan; Anand, Kheda, Vadodara, Panchmahal and Dahod of Gujarat; and the Government of Nagaland. Our effort would not have been possible without assistance and support from the respective State Governments.

The National Dairy Development Board, Anand, for nurturing and supporting our work over many years. The National Bank for Agriculture and Rural Development (NABARD), NABARD-IGWDP, Omidyar Network, Sir Dorabji Tata and Allied Trusts (SDTT) - Mumbai, ITC Ltd (Mission Sunehra Kal), Concern Worldwide, the UNDP - GEF Small Grants Programme, Water and Sanitation Management Organization (WASMO), Ford Foundation, RBS Foundation-Mumbai, Sir Ratan Tata Trusts-Mumbai, Collective for Integrated Livelihood Initiatives (CINI)-Jamshedpur, Coastal Salinity Prevention Cell (CSPC) - Ahmedabad, Ensemble Fondation, International Food Policy Research Institute (IFPRI), Deutsche Gesellschaft für Internationale Zusammenarbeit (giz), Welthungerlife, Hilton Foundation, Grow-Trees, Ms. Edie Hoffmeister and The Duleep Matthai Nature Conservation Trust, for their financial assistance.

Kalpvriksh - Pune, ACWADAM - Pune, Dakshin Foundation, ICRISAT - Hyderabad, IUCN-The World Conservation Union, International Land Coalition (ILC), International Livestock Research Institute, Collective Action and Property Rights (CAPRI), South Asia Pro-Poor Livestock Policy Programme (SAPLPP), Partner organisations of Rainfed Livestock Network (RLN), Washington University - St. Louis, University of Michigan - Ann Arbor, University of Illinois - Urbana Champaign, University of Iowa, International Forestry Resources & Institutions (IFRI), Indiana University - Bloomington, Arizona State University, Worldwide Fund for Nature (India) - New Delhi, Pankaj Seksaria, Kanchi Kohli, Shalini Bhutani, Ritwick Dutta and Meenakshi Kapoor, for collaborating with us on various initiatives.

We would like to thank Ruth Meinzen Dick, International Food Policy Research Institute; Anita Cheria, Edwin Daniel, Gautam Yadama and Peter Hovmand of Washington University at St. Louis for helping us in many ways. We are also thankful to GB Mukherjee, Arun Agarwal, Ashwini Chhatre, Harini Nagendra, Kanchan Chopra, Rita Brara, Rucha Ghate and Sharad Lele for continued support and guidance.

We would like to thank the support of Swiss Agency for Development and Cooperation (SDC), Kutch Navnirman Abhiyan - Kutch, T R Raghunandan, Sanjay Upadhyay, Anita Mathur and Parimala Inamdar for the training of panchayat representatives on the use of information technology for improved local self-governance. We acknowledge the support of Rozmin Ajani, Rama Mohan and Bismaya Mahapatra in helping conduct reviews.

We would also like to thank the Survey of India, National Bureau of Soil Survey and Land Use Planning - Nagpur, Forest Survey of India, Census of India, and National Remote Sensing Agency (NRSA) - Hyderabad, and ESRI - New Delhi, for their support in providing data and technical assistance to our GIS Cell.

The Institute of Rural Management (IRMA) - Anand, Xavier Institute of Social Sciences (XISS) - Ranchi, Tata Institute of Social Sciences (TISS) - Mumbai, TATA-Dhan Academy - Madurai, Roshini Nilaya - Mangalore, the Baroda and Vidyanagar Chapters of AIESEC (International Student Exchange Programme), and the Foundation for Sustainable Development (FSD) - California, with whom we have had a fruitful association.

In addition, there are many organisations and individuals who have supported us in all our project areas.

In Rajasthan, we thank the departments of Rural Development and Panchayati Raj, Finance (Revenue) and the Forest department; SLNA (IWMP-Rajasthan), the Institute of Development Studies - Jaipur; RTI Manch - Jaipur and NCPRI - Jaipur; Abhijit Ghosh and R N Mehrotra for their support.

We acknowledge the support of Sanjeet Purohit, Advocate, LIBRA, Ritwick Dutta, Advocate Supreme Court, Delhi, Meghraj Shrimali, Journalist - Diamond India, Dr. M. S. Rathore, Charul Bharwada and Vinay Mahajan, Arvind Lodaya, Sangita Shroff and Elizabeth Thomas for supporting the Commons Campaign across Rajasthan.

In Bhilwara we would like to thank the support of Mazdoor Kisan Shakti Sangthan (MKSS), the Bhilwara Dairy, Mewar Sewa Sansthan, BAIF, Krishi Vigyan Kendra, Dryland Farming Research Station, DFRS Arjiya, RUDSETI, One World, Forest Department, Department of Animal Husbandry, District Watershed Management Unit, MGNREGA unit of Zila Parishad - Bhilwara, and Shamlat Panel of Lawyers - Bhilwara. In Udaipur, we

would like to acknowledge the support from the MGNREGA unit, Zila Parishad, Udaipur, Forest Department, Rajasthan College of Agriculture, College of Home Science, College of Technology and Engineering of MPUAT, Vidya Bhawan, Krishi Vigyan Kendra, Gandhi Manav Kalyan Society, Astha Sansthan, Society for Promotion of Wastelands Development, Seva Mandir, Prayatna Samiti, Samarthak Samiti, Jagran Jan Vikas Samiti, Ubeshwar Vikas Mandal, Van Uthan Sangh, BAIIF-RRIDMA, Centre for Environment Education, Dr. Satish Sharma, Anita Mathur and BL Paliwal. In Pratapgarh, we would like to thank the support of the MGNREGA unit, Zila Parishad, the Forest Department, Pratapgarh Agriculture Research Centre, Agriculture and Animal Husbandry Department, Prayas, IFFDC, WASCO, and KVK - Mandsaur, and Chairman, Pratapgarh Nagarpalika.

In Madhya Pradesh, we thank the Departments of the Revenue, Agriculture, Panchayat and Rural Development, Animal Husbandry and the Department of Forests for their support. Our work is supported by the CCF and Director, Kanha Tiger Reserve, Rajiv Gandhi Watershed Mission, MGNREGS Parishad, Madhya Pradesh Bio-Diversity Board, Center for Rural Bio-Technology, State Forestry Research Institute, Tropical Forestry Research Institute and Jawaharlal Nehru Krishi Vishwavidyalaya of Jabalpur, Krishi Vigyan Kendra of Shajapur and Mandla, CARD - Bhopal, Climate Change Cell of EPCO, WWF-I - Mandla, DISHA - Jabalpur, Department of Horticulture and Agriculture - Shajapur, Jan Abhiyan Parishad, Jan Sahas, Samaj Pragati Sahyog (SPS) - Bagli, NIRMAAN, PRADAN and NWCYED, Mandla.

In Andhra Pradesh and Karnataka, we would like to thank the support of Department of Rural Development, Government of Andhra Pradesh; Hyderabad Regional Office of NABARD, Anantha Paryavarana Parirakshana Samithi (APPS) and Arghyam, Bengaluru. We acknowledge the support of Agriculture Man and Ecology Foundation, Outreach, WASSAN, Centre for World Solidarity and AP-MASS - Hyderabad, Abdul Nazir Sab State Institute for Rural Development (ANSSIRD) - Mysore, Fodder Research Institute - Dharwad, Central Fodder Seeds Production Farm (CFSPF) - Hessaraghatta, and Green Foundation, Bengaluru.

In Odisha, we would like to thank the Departments of Panchayati Raj, Forest and Environment, Rural Development, Agriculture and Development of SC and ST Department, Board of Revenue, SIRD, OTELP, OFSDP, OCTMP RCDC, Vasundhara, Human Development Foundation, Xavier Institute of Management, SC and ST Research and Training Institute, KIIT School of Rural Management, CWS - Bhubaneswar, CYSD, Odisha Jungle Manch, Sambhav - Nayagarh, SWWS - Gajapati, SEWAK - Sundargarh, WOSCA and Prakalpa - Keonjhar, Seba Jagat and Jan Kalyan Sansthan - Bhawani patna, NEWS - Angul, District Environment Society - Angul, Jagadananda, Artabandhu Mishra, KC Panigrahi, P Venkat Rao, Sudhir Pattnaik, Sisir Pradhan, Raj Kishore Mishra, Shahid Ummer, Ranger's Training College - Angul, ATMA - Angul and Dhenkanal, DSMS, Angul; COATS, District Planning and Monitoring Unit, CYSD, Koraput Farmers' Association, TCRC and SPREAD of Koraput.

In Gujarat, we would like to express our thanks to the Center for Environment Education (CEE), UNNATI, ANANDI, Bhaikaka Krishi Kendra - Ravipura, Panchmahal Milk Union - Godhra, JK Trust - Dahod, Central Soil Salinity Research Institute (CSSRI) - Bharuch, Central Soil & Water Conservation and Research and Training Institute (CSWCRTI) - Vasad, Anand Agriculture University, Vidyanagar Nature Club, Gramin Vikas Trust, Utthan, SARTHI, NM Sadguru Foundation - Dahod, Prakriti Foundation, Gujarat Vidhyapith, MSW colleges of SP University, Gujarat Nature Conservation Society - Sindhrot, Krishi Vigyan Kendra - Vejalpur, and Maize Research Station - Godhra.

In the North-East region, we thank the Government of Nagaland, Nagaland Empowerment of People for Economic Development (NEPED), Nagaland Remote Sensing and GIS Centre, Meghalaya Rural Development Society (MRDS); the Department of Forest and Environment and the Department of Agriculture, Tzula (Dikhu) Green Zone Committee members, Nanga Greener Zone Committee members, Village Councils of Ungma, Longsa and 14 villages of Dikhu river upstream area, Amba Jamir, Dr Gautam Narayan, Nimesh Ved for their support in our initiatives in the region.

We also thank the families of the staff members and the many individuals and organisations who have been associated with us over the years and have provided encouragement and support to our endeavour and whose names do not find mention here.



Our Funding Agencies

We are thankful for the support of funding agencies: Omidyar Network, Sir Dorabji Tata Trust and The Allied Trusts, The National Bank for Agriculture and Rural Development (NABARD), NABARD – Watershed Development Fund, NABARD – Indo-German Watershed Development Programme, NABARD – Tribal Development Fund, ITC Ltd. (Mission Sunehara Kal), Sir Ratan Tata Trust and Navajbai Ratan Tata Trust, Concern Worldwide, RBS Foundation, The Ford Foundation, Grow-Trees, UNDP-GEF Small Grants Programme, Water and Sanitation Management Organisation, Rufford Foundation, Fondation Ensemble, International Food Policy Research Institute (IFPRI), Deutsche Gesellschaft für Internationale Zusammenarbeit (giz), ICRISAT, University of Michigan, Aga Khan Rural Support Programme – Hilton Foundation, Coastal Salinity Prevention Cell, Gujarat State Watershed Management Agency, Arghyam, Duleep Matthai Nature Conservation Trust, National Bamboo Mission, and Governments of Rajasthan, Gujarat, Madhya Pradesh, Karnataka, Andhra Pradesh and Odisha.



We are grateful to **Mark Katzman, Hilary Skirbol, Gautam Yadama and Paul Nordmann**
for contributing their wonderful photographs.

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