

## Strengthen civil societies for improved resource management for conservation



### Project Title

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**Time Period: April 2008 to March 2011**

### COMPLETION REPORT

#### *Opening Remarks*

Darjeeling District is the only hill district in the Indian state of West Bengal. It is the northern most district and is bounded by the states of Sikkim, Assam and countries Nepal, Bhutan, Bangladesh.

The regional marginalization of the hills has led to a long standing political demand for autonomy within the Indian nation. The demand re-escalated in the project period disrupting the proposed timelines of the project.

Darjeeling is described to be famous for its tea, timber and tourism. More than 40% of the land area is under the forest department. The region has a high concentration of protected areas with 4 in the district. Conservation efforts are primarily forest department centric, which is slowly moving away from the policing practices to a carrot and stick efforts. Even though Darjeeling comes under the state of the famed Joint Forest Management (JFM), the levels of participation, access and benefits share is not community centric. The user group definition is also very narrow leaving large sections of the community.

The forest villages fringe the Singalila National Park and also come under the JFM. The key species of the national park are Red Panda, Clouded Leopard, Satyr Tragopan, and Chestnut-breasted Partridge. The villages are far flung, isolated and difficult to access. Access to social benefits are poor and the market far and very exploitative. The villages run parallel to the popular Singalila trekking route but get nominal benefits from it. The communities' livelihoods depend on forest works and agro-biodiversity. With increasing market influence the people have been shifting out of agriculture. The people were using high amounts of synthetic agro-chemicals which was identified as a threat to conservation efforts.

The communities are organized into traditional community based organizations called *samajs*, which would be geographical or community in demarcation. The *samajs* provide welfare services and support to its members in births, marriages, deaths and sickness. They also provide minor conflict resolution bodies. These *samajs* are typical of the Darjeeling Hills irrespective of rural, urban, tea or forest communities. The challenge is contextualizing the *samaj's* activities to present day issues and increase equity and participation. All 5 communities are organized in some form of *samaj* or the other.

The 5 forest villages also come under the JFM and have Forest Protection Committees (FPC). The activities of the FPC are primarily developmental in nature of projects supported by the Forest Department. The agenda of the FPC is primarily set by the Forest Department representative in the FPC. Peoples participation especially women is very low.

**Project Impacts:**

**Long Term:** Improved status of key floral and faunal species and their habitat in Singhalila National Park through conservation friendly sustainable livelihood practices.

**Targeted Outcomes**

1. Status of key species (Red Panda, Clouded Leopard, Satyr Tragopan, and Chestnut-breasted Partridge) and their habitat improved due to reduction of unsustainable harvesting of forest resources.
2. Integrity of 72 sq km of Singhalila National Park and its contiguity with the forests of Nepal and Sikkim maintained.

**Short Term:** The capacity of communities in the five villages of the buffer zone of Singhalila National Park enhanced to practice sustainable livelihoods and environmentally friendly agriculture that contribute to the conservation of the national park.

1. Change in resource use practices among at least one community group of the project site during the project period of 2 years through adoption of alternative sustainable livelihood strategies.
2. Synthetic agro-chemical use threat reduction through the adoption of sustainable natural resource management practices by 80% of the 5 communities by 3 year of the project.

**Achieving its intended impact objective and performance indicators.**

Within the 5 communities of the project site, agro-biodiversity has increased with reintroduction of crops eg *Uwa*, a local wheat, that they had stopped cultivating. Indigenous vegetable seeds were introduced expanding their cropping varieties from only potato, maize and peas to carrot, cabbage, beans and a variety of green vegetables. Working on food forest with fruiting trees as the base looked at mimicking nature in agriculture. 4 of the 5 villages have stopped grazing their cattle in the forest by increasing fodder plantation in their land and fringe areas. The collection of forest litter for cattle and fertilizer has also been restricted to forest pathways and not from the core forest areas. These interventions have increased the agro-biodiversity of the communities, improved forests contributing to the increased connectivity of the fragmented forests of the landscape.

70% of the communities of 5 forest villages in the project site have completely stopped using synthetic agro-chemicals. This has been achieved through progressive farmers' trainings, follow-ups at site and formation of core group of progressive farmers on organic farming and permaculture, a sustainable design system. The processes have been speeded up with start-up support of seeds, square metre vegetable poly houses, vermi-compost bins and trainings and tools for apiary. Bees also has also an added benefit of pollinators. The trainings and support have been based on strengthening existing resources of soil, water, seeds and livestock. Thus the community have initiated composting(different techniques); natural soil nutrient supplements using plant extracts and cow urine; leveling of their cropping land in contours reducing soil erosion; grey water management and integrated pest management using fermented plant extracts. The introduction of these technologies as well as their experience of use of synthetic agro-chemicals has thus enabled 70% of the community to move towards sustainable resource management and reduced the conservation threat of synthetic agro-chemicals.

Darjeeling Singalila *Sangrakchan Samity*(Darjeeling Singalila Conservation Federation), has been an outcome of the interventions of focused discussions on socio-ecological analysis, participatory leadership and planning, effective communication at the community level. The Network of the 5 forest villages of the project site has a conservation action plan with 6 key objectives on conservation and livelihoods, which goes beyond the project short term objectives. The objectives are:

- i. 100% organic farming and marketing.
- ii. Work on issues of conservation and environment of Singalila Complex including tourism.
- iii. Activities to improve socio-economic conditions of the villages and decisions to be taken in a participatory manner.

- iv. Undertake any proactive community initiatives for the upliftment of the community based organizations.
- v. Proper livestock management through different programmes.
- vi. Work on issues of disaster management

The network also recognizes the issue of the landscape and has kept scope for including more members. The network promotes conservation and also addresses the issue of cross learning, knowledge sharing and monitoring of its policies through the internal control systems. They have identified linkage as a key strategy for furthering their vision.

Thus, the interventions have made visible impacts on improving agro-biodiversity and increasing forest connectivity; reduced threats of synthetic agro-chemical use and increased sustainable natural resource management. The efforts have been institutionalized through the Darjeeling Singalila *Sangrakchan Samity* (Darjeeling Singalila Conservation Federation) with its conservation action plan.

### ***Unexpected impacts***

In 3 of the 5 communities of the project site, the Forest Villages were part of a larger community. The community outside of the forest village jurisdiction are described as *Khasmal* or revenue villages which do not fall under the forest department, yet are user groups of the forest resources. The communities of the *khasmal* villages have the same livelihood option of the forest villages and in some instances the two come under a larger community based organization outside of the forest protection committee. In Bich Gaon Forest Village, the larger community based organization decided to be part of the project intervention even though they did not avail of the start-up material and training. They become closely involved in the knowledge sharing and networking processes.

The project worked in close partnership with the Forest Department of the Rimbick Range and the Darjeeling Divisional Forest Office. This enabled the essential official support in taking the interventions forward at the forest village level. The positive experiences of the project and partnership has led to the Forest Department to take some of the project interventions themselves, namely, improving cattle sheds and including cow urine collection points in the shed, promotion of organic farming and square metre poly house vegetable gardening in the project sites expanding the interventions. In Samanden, the forest department has decided to build two homestay cottages for the Samanden Forest Village. The cottages were designed by the project proponent team and incorporated sustainable and appropriate technologies for energy and water use and local natural resources and skills as building material.

During the various socio-ecological analysis at the community level, human wildlife conflict emerged as an important issue of the community with upto 40% crop loss to 13 different species at Samanden forest village. The project did not have scope for the issue. It also emerged that the issue has not merited attention it needs. Most interventions have been based on large mammals in the plains thus academia, action and policies have not addressed it at length. A pilot project to study the issue and propose mitigation measures in Samanden Forest Village has been leveraged from Rufford Small Grants Foundation fund for a period of 15 months.

The focus on increasing agro-biodiversity has meant increase in types and quantity of crops produced in the villages. With access to market and bargaining power poor the forest villagers still have to depend on a monopsony exploitative market. Thus, additional benefits of increased crop production does not necessarily convert to equivalent income terms.

With the CEPF partners from Sikkim and East Nepal a transboundary perspective was achieved in terms of understanding and knowledge sharing. In a number of workshops, exposure visits, transboundary issues were discussed and strategized. The strategies are yet to be taken forward in a concerted manner.

Rimbick town is key to the communities of the project site. It also became a base for the proponent and in the project period, linkages have been built and discussions for future joint action with the community based organizations have been undertaken with special focus on solid waste management.

***Success of the project in terms of delivering the intended outputs.***

**Output 1: Community based organizations strengthened and mobilized to promote conservation friendly sustainable livelihoods and resource use practices.**

Community based organizations promoting and undertaking conservation friendly sustainable livelihoods and resource use practices.

In all the 5 forest villages of the project site socio-ecological analysis, participatory leadership and planning workshops were facilitated which looked inwards and provided additional information and motivation for strengthening the existing community based organizations to promote conservation friendly sustainable livelihoods and resource practices. The analysis and additional information motivated the 5 community based organizations to build on their existing best practices and change conservation threats towards sustainable livelihoods and resource use practice focusing on agro-biodiversity, forest, soil and water management.

**Output 2: Communities in 5 villages adopt environmental friendly agriculture practices to enhance agro-biodiversity that supports forest cover.**

Communities of 5 villages adopt environmental friendly agriculture and enhance agro-biodiversity that supports forest cover.

70% of the communities removed the conservation threat of use of synthetic agro-chemical usage and replaced it with organic farming practices using locally available resources and technologies provided in the training of progressive farmers and support visits by the proponent. The process was incentivized with start-up material of seeds, vermi-composting units, square metre vegetable ploy houses and apiary tools and technologies. Food forests, reintroduction of seeds and introduction of new seeds increased agro-biodiversity which contributes to the forest cover. Through the network, the percentage of communities practicing environmental friendly agriculture will be enhanced to cross the existing 70%.

**Output 3: A system of sharing knowledge and skills about conservation friendly livelihood practices among communities in the project site established.**

A systems of knowledge and skills about conservation friendly livelihood practices among communities in the project site is established and functioning.

The project output, Darjeeling Singalila *Sangrakchan Samity*(Darjeeling Singalila Conservation Federation) the network of the 5 forest villages has a conservation action plan with 6 key objectives focusing on conservation and livelihoods. The network promotes the core group of progressive farmers to share information, knowledge and skills at the village level as well as cross villages on conservation friendly livelihood practices. They also are a monitoring body for these practices with the development of the internal control systems.

***Lessons Learnt***

Community based conservation efforts are extremely important to sustainable conservation efforts. Community conservation efforts need behavioural change at all levels with regard to recognizing the important role of the community as primary stakeholders. The process also requires hand holding of the

community efforts which needs to be integrated in approach addressing both the visible and invisible structures. Interventions based on the resources and livelihoods of the community have better acceptance possibilities at the community level. The process also requires a larger user group definition to incorporate people beyond the forest villages. Community based conservation efforts needs to be expanded in the region as the region lacks such pilots to learn from and expand.

A transboundary landscape level approach is essential for most effective impacts, recognizing that political boundaries are mental boundaries which are constantly being crossed over and to bring about a synergy of diverse micro-efforts.

The region needs further investment for its conservation potential as well as its regional marginalization.

### ***Project Design Process***

The wide discussion with stakeholders: academics, forest department, community representatives, NGOs and experts enabled the design to be refined and made pertinent. The continual availability of experts like Dr. Sunita Pradhan, Dr. Sarala Khaling, Rico Zook and the forest department enabled the design to be actualized. The design also revolved around the core strengths of the proponent: of organic farming, community governance and experience in the Darjeeling Hills contributing to its success.

The project failed to incorporate the market in its design which is an important component influencing the long term impacts of the project.

### ***Project Execution: (aspects of the project execution that contributed to its success/failure)***

The project outputs were based on the existing livelihoods and resources of the community so was well accepted. The continual capacity enhancement based on local knowledge and culture with residential trainings, support visits was critical in bringing about a behavioural change and adoption of sustainable resource management. The interventions addressed both the visible and invisible structures of the community ensuring increased sustainability of the outputs.

The project sites being high altitude with slow growth, agro-biodiversity interventions had a very small window of time and changes were slow. This meant that seeing is believing and learning from it by other community members got delayed and slow. With the demand for political autonomy and its disruption in the case of introduction of square metre vegetable poly houses was delayed and a season of planting was missed.

### ***Project Sustainability***

Darjeeling Singalila *Sangrakchan Samity*(Darjeeling Singalila Conservation Federation) will enable the project outputs to carry on as well as to build upon. The network has also initiated a membership fees drive ensuring that it has financial resources to continue its activities. At the individual farmer level the diversity in livelihood option as well as its visible effects in increase in production and quality improvement will enable its continuity. A key driver for sustainability is the understanding and acceptance by the members of the community for sustainable natural resource management and conservation.

The Forest Department has also been convinced of the project outputs which can be seen in their support of building square metre vegetable poly houses, promoting organic farming, improving livestock sheds incorporating with cow urine collection points as well as taking the design components for the two Samanden home stays from the proponent.

The Rufford Small Grants Foundation fund support for the pilot on human wildlife conflict at Samanden Forest Village addresses the issue which the CEPF project did not address as well as enables the proponents' continued presence in the communities.

With the consultancies that DLR Prerna undertakes on organic certification, organic farming, fair-trade and governance, the proponent has additional resources which is being utilized to continue supporting the network and communities of the project site.

Along with ATREE, Eastern Himalaya office, a concept note is being prepared for a landscape approach in the West Bengal context as well as networking and linkage possibilities with Sikkim and Nepal. The concept note will be a strategy document for proposal development for additional resource mobilization.