# CEPF FINAL PROJECT COMPLETION REPORT

## I. BASIC DATA

Organization Legal Name: Shree Deep Jyoti Youth Club

**Project Title (as stated in the grant agreement):** Conservation of Key Plant Species and their Habitats in Kangchenjunga Singalila Complex for Livelihood Improvement

Implementation Partners for this Project: NA

Project Dates (as stated in the grant agreement): Oct 1, 2008-Sep 30, 2010

Date of Report (month/year):

## II. OPENING REMARKS

Provide any opening remarks that may assist in the review of this report.

The project aims to conserve key plant species of Kanchenjunga Singhalila Complex, Eastern Nepal through the implementation of in-situ and ex-situ conservation strategies. The project was conceived with the long term goal of conserving plant hotspots (priority site outcomes), and key plant species based on the recommendations of CEFP project implemented by Ethnobotancal Society of Nepal (ESON). This project was follow up of the project implemented by ESON. The ESON project had identified key species of plants and its habitats (hotspots) in Kanchenjunga Singhalila Complex, Nepal needing community based conservation initiatives. Based on ESON's recommendations for short-term and mid-term implementation strategies, this project focused on the in-situ ex-situ conservation of priority species *Aconitum spp., Nardostachys grandiflora, Neopricrorhiza scrophulariiflora, Michelia spp. and Taxus wallichiana* in two of the priority sites Falaicha VDC of Panchthar and Jamuna VDC of llam. The project supported commercial farming of Swartia chirata in private lands to support local livelihood and established networks and built capacity of groups involved in NTFP's harvesting, trading and cultivation.

In addition the project linked with strategic direction 1 and 2 of the ecosystem profile and it address biodiversity conservation in priority corridor and promotes alternative livelihoods to reduce threat and enhance conservation priority plant hotspots. Root/community level activities/ strategies were focused for proper implementation so as to generate the local livelihood and hence love and appreciation for nature.

More efforts had been paid to achieve all the target outputs, additionally a technical science based study of some key plant species carried out which was not planned during the project design phase. There were not any adverse factors encountered so that no cancelation and change to the planned project outputs occurred, as has been reported in quarterly reports to CEPF but the political instability (frequents strikes) resulted in the delayed implementation of some field activities.

This project was implemented since Oct 2008 for 2 years, gained appreciable community and stakeholder supports, and finally led to be a successful project

# **III. ACHIEVEMENT OF PROJECT PURPOSE**

**Project Purpose**: Community based in-situ and ex-situ conservation of prioritized plant species initiated in priority sites of Kangchenjunga Singalila Complex, Nepal.

#### Planned vs. Actual Performance

Indicator	Actual at Completion	
Purpose-level:		
Conservation status of at least 3 key plants species in the project area improved by year 2	Ecological study of 3 key plant species Aconitum spicatum, Neopicrorhiza crophulariiflora, Nardostachys grandiflora was carried out	
	Three blocks that consists of 15 plots (2x2 sq.m) monitored regularly for <i>Aconitum spp.</i> within the altitudinal range of 2700m to 4300m asl.	
	Sustainable harvesting of Key species specifically Swertia spp. is in action.	
	No of households practicing key plant species cultivation increased.	
2. 2 key plant hot spots and prioritize plant species conserved by local community by Year 2	Establishment and delineation of two conservation demonstration sites (focusing key species afforestation of indigenous species, etc are few examples of community initiatives.  Community based monitoring of key plant	
	species in Jamuna (one of the priority site)	
	Plantation of <i>Michelia spp.</i> and <i>Taxus spp.</i> in community forest and private land, cultivation of <i>Swertia spp.</i> in their private land and setting out the time of harvest for sustainable conservation are the key examples of local community initiatives of conservation actions.	

Describe the success of the project in terms of achieving its intended impact objective and performance indicators.

About 714 households from the project site practiced sustainable *Swertia chirata* cultivation in their private land area of almost 90 ha at Jamuna and Falaicha VDC and by the end of this year, it is expected to fetch an income of NRs 780,000 (USD 10,540) with production of about 2400kg chiraito.

About 250 households from Jamuna VDC planted about 750 saplings of *Michelia spp.* and 2100 saplings of *Taxus wallichiana* in their private land. Similarly, 1600 *Michelia spp.*, 1900 *Taxus wallichiana* and 500 *Schleflerra impressa* were restocked in community forests.

Two Demo Station Sites (Special in-situ management sites), on at Choyatar (3 ha at 2300m asl) and another at Falaicha (5 ha at 4300m asl) established. In Choyatar the focus species are *Michelia spp.* and *Taxus wallichiana* while in Falaicha the foucs species are *Aconitum spicatum*,

Neopicrorhiza crophulariiflora, Nardostachys grandiflora. These sites are managed by local community groups and CF and are regularly monitored by the project staff as well.

Ecological study of 3 key plant species *Aconitum spicatum, Neopicrorhiza crophulariiflora, Nardostachys grandiflora* was carried out. Three blocks that consists of 15 plots (2x2 sq.m) monitored regularly for within the altitudinal range of 2700m to 4300m asl. Data collected were analyzed and yield a separate technical report.

Sustainable harvesting guideline for 3 key plant species developed and now the local community started to practice it.

Community based monitoring of key plant species in practice for project area.

A NTFP-MAPs farmers network established and strategic operating guideline was also developed so that it acts as advocacy forum and brings effectiveness in value addition. Training cum workshop was conducted to deal with value chain analysis at local level.

## Were there any unexpected impacts (positive or negative)?

There were not any unexpected impacts due to this project execution

# IV. PROJECT OUTPUTS

# **Project Outputs:**

#### Planned vs. Actual Performance

Indicator	Actual at Completion	
Output 1: Key plant species (Aconitum ferox, A. spicatum, Neopicrorhiza crophulariiflora, Nardostachys grandiflora, Michelia species and Taxus wallichiana) conserved in their natural habitats.		
1.1. At least 2 demonstration sites (special management zone) will be developed for in- situ conservation of key plant species in two important plants areas by year 2 of project	Two trainings for local community for the development of in-situ conservation sites and key species organized in Falaicha and Jamuna  Two demonstration sites (special management zone) comprising the total area of 8 ha developed in Pahade Meghu area of Falaicha and Choyatar area of Jamuna, 5 ha and 3 ha respectively. Pahade Megu area supports the conservation of high altitude key plant species with medicinal value such as Aconitum spicatum, Neopicrorhiza crophulariiflora, and Nardostachys grandiflora while Choyatar area supports Taxus wallichiana and Michelia spp.  A workshop cum training organized so as to aware local people regarding the importance of in-situ conservation site and its management in each sites.	
1.2. Site specific sustainable harvesting plans developed for 3 species (Aconitum	After having all the ecological data on <i>Aconitum spp.</i> , its site specific sustainable harvesting plan/ guideline was developed. Sustainable harvesting plan for other two key species <i>Neopicrorhiza crophulariiflora</i> , and <i>Nardostachys grandiflora</i> also developed based on existing information and guideline. This documents are in simple format in Nepali language easily understandable by the local	

spp, Neopicrorhiza scrophulariiflora), Nardostachys grandiflora) based on existing guidelines by year 2	community so that long term implementation is secured.
Output 2: Community and private forests restocked with key plants species (Aconitum ferox, A. spicatum, Michelia species, Taxus wallichiana).	
2.1. At least 2 community groups will initiate the cultivation of 4 key species in private land and	<ul> <li>Key Plant species <i>Michelia spp</i> (1600), <i>Taxus wallichiana</i> (1900), <i>Schleflerra impressa</i> (500) were planted by 3 community groups (Mangenalung, Hangetham and Choyatar).</li> <li>24 kg seed of <i>Swertia chirata</i> distributed to 714 households from 3 community groups. Total area of about 90 ha was covered by <i>Swertia</i> cultivation in the</li> </ul>
community forest by year 2	project area.  Community groups reported 80% of seed distributed successfully germinated and growth occurred.
	The private land owners were encouraged to conserve key plant species such as Michelia spp and Taxus wallichiana
2.2. At least 2 nurseries will be established in two plant hotspot sites for prioritized plant species such as Aconitum spp., Michelia spp. and Taxus wallichiana	A nursery with seedling capacity of 6000 was established at Hangetham Community Forest fledged with seeds of <i>Michelia spp</i> (1200), cuttings of <i>Taxus walllichiana</i> (4200) and <i>Swertia chirata</i> in adjoining vicinity. This nursery produced 800 seedlings of <i>Michelia</i> and 2100 cuttings of <i>Taxus</i> with plenty of <i>Swertia</i> . During the implementation, the project realized that another nursery is not necessary since it is difficult to establish nursery for <i>Acomitum spp</i> . However for this species in-situ conservation was encouraged. This was previously communicated during mid-term evaluation of the project.
Output 3: Networking of relevant civil society groups working on Non Timber Forest Products-Medicinal and Aromatic Plants conservation eastablished and their capacity enhanced.	
3.1. At least 2 functioning community groups in place working with the NTFP and MAPS conservation in identified key plant hotspots by year 2	One community group at Falaicha VDC named Mangenalung herbal conservation and herders group was formed and made functional. In case of Jamuna VDC, an existing group formed by another project was made functional for the conservation of key plant species and key priority areas. These groups are actively engaged in awareness raising, advocacy for conservation at VDC level.
of project. 3.2. 1 Long-term strategic document of NTFP-MAP Network developed by year 2 of project.	A long term strategic document of NTFP-MAP network developed and now is in implementation. This specifically focuses on promotion of NTFP-MAPs cultivation, sustainable harvesting, trading and value addition issues. This strategic document also incorporates some small scale processing of raw NTFP-MAPs in long term run.

Output 4: Economic opportunities increased through establishment of market and information network for key commercially viable plant species (Swertia chirata)	
4.1A mechanism in place for timely knowledge and information sharing on commercially valuable species by year 1 of project	The information regarding the market value of commercially viable species regularly broadcasted via local FMs.  NTFP-MAPs Network established a mechanism to share farmers regarding the market value in the timely manner and not to trade before certain timeline after harvesting.
4.2 For 1 commercially valuable species (Swertia chirat) market network developed for farmers by year 1 of project.	A district level interaction workshop was organized with I traders, NTFP-MAPs cultivators and other relevant stakeholders for value chain analysis and a market network was developed for commercially viable and valuable species. Due to this network, farmers will get sustainable benefit via ease in marketing and value addition

# Describe the success of the project in terms of delivering the intended outputs.

The project remains successful in terms of delivering most of the intended outputs.

A nursery with seedling capacity of 6000 was established at Hangetham Community Forest fledged with seeds of *Michelia spp* (1200), cuttings of *Taxus walllichiana* (4200) and *Swertia chirata* in adjoining vicinity. This nursery produced 800 saplings of *Michelia* and 2100 cuttings of *Taxus* with plenty of *Swertia*.

Two community groups were made functional and working on conservation and promotion of NTPF- MAPs. One community group at Falaicha VDC named Mangenalung herbal conservation and herders group was newly formed and made functional. In case of Jamuna VDC, an existing group formed by another project was made functional for the conservation of key plant species and key priority areas. These groups are actively engaged in awareness raising, advocacy for conservation at VDC level.

Timely information and knowledge sharing on commercially valuable plant species was carried out via a mechanism executed by NTFP-MAPs Network and also assisted by regularly broadcasted via local FM radios. Long term strategic operational plans had also been developed so that this Network could autonomously continue its actions beyond this project.

A market network was developed for *Swertia chirata*, a commercially valuable plant species due to this farmers will get sustainable benefit via ease in marketing and value addition.

# Were any outputs unrealized? If so, how has this affected the overall impact of the project?

With the exception of establishment of two nurseries, all outputs have been realized. We had originally planned the establishment of two nurseries in both of the prioritized areas for different key plant species which proved not to be possible due to unknown biology of Aconitum spp. and difficulty producing nursery. Similarly, there was a slight change in implementation as this project enforced in functionality of existing community group in Jamuna instead of forming the new one.

## V. SAFEGUARD POLICY ASSESSMENTS

Provide a summary of the implementation of any required action toward the environmental and social safeguard policies within the project.

As indicated in the original application documents this Project anticipated no adverse impacts on environment, social aspects, human health and safety. As of the completion of this project no safeguard issues have arisen.

## VI. LESSONS LEARNED FROM THE PROJECT

Describe any lessons learned during the various phases of the project. Consider lessons both for future projects, as well as for CEPF's future performance.

The lessons learned during the implementation of the project are as following;

- Detailed assessment (conservation status, socio-economic, and local community interest) of the project area need to be carried out before designing a project.
- Technical research is crucial for implementation of sustainable use of natural resources especially medicinal plants.
- Acknowledging local knowledge and practices, in-situ and ex-situ conservation strategies should be put in implementation with proper acknowledgement of local knowledge and practices, which motivates the local community and finally adds in sustainability.
- Long term presence and continuation of conservation activities are crucial for gaining community support and building ownership for their long term involvement in conservation initiatives.
- IGAs are more supported by local community and so integrated projects to meet multiple needs of the community will be appropriate to design to have community ownership and stewardship.
- Effective coordination and communication and proper strategies is imperative and need to be developed for value addition of products by NTFP-MAPs groups.
- Adaptive management of projects is essential to meet the changing conditions of the field sites and local community priorities.

# Project Design Process: (aspects of the project design that contributed to its success/failure)

The project was designed on the ground of recommendations of the CEPF Project implemented by ESON with the aim of conserving key plants species and their priority sites in Kangchenjunga Singhalila Complex, Eastern Nepal. Detailed assessment of project area was carried out by ESON in which SDJYC was an implementation partner. During that time SDJYC had assessed the willingness of the local community to this particular project. This greatly contributed to the success of this project. Similarly, SDJYC's expertise in NTFP conservation, commercial cultivation and pastureland management greatly influenced the implementation positively.

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

In spite of the challenges in the field specially its remoteness and climatic conditions (In Falaicha, field level activities were possible in certain seasons only), the project was successfully implemented. Elements of the project execution that resulted in it success, included:

- Organizational presence in the project since last 5 years regarding the natural resource management, pastureland management and NTFP promotion had provided good experience, goodwill and trust of SDJYC among local communities.
- Willingness of the local community for NTFP cultivation and promotion as effective tool of livelihood improvement in the project area.
- Involvement of relevant stakeholders and local community in every phase of the field level implementation.
- Well coordination among district and local level stakeholders.
- Well trained and skilled human resources and team spirit.

# VII. ADDITIONAL FUNDING

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount	Notes
Poverty Alleviation	С	\$14,100	Alternative income
Fund			generating program (NTFP
			Cultivation and Promotion)
			for livelihood improvement
		\$	
		\$	
		\$	
		\$	
		\$	
		\$	
		\$	

<sup>\*</sup>Additional funding should be reported using the following categories:

- A Project co-financing (Other donors contribute to the direct costs of this CEPF project)
- **B** Complementary funding (Other donors contribute to partner organizations that are working on a project linked with this CEPF project)
- **C** Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)
- **D** Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

Provide details of whether this project will continue in the future and if so, how any additional funding already secured or fundraising plans will help ensure its sustainability.

The project has encouraged local community for in-situ and ex-situ conservation of key plant species in Kanchenjunga-Singhalila Complex. Due to more efforts in ex-situ conservation (commercial cultivation of *Swertia chirata*), local community of the project area started to generate income. This conservation incentive made them to take actions for conservation. Beside these, NTFP-MAPs farmers' network will continue the awareness raising, promotion of NTFP-MAPs cultivation, advocacy and institutional lobbying for value addition and conservation. In the mean time, being a local organization and long history of its existence in the project site, the resource persons and staffs are available for supporting the farmers groups in ensuring in-situ conservation and commercial cultivation of key and prioritized plant species.

## **VIII. ADDITIONAL COMMENTS AND RECOMMENDATIONS**

The funding support of the Critical Ecosystem Partnership Fund has been instrumental in the successes achieved during implementation of this project. Through this support SDJYC has succeeded in initiating the process of protecting 5 key plant species via community participation. Advocacy, awareness raising and local community empowerment and capacity development Practices of in-situ and ex-situ conservation. This project has been at the forefront of this effort and will continue to be beyond this project's duration. The further programs should focus on continuing efforts to secure sustainable financing for in-situ and ex-situ conservation, shaping community conservation vision, establishing long term conservation plans and initiating appropriate monitoring programs, both social and biological, to ensure the integrity of the Kanchenjunga-Singhalila landscape.

# VIII. INFORMATION SHARING

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. One way we do this is by making programmatic project documents available on our Web site, www.cepf.net, and by marketing these in our newsletter and other communications.

These documents are accessed frequently by other CEPF grantees, potential partners, and the wider conservation community.

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