

2016

Consolidated Village Biodiversity Conservation plans

Original micro-plans prepared by
Rural communities

Facilitated by
Shankar Datt and Shramyog team

Plans translated and consolidated by
Shankar Datt



Technical support



Financial support



Executive summary

We have been facilitating rural communities in the buffer zone of Corbett national park to make village biodiversity conservation plans (VBCP) for last one year with the financial support of Rufford foundation, UK. We have worked in five villages and developed five VBCP. Primarily these plans were prepared in vernacular language and followed by Hindi translation. This document is a consolidated story of the five micro-plans in English. The objective of this document is to share the generated knowledge with national and international communities and mobilize resources to follow-up the action plan.

The buffer zone of Corbett National Park is a very important land from a biodiversity point of view. Until 1990, about 85% of the population was involved in agriculture and was dependent on local resources. Many local institutions such as 'Van panchayat' (Forest council), Yuva mangal dal',(youth forum) 'Mahila mangal dal' (women forum) etc, were very strong and worked in synergy with the government towards the common goal of forest and natural resource conservation. Unequal economic development brought about the sudden change in livelihood, which led to mass migration of the local/rural youth towards the cities and decreasing interest towards agriculture. As a result, of this demographic and socio-economic shift, the institution based system has weakened and the biodiversity and natural resource conservation activities are suffering from poor results. Nowadays, the buffer zone of Corbett National Park is becoming notorious for hunting and smuggling activities. Not only the outsiders but also the locals are involved in these activities. For instance, fishermen use electric current to kill fish illegally in the river Ramganga, in another instance, forest area is burnt down strategically during the summers and the land is encroached upon for illegal hunting and smuggling. These activities are being done by local youth and outsider.

The accomplished program facilitated the local people to prepare village's VBCP and sensitized against such practices. We adopted a constructive capacity building approach. Firstly, we developed a relationship with the local community and involved them actively in the program's awareness process. We tried to get participation from each and every household in the awareness campaign. Twenty-two youths were educated on participatory learning and action exercise and biodiversity conservation. After that, we started participatory learning and action exercise (PLA) in the villages. During PLA, villagers analyzed existing situation of biodiversity decided to require actions to threaten species. More than 400 villagers participated in the PLA. In addition, community-based institutions were revived and formed. After planning exercise, we shared the micro-plans with government and non-governmental agencies to get financial and technical support to implement prepared plans. We have mobilized about 400000 INR to implement the proposed plans so far. In addition, we have collaborated with a state university (Kumaun University Nainital) and fisheries department, Uttarakhand for technical and volunteer support.

We were successful in involving local communities in biodiversity conservation planning and sensitized them to biodiversity issues. It was a small effort to make a big change. Now we are in a process to scale-up the program and involve more people and organizations in biodiversity conservation.

1. Introduction

The Rufford Foundation is a UK registered charity which funds nature conservation projects across the developing world. To date, the Foundation has awarded grants to over 3000 projects in 155 countries. The Foundation encourages the sharing of knowledge and best practice throughout the conservation world.



(Gave financial support to implement the program)



Shramyog is a non-profit people's organization registered in New Delhi under the Societies Registration Act of India (1860). In the year 2011, Shramyog was set up with a vision to establish an oppression-free society, where environment sensitive and scientific conscience people will live in healthy ecosystems with dignity and harmony. Shramyog believes that organized and aware people can contribute to ensuring sustainable and equitable development. The name Shramyog is derived from

“Shram” means “hard work” and “Yog” means “organized union”.

(Gave technical support to implement the program)

Shankar Datt completed his B.Sc. and M.Sc. program at DSB Campus, Kumaun University, Nainital in Life Sciences with a specialization in Botany. He has more than 10 years of working experience in biodiversity conservation and community development. He also completed his advanced degree; Master's in Environmental science from Wageningen University Netherlands in 2013 with the Ford Foundation Fellowship.



(Facilitated the program)



Jim Corbett National Park is the oldest national park in India and was established in 1936 as Hailey National Park to protect the endangered Bengal tiger. It is located in Nainital district of Uttarakhand and was named after Jim Corbett who played a key role in its establishment. The park has sub-Himalayan belt geographical and ecological characteristics. It contains 488 different species of plants and a diverse variety of fauna. The increase in tourist

activities, among other problems, continues to present a serious challenge to the park's ecological balance. Corbett National Park comprises 520.8 km² (201.1 sq mi) area of hills, riverine belts, marshy depressions, grass lands and a large lake. The elevation ranges from 1,300 to 4,000 ft (400 to 1,220 m).

(Project area: buffer zone of the national park)

Villages and volunteers: About 450 villagers participated in the program. We got participation from every household during the entire program. Twenty-two volunteers got training on PLA and actively participated in the program. Although most of the volunteers want to continue conservation activities in their village, however, they have to leave the village after some time in the search of livelihood or cash income.

**(Villagers of these villages prepared the village biodiversity conservation plan)
Volunteers Name list**

Village Name	Matwas	Bandran	Jamariya	Sakara	Baluli
Volunteers Name	Deepa Devi	Sohan	Champa Devi	Kamala Devi	Sheela Devi
	Manju Devi	Santoshi Devi	Asha Rawat	Sanjay	Nandi Devi
	Sunil Prakash	Reena Devi	Mahesh	Pradeep Rawat	Archana Devi
	Kamla Devi	Kalawati Devi	Maneesh	Neetu Singh Pankaj	Vinod Basanti Devi

Program: Biodiversity conservation: A case for indigenous community-centric buffer zone management was implemented in above mentioned villages from February 2015 to march 2016. The project is designed to capture the dynamics of conservation practice and knowledge. The first component of the program was awareness; intention was to sensitize the local community on biodiversity conservation issues. The second component, an action component was built on a participatory approach of conservation micro-planning, using 'Participatory Learning and Action tools' (PLA) and inventoried ethno-botanic resources in the region. The last component was convergence, aimed at mobilizing government and non-governmental organizations' financial and technical support to implement the proposed activities and annual action plan.

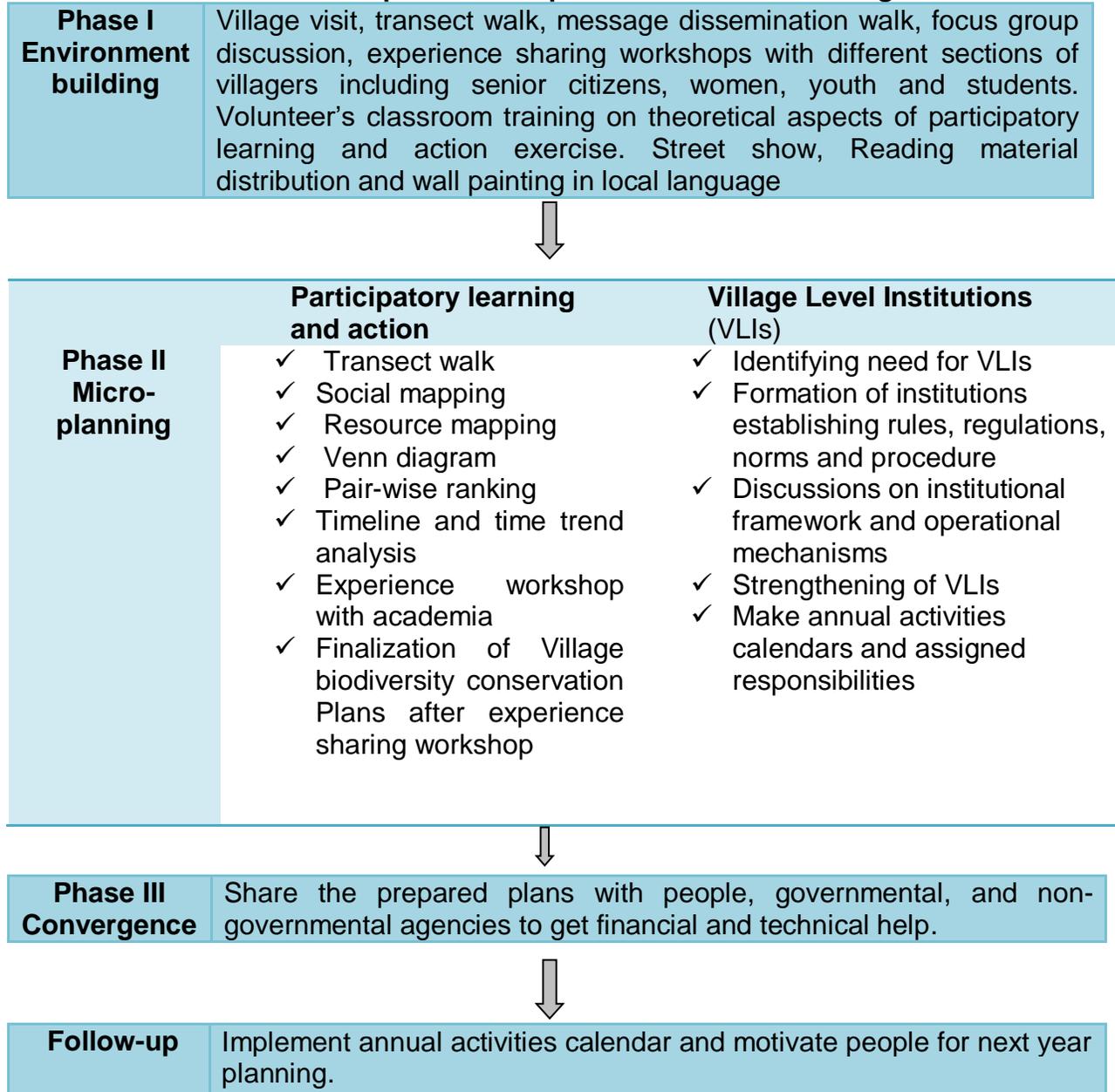


Project area picture

2. Methodology

The process adopted for the preparation of the Village biodiversity conservation plan (VBCP) was Micro Level Planning (MLP). The guiding principles of MLP are - participation, sustainability, self-reliant development, equity and formation of the democratic institutions. The process of MLP is more important than output, as it focuses on the *conscientization* of the communities than the information extraction.

Table: The snapshot of the process is as shown in figure



Environment building

Why

Whenever a new project is started, the planners spend a lot of time in conceiving the idea; it contains input from a lot of people. The final implementation of the project follows a set process. But it is a very new and alien thing for the local community; hence, the planners don't have much idea about the acceptability of the project and the implementing agency. So relationship building with the local community makes the project more acceptable. It strengthens the partnership between the implementing agency and the local community. It also promotes the exchange of ideas, concerns and knowledge. All this collectively results in a successful implementation of the project; hence conducive environment building is extremely important for a project.

How

First of all, we informed the members of the village council and forest council and received their permission to work in their village. Once this permission was obtained, we started a discussion about the project in various village forums, such as women's group, youth forums etc. Through various efforts, we continued to hold these discussions until the local community understood our goals of being there in their village. We had certain indicators to evaluate if the local community has received our message or not. Next step was to study the local geography and land-use patterns through a transect walk. All the members of the local community were encouraged to participate in this walk. It ensured that we understand our hosts while the local community is properly aware of our arrival. Based on our observations of the area, observations of the local community and the various discussions, we prepared a transect map which helped us in analyzing the core issues of the local community. Through this initial interaction and the transect walk, we built a relationship with the local community. Once this relationship was built, then we started spreading the awareness about the project at hand. This was done through street shows, wall painting, cultural activities, and some entry point activities according to the needs of the local community. Although, this entire phase took around 2-3 months, but it provided us with a very strong foundation for the future implementations.

Institution Building

What and why

India, especially Uttarakhand, saw a golden age in environmental conservation during 70's and 80's. Whenever people organize and decided to work for environmental conservation, they have been immensely successful. Such is the strength of the community that such drives didn't need any external research, funds or other resources. "Chipko movement" is a great example of such an effort. Our team believes that community-based institutions aimed at environmental conservations are very powerful bodies. Such institutions are exceptional in assessing the present status of the biodiversity on their territory but at the same time are also very capable of finding long-lasting solutions to their problems. As part of our project, we inspired people from all local communities to form their own community-based institutions, for example, creative women's forum for the women, creative child forums for the children, creative youth forums for the young. These forums helped us to prepare VBCP.

How

In the Indian society, we have a centuries-old tradition of community-based institutions. Almost every village has forums for organizing all small and major events and festivals. These forums continuously worked towards conservation and development of the available resources. In this project, we firstly revived the traditional community-based institutions and then we continued work for the strengthening of these forums. In two villages there were no more such traditional forums then we worked towards setting up such forums from the scratch. Forming such forums takes around 3 months, but it sets up a complete institutional structure essential for the smooth functioning of any future projects.

Micro planning

What and why

Participatory micro planning is a very effective tool to understand and analyze the current status of any selected focus area. This exercise provides a chance for everyone to express their views in village planning. It not only provides an accurate exchange of information but also empowers the local people while keeping the local conditions in consideration. It is also a robust tool for maintaining the data integrity because it allows for public verification of the data. Such a provision is not available to isolated researchers.

During our interaction with the local community in the proposed target area, the local community clearly emphasized that biodiversity conservation could not be achieved through isolated program aimed at only biodiversity conservation. As equal stakeholders, they stressed that their concerns must be addressed and their sensitivities are taken care of. With this insight, we determined to develop a comprehensive village biodiversity conservation plan which achieved its targets and also appeased the local.

How

We identified leadership and volunteers within the various forums in the local community. These selected individuals trained in participatory learning and action exercises. At the end of this process, we had a skilled team ready for work. We had 2 Shramyog members, 6 village community volunteers and fully aware villagers working towards making this program a success. All these people worked together to develop a comprehensive micro plan (VBCP) for the village. There were special discussions on the following points:

Social mapping: Through this exercise we had accurate data on the local demography, sex ratio, occupation, education and caste composition of the entire community. We were able to understand and analyze the social structure within the target community.

Resource mapping: In this exercise we discussed and analyzed the land, water and biodiversity resource of the local community. We were able to understand the land use pattern and other available resources within this community.

Trend analysis: In this step we studied the population changes, habitat changes, behavioral changes, illegal smuggling and others happening during the past 25 years. All this memory based knowledge was documented.

Problem tree and prioritization: Through all of the above-mentioned exercises we came to know about a lot of issues related to biodiversity conservation. These issues were then discussed and analyzed with the local community. The related issues were clustered together and ultimately through this exercise, we prepared a problem tree. We were able to point out the most serious issues and hence assign priority orders to remedial actions.

Sensitization workshop and expert advice: So far the focus has been on traditional knowledge and now at this step we enriched the project with scientific input. The data and findings were shared with scientific experts and their inputs were incorporated in the plan prepared by the local community.

Annual activities: After the plan was reviewed by the local communities and the scientific experts and cleared for execution. The project was divided into smaller activities with set milestones. Based on this we prepared our annual activity calendar.

Convergence

This step focused on mobilizing the optimized resources for problem-solving activities. The problems were analyzed and most effective solutions were chosen. Each solution was further researched and required interventions were mapped. This mapping was based on the various roles and responsibilities of various governmental and non-governmental agencies to figure out which agency will be most effective in dealing with a particular problem. The activity and the target agency were identified. We have been sharing the plan with the concerned agencies for last 3 months.

3. Outcomes and action plan

Measurable outcome of the program are as follow:

Education and awareness: Increased awareness and education on biodiversity conservation among local people. About 450 people including women, students, farmers and local NGO representatives participated in the program. In addition 22 self-motivated youth trained in participatory learning and action exercise.

Community-based institutions: Five creative women forums, five creative children forums one farmers and youth club were formed and strengthen to sustain program activities beyond project age. In addition three forest councils were revived.

Village biodiversity conservation plan: Five villages have their own village biodiversity conservation plans with detailed budget and annual planning. Moreover, villagers, have their community-based institutional framework to sustain the project activities.

Convergence: We have got financial support from fishery department Uttarakhand and SPECS, NGO Dehradun to implement the project activities. In addition, we got financial and technical support from UNEP-Eco-peace leadership center, South Korea to scale-up the program in another two villages.

The action was taken: During planning exercise, we came to know that fish hunters with few local people make a trap (single outlet stone-mud barrier locally known goda) in the river. Therefore, the fish ambush while moving downwards. We with local community spotted such four fish hunting units and came forward to stop this. Local institutions registered a complaint against fishermen and did protest to stop this illegal activity.

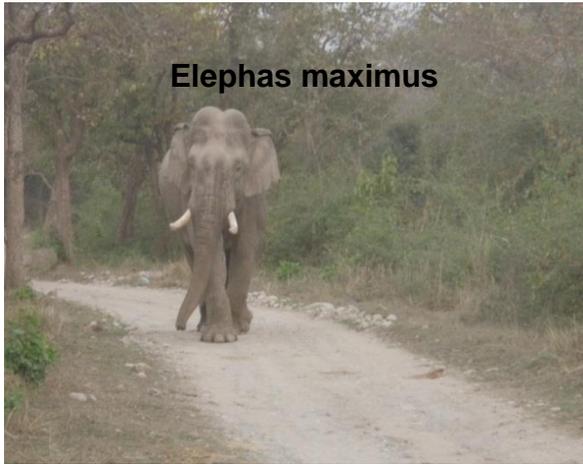
Follow-up: I am with local NGO Shramyog facilitating community-based institutions to implement proposed annual activities. In addition, convergence is going on to get financial assistance to accelerate the work.

Action plan for the year 2016-17 is as follows:

We listed 96 plants 26 wild animals 7 fishes 42 birds 5 reptiles and 29 cultivated crop species during our program in the area. We shortlisted all species according to their current status through prioritization and ranking exercise. At the end of the exercise, we picked 4 plants 5 animals 2 fishes 5 birds 2 reptiles and 9 cultivated species whose numbers have dramatically decreasing from village ecosystem. This exercise was totally based on villager's observation. To get some scientific input we shared the shortlisted species list with some academicians and conservationists and prepared a list of species which need immediate attention. The final finding of the exercise is as follow

Specific species identified for conservation action for 2016-17

Species local name	Scientific name	Villagers observation	Academician and conservationist opinion	IUCN status
Kilmoda	<i>Berberis aristata</i>	Number of plants decreasing dramatically	Immediate conservation action required	Endangered
Mahasheer	<i>Tor putitora</i>	Population decreased up to 75%	Immediate conservation action required	Endangered
Hathi	<i>Elephas maximus</i>	Now we see only 6-7 elephants in the session while we used to see 20-25 elephants in the group in our area	Immediate conservation action required	Endangered
Chukar	<i>Alectoris chukar</i>	Almost died out from villages.	Immediate conservation action required	Least concern



Local Name: Kilmoda
Botanical name: Berberis aristat

(I) Situation	(II) Why this situation is problem
<ul style="list-style-type: none"> ➤ Illegal uprooting ➤ High demand for the local and the bigger market ➤ Local people are not aware of the plant threat ➤ Not in cultivation ➤ Not any organization doing conservation action for the plant in the area 	<ul style="list-style-type: none"> ➤ Plant population has been decreasing dramatically in the area for last 15 years ➤ Not even a single well-grown plant found in the all proposed villages ➤ People do not know propagation method since it was not in cultivation ➤ Few birds make their nest in the bush and eat its berry, those birds also despair in the village ecosystem for last 10 years
(III) Suggested response	(IV) Action plan
<ul style="list-style-type: none"> ➤ Plantation of the plant in all villages ➤ Awareness camp in the area to stop uprooting the plant ➤ Stop un-control grazing ➤ Trained local people to propagate the plant 	<ul style="list-style-type: none"> ➤ 100 plants will be planted in the villages incoming rainy season (20 in each village) ➤ Awareness camp including slogan writing, rally, street show would be organized to sensitize people about the-the plant status
Convergence	
Dr. Brij Mohan Shrama a founder of a local NGO SPECS is going to support the proposed action plan for the year 2016	

Local Name: Chakor
Scientific Name: Alectoris chukar

(V) Situation	(VI) Why this situation is problem
<ul style="list-style-type: none"> ➤ Bird are hunted by villagers and outsider ➤ Bird has specific habitat so villagers easily locate the bird and catch ➤ Villagers have many techniques to catch the bird ➤ Limited knowledge and research 	<ul style="list-style-type: none"> ➤ Bird's population decreasing dramatically ➤ Habitat destruction ➤ no any conservation program and activities ➤
(VII) Suggested response	(VIII) Action plan
<ul style="list-style-type: none"> ➤ Awareness about birds among local community ➤ Habitat conservation ➤ Participatory research and action ➤ Promote bird's farming ➤ Authentic research and knowledge 	<ul style="list-style-type: none"> ➤ Awareness campaign in the valley ➤ Advocacy to promote bird farming ➤ Habitat conservation ➤ Effort to conduct a research on bird's breeding cycle
Convergence: Not yet	

Local Name : Mahasheer
Scientific Name: Tor putitora

(IX) Situation	(X) Why this situation is problem
<ul style="list-style-type: none"> ➤ Uncontrolled fishing in the ram gang river ➤ Electric current and bleaching powder are being used to kill the fish ➤ Locally Handmade explosions are being used to kill the fishes ➤ Huge ambush is made in the river to trap the fish ➤ Unorganized water sports are done by local tourist organizer ➤ Unregulated encroaching in the river bank ➤ Uncontrolled construction work is going on nearby river ➤ Soil dumping after road construction and huge soil erosion due to construction activities ➤ Government has good policy for fish cultivation but implementation is not effective 	<ul style="list-style-type: none"> ➤ Fish population is decreasing dramatically ➤ Other species also suffered by uncontrolled fishing method ➤ Pollution is increasing in the river ➤ Natural water storage point in the river filled with soil which comes from road construction or construction work ➤ Demand is regularly increasing, therefore, outsider also involved in illegal fishing ➤ People construct the fish pond to get government subsidy or license to sell the fish however they catch fish from river only
(XI) Suggested response	(XII) Action plan
<ul style="list-style-type: none"> ➤ Community should actively participate to stop uncontrolled fishing in the river ➤ Government and forest department should have efficient mechanism to stop illegal fishing ➤ Soil should not dump after road construction, there should be proper dumping system so mass flow can be stopped in the rainy session ➤ Water sport should be regularized and local people should get livelihood from those activities ➤ People who are involved in fishing for their livelihood must get fish pond or other livelihood option from the government 	<ul style="list-style-type: none"> ➤ Awareness program will be conducted in the valley ➤ Farmer women, youth, and student all section of the village should know the impotence of ecological balance ➤ Advocacy to have good policy to save river ecosystem ➤ Fishpond for local people who have been involved in fishing for many years and have the only source of livelihood
Convergence	
Fisheries department Uttarakhand government going to provide 10 fish ponds and about 30% of total proposed funds to fish conservation	



Alectoris chukar



Tor putitora

Local Name: Asian elephant
Scientific Name: Elephas maximus

(XIII) Situation	(XIV) Why this situation is problem
<ul style="list-style-type: none"> ➤ People are not much aware of elephant behavior ➤ People don't see their role in elephant conservation ➤ Villagers afraid of elephant attack; therefore, they use any method to scare away elephant, if elephants are nearby the village ➤ Villagers use loud noise include firecrackers, vehicle horns, shouts etc to scare away elephants. 	<ul style="list-style-type: none"> ➤ Number of elephants are decreasing every year ➤ Heavey hebetate encroachment due to road and building construction ➤ No community initiative to protect the habitat and elephants ➤ Local youths have been involving with outside in poaching activities. ➤ Human-animal conflict is increasing in the area
(XV) Suggested response	(XVI) Action plan
<ul style="list-style-type: none"> ➤ Community must know about elephant behavior ➤ Local youth must participate in elephant conservation ➤ Awareness camp should be organized not only in the proposed village but also in the entire elephant corridor ➤ Government and civil societies must work aggressively to protect the animal ➤ Community-based Institutional arrangement should be there in cluster level to protect the animal and knowledge generation 	<ul style="list-style-type: none"> ➤ Awareness program will be conducted in the valley ➤ Cluster level community-based elephant research and conservation forum will be formed ➤ Elephant information book will be made to involve local youth and student in elephant conservation process ➤ Micro –planning would be done in 9 villages which are popular destinations of elephants
Convergence	
<p>Dialogue has been made with International elephant foundation and WWF India to help the communities to implement proposed action plan. In addition, we have also submitted village biodiversity conservation plan to forest department, Uttarakhand but have not received any response yet.</p>	

Apart from species-specific approach we also came up with micro level comprehensive biodiversity conservation activities. It is basically social fencing to protect local flora and fauna. The basic idea is as follows:

Village biodiversity conservation zone (VBCZ (participatory in-situ conservation of flora and fauna)

Idea:

Participatory in-situ biodiversity conservation by developing a village biodiversity zone (idea developed in participatory learning and action exercise in the Gingira village).

Origin of idea:

During PLA we discussed the impotence of national parks and biodiversity. In the Gingira village, a woman (Devki Devi) asked can we have a small village biodiversity park in our village. We discussed this idea in the other villages and got a positive response, villagers were agreed to have a small minimum 5 hectares and maximum 20 hectares village biodiversity zone in their villages.

Objectives:

- To get people's active participation in biodiversity conservation
- To have physical assets in the village to aware the people about biodiversity
- To conserve village's biodiversity
- To develop a culture of biodiversity conservation at micro-level

Action plan

In 2016, we are going to facilitate villagers to develop the VBCZ in two villages. Land selection and agreement with villagers to give the land for VBCZ, plantation, soil and water conservation measures would be done in this year.

Scale-up plan

There are about 90 villages in the valley. If we get a significant result in the proposed two villages, we will scale-up the idea in another 10 villages in 2017.

Convergence and funds

For first two villages, we will mobilize fund from friends, local community, and like-minded people. Later on we will write for funding to foundation and donor agencies to scale-up the program.

4. Conclusion

In India, 70% of the population lives in rural areas and their livelihood is dependent on water, land, forest and biodiversity. As a result of this dependence, many traditional systems have biodiversity and environmental conservation as one of the guiding factors in their mannerisms. The project-based approach to conservation is desensitizing the rural population because every time a big project is launched the locals are paid to be a part of such projects. This has swiftly replaced the non-profit, traditional practices of biodiversity and environmental conservations. So the people are involved until there are resources to pay them. Once a project runs dry, the people participation also ceases. Now this has led to a situation where people instead of following their tradition of conservation start waiting for projects and resources that come with it. So the traditional knowledge, community-based institutions and volunteer activity are being replaced with alien concepts, short-lived institutions and paid work.

Furthermore, externally-aided conservation programs including research or project are often constrained by limited people's participation in planning, implementation, and monitoring phases. The institutional systems in such 'external' conservation programs not only promote alien knowledge and power structures built on formal rules and hierarchies, incapable of determining the conservation behavior of stakeholders but also, conflict with their ecological and socio-political histories. The modern conservation programs do not adequately institutionalize the indigenous collective knowledge on conservation and community development. The above mentioned centralized planning and implementation may attain short-lived success in biodiversity conservation but if the local communities are not taking ownership, then it is not possible to sustain such achievements in the longer run. Therefore, it was very important to involve local people and their active participation to successfully run conservation programs.

The program was an attempt to develop a comprehensive knowledge base and plan to conserve biodiversity by involving local people's participation right from the beginning. The program not only ensured active participation of local communities but also provided them additional knowledge on conservation aspect. The process of the project activities involved local people right from the project conception stage to execution and monitoring stage. This approach not only instilled a sense of ownership of the project in the participating population but will also contribute to the revival of beneficial traditional customs.

If you want more information about the project activities or want a copy of complete village biodiversity conservation plans you may write to:

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Dr Ajay Josi (President Shramyog)

info@shramyog.org

ajaymanav@shramyog.org



Picture 1



Picture 2



Picture 3



Picture 4

Environment building

Picture 1 Entry point activities

Picture 2 Transect walk

Picture 3 wall painting

Picture 4 message dissemination walk

Picture 5 workshop with students

Picture 3



Picture 5



Picture 1



Picture 2



Picture 3



Picture 4



Picture 5

Micro-planning

Picture 1 Volunteer training

Picture 2 Village meeting

Picture 3 PLA* at Jamriya

Picture 4 PLA at Matwas

Picture 5 PLA at Gingira

*Participatory learning and action (PLA)

