



Annual Report (2012 - 2013)



**People's
Science
Institute**

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Uttarakhand**

PEOPLE'S SCIENCE INSTITUTE

ANNUAL REPORT 2012-2013

People's Science Institute (PSI) is registered as a society in New Delhi under the societies Act (1860) and the Foreign Contributions Regulations Act (FCRA). It is a non-profit research and development organization. Its stated mission is, "To help eradicate poverty through the empowerment of the poor and the productive, sustainable and equitable use of available human and natural resources."

PSI has active units and programs in natural resources management, environmental quality monitoring, innovative projects and disaster mitigation and response. Each unit undertakes activities primarily in response to felt needs expressed by communities or

organizations that work with them, including government/donor agencies. PSI believes that research, communication, training and development support are key steps in promoting self-reliant development. Thus all PSI units implement development projects, undertake research and provide training and professional support to communities, VOs and other agencies – including governments. PSI has a competent staff of socially conscious engineers, scientists and social workers to carry out these tasks. This annual report outlines the major activities of each group in 2012-13.

I. NATURAL RESOURCES MANAGEMENT

The Natural Resources Management (NRM) Group conducts the Institute's natural resource management activities. The NRM Group is involved in community-led NRM-based food, livelihoods and participatory watershed development projects. It undertakes research in hydrology, NRM traditions, water technologies and NRM policies.

In 2012-13 the NRM team was largely involved in enhancing food and livelihoods security in Uttarakhand, Bundelkhand and Himachal Pradesh (HP) through projects on up scaling the System of Crop Intensification (SCI) in these regions and implementing a

project on Sustainable Mountain Livelihoods (SML) in Uttarakhand and (HP). Training of watershed development teams (WDTs) and community representatives from various



Farmers training on SRI in Uttarakhand

districts in Himachal Pradesh on Participatory Watershed Development and evaluation of preparatory phase of IWMP was another major activity undertaken this year.

1.1 Up scaling SCI in Uttarakhand and Bundelkhand

PSI extended its SRI programme in Kharif season 2012 with the financial assistance of Sir Dorabji Tata Trust (SDTT) to enable farmers in 6 districts of Uttarakhand and 4 districts of Bundelkhand to address their food and livelihood security needs. The project aimed at SCI's adoption for paddy cultivation by 4,200 farmers (UKD 1,500 and BKD 2,700) in 454.8 ha area.

To achieve this target, PSI partnered with six local voluntary organizations (VOs) in Uttarakhand (UKD) and four in Bundelkhand (BKD). PSI's partners selected 135 villages (50 in UKD and 85 in BKD). One coordinator, nineteen (UKD-6, BKD-13) master trainers (MTs) and eighty four (UKD-30, BKD-54) village level support persons (VLRPs) were trained during Kharif season. With the support of PSI they conducted 100



Use of a weeder in an SRI field

orientation workshops resulting in capacity building of 4367 farmers. Finally, 4247 farmers (1428 in UKD and 2829 in BKD) adopted SRI in 757.08 ha. area as against the proposed 4200 farmers and 454.8 ha. area.



Monitoring of SRI plots

After the farmer orientations in each season, the practicing farmers were provided field support by the MTs and VLRPs. In addition PSI's field staff undertook regular monitoring and field support activities during the various stages of crop growth till harvesting. PSI along with its partner organizations organized exposure visits for prospective practitioners to SRI farms before the harvest season. Crop cutting exercises and district level experience sharing workshops were conducted in September-October 2012 when the paddy crop was ready for harvesting. Monitoring visits were made by the experts and members of the program monitoring committee to the SRI fields. Experiences of PSI towards addressing food security in Uttarakhand and Bundelkhand were documented. Details of the programme achievements are given in Tables 1a and 1b.

Table 1a: SRI Coverage and Results for Paddy (Kharif 2012)

State	Districts	Blocks	No. of POs	No. of Villages	Farmers		Area	
					Tar.	Ach.	Tar.	Ach.
UKD	6	6	6	50	1500	1428	78.8	52.07
BKD	4	4	4	85	2700	2819	376	705.01
Total	10	10	10	135	4,200	4,247	454.8	757.08

Note: Figures in brackets give the programme targets

Table – 1b SCI Practices on Other Crops: Targets and Achievements for UKD and BKD

State	Districts	Blocks	No. of POs	No. of Villages	Achieved /Targeted Farmers	Achieved / Targeted Area (Ha.)
UKD	8	19	16	193	111 (250)	3.8 (10)
BKD	4	4	4	68	73 (0)	1.6 (0)
Total	12	23	20	261	184 (250)	5.4 (10)

Note: Figures in brackets give the programme targets

Case Study: Village Baildana district Damoh Bundelkhand

Baildana village is a 300 household village in Damoh district. Balkishan Kewat, a 55 years old farmer in the village who has 2 acre (about 0.8 ha) land started growing paddy in half of his land in 2010 as an experiment following the



example of his brother Pritam Kewat who had grown paddy using the SRI method and had grown 30 quintals paddy only by using 3 kg seeds. Next year, Balkishan switched

over to the SRI method in his entire field. Using the SRI method, he got much more rice and husk

than he used to get from the conventional method. By selling the surplus production, he not only fed his family of 11 but also bought silver ornaments for his wife and daughter. Encouraged with the benefits of SRI technique in paddy cultivation, Kewat is all set to use this technique for other crops, namely wheat and urad (a legume) this winter in the Rabi season.

I.2 Promoting SWI in Mountain Farms of Himachal Pradesh

Under the RKVY program of Department of Agriculture, H P, PSI worked on promoting SWI in mountain farms of Himachal Pradesh. PSI selected 5 partner organizations to popularize SWI for addressing the livelihoods and food security needs of small and marginal farmers in four districts of HP (Bilaspur, Kangra, Sirmour and Mandi). During the Rabi season (2012-13) PSI and its



A SWI field in Himachal Pradesh

availability of organic manure and weeder for the prospective SWI farmers was also formulated in these workshops.

Details of the extension programme and their achievements are given in Table 2a below.

In addition to this, 307 farmers applied the SCI method for cultivating other crops like pea, mustard, peas, gram and barley during rabi season over a total area of 20 ha.

Table 2a: Target and Achievement of POs Rabi 2012-13 (HP)

Name of POs	Name of District	Target Villages	Achieved Villages	Farmers		Area (Ha)	
				Target	Achievement	Target	Achievement
MVS	Bilaspur	10	21	450	470	45	45.6
SKVM	Mandi	10	20	450	474	45	48.5
CORD	Kangra	5	30	250	251	25	19.0
GSA	Kangra	10	20	450	510	45	43.8
SARDHA	Sirmour	10	13	450	449	45	41.4
Total	4	45	104	2,050	2,154	205	198.3

Source: Information received from POs February 2013.

partners worked in 104 villages for widespread extension of SWI. Teams of trained MTs and group facilitators provided field support to the participating farmers. With the help of PSI's programme staff these local resource persons trained 571 farmers during the rabi season. Farmer orientation workshops in which district agriculture officials also participated, educated farmers in the principles and procedures of the SWI methods. Demonstrations were conducted to explain the use of equipment to them. Copies of the SRI and SWI manuals prepared in Hindi by PSI were distributed to the new farmers. Poster sets describing recommended SCI practices were displayed these workshops. A strategy to manage the

Table 2b: Coverage under other crops in Rabi 2012-13 (HP)

S. No.	Crops	No. of Farmers	Area (ha)
1.	Pea	170	13.9
2.	Mustard	50	2.22
3.	Gram	25	1.36
4.	Barley	62	2.48
Total	4	307	20

Program Review

SDTT extended the SRI program for Kharif season in UKD and BKD on a request from PSI. PSI's extension programme proved to be quite fruitful. PSI could reach out to 4247 farmers in 757.08 ha. area as against the proposed target of 4200 farmers in 454.8 ha.

This year the monsoon arrived late and then it rained heavily in the month of August and September. This was followed by a long dry spell. In spite of the erratic rainfall the crop cutting results in UKD showed an increase of 42.4 percent in grain yield and 32.2 percent in straw yield while in BKD there was 56.97 percent increase in grain yield and 62.56 percent increase in straw yield. In Damoh district of MP increased production of grain particularly paddy has changed the life of people.

In a nutshell, PSI was able to consolidate its experiences in Uttarakhand and Bundelkhand. The Partner organisations were asked to use their experiences and develop linkages with Department of Agriculture and NABARD and other agencies for promotion of SRI in future. The concept of extension of SRI through farmer groups and federation was also popularised through trainings, meeting and workshops. On the concluding day of the workshop organised by SDTT on 22nd June 2012 in Dehradun, SDTT appreciated the strategy developed by PSI for the extension of SRI.

In future PSI has decided to integrate SCI with its Integrated Farming System Development (IFSD) program. SCI will be promoted through farmer groups. The SWI program in Himachal Pradesh is in progress. The program will be reviewed after the crop cutting exercises in the month of June 2013

I.3 Sustainable Mountain Livelihoods

Communities residing in the rural areas of Uttarakhand and Himachal Pradesh have traditionally relied on integrated farming

systems – combining forestry, animal husbandry and agriculture – for their sustenance. Forest and pasture land degradation, low farm productivity, scarcity of fodder and fuel wood has significantly affected their livelihoods in recent decades leading to large-scale outmigration of men in search of jobs. Immediate interventions were thus required for providing livelihoods and food security to mountain communities.

Therefore the NRM Group at PSI began a pilot “Sustainable Mountain Livelihoods (SML)” project in 2011 as a follow up to its earlier watershed development programme in UKD and HP with the financial assistance from the Navajbai Ratan Tata Trust (NRTT). A Programme Advisory Committee (PAC) guides and monitors this programme. The basic programme goal is to enable the rural communities of these two states to achieve sustainable livelihoods and food security.

PSI began its activities by strengthening the project’s institutional base. It organized meetings with its partner organizations (POs) and two orientation programmes for the POs’ livelihood development promotion teams (LDPTs) and PSI’s support team. During the current year, LDPTs and PSI’s programme staff continued attending the *aam sabha* meetings in all the SML villages. Frequent meetings were also organized with *Gram Panchayats* to implement the approved works under MGNREGA. Active villagers from Middle Beas and Nakehad Khad clusters, LDPT members and PSI’s project team visited CSK Agriculture University Palampur (HP), Jolagad (MVDA) and Hilaungad (JVS)

clusters to study the various activities related to livelihood including disease free farming, dairy and poultry rearing especially Hilaungad clusters.

A pickle-making micro-enterprise was started by the Middle Beas cluster SCGs. In the first season the SHGs prepared 1055 kg of semi processed mango pickle and sauce which was supplied to *Samridh*, a Palampur-based co-operative society. After this venture the women have gained confidence and would like to start producing other products like garlic pickle.



Women are Making Pickle in Middle Beas Cluster of HP

Frequent training programmes were organized for farmer groups on the system of crop intensification (SCI), vegetable cultivation, composting and poultry rearing. SCI cultivation is one of the main activities proposed for increasing agricultural

productivity and thereby the food security of the participating families. During *Kharif* season 2012, a total of 418 farmers adopted SRI on 29.6 hectares of land and 636 farmers adopted SCI method in *rajma*, *mandua*, maize and black gram covering an area of 76 hectares.

Vegetable cultivation was proposed to generate additional income from farms. A total of 632 farmers cultivated vegetables like ginger, turmeric, *arbi*, cabbage and chilly covering an area of over 30.7 ha in all the clusters. Vegetable cultivation has provided



Vegetable Cultivation in Hilaungad (UKD)

significant contribution to the incomes of the beneficiaries in all the clusters generating average per household income of Rs. 869. Out of 352 farmers who carried out vegetable cultivation in Jolagad and Hilaungad Clusters 300 farmers sold their produce and earned profits. Therefore, PSI is now focusing on organizing the farmers into a federation to generate higher incomes and create market linkages.

During *Rabi* season 2012-13 total 560 farmers applied the SWI technique covering around

52.74 hectare area. In addition, 602 farmers participated in vegetable cultivation and around 30.83 hectare area was covered in all clusters. The vegetables cultivated were garlic, onion, peas and potato in all clusters.

During the current year, 51 poly-tunnels units were constructed. To further promote the trend of organic agriculture in the region and improve the soil quality and fertility, 169 vermi-compost pits were constructed this year which has brought the total number of compost pits to 438 against the proposed target of 415 pits. Around 1,750 fruit saplings were distributed in the two clusters of Uttarakhand this year. Total 9,117 fruit saplings have been distributed so far among 617 households in all the clusters.

The past experiences of Himmothan Society in Uttarakhand have led us to believe that fodder grass production can enhance the milk production in the region. Based on these findings efforts were made to encourage animal husbandry and dairying. Subsequently, fodder grass development was started in the SML clusters. During the



Cattle Trough in Middle Beas Cluster (HP)

current year, 674 farmers planted fodder grass on their field bunds covering an area of 95 ha against the proposed area of 81.32ha in all the clusters. The construction of cattle troughs had been proposed in the programme to reduce wastage of fodder grass and reduce the drudgery of women. Out of a total of 229 cattle troughs constructed so far in the SML programme 59 were constructed this year. Chaff cutters were proposed to improve the nutritional intake of milch animals and enhance milk productivity but only 36 chaff cutters could be distributed out of the proposed 206. The reason for low distribution of chaff cutters is that these were to be distributed through a Government Scheme but by the time our project started the scheme was withdrawn by the government hence, the low achievement.

Kuroiler based backyard poultry is being promoted as the main secondary income generation activity among the rural communities. This is PSI's first experience in poultry farming. During the current year, 34 poultry sheds were constructed in two clusters of Himachal Pradesh bringing the total to 135 poultry sheds. Chicks were distributed to 124 households. A local feed unit and systematic marketing of eggs and meat was established in Hilaungad cluster of Uttarakhand.

Under the SML programme, goatery rearing units were proposed for Below Perceived Poverty Line (BPPL) families to increase their income. Out of the proposed 57 goatery units (each unit having 1 male and two or three

females), 48 units of goatery were distributed in three clusters.



Poultry rearing in Middle Beas Cluster (HP)

Under the irrigation and soil & water conservation works total 500m PVC pipe line, 154 m irrigation *Kuhal*, 9 irrigation tanks, 1 *kathri*, 14 Brush wood Check Dams, 20 gabions and 200m foot path were constructed in selected villages of all the clusters. Proper systems for management of accounts were developed and members of all the VDCs were trained in accounting systems. Norms for community contributions have been worked out.

Programme Review

The programme got off to a slow start as the Tata Trust took two years to review and approve the livelihoods development plans that had been prepared by the village communities. Thus, the first six months of the implementation phase was again dedicated to rapport building and regularizing the village *aam sabha* meetings in most of the farmers- 82 percent of the target- participated in vegetable cultivation on 30.7 ha. of land.

project areas. The level of participation of the local villagers is now satisfactory. The village *aam sabhas* serve as platforms to discuss the progress of the SML project. Many women have acquired confidence and some of the more dynamic ones have become role models for other women. From community strengthening point of view many CBOs have been established who are involving themselves in improving the state of affairs in their respective villages. There are total 21 VDCs/GSSs, 8 UGs, 40 SCGs and 13 MMs/MMDs. 5 SHGs in Middle Beas Cluster have initiated pickle making and marketing activities and are planning to further diversify their range of products and also expand their initiative by involving women from other SHGs.

During *Kharif* - 2012, a long delay in the onset of the south-west monsoon in the region led to a near abandonment of paddy cultivation by the SRI method. Only 29.6 ha were cultivated by 418 (54 percent) farmers. As a fall back measure the farmers were encouraged to cultivate low water consuming food grains. Thus during the *kharif* season, 636 farmers cultivated maize, *mandua* (foxtail millet), *rajma* and black gram. Intensive efforts were made before the start of the *rabi* season to encourage farmers to practice the system of wheat intensification (SWI). These efforts received a significant response and 560 farmers – 73 per cent of the target – adopted the new technique on 52.74 ha against the targeted 19.2 ha. In addition 632

Poultry rearing has been a learning experience for PSI and its partners. In spite of

an initial setback, the rearers have begun to make significant profits. The average profit earned is Rs. 3000 per farmer per cycle (9 months). With the experience gained we expect even better results in the remaining period.

The entire programme is designed in such a way that almost 50% of the programme funds need to be mobilized from other sources and community contributions. Out of Rs. 79.77 lakhs from convergence, physical works worth Rs. 60.74 (76%) have been completed under other sources. Though the convergence funds have been approved, the real challenge lies in the implementation. The *Gram panchayats* are delaying the implementation of works on one or the other pretext. Initiative has been taken by people to implement the approved works under MGNREGA. The village organizations have started to put pressure through demonstrations. Some of the approved works under MGNREGA have been completed after continuously pursuing with gram panchayats, block and district level officials.

An external agency (CEDAR) was empanelled by SRTT to monitor and evaluate

the programme. Field visits were carried out by the monitors to all the clusters. As per the field observations, the monitors reported that the SWI and vegetable results were encouraging in most of the villages. PSI along with its POs is now focusing on ensuring a pathway for sustainability of the programme.

I.4 IWMP Training & Orientation Courses

PSI organized 32 training workshops under Integrated Watershed Management Program (IWMP) during the financial year 2012-13. The objective of these training cum orientation courses was to develop an understanding on the concept of watershed management and utilization of land, water and forest resources in a sustainable manner. These training workshops were organized for the stakeholders of micro watersheds including Watershed Development Team (WDT), PRIs, user groups, SHG members and junior engineers belonging to 8 districts (Sirmour, Bilaspur, Mandi, Solan, Kullu, Kangra, Hamirpur and Kinnaur) of Himachal Pradesh. Total 941 participants were trained in the concepts of watershed management, soil and water conservation measures, benefit

Details of the IWMP training for the financial year 2011-12

No. of Trainings held	No. of participants	Districts Covered	Blocks covered	Target group
32	941	8	22	Elected representatives of gram and block panchayat, WDTs, block officials, DRDA and DWDA official members and other stakeholders of the micro watersheds, PRIs, users groups and SHG members.

sharing mechanism etc., through lectures, audio visual sessions, group discussions and field exposure sessions. Looking at the outstanding performance of PSI in providing training, the Department of Rural Development, Himachal Pradesh

Government has empanelled PSI as an evaluator under IWMP preparatory phase for evaluation of 2009-10 projects of Bangana Block, of District Una, Himachal Pradesh.

NRM Group Financial Statement (2012-13)

S. No.	Project	Funding partner	Opening Bal. (Rs)	Income Rs.	Utilization Rs.	Balance Rs.
1.	Up scaling SCI for Food Security In UKD & BKD	SDTT, Mumbai	61,68,031	32,35,903	85,30,705	8,73,230
2.	Promoting SCI in Mountain Farms of Himachal Pradesh	Dept. of Ag. (GoHP)	1,72,114	28,00,000	32,96,580	(3,24,466)
3	Sustaining Mountain Livelihoods (SML) Phase-II	NRTT, Mumbai	2,96,166	60,51,372	66,35,846	(2,88,309)
4	IWMP Training	DoRD, various districts of HP	Nil	68,33,645	68,33,645	Nil
5	Vishal Himalaya Foundation	Vishal Himalaya Foundation	3,96,684	15,55,908	7,59,428	11,93,164
		Total	70,32,995	2,04,76,828	2,60,56,204	14,53,619

II. ENVIRONMENTAL QUALITY MONITORING

The Environmental Quality Monitoring Group (EQMG) monitors environmental quality in the public interest, develops user-friendly monitoring techniques and builds the capacities of VOs and citizens' groups to gather and interpret environmental quality data. The Group also assesses the environmental impacts of developmental projects. It operates a well-equipped laboratory in Dehra Doon.

In 2012-13 the major activities of the EQM Group were centered around a project funded by Arghyam on promoting participatory ground water management in the Himalayan region. It also carried out a study on the impact of the System of Root Intensification (SRI) on soil nutrients in mountain farms with a small grant from SDTT. In addition it carried out a few small projects on river water quality monitoring besides being involved in a number of public interest activities. The year's activities are outlined below.

II.1 Participatory Ground Water Management (PGWM)

The Himalayan region is characterized by steep slopes and a tortured geology consisting of highly fragmented and fractured rocks. This is not conducive to the formation of large underground aquifers. Ground water occurs largely in disconnected localized bodies in jointed fractured zones. Over millennia mountain communities have developed a glorious tradition of harvesting these

resources. But the Himalayan ground water resources are threatened by inadequate recharge, over extraction and pollution. These problems prompted a group of organizations (ACWADAM, ACT, WASSAN and PSI) to work together to promote integration of geo-hydrology and mainstream watershed management. Funding for the programme is being provided by Arghyam. PSI is anchoring this programme in the Thana Kasoga, Himachal Pradesh. Its overall focus is to:

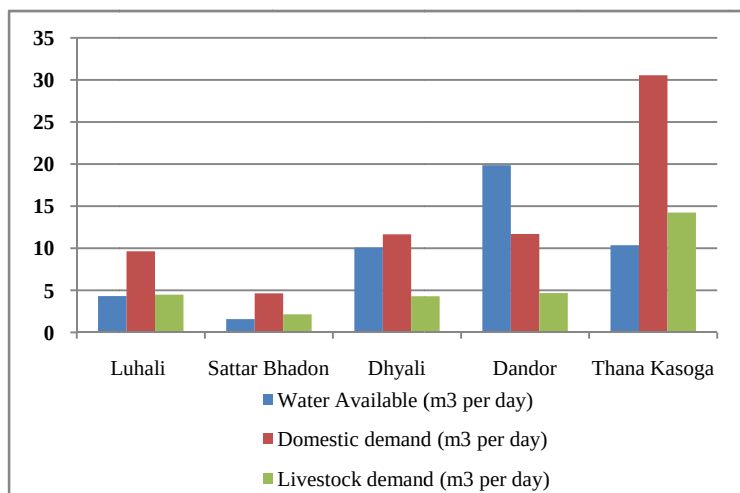
- Create resource base of people knowledgeable about groundwater
- Undertake action research projects that lead to rational and equitable use of ground water resources
- Enhance equity in ground water use through community based institutions
- Minimize degradation of groundwater resources

The main activities undertaken in PGWM project during 2012-13 are as follows:

Regional Specific Training Workshops: Two regional specific training workshops were organized by PSI in Dehradun from **June 11th to 22nd, 2012 and December 12th to 21st, 2012.** The objective was to train community-based activists in the Indian Himalayan region in geo-hydrology, groundwater quality and equity issues so that they can later assist Himalayan communities to manage their groundwater resources in an equitable and sustainable manner. A total of 49 participants from voluntary organizations (VOs),

watershed communities and education institutions in Uttarakhand, Himachal Pradesh, the north-eastern states, Maharashtra, Madhya Pradesh and Kerala attended the workshop.

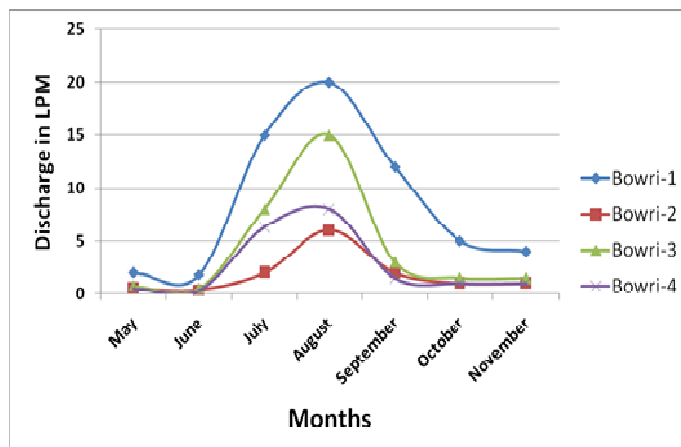
- **Action Research:** The action research activities carried out in the five villages of Thana Kasoga panchayat in Sirmour District of Himachal Pradesh included:
- Collection of details on demographic structure, land use pattern, available water sources and estimation of water availability in the region and water demand of the villagers in summer, monsoon and winter season.



Water availability versus water demand of the villagers in the summer season

- Hydrogeological mapping of the five villages of Thana Kasoga springshed.
- Identification of the recharge area of the respective baoris on the basis of local geology and their structural settings.
- Installation of rain-gauge in Dhyali village to get actual rainfall data.

- Monthly discharge measurements and monitoring of water quality of the selected domestic water sources.



Month wise water discharge of the different selected sources of Thana Kasoga village (2012)

- Conduction of social surveys to collect socio-economic information and to identify water related issues. These surveys were carried out with the help of the water user groups in the villages.

- Plantation of fodder grass as part of a rapport-building exercise with the local communities. The plantation was done in the recharge areas of four baoris in Dhyali and

Thana Kasoga villages in September. Nearly 10,000 saplings of Napier and Steria grass purchased from KVK, Dhaula Kuan were planted.

- Conduction of village level meetings to give an overview of the importance and main objectives of the PGWM programme to the villagers.

II.2 Impact of System of Root Intensification (SRI) on Soil Nutrient Status in Mountain Farms:

PSI has been promoting SCI for paddy and wheat cultivation on mountain farms since 2007. SCI practicing mountain farmers have reported very significant gains in the crop yields. Consequently questions have arisen about the sustainability of soil fertility in the SRI farms. As part of a nation-wide effort to investigate this issue, the EQM Group began a soil nutrient study to assess sustainability of soil fertility in the SRI farms of Rudraprayag district for four practices (1) SRI followed by Conventional Wheat, (2) SRI followed by SWI, (3) Conventional Paddy followed by SWI, and (4) Conventional Paddy followed by Conventional Wheat. Soil samples were collected during pre kharif and post kharif season from farmlands of 40 farmers. The parameters studied were pH, bulk density, organic carbon, nitrate, phosphorus, potassium, sulphate, calcium and magnesium. The analysis done so far reveal the following facts:

- The pH values increase during the kharif season more under the SCI systems as compared to conventional practices
- There is substantial increase in the organic carbon content in soils under SCI systems as compared to conventional practices during the wheat season.
- Though the nitrate content under all the practices has decreased over time, there was an increase observed during the wheat season under SWI systems.

- The phosphorus content under all the practices has decreased over time. The observed decrease under SCI systems was much more than in conventional method.
- The potassium and sulphate content under all the practices has increased over time.
- The calcium content under the SCI



practices has increased over time (minimum increase under SRI-SWI cycle) while under conventional method it has slightly decreased.

- The magnesium content under all the practices has decreased over time. Minimum decrease was observed under conventional method.

The above results suggest that a more systematic study on relationship between SCI practices and soil nutrients needs to be done. The data will have to be compared with a control farm. This will help in developing an understanding about long term impact of SCI on the soil nutrient status and will thereby help in formulating effective strategy for making up for nutrient loss if any in the SCI farmlands. The proposed research study will

guide the relevant stakeholders to promote SCI on a significant scale and in a sustainable manner.

II.3 River Water Quality Monitoring

Socio-Cultural Surveys for Assessment of Environmental Flows

The concept of E-flows is gaining significance all over the world both as a decision making tool and as a tool to assess health of a riverine ecosystem. In this context it was decided by WWF-India, IITs Consortia and the working group members that Kumbh 2013 would provide them a unique opportunity to assess and implement E-Flows in Ganga at Sangam Allahabad. But since Ganga River carries a lot of spiritual significance and has influenced the people of India and their social ethics tremendously, the socio-cultural surveys were required to be undertaken and documented to help in determining the flow required to meet the aspirations of the people during Kumbh 2013. Being a part of the multidisciplinary Working Group formed by WWF to assess E-Flows for Ganga, PSI was assigned the responsibility of conducting socio-cultural surveys at Haridwar, Rishikesh, Allahabad and Varanasi. Through a questionnaire and purposive sampling technique, 117 interviews were conducted by PSI involving spiritual leaders, local residents, pilgrims, fishermen etc.

On the basis of the survey it was concluded that minimum 250 cumecs of water should be released every day into the river during Kumbh and discharge of untreated waste into the river should not be allowed to control

pollution and to help in cultural functions of the river. PSI's recommendations were readily accepted. The Uttarakhand government was asked to ensure adequate flow of water in Ganga during Kumbh and the Uttar Pradesh Government was given instructions to take necessary measures to check and maintain proper quality of water.

Health Assessment of Ganga at Haridwar:

The EQM group is carrying out health assessment of Ganga River with the financial support of WWF-India. The objective is to monitor the health of river Ganga pre, during and post *Kumbh 2013* at Jagitpur in Haridwar on the dates specified by WWF. This sampling

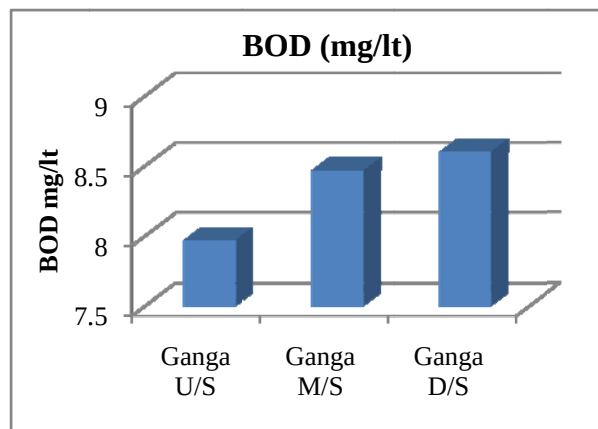


location is situated downstream of a sewage treatment plant. Sand mining is a major activity observed at this location. Health of the river is being assessed in terms of water quality, macro flora/fauna and socio-cultural perceptions. The water quality data obtained so far indicate high oxygen demand due to presence of organic waste in water. During the socio-cultural survey the respondents stated that the river water is very dirty and the flow is also less on *non-snan* days. At many

locations it is now possible to walk across the river. The benthic varieties found are pollution tolerant. The benthic diversity index score suggests poor water quality.

Water Quality Monitoring of Ganga at Garh

Mukteshwar: Situated at the bank of the holy river Ganga, Garh Mukteshwar is famous for its Ganga fair which is held every year in the month of November. Around 25 lakh pilgrims assembled this year at Garh Mukteshwar to fulfill their spiritual aspirations by taking a holy dip in the river. Due to large gathering the flow and water quality of Ganga is always a matter of concern here. Therefore, PSI with the help of Ganga Sewa Abhiyanam and Guru Ganga Envirotech Trust carried out a continuous monitoring of river water for four days to assess the quality of Ganga, samples were collected from different locations (upstream, main stream and downstream Ganga; Brijghat). Samples from four drains falling into river Ganga at different locations around Garh Mukteshwar were also collected. These drains contain effluents from Mohit Factory, Jain Bisleri and Paper mill. Ganga's water was found to be unacceptable for bathing purposes. A high fluctuation was noticed in the flow of the river. This was because water was released into the river in the morning so that people can take bath but the flow was reduced in the afternoon. Due to fluctuating flows the dissolved oxygen content was recorded in the range of 5.6 mg/l to 10.4 mg/l. The BOD was found to vary from 7.6 mg/L to 9.3 mg/l as against the CPCB standards of less than 5mg/l for mass bathing. The fecal and total coliform counts were also



found to be well above the CPCB prescribed standards of 500 MPN/100ml. The values ranged from 1280 to 1900 CFU/100ml and 5500 to 9050 CFU/100ml respectively. The BOD and COD values of drain samples were also found to be several times higher than the CPCB standards. These findings were published in the local newspaper. Pamphlets were distributed and posters were put up to create awareness among the pilgrims about Ganga's water quality, use of toilet facilities and waste disposal methods to curb water pollution.

Ganga at Allahabad during Kumbh: The E-Flow assessment forced the government to pass orders for release of 250 cumecs of water and to conduct periodic check on polluting industries along the river bank during Allahabad Kumbh. PSI decided to analyze the situation by monitoring the quality of Ganga's water during Kumbh at Allahabad. According to PSI's study, the flow of river varied between 70-130 cumecs. Due to inadequate and fluctuating flows, the quality of water also fluctuated. Foam and floating matter was observed consistently. Mixed sewage was being discharged continuously by Bakshi STP upstream of the river. The



*Mixed sewage discharge from Bakshi STP, 1.5
Km upstream of Sangam*

monitoring results obtained indicate that organic pollution continued to be the major problem in the river. BOD was found to be ranging from 8.6 to 14.2 mg/l which is much higher than the CPCB prescribed limit of 3 mg/l. Similarly, The Total Coliform values ranged from 32400 to 62400 CFU/100ml and the Fecal Coliform values ranged from 11200 to 24400 CFU/100ml. These revelations are really alarming as they show the apathy of Central and State Governments who, in spite of promises of providing clean and free flowing Ganga at least during kumbh in Allahabad failed to do so.

Mandakini River Study: Mandakini is an important river in Hindu mythology. But over the years, mindless release of waste has virtually turned the river in Chitrakoot into a big sewer drain. Two sewage drains, Nagar Palika and Saryoo are proving a major source of pollution in the river. Residential localities

also contribute to the river pollution. The EQM group monitored Mandakini River's water quality at Chitrakoot with the financial support of Guru Ganga Envirotech Trust. High levels of BOD and COD were recorded during the study and the information was shared with the concerned authorities to speed up the process of setting up of a treatment plant in Chitrakoot.

Other Projects and Activities

Study of crude oil leakage in Changpang: Crude oil from Changpang oil field under Wokha district, Nagaland was extracted by ONGC from 1981 to 1994. In 1995 this oil field was abandoned by ONGC and the wells were sealed. Presently 8 of these wells are leaking and oil spillages have occurred along with 1 gas leakage in the recent past causing enormous environmental hazards and damage around the area. On a request from Distinguished Innovations Collaboration and Entrepreneurship Foundation (DICE), PSI team tried to study the impact of oil spillage on water (springs, dug wells and hand pumps) in that area and some health observations were also made. People are facing stomach and skin related problems. Oil and grease was found to be above the BIS standards in the water samples collected. A thorough study of air, water and soil quality needs to be done during pre- monsoon and post monsoon in this area and the sealed wells should be recapped by the ONGCL.

Water Testing: The EQM laboratory is equipped with state-of-the-art equipment like Atomic Absorption Spectrometer (AAS), Gas Chromatograph (GC), thermo electron Fluoride ion meter (290A+), respirable dust sampler, handy air sampler, spectrophotometer, flame photometer, conductivity meter and a TKN assembly. Its facilities are used for assessing environmental quality and for providing technical support to voluntary organizations (VOs), citizen's groups and government agencies working on environmental pollution problems. In 2012-13, over 70 water samples were tested at the lab. Most of them were from voluntary organizations and reputed institutions like Lal Bahadur Shastri National Academy of Administration, Doon, Hope Town and Welham Girls School. The Group also produces water testing kits. This year it sold 32 kits and supplied 49 refill orders.

Internship Programme: EQMG organized an internship programme during 2012 and January to April 2013. Students from Doon University Dehra Doon and Awadhesh Pratap Singh University, Rewa (M.P) carried out their internships on Participatory Groundwater Management in Sirmour, H.P and Status of River Ganga at Haridwar.

Workshops Attended: Training is crucial for organizational development and success as it improves knowledge and efficiency of work. The EQM team attended workshops on aquifer information system and aquifer management



plan, climate change and millennium development goals for UKD.

Products Prepared: Kit flyer, pamphlet in Hindi on Ganga.

Remarks: The work under PGWM project took momentum. Through training workshops, meetings and field visits we could develop the understanding of the importance of groundwater management to such an extent that the government has now sanctioned funding of treatment plans of eight baoris in Thanakasoga Panchayat under the MNREGA Scheme. Even the CGWB Dehra Doon has expressed its interest of collaborating with PSI on ground water management issues. Our PGWM training workshop was highly appreciated by the participants. PSI was invited by Kalimpong Krishak Kalyan Sangathan, Darjeeling, to conduct a regional training workshop for DRDA officials and local NGOs in the Northeastern region. Hydrogeological mapping of the recharge area done by PSI for Thanakasoga, H.P, has been appreciated by PGWM partner organizations. PGWM programme will be scaled up in UKD,

HP, Jammu Kashmir and Sikkim in the next 4-5 years.

PSI has made its mark in E-Flows setting. It has now been involved in health assessment of Ganga River by WWF-India. This is a new initiative and will help in development of complete methodology for health assessment of rivers. As every year, the EQM group monitored the river water quality, gained more experience and came up outcomes which were in public interest.

The sale of water testing kit went down this year. The team has come up with an idea of

taking feedback from the kit users to aid in incorporating necessary changes in the kit and it's manual. Kit flyer has been designed and the kit is being promoted in local schools. The group is also trying to sell the kit abroad through Envirotech Instruments Pvt. Ltd.

The EQM Group has prepared a proposal for supply of community based safe drinking water in fluorosis affected region of Dhar district, M.P. Hopefully it will get sanctioned and the team will build on its earlier experiences in community based fluorosis mitigation.

EQMG Group Financial Statement (2012-13)

S. No.	Project	Funding partner	Opening Bal. (Rs)	Income Rs.	Utilization Rs.	Balance Rs.
1.	PGWM	Arghyam	14,57,729	23,41,657	18,54,189	19,45,197
2.	River Water Quality Monitoring	GGET	34,560	1,00,000	1,97,031	(62,471)
3	Water Sampling & Kits Sale		Nil	7,69,957	7,69,957	Nil
	Total		14,92,289	32,11,614	28,21,177	18,82,726

III. INNOVATIVE PROJECTS GROUP

PSI's Innovative Projects Group (IPG) is charged with innovating technologies and social processes that can provide a cutting edge to the Institute's work. In 2002 IPG pioneered the Gram Swaraj Abhiyan as a community-led developmental response to the starvation deaths in western Orissa. This innovative and very effective social process was appreciated by many. In 2010 the ministry of rural Development, Government of India approached PSI to replicate the effort in Bundelkhand.

Since 2002 IPG has also been engaged in developing a revolutionary web-based GIS software application –Village Information System (VIS) which provides Census data and other information for every village and district of several states in India. In 2012 it developed the Decision Support System (DSS).

III.1 Gram Swaraj Abhiyan - Towards Self-Reliant Development in Bundelkhand

Gram Swaraj Abhiyan is a long term action research programme of poverty eradication and drought mitigation to enable and empower communities in Bundelkhand to initiate self-reliant development in a sustainable and socially just manner. It combines self-help with improved governance and convergence of funds from MGNREGA and other government schemes. The five selected districts are Chhatarpur, Panna, and Damoh in MP and Lalitpur and Mahoba in UP.

In each district, a partner organization (PO) has been selected.

The main expected outcomes in the selected villages over a period of three years are:

1. Strong grassroots democracy through increased participation in Gram Sabhas
2. Greater sustainable livelihood opportunities by regenerating the productivity of local natural resources and livelihood options.
3. Social institutions to cope with scarcities.
4. Improved social indicators through better access to education, health and other government services through functional VLIs.
5. Improved quality of work through community monitoring and
6. Real time administrative monitoring through the use of a Decision Support System.

The year 2011-12 was a preparatory year which was used for setting up local office and lab., selecting villages, POs, a local cadre of activists (village engineers, sahayaks, lok sevaks, agriculture engineers) and preparation of MLPs for some of the selected villages. However, in 2012-13 the major focus was on preparing VDPs through the process of MLP, mobilizing communities and strengthening the village level institutions. The brainstorming exercises held during the MLP process proved instrumental in consenting the community

towards the causes of their deprivation and the potential solutions to their problems.

Emphasis during the micro level planning process was on making the process participatory, with special focus on the weaker and the vulnerable sections – the marginalized, the poor and the women. Energies were also invested on generating awareness on their rights and enabling them to take action for demanding their share of the community's resources.

Subsequently, instances of social action have begun to take place. Moreover, there has been a de-emphasis of physical works as solutions to the community's problems and social action has gained ground.

Oppressed ST/SCs reclaimed their lands from the hands of the dominant classes – District Lalitpur

The PRA was taking place in *Badron* during March 2012, where many cases of land encroachment by upper classes over the SC/STs land were reported. The discussion went on to solve the problem of land grab, in which SC/ST communities demanded for *Jan-Sunvayee*. These families had been allotted the agriculture land before few years. But their lands were never measured properly by *Patawari* and villagers were unaware of the location of their land. The stir caused by this discussion resulted in *Jan-Sunvayee* in the month of April 2012 which was organized by B.S.S and duly attended by SDM (Sub Divisional Magistrate). **Around 43 families (13 in Bhavarkali, 20 in Badron, and 10 in Budheri) reclaimed their lands. Their lands had been properly measured by *Patawari*,**

which collectively comes around 76 acres. Among 43 families, around 90% were from Sahariya tribes (ST) and Ahirwar (SCs).

Shramdaan was yet another element which was emphasized in order to reinforce the strength of the community, thereby encouraging them to materialize their aspirations without or with very little external aid. Out of the 45 villages intervened, residents of 15 villages have initiated physical works in their respective villages through *shramdan*. This labour contribution has been invested for the construction or renovation of water harvesting structures, road repairing, community well clearance, etc.

In order to bring women in the centrality of the developmental efforts and to enhance opportunities of sustainable livelihoods, women savings and credit groups have been formed in the target villages. These SCGs have been formed not just for savings and credit activities but also to provide them a forum to discuss their problems and act as pressure groups in the local democratic institutions in future. As part of our efforts towards making the process sustainable, energies were invested in capacity building of local activists (lok sevaks, village engineers, and *sahayaks*) on various issues like NREGA, other



government schemes, gender issue, SWI and SCI techniques etc.

The entire process of community mobilization has resulted in creating an atmosphere of enthusiasm in and around the intervened villages. This reflects the beginning of a larger movement for self-reliant village development or Gram Swaraj.

Key Achievements During The Year:

- 11 MLPs were developed during 2011-12, and rest of the 34 MLPs were developed during 2012-13
- Comprehensive plan document for every village formally ratified by respective Gram Sabhas.
- Aam Sabha meetings regularized in 45 villages
- Gram Sabha meetings conducted in all 15 panchayats
- 36 Women's Organizations and 21 Saving and credit Groups formed and functioning
- A team of 51 dedicated, capable Gram Swaraj Sahayaks and lok sevaks
- A team of 15 village engineers with technical capabilities
- Over 1,200 person-days of training achieved.
- People's Action begun in 21 villages, in terms of social action on
 - Land – 76 acres land reclaimed by SC/ST HHs from land grab from encroachment by upper caste
 - Community work – road repairing, cleaning community wells
 - NADEP composting



- Primary education – sending children to school and monitoring teachers attendance
- Health services – regularizing ANMs visit and immunization
- Spin-off Effect – Request from District Collector to expand in 20 more villages in Chhattarpur district

III.2 Decision Support System (DSS)

In June 2012 the IPG developed a Decision Support System (DSS). It is a GIS based system which provides detailed information for each plot of the village. It generates thematic maps of land use, landownership, soil type, irrigated area etc. for each village. These thematic maps laid over each other help in analyzing the present resource situation and for planning different activities. It can also show the proposed work plan like check dams, stop dams etc. on a map. The DSS has been prepared for 45 villages of 5 districts (Chhattarpur, Mahoba, Panna, Lalitpur and Damoh) of Bundelkhand. The information is available on the public domain (www.bundelkhanportal.org).

Remarks: The major hurdle in the programme was to get timely funds from NIRD. Moreover,

the one year programme with NIRD got completed in October 2012 in Chhatarpur, Panna, Damoh and Mahoba and in March 2013 in Lalitpur district. A decision has been taken by IPG to expand the programme in 20 villages of Chhatarpur and Panna district with the help of other funding agencies. Hence, SDTT has been given a proposal for the extension of this programme for the year 2013-14. Meanwhile, efforts are being made not to lose the momentum gained last year. Hence, low-budget extensions have been given to Chhatarpur, Mahoba and Panna for the months November-2012 to March-2013 to support those activities in villages which do not need financial support

like follow up of social actions, regularizing Gram Sabha meeting, formation of youth groups and Mahila Mandal Dal meetings etc.

The future strategy to continue the Gram Swaraj Abhiyan in other region has been discussed with respective partner organization and they have been asked to take the initiative by converging funds from various government schemes like MNEREGA. The main role of PSI would be to guide and provide support to them wherever required.

The implementation of physical work and forming VLIs for monitoring the implementation of the works, livelihood interventions and enhancing the productivity

of agriculture will be the main focus of the programme in the coming

year in those villages where MLPs have been prepared. The process of MLP will be replicated in the newly expanded villages. Over the years, Bundelkhand has become synonymous with droughts, distress and poverty and PSI's past experience of SCI and SWI techniques suggest that these techniques can be used even in drought conditions to enhance livelihood and food security. Hence the major focus in future would be on development of SRI/SWI/SCI techniques in Bundelkhand.

Under DSS, thematic maps were used to analyze geographical distribution of the social problems and spread of infrastructure. Vulnerability of individual villages in the district was analyzed using SC- ST population and number of BPL households in the village, female illiteracy, unemployment, marginal workers, area not available for cultivation and unirrigated areas. These vulnerability maps were appreciated by the Chhatarpur District Collector and he has requested NIRD to provide support to PSI in extending this programme to atleast 3 more panchayats of Kishangarh region of Chhatarpur district and facilitate villagers in preparing the village development plans of their villages.

Financial Statement:

EQMG Group Financial Statement (2012-13)						
S. No.	Project	Funding partner	Opening Bal. (Rs)	Income Rs.	Utilization Rs.	Balance Rs.
1	Gram Swaraj Abhiyan	NIRD	(688,299)	49,60,000 -	6,142,447	(1,870,746.09)
	Total		(688,299)	49,60,000 -	6,142,447	(1,870,746.09)

IV. OTHER ACTIVITIES

Uttarkashi Flood Responses (UFR)

The Ganga valley of Uttarkashi district witnessed a cloud burst and unusually heavy rainfall on August 3-4, 2012. The cloud burst took place in Assi Ganga valley near Gangori in Bhatwari block, district Uttarkashi. The unprecedented rain caused widespread loss of life and property. Again on 13th and 14th September a cloud burst took place in Ukhimath area of district Rudraprayag in which 8 villages were worst affected, 60 people died and 150 houses got damaged.

Several individuals and organizations from Uttarkashi and Ukhimath approached PSI to assist with disaster response. PSI realized that construction of temporary shelters that could provide homeless families with security was the need of the hour. With the timely financial assistance of SDTT, PSI organized two training workshops for masons/carpenters and the staff of the POs and thereafter monitored the

construction of 100 temporary shelters (65 in Uttarkashi and 35 in Ukhimath). Besides this, 400 hypo chloride bottles were also distributed to the partner organizations. PSI's prompt response to the disaster not only helped the flood victims but also helped build the disaster response capabilities of the partner organizations and masons.

Case Study

Usha Devi belonging to a poor family of village Premnagar, Ukhimath told the PSI team that



Usha Devi inside the shelter

after her family lost their house in flood they were shifted by the government to Dharmsala. Many affected families of her village were shifted there and they were all living together with no privacy. It was very difficult to stay there. But now they have a shelter prepared by PSI. They feel cold in the tin shed but they warm up their shelter by burning wood. Now they feel safe even from the wild animals in the temporary shelter.



A shelter in village Mangoli district

Table -3a Name of POs and no. of shelters constructed in District Uttarkashi

S.No.	Partner Organization	Location	No. of shelters
1	Himalayan Development Association (HAD)	Nald	20
2	Himalaya Trust,	Gangori	12
3	Tarun ParyavaranVikas Samiti	Ganeshpur, Nald, Uttaron	08
4	Gramin Samudaik Sewa Sansthan (GSS)	Bhatwari	15
5.	Himalayan Paryavaran Jaribooti Agro Sansthan	Gangori -Nald	10
		Total	65

Table -3b Name of POs and no. of shelters constructed in Ukhimath (District Rudraprayag)

S.No.	Partner Organization	Location	No. of shelters
1	Parvatiya Niyojan Evam Vikas Sansthan (PNVS)	Ukhimath	27
2	Alaknanda Dehatee Network (ADN) Sansthan	Ukhimath	08
		Total	35

Technical Supports to Other Organizations:

After the flood disaster in Ukhimath, BAIF received a project from SDTT for the construction of temporary shelters in the flood affected villages. BAIF approached PSI to assist with disaster response. PSI provided technical support to BAIF for the construction of 30 temporary shelters in Ukhimath as a response to flood disaster.

Greening Rural Development: At the request of MORD, UNDP commissioned an in-depth study on “Greening Rural Development Programmes in India” to PSI. The main objective of the study was to examine the potential of rural development programs to provide environmental benefits that further their developmental goals and recommend specific and generic changes in their guidelines to achieve them. The report was prepared in two volumes. The first volume is an overarching study that begins with elaborating a conceptual framework for ‘greening rural development’. The second volume of the report consists of six technical papers – one on

each of six major MoRD and MDWS schemes - written by subject experts commissioned by UNDP.

2013 Calendar: One of PSI’s more well-known activities is the production and sale of its annual calendar-planner. Since 2009, PSI has been producing calendars under the Himalayan River series. The 2013 calendar features Uttarakhand’s rain-fed Western Ramganga river.

The Western Ramganga flows for 596 km before it joins River Ganga in Uttar Pradesh. It descends from the Doodhatoli mountain range – the tallest in Uttarakhand’s middle Himalayan region. A distinctive feature of its catchment in Uttarakhand is its biodiversity. The Jim Corbett Park abounds in Bengal tigers, Asian elephants, cheetal and sambhar besides over 500 animal species, 488 plants species and an estimated 580 avian species.

The river itself is an anglers’ paradise, famous for the golden Himalayan mahseer and monster catfish. But now these rare species are



endangered because of sand mining and illegal fishing with the use of dynamite. Otters, turtles crocodiles and gharials are the prominent species in the Corbett stretch of the Western Ramganga. Migratory birds, sauras cranes dot the wetlands in the Park. PSI's photographers Devraj Agrawal and Dinesh Sharma travelled along the river earlier this year to bring back some special pictures. Additional pictures were provided by Shri Anup Sah, Uttarakhand's most well-known nature photographer.

The 5 Kilometer Classroom: In 2011-12 PSI produced a booklet titled "The 5 Kilometer Classroom". The 5 Kilometer Classroom booklets are a series developed and funded by Winterline Foundation based on a concept by Richard Wechter a former science teacher at Woodstock School. This booklet is based on a short five kilometer walk from Baijnath to Ghongli Bridge Church. It provides visual lessons about the region's history, geography, geology, eco-systems, flora, fauna, people, culture and more. PSI is preparing the English version of this booklet.

Research Publications and Reports: Research at PSI is undertaken to improve the implementation of field projects, identify new areas of work and to innovate new technologies and social processes. The following research publications and reports were prepared in 2012-13:

- <http://peoplescienceinstitute.org/PDF's/EQMG/socio-cultural%20survey%20final%20report%20edited.pdf>

This report has been used by WWF-India in compiling its report on assessment of E-Flows for Kumbh 2013 at Triveni Sangam, Allahabad.

- Submitted a paper on "**Prevention Of Water Pollution In India**" to The Comptroller and Auditor General (CAG) of India. The paper was also published in a local newspaper.
- A submission on Millennium Development Goals for UKD was given to CII. The ideas were included by CII in their Post MDG Development Agenda India National Consultation Paper.

Miscellanea: During the course of the year PSI staff continued to associate themselves with public interest activities and social issues in different parts of the country. In particular various colleagues from PSI spoke out on the state of Indian rivers and the current approach to hydropower development which destroys rivers and the local environment. Addressing social issues has always been a concern of PSI. In this context, PSI actively participated in the activities organized by the social organizations on violence against women.

V. FINANCIAL REPORT

PSI's balance sheet and consolidated income and expenditure account for 2012-13, ending March 31, 2013 are attached as Annexures 1a and 1b.

During the year the Institute generated grants worth Rs. 2,08,10,402 /- and donations worth Rs.1,16,971/-, Other receipts from consultancies, sale of products and publications amounted to Rs.88,12,193/- .Adding the opening balance and other incomes the total income for 2012-13 amounted to Rs.3,95,65,855/-.The Institute spent Rs.3,50,94,475/-,leaving a balance of Rs.44,71,380/-. It is proposed that Rs. 25, 00,000/- be transferred to the campus fund. With unutilized grants carried forward amounting to Rs.16,86,486/-, the surplus transferred to the capital fund is Rs 2,84,893/-.

The pie-charts below shows the sourcing of income from local grants and donations, foreign grants and donations and revenues from the sale of goods and services for 2012-13 and the previous years.

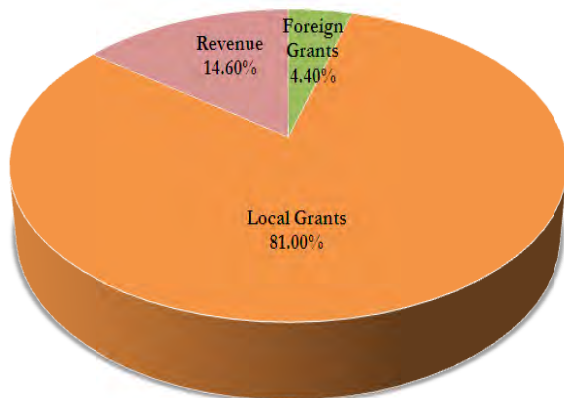
The main donors for local and foreign grants are listed below. PSI is thankful to all of them for their support. Revenue income was earned from consultancies, training programmes, sales of publications, calendars, water quality testing kits and posters.

Indian

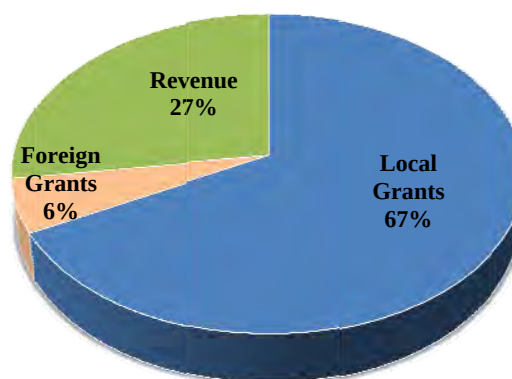
Sir Dorabji Tata Trust, Navajbai Ratan Tata Trust, Government of HP, National Institute of Rural Development (GoI), Arghyam, Guru Ganga Envirotech Trust, Livolink Foundation.

Foreign

Vishal Himalaya Foundation



2011-12



2012-13

VI. EXECUTIVE BOARD 2012-13

Dr. K.S.Chawla	Chairperson	Geotechnical Engineer
Mr. A.K. Roy	Treasurer	Chemical Engineer
Dr. B.K.Joshi	Hony. Dean of Research	Political Scientist
Ms Madhu Sarin	Member	Architect
Dr. Leela Visaria	Member	Sociologist
Dr. Kshama Metre	Member	Medical Practitioner
Dr. Ravi Chopra	Director (Ex-Officio)	Scientist

VII. PSI STAFF 2012-13

S.No.	Name	Date of Joining	Date of Leaving
1	Deepak Ahirwar	01.03.12	14.05.12
2	Shubhoshree Banerjee	15.07.10	
3	Puran Bartwal	03.01.11	
4	Anupriya Chauhan	01.11.11	30.06.12
5	Ravi Chopra	27.06.88	
6	Salil Das	21.02.90	31.01.13
7	Abhinandan Dhakal	02.07.12	
8	D.N. Dwivedy	17.08.98	
9	Anil Kumar Gautam	01.03.02	
10	Vishal Gupta	16.12.11	
11	Ajay Jairwan	01.05.08	
12	Pushpa Juyal	21.12.92	
13	Ranjana Khare	01.12.11	
14	Arvind Kumar	02.08.10	
15	Harendra Kumar	02.08.10	
16	Manoj Kumar	10.07.06	
17	Heera Lal	01.04.02	
18	Mitthan Lal	26.07.10	
19	Toshar Diliprao Palaskar	01.12.11	31.01.13

20	Ashish Panwar	01.12.11	31.05.12
21	Krishna Mohan Poddar	02.07.12	
22	R.S. Prasad	01.11.94	
23	Raj Deo Ojha	16.07.12	
24	Mahendra Singh Rajwar	01.01.08	
25	Surendra Singh Rana	01.06.12	
26	Harshmani Raturi	02.07.12	
27	Seema Ravendale	05.03.12	
28	Ramesh Singh Rawat	16.09.04	
29	Subhash S. Rawat	01.06.02	
30	Anita Sharma	02.07.12	
31	Deepak Sharma	15.06.12	28.08.12
32	Dinesh Sharma	02.10.97	
33	Rajesh K. Sharma	20.08.98	
34	Sunesh Kumar Sharma	01.04.11	
35	Pavitra Singh	01.11.06	
36	Ropesh Kumar Singh	21.08.12	
37	Vijay Pal Singh	08.09.08	06.05.12
38	Vikram Singh	01.02.00	
39	Yashpaul Singh	03.01.11	
40	Shiv Kumar Soni	01.10.11	
41	Suresh Tiwari	01.03.12	06.05.12
42	C. Tripathi	15.06.88	
43	Anil Tyagi	01.12.02	09.10.12
44	Meena Yadav	07.11.08	

PEOPLES' SCIENCE INSTITUTE
E-57, PANCHSHEEL PARK NEW DELHI-110 016

BALANCE SHEET AS AT 31st MARCH, 2013

S.NO	PARTICULARS	Notes	FOREIGN GRANTS	LOCAL GRANTS	REVENUES	TOTAL AS AT 31.03.2013	TOTAL AS AT 31.03.2012
I	<u>CAPITAL AND LIABILITIES</u>						
	<u>CAPITAL FUND</u>						
	ENDOWMENT FUND		597,837.00	-	-	597,837.00	597,837.00
	CAMPUS FUND						
	Opening Balance		6,385,133.00	1,472,000.00	1,300,000.00	9,157,133.00	7,537,133.00
	Add: Transfer from General Fund		250,000.00	650,000.00	1,600,000.00	2,500,000.00	1,600,000.00
	Add: During the year					-	20,000.00
	Closing Balance		6,635,133.00	2,122,000.00	2,900,000.00	11,657,133.00	9,157,133.00
	CAPITAL FUND						
	Opening Balance		1,004,619.09	2,423,259.19	211,762.20	3,639,640.48	3,133,383.46
	Add: Excess of Income over expenditure		76,927.75	113,981.27	93,984.15	284,893.17	506,257.02
	Closing Balance		1,081,546.84	2,537,240.46	305,746.35	3,924,533.65	3,639,640.48
	GRANTS (to the extent unutilised)		1,414,050.96	272,435.41	-	1,686,486.37	8,062,548.46
	Farmer's Fund			107,880.00	-	107,880.00	363,800.00
	<u>CURRENT LIABILITIES</u>						
	OTHER CURRENT LIABILITIES	1	9,100.00	198,800.00	34,750.00	242,650.00	193,650.00
	TOTAL		9,737,667.80	5,238,355.87	3,240,496.35	18,216,520.02	22,014,608.94
II	<u>ASSETS</u>						
	<u>Non-Current Assets</u>						
	<u>FIXED ASSETS (at cost)</u>						
	TANGIBLE ASSETS						
	less Depreciation	2	3,575,113.95	632,879.00	445,816.85	4,653,809.80	4,940,858.00
	NON CURRENT INVESTMENTS	3	5,056,590.00	592,970.00	1,300,000.00	6,949,560.00	4,612,378.00
	LONG TERM LOANS AND ADVANCES	4	-	114,000.00	73,758.00	187,758.00	114,000.00
	<u>Current Assets</u>						
	TRADE RECEIVABLES	5	-	-	88,882.00	88,882.00	69,050.00
	CASH AND CASH EQUIVALENTS	6	722,364.86	3,720,223.87	1,238,934.50	5,681,523.23	10,120,934.94
	OTHER CURRENT ASSETS	7	383,598.99	178,283.00	93,105.00	654,986.99	2,157,388.00
	NOTES TO THE ACCOUNTS	8					
	TOTAL		9,737,667.80	5,238,355.87	3,240,496.35	18,216,520.02	22,014,608.94

"As per our separate report of even date attached herev

For S.M. VARMA & CO.
Chartered Accountants

SUDHIR VARMA
FCA, CIA (USA)

For PEOPLES' SCIENCE INSTITUTE

Ravi Chopra
RAVI CHOPRA
Director

Kanwarjit S. Chawla
KANWARJIT S. CHAWLA
President

A.K.Roy
Board Member

Date:
Place: New Delhi

PEOPLES' SCIENCE INSTITUTE
E-57, PANCHSHEEL PARK, NEW DELHI- 110016

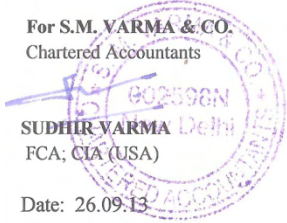
CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD ENDED 31st MARCH, 2013

PARTICULARS	FC AMOUNT AS AT 31-3-2013	LG AMOUNT AS AT 31-3-2013	REVENUE AMOUNT AS AT 31-3-2013	TOTAL AMOUNT AS AT 31-3-2013	TOTAL AMOUNT AS AT 31-3-2012
REVENUE:-					
Grants					
Grants received	1,555,907.72	19,254,494.00	-	20,810,401.72	30,220,001.66
Donations Received	12,001.00	104,970.00	-	116,971.00	130,090.00
Grants Unutilised C/f	622,247.55	7,440,300.91	-	8,062,548.46	7,800,814.24
Other Income					
Bank Interest-Saving Account	53,740.00	320,281.00	91,935.00	465,956.00	254,136.00
Training and Consultancy receipts	-	-	6,833,644.50	6,833,644.50	6,121,100.00
Miscellaneous Receipts	-	4,243.00	119,432.00	123,675.00	321,341.00
Publications, Posters & Maps Receipts	-	-	218,437.00	218,437.00	187,445.00
Return on Investments	345,405.00	51,913.47	3,205.00	400,523.47	596,493.67
Water Sampling & Kits	-	-	769,957.00	769,957.00	651,995.00
Projects Closed	47,212.80	-	-	47,212.80	570,448.35
Overheads transferred to General Fund	-	1,714,659.00	-	1,714,659.00	1,453,931.00
Interest on Income Tax refund	-	-	1,869.00	1,869.00	30,856.00
TOTAL (A)	2,636,514.07	28,890,861.38	8,038,479.50	39,565,854.95	48,338,651.92
EXPENSES					
PROGRAMME EXPENSES					
Books, Periodicals & Data CDs	-	6,374.00	29,590.00	35,964.00	58,841.00
Grants to Other Organisations	-	11,727,058.00	-	11,727,058.00	12,149,063.00
Honoraria/Consultancies	88,000.00	591,294.00	260,290.00	939,584.00	807,896.00
Laboratory Expenses	-	25,218.00	-	25,218.00	15,372.00
Meetings/ Conferences /Workshops	-	835,528.00	41,020.00	876,548.00	1,790,508.00
Publications Expenses	-	-	-	-	16,500.00
Relief & Community Development Works	515,802.06	2,196,135.00	-	2,711,937.06	861,450.00
Server & Website Expenses	-	304,527.00	6,824.00	311,351.00	347,853.00
Training Expenses	-	67,021.00	2,629,007.00	2,696,028.00	3,207,520.00
Travelling	96,188.21	1,836,922.00	361,527.00	2,294,637.21	2,692,696.00
Water Kits Production Expenses	-	-	304,989.00	304,989.00	70,916.00

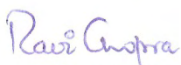


PARTICULARS	FC AMOUNT	LG AMOUNT	REVENUE AMOUNT	TOTAL AMOUNT	TOTAL AMOUNT
	AS AT 31-3-2013	AS AT 31-3-2013	AS AT 31-3-2013	AS AT 31-3-2013	AS AT 31-3-2012
<u>NON PROGRAMME EXPENSES</u>					
Employee Benefit Expenses					
Salaries	58,842.00	6,518,575.00	1,412,454.00	7,989,871.00	6,818,239.00
EPF Contribution	4,716.00	290,033.00	69,549.00	364,298.00	345,857.00
Staff Welfare	-	35,784.00	26,047.00	61,831.00	60,545.00
Other Expenses					
Bank Charges	253.50	3,839.70	1,323.20	5,416.40	6,300.09
Miscellaneous Expenditure	535.74	5,712.00	11,649.00	17,896.74	1,202.00
Hospitality Expenses	-	6,865.00	27,793.00	34,658.00	19,176.00
Insurance Charges	-	-	4,757.00	4,757.00	17,884.00
Local Conveyance	-	6,628.00	24,767.00	31,395.00	23,453.00
Office Maintenance	2,300.00	73,767.00	101,523.00	177,590.00	278,047.00
Postage & Courier	-	1,837.00	51,799.00	53,636.00	57,203.00
Printing, Stationery & Computer Consum	-	116,751.00	378,319.00	495,070.00	380,711.00
Professional Charges	25,093.00	29,116.00	36,653.00	90,862.00	141,842.00
Rent	-	910,050.00	166,408.00	1,076,458.00	992,299.00
Repair & Maintenance	-	85,779.00	60,131.00	145,910.00	175,553.00
Service Tax	-	-	-	-	551,360.00
Staff Recruitment	-	-	16,678.00	16,678.00	59,949.00
Telephone & Fax	-	129,943.00	58,002.00	187,945.00	174,916.00
Vehicle Running & Maintenance	4,059.00	18,300.00	159,901.00	182,260.00	281,854.00
Water & Electricity Charges	-	75,466.00	13,845.00	89,311.00	74,098.00
Grant Receivable Written off	-	-	-	-	1,475,771.00
Projects Closed	47,212.80	-	-	47,212.80	570,448.35
Overheads transferred to General Fund	-	1,714,659.00	-	1,714,659.00	1,453,931.00
Depreciation	52,533.05	241,263.00	89,650.15	383,446.20	491,650.00
TOTAL (B)	895,535.36	27,854,444.70	6,344,495.35	35,094,475.41	36,470,903.44
Balance (A-B)	1,740,978.71	1,036,416.68	1,693,984.15	4,471,379.54	11,867,748.48
Less : Grant Refunded	-	-	-	-	1,698,943.00
Transferred to Campus Fund	250,000.00	650,000.00	1,600,000.00	2,500,000.00	1,600,000.00
Unutilised Grants Carried Forward to Balance Sheet	1,414,050.96	272,435.41	-	1,686,486.37	7,352,025.58
Surplus transferred to Capital Fund	76,927.75	113,981.27	93,984.15	284,893.17	1,216,779.90

For S.M. VARMA & CO.
Chartered Accountants


SUDHIR VARMA Delhi
FCA; CIA (USA)

Date: 26.09.13
Place: New Delhi


RAVI CHOPRA
Director

For PEOPLES' SCIENCE INSTITUTE


KANWARJIT S. CHAWLA
President


A.K. Roy
Board Member