

PEOPLE'S SCIENCE INSTITUTE

ANNUAL REPORT 2004-2005

PROJECTS AND ACTIVITIES

Sustained efforts in the last three years on multi-year programmes at People's Science Institute (PSI) bore fruit in the form of some remarkable accomplishments in the 17th year (2004-2005) of the Institute's operations. The most heartening were the emergence of model watersheds in the Hamirpur Watershed Development Programme in Himachal Pradesh, the recognition of the Gram Swaraj movement in western Orissa, the response to Tsunami in Tamil Nadu, beginning of fluorosis mitigation programme in eastern Uttar Pradesh, and the establishment of a first-rate GIS cell at PSI. The growth of the Institute is apparent from the summary narrative and financial reports in the following sections. Credit for these accomplishments goes to the Institute's staff and the communities we work with. Several of our Board and General Body members also assisted us when the need arose.

NATURAL RESOURCES MANAGEMENT

The Natural Resources Management Group at PSI accounts for more than half of the Institute's staff and annual revenues. Most of its activities are conducted through the Centre for Participatory Watershed Development (CPWD). During the review period, 2004-2005, it had some exciting and inspiring achievements in its watershed projects. PSI also initiated the second phase of the Jal Sanskriti Programme through promotion of restoration of traditional water harvesting structures in Uttarakhand with the support of Canadian International Development Agency (CIDA). Comprehensive reports from CPWD and the CIDA Programmes follow. The Pauri project came to a virtual standstill since no money was released for the project activities since April 2002.

I. CENTRE FOR PARTICIPATORY WATERSHED DEVELOPMENT (CPWD)

Background

The Centre for Participatory Watershed Development (CPWD) at Peoples' Science Institute is mandated by CAPART (Ministry of Rural Development, Government of India), to extend training, development, research and communication support to government and non-government organizations engaged in watershed/natural resource management projects in the states of Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Uttarakhand and Uttar Pradesh. Its' premier project is "Resolving the Himalayan Dilemma" which is being implemented in Uttarakhand and Himachal Pradesh with the financial support of Sir Ratan Tata Trust (SRTT) under the latter's "Himmothan Pariyojana". The Centre is also implementing an integrated watershed development projects in Hamirpur district (H.P.) and Pauri Garhwal district (Uttarakhand) with grants from the respective District Rural Development Agencies (DRDA). It conducts several other training and orientation workshops every year. Its' activities during 2004-2005 are summarized below.

Activities

Resolving the Himalayan Dilemma (RTHD) Programme: In 2001-02, PSI initiated the RTHD programme under the initiative "Himmothan Pariyojana" supported by Sir Ratan Tata Trust, Mumbai for providing training and development support to 15 voluntary organisations (VOs) in the states of

Uttarakhand and Himachal Pradesh to undertake participatory natural resources management projects on a watershed basis, each in an area of about 500 ha over a period of four years. A Programme Advisory Committee (PAC) has been constituted to help and guide in the implementation of the programme. In 2004-2005 following activities were undertaken through the programme:

- Capacity Building – Fifteen NRMT members from five new (Batch III) POs underwent a Basic Training Course at CPWD. The latter also conducted exposure tours of 15 days each for the NRMT members and 50 villagers from the selected micro-watersheds. They were taken to observe good practices at participatory natural resource management projects and a few universities. Special training courses were organised on Community Mobilisation, Micro-finance, Monitoring Mechanisms, Process Management Systems, Assessment of Works, Accounts Keeping, Nursery Raising and Construction of Gabions, to meet the requirements of the Batch I and II POs.
- Development Support – Development support was provided to Batch I, II and III POs at critical intervals. The action plans of all the five Batch II POs were approved by SRTT in August 2004. Thereafter field support was extended to them for implementing their watershed plans. Field support was extended to Batch I and II POs for community mobilization, and strengthening of Savings and Credit Groups (SCGs) and Mahila Mandals. Batch I POs completed their first year of implementation in the month of August 2004. A mid term monitoring of their watershed programmes was conducted in October – November 2004 with the help of a monitoring team through a SGP from the Trust. The monitors appreciated the overall quality of the work done. Development support was provided to the Batch III POs to undertake community mobilization and participatory exercises in their respective watersheds leading to the preparation of four watershed development plans. The monitors would now review these action plans.
- Evaluation of the Capacity-Building Activities - In November 2004, SRTT conducted an evaluation of the Centre's capacity building work through an external monitor. The monitor acknowledged the improvements made in the capacity building activities undertaken by the Centre.
- Research Activities – CPWD initiated a few research activities in selected micro-watersheds of Uttaranchal and Himachal Pradesh. These included: (i) design of pipeline water supply scheme for SC community of Bhanajgad watershed, (ii) design, fabrication and installation of eight low cost hydrams in the mountain micro-watersheds and study of their performance, (iii) study of market potential and natural resource base for promoting micro-enterprise in mountain micro-watersheds and (iii) participatory appraisal of village level institutions like WC, VDCs, MMDs, SHGs and UGs in selected micro-watersheds of Himachal Pradesh and Uttaranchal to help improve their functioning.
- Capacity Building of Programme Staff - Special training courses and workshops were organized to enhance the capabilities of the Centre's programme staff. These included: (i) a three-weeks



training programme on social and technical issues related to participatory watershed development organized by Central Soil and Water Conservation Research and Training Institute, Dehradun; (ii) an eight weeks in-house training programme on the use of AutoCad software for the technical staff; (iii) a five-days training programme on sustainable livelihoods, community organization and income generation activities organized by IRMA, Anand; (iv) a four-days training programme on rainwater harvesting organized by CSE, New Delhi. Various staff members also visited other VO's and research institutions to familiarize themselves with innovative technologies and approaches.

Hamirpur Watershed Development Programme: The Hamirpur Watershed Development Programme (HWDP) completed its final year of programme implementation. The earlier thrusts on transparency and long-term sustainability of the natural resource base and community-led development process were maintained.



A number of physical works related to soil and water conservation, biomass conservation and development and irrigation were undertaken during the year. Horticulture plantations, afforestation and grassland development were carried out on 85 ha. This work was supported by 16 Women's Nurseries. About 8 ha of farm lands were brought under irrigation. People began cultivating vegetables in addition to the traditional crops on these lands. About 60,000 saplings of fuelwood and fodder have been raised in the nurseries, which will be planted next year. One of the significant

achievements has been the construction of the two deep infiltration wells (first time in the district) that are now supplying safe drinking water to 31 households in two villages of Choa Chakrala watershed.

Several training programmes for villagers were also organised including (i) accounts training for secretaries, (ii) fruit processing for SHGs and (iii) NADEP composting for farmers. Women's mobilization continued to gather strength in the watershed villages. The women's federation 'Astha' consisting of women from all the 69 villages in the five micro-watersheds organized programmes on August 15, 2004, January 26, 2005 and March 8, 2005. Over 1000 villagers have participated in each of these programmes. Two new Mahila Mandals and one Savings and Credit Group were formed. Now there are 21 Mahila Mandals and 30 SCGs in all the 69 villages. Their total savings add up to Rs. 4,03,428 while an inter-loaning of Rs. 4,37,690 has taken place amongst the group members. A total of 10 groups have been linked with local banks so that they can access credit. These groups have availed bank loans to the tune of Rs.3,90,000. Women from all the 69 villages in the five micro-watersheds have come together to form a common forum called Astha. They have organized programmes on August 15, 2003, January 26, 2004 and March 8, 2004. Over 1500 villagers have participated in each of these programmes.

Other Training Programmes: During 2004-05, the Centre generated a total of 6,500 trainee days under the RTHD and other watershed development programmes. Several community based organizations like WCs, VDCs, SHGs, UGs and MMDs, Panchayat Pradhans and WDT members

along with BDOs from Hamirpur, Kangra, Kinnaur, Shimla, Sirmour and Una districts of H.P were trained during the year. Capacity building of MDTs and Gram Panchayat members was also conducted under Uttaranchal Decentralised Watershed Development Programme for Watershed Management Directorate, Dehradun.

Development Support Activities: The Centre continued to extend field support to a number of CAPART-funded VOs, including (1) SMTA in Chakrata (Uttarakhand), (2) KAGAS of Pithoragarh (Uttarakhand), (3) UYRDC (Chamoli), Uttarakhand, (4) Samarpit Sewa Sansthan in Dehradun (Uttarakhand), and (4) MMJ (Jabli, H.P) and (5) FDRA in Dehradun (Uttarakhand). Development support was also provided to non-CAPART VOs like (i) Eight Partner Organisations of OXFAM, Lucknow based in Bundelkhnad region of U.P., (ii) AKDN, Afghanistan for its MAD programme, and (iii) Office of Chattisgarh Tribal Development Programme, Bilaspur, Chattisgarh. Apart from the above, field support was also provided to two CBOs, namely (i) Adivasi Mukti Morcha, Sendwa, M.P. and (ii) Chattisgarh Mukti Morcha, Rajnand gaon, Chattisgarh to train local people in conducting study of submergence area for proposed dams.

Promotional Workshop: Three promotional workshops on CAPART's Watershed Conservation and Development Programme were conducted for potential POs of (i) Uttar Pradesh at Allahabad, (ii) Uttarakhand at Dehradun, and (iii) Himachal Pradesh at Jwalaji. Representatives from 77 VOs attended this workshop. 19 proposals were generated as a result of these workshops.

Funding

The fund utilization statement for CPWD is summarized below.

S. No.	Particulars	Opening Balance Rs.	Income Rs.	Fund Utilised Rs.	Balance Rs.
1	RTHD Programme	14,08,856	46,46,000	43,75,988	16,78,868
2	Promotional Workshop	1,87,790	-	2,26,378	(38,588)
3	Training & Development Support	-	15,75,459	15,29,511	45,948
4	HWDP Project	-	-	-	-
	Total	15,96,646	62,21,459	61,31,877	16,86,228

Remarks

PSI is currently involved in supporting or implementing 40 micro-watershed projects in Uttarakhand and Himachal Pradesh. They cover a total area of over 35,000 ha. Outside of the government sector, this may be the largest watershed programme in the two states. These projects are spread over a number of agro-climatic regions. A majority of them have a potential of developing into model watersheds.

Using knowledge gained from the Institute's Jal Sanskriti Programme CPWD and its partners has been able to mobilize the local communities to implement a combination of traditional water harvesting structures (*bawris* and *nauns*) and new innovative technologies (deep infiltration wells and water sanctuaries) along with conventional soil and water conservation measures. The results are beginning to emerge in form of assured household water supply, increased fodder production, reduction in soil erosion and increased agricultural income.

A more significant indicator of the success achieved in these watersheds is the commitment of many VLIs to continue to work on the path of transparent and self-reliant processes even after the watershed development project is over. The challenge before PSI is to develop a proper withdrawal strategy by strengthening the VLIs and their institutional systems over the next one year.

II. COMMUNITY-LED RESTORATION OF TRADITIONAL WATER HARVESTING STRUCTURES IN UTTARAKHAND

Background

The mountain state of Uttarakhand has a glorious tradition of water harvesting. Its geological and ecological diversities have led to a profusion of water harvesting structures like nulas, baoris, dharas, kunds, khals, and chals. In January 2000, PSI began a programme, called Jal Sanskriti, to re-establish the cultural basis for conservation and use in the central-western Himalayan region of Uttarakhand and Himachal Pradesh. As a followup of the programme, the Institute received several requests for financial and technical support from VOs and individuals in the region for revival of naulas and baoris. In January 2005, India-Canada Cooperation Office (ICCO) provided financial support for renovation and catchment area treatment of 25 naulas in Uttarakhand. The activities undertaken during 2004-2005 are summarized below.

Activities

PSI organized a two-days inception workshop in Dehra Doon in January 2005, inviting different VOs interested in spreading the concept of Jal Sanskriti. About 15 participants participated in the workshop. Apart from session on concepts of Jal Sanskriti, there were two technical sessions also. One session dealt with the technical know-how on renovation of naulas and the other on various techniques of catchment area treatment. During the discussions, criteria were identified for selection of naulas for renovation. These included villages where (i) community was suffering from domestic water crisis/scarcity; (ii) each section of the community had users rights on the naula; and (iii) social conflicts existed regarding accessibility to naula water, a naula belonging to dalits should be given priority. It was decided that villagers should be willing to contribute a share of the cost of the naula repair and its catchment area treatment (minimum 20 per cent of the total cost).



By March 2005, 49 proposals for naula renovation were received from five voluntary organizations. These proposals were prepared by the VOs after consultation with the respective communities. The proposals included a list of identified naulas and rough estimate of their renovation and catchment area treatment costs.

Funding

The India-Canada Cooperation Office (ICCO) released the first installment of the project grant amounting to Rs. 8,37,000 out of which, Rs. 79,678 were spent during 2004-05, leaving a balance of Rs. 7,57,322.

Remarks

It is evident from the response of proposals that the Jal Sanskriti programme has led to a renewed interest in the conservation of traditional water harvesting structures and their catchments. One

engineer from PSI would now visit each naula site for physical verification and finalization of the estimates for renovation and catchment area treatment. The challenge before is the restoration of about 30 naulas to provide assured household water supply to the rural communities. There is a need to establish decentralized systems and create awareness about the role of *sanskriti* (culture) in the sustainable management of these resources.

DISASTER MITIGATION AND RESPONSE

Uttarakhand is prone to earthquakes, landslides, flash floods, forest fires and even droughts. To cater to the need of strengthening the overall state of preparedness and evolve effective people-centred response mechanisms, PSI began a pilot programme on community-led disaster preparedness, mitigation and response in Rudraprayag district of Uttarakhand in early 2004 with financial support from Oxfam India Trust, Lucknow. This resulted in a formal establishment of a Centre for Disaster Mitigation and Response at the Institute in Dehra Doon. The Centre has conceived a three-year action programme, to prepare 550 villages in 11 of the 13 districts in the State, to tackle natural disasters. These districts are traversed either by the Main Central Thrust (MCT) or the Main Boundary Thrust (MBT) and are therefore more vulnerable. In 2004 the Centre also responded to the Tsunami affected areas of Tamil Nadu. The significant activities of the group are outlined below.

I. CENTRE FOR DISASTER MITIGATION AND RESPONSE (CDMR)

Background

In January 2003 a one-year pilot programme was launched in Rudraprayag district. The main goals of the programme were to inculcate a culture of disaster preparedness among the communities and establish a Resource Centre (Link Centre) with a stockpile of emergency relief materials and act as an information centre. Here CDMR is partnering with Centre for Development Initiatives (CDI), a Rudraprayag based voluntary organisation, to implement the programme. CDMR and CDI are working together in three adjacent valleys -- Kyunja Gad, Kusum Gad and Akash Kamini in the proximity of the MCT zone.

Activities

In the pilot programme the centre is working in 53 villages of the three valleys of the disaster prone Rudraprayag district of Uttarakhand state. The major outcomes of the programme are:

- Establishment of a Link Centre with stockpile of emergency relief supplies in Bedubagar, Rudraprayag.
- Formation of Task Forces in 53 villages.
- Hazard mapping of all the 53 villages and preparedness plans of the villages, which have been prepared by the Task Forces.
- Production of literature, posters, booklets, manuals, CDs and calendars on disaster mitigation.
- Six masons training workshops were held which resulted in the creation of a pool of 130 trained masons and a communication team.



- A Resource Directory of individuals and organizations in Uttarakhand working on disaster related activities.

- A team of professionals for disaster response in the state.
- Draft copy of adaptation of the Humanitarian Charter and Minimum Standards (SPHERE Guidelines) for post-disaster immediate relief and response in Uttarakhand
- Draft copy of the guiding principles for a disaster management policy for Uttarakhand

Funding

Oxfam (India) Trust released an amount of Rs. 28,82,000 for the one-year pilot programme. Out of the above, a sum of Rs. 26,93,321 was spent on the programme.

Remarks

One of the achievements of the CDMR programme so far has been in the creation of awareness amongst the targeted communities, especially in Kusum Gad and Akash Kamini valleys about the need and concept of disaster preparedness. There has been a positive response towards the programme interventions both from the villagers as well as the district administration. The DPO (Disaster) Rudraprayag has appreciated the strategy adopted by CDMR to build the capacity of the villagers to face disasters. He has asked BDO, Ukhimath and Tehsildar, Ukhimath for coordination between the district administration and CDI. This year when there were incidences of landslides due to cloudburst in Jakholi Block of Rudraprayag, the DPO availed a pair of tents from the stockpile of CDMR.

Although some enthusiasm has been created in the villages, there is a need to encourage and facilitate the communities for disaster mitigation and preparedness. The challenge now is to achieve a quantum jump in the scale of operation of the Centre, in a manner that it is able to reach to a larger section of the vulnerable community.

II. TSUNAMI RESPONSE

Background

Tsunami waves struck the Tamil Nadu coast on December 26, 2004 following an earthquake epicentred in Indonesia, not far from the southern tip of India's Nicobar Island. At the coast the waves were about 30 ft high. The impact was mainly felt in the Andaman and Nicobar islands, the coast- lines of Tamil Nadu, Andhra Pradesh and parts of Kerala. In Tamil Nadu, 13 districts were affected out of which Nagapattinam, Cuddalore and Kanyakumari were the most affected. About 8000 people were killed in the disaster. PSI supported Swayam Shikshan Prayog (SSP) and Madurai based local organisation Covenant for Community Development (CCD) in Tamil Nadu.

Activities

On the first visit to Tamil Nadu in January 2005, PSI supported Oxfam in the construction of a low cost temporary shelter made of ferro-cement walls on bamboo frame with thatched roof. Thereafter, PSI made another low cost temporary shelter made of jute coated with cement on a bamboo frame. Other activities undertaken during the year include:

- A Four-days masons training workshop on construction of disaster-safe houses was organized in Pumpoohar village. 17 masons attended this workshop.
- Construction of a model permanent shelter was started along with training.
- The posters on disaster safe houses were translated in Tamil language.



Funding

The reconstruction and training activities so far has been undertaken through consultancies provided by SSP and CCD. PSI may request for grants from some funding agencies in the next year.

Remarks

In the Tsunami affected areas, the State Government has provided temporary shelters, where people are expected to stay till they construct their own permanent houses. However, people are not at all comfortable in these houses and have complained of heat boils (prickly heat). At the present pace of housing reconstruction activities, it will take a minimum of one-and-a-half to two years before all the affected people are able to shift to their permanent homes. Heavy rains will arrive in this region in October '05, which means that the people presently living in the present temporary shelters will face severe hardships if alternative arrangements are not made.

The Government expects NGOs and voluntary organizations to undertake housing reconstruction in the affected villages. But, any NGO or VO willing to undertake housing reconstruction will have to sign a MoU with the Government stating that it will spend a minimum of Rs 1.5 lakh per house for at least 50 houses. Very few NGOs and VOs have that kind of financial capability. No organization is willing to sign the MoU and therefore no significant construction activities have been started by the NGOs and VOs.

SSP is planning to set up Area Resource Centres for the Mahila Mandals in the affected villages, for which it has requested PSI to support them in design and supervision activities in the coming year. There is an urgent need of constructing low cost temporary shelters in the affected areas, especially in Tamil Nadu and Andamans, which is more severely affected.

ENVIRONMENTAL QUALITY MONITORING

The Environmental Quality Monitoring Group (EQMG) at PSI, established in 1991, monitors environmental pollution and its impact, undertakes research studies, develops low-cost and simple-to-use test methods and kits and disseminates information on environmental quality related issues. It

also provides technical support to voluntary organizations (VOs), social action groups, labour unions, citizen's organizations and government agencies working on environmental pollution issues. Highlights from its activities conducted in 2004-05 are described in the following sections.

I. TIE-OFF GRANT

Background

Between July 2000 and March 2004 PSI established a state-of-the-art environmental quality monitoring facility – including a laboratory and trained personnel -- at its premises in Dehra Doon, with the help of a grant from The Ford Foundation. At the end of the grant period PSI prepared a long-term strategy for the sustainability of its new facilities. The Institute identified certain thrust areas for its future activities, viz., (i) mitigation of fluorosis (ii) pesticides monitoring and assessing their impact (iii) monitoring of heavy metals in the environment (iv) air quality monitoring and assessment of impact on human health and (v) the sale of water, air and soil quality kits. The Institute sought and obtained a short-term tie-off grant from The Ford Foundation to (i) consolidate the achievements of the earlier grant and (ii) to ensure the sustainability of the EQM facilities created at PSI.

Activities

Fluoride Testing and Fluorosis Mitigation: PSI's Environmental Quality Monitoring Group (EQMG) initiated a fluorosis mitigation programme in Sonebhadra district with active collaboration



of Banwasi Sewa Ashram (BSA). In partnership with BSA, EQMG undertook a comprehensive study to assess the prevalence of fluorosis and monitoring the fluoride content of all the drinking water sources – 1477 of them -- in 21 villages of Sonebhadra district. It helped the local communities to identify the fluoride-safe and unsafe drinking water sources. It also clearly defined threshold values of fluoride concentrations for the initiation of different degrees of severity of fluorosis in the selected villages.

Each one of the 21 selected villages prepared a comprehensive fluorosis mitigation plan through a series of village meetings. The village interactions educated the local villagers about the nature, causes and mitigation measures of fluorosis. This enabled them to propose a mix of approaches to access fluoride-safe drinking water. These measures include conversion of fluoride-safe dug wells and concrete wells into sanitary wells, use of domestic and community defluoridation kits and three rainwater harvesting structures. The total capital cost of these measures is estimated at Rs .80, 70,000 for 12988 beneficiaries, or approximately Rs.621 per beneficiary. It is proposed that at the village level, local Fluorosis Mitigation Samitis will implement the proposed plans and ensure the maintenance and repair of the assets created, with the support of the existing Gram Swaraj Samitis established by BSA.

BSA has begun efforts to obtain funding to implement the above fluorosis mitigation plans. Hindalco and the National Thermal Power Corporation (NTPC-Bijpur), two major industrial corporations in the area, have agreed to support the implementation of the proposed plans in 7 out of the 21 villages. A Steering Committee has been formed to guide the implementation of the entire programme. BSA is pursuing funding for the remaining 14 villages. Hi-Tech Carbon, another corporate giant in

Sonebhadra, has requested for extending the entire exercise to 3 additional villages. Once that is done, 24 villages in the district will be covered.

The project has had an immediate impact on the local authorities. The district administration had been following the course of the scientific study. Even as it was going on, SSADA (Shaktinagar Special Area Development Authority) got two deep tubewells bored to supply fluoride-safe water to the residents of Parwarkodwari-Naibasti village, one of the 21 project villages, where most of the sources had very high fluoride content. SSADA had EQMG's scientists test the fluoride content of the new sources at different depths. The facilities and assets created by SSADA, however, are managed by the district administration. According to recent reports, SSADA is now likely to undertake safe water supply to three more of the 21 project villages. The district's Chief Development Officer has agreed to convene a meeting with BSA and PSI for reviewing the fluorosis mitigation programme. Thus there are good prospects of obtaining funds for safe water supply to all the project villages.

EQMG also initiated a small fluorosis mitigation planning exercise in seven villages of western Orissa, as part of PSI's Gram Swaraj Abhiyan (GSA) programme, as an extension of the Sonebhadra initiative.

Monitoring Pesticides' Residues: PSI supported Janhit Foundation's efforts to reduce the use of pesticides in Meerut district by (i) producing data on the presence of pesticide residues in the environment (soil and water) and vegetable crops and (ii) using it to prepare campaign materials for promoting organic farming.

Pesticides monitoring showed that farmers in Meerut district spray a variety of pesticides in their fields, including banned and restricted ones. Most of them tend to persist in the soil and surface water bodies. Interactions with local farmers showed that they were aware of the harmful nature of chemical pesticides, but they were not well informed about the alternatives. Discussions regarding organic farming, during the awareness campaign highlighted the economic difficulties associated with the switchover. This calls for policy changes that favour organic farming. PSI's project partner Janhit Foundation plans to address this issue. During the project period the number of farmers who enrolled with Janhit Foundation as practitioners of organic farming increased from 209 in 2004 to about 360 in 2005. Actually 182 new farmers were added in 2005, but about 30 farmers from the previous year dropped out.



The Meerut pesticides monitoring study helped develop experience in pesticides monitoring within the EQMG. One disappointment in this study was that EQMG's Gas Chromatograph was equipped with a column that could only detect the presence of organochlorine pesticides but not the organophosphorus (OPs) type. The Institute now plans to purchase a second column to monitor OPs. The latter has high acute and chronic toxicity. Janhit Foundation has approached PSI to undertake regular monitoring of pesticides for it. The Institute has also entered into a close working relationship with Kheti Virasat Mission, which is working with farmers of western Punjab on pesticides poisoning due to sustained exposure.

Funding

The Ford Foundation provided a grant of Rs. 13,88,802.54 during the year 2004-05. A sum of Rs. 8,49,277 was spent under the different scheduled project activities during this period. The group has to now look for long-term programme funds to sustain its activities.

Remarks

The comprehensive nature of the fluoride testing and fluorosis mitigation planning work done in Sonebhadra district has received lot of appreciation. PSI has received requests from four voluntary organizations to undertake similar programmes in their areas. This demand has strengthened PSI's resolve to establish a Fluorosis Mitigation Center in Dehra Doon.

II. TRAINING WORKSHOPS AND BIOMONITORING

Background

The State Council of Science, Technology & Environment (SCSTE), Himachal Pradesh requested PSI to conduct a series of workshops in nine blocks of Shimla district as a part of community capacity building on water quality monitoring (WQM) and water sources management (WSM).

PSI along with the Uttaranchal Environment Protection & Pollution control Board (UEPPCB) conducted biomonitoring of Ganga river and its tributaries in Uttarakhand.

Activities

Training Workshops on Water Quality and Water Sources Management: On the request of SCSTE, Himachal Pradesh, the EQM group along with the NRM unit of PSI conducted a series of



workshops in six blocks of Shimla district for capacity building of Panchayat representatives and villagers on water source management and water quality monitoring. Each of the five days' workshop also included field exercises for identification of catchment area treatment measures of water sources and demonstration of water quality testing. The villagers for water quality testing used PSI's water quality testing kits. More than 150 villagers underwent orientation and about 60 were trained in these workshops.

Envirotech Instruments, New Delhi has requested EQM group to conduct a consultative workshop on the pros and cons of the model syllabi of environment education prepared by the NCERT.

Biomonitoring of Ganga river: PSI along with the Uttaranchal Environment Protection & Pollution control Board (UEPPCB) conducted biomonitoring of Ganga river and its tributaries in Uttarakhand. Thirty-five sampling stations were selected on the river Ganga and two rounds of joint monitoring were carried out. A critical review report of the first round of monitoring was submitted to both CPCB and UEPPCB.

Funding

The EQM group received grant from SCSTE (H.P.) for conducting capacity building workshop for villagers and Panchayat representatives on water source management and water quality monitoring.

Similarly, CPCB provided small project fund for the biomonitoring exercise of Ganga river and its tributaries in Uttarakhand

Remarks

The prime institutional responsibility of the group has been to respond to peoples' requests in pollution-affected areas across the country. Along with completing the Ford Foundation's assignment, the group has also responded to monitoring requests of a few small community based organisations.

The EQM Group feels considerably strengthened by the experience gained in pesticides monitoring. It has developed work-based relationships with organizations like Janhit Foundation (Meerut), Kheti Virasat Mission (Bhatinda), Thanal Conservation Council (Thiruvananthapuram) and Centre for Sustainable Agriculture (Hyderabad). The Group has also developed its own knowledge on organic farming. It has identified farmers and organizations successfully practicing organic farming and other alternatives to chemicals based farming.

As stated earlier, PSI has been encouraged by the experience developed in the fluorosis mitigation project in Sonebhadra to decide on establishing a Fluorosis Mitigation Center at its premises. When established, the Center will be the first institution in India exclusively dedicated towards fluorosis mitigation.

INNOVATIVE PROGRAMMES

In 2004-05, the Institute moved ahead with two innovative programmes i.e. (1) the second phase (2003-07) of the Gram Swaraj Abhiyan (GSA) in western Orissa and (2) developing Village Information System (VIS), a revolutionary software application for knowledge-based decision-making. The significant activities and achievements under the programmes are outlined below.

I. GRAM SWARAJ ABHIYAN

Background

Western Orissa has been notorious for its poverty, famines and drought. Despite hundreds of crores of rupees and a profusion of government and non-governmental schemes, programmes and plans, the region's predominantly tribal rural communities remain poor and vulnerable to drought, and have failed to develop in either a sustainable or self-reliant manner. After reports of starvation deaths in the KBK region in August 2001, Sahabagi Vikas Abhiyan (SVA), Bhubaneswar approached PSI to replicate its work of SMA (drought-proofing) in western Orissa. After some preliminary study and information gathering, the picture that emerged was that there is low resource productivity, high rural indebtedness, and that development funds do not reach the intended beneficiaries. In February 2002, PSI and SVA initiated a programme 'Gram Swaraj Abhiyan', that aims to initiate a process of self-reliant development in villages in Nuapada, Kalahandi, Bargarh and Bolangir districts. The programme was funded by the employees of BPL Innovation Group, and supported by the Prime Minister's National Relief Fund.

The main guiding principle of the programme is to establish grass root democracy by involving the community in the process of collective identification and analysis of their own issues and enabling them to address those issues by utilising local resources and without or with very little external aid. The programme adopted an approach of evolving village-level comprehensive development

microplans, and then executing these plans to address fundamental challenges and establish a sustainable process for the communities' development.

Activities

The following tasks were accomplished in 2004-05:

- Micro plans of 118 villages prepared in addition to the 206 of previous year.
- Comprehensive panchayat plans developed for 12 panchayats.
- 127 Saving and Credit Groups formed and functioning
- Pisciculture started in 48 villages. Women SHGs have taken lease of village ponds after fighting against contractors.
- 39 women SHGs started time value addition of Mahua resulting in total procurement of about 400 quintals worth Rs 232400.
- Gram Sabha and Palli Sabha (village level organizations) strengthened in all villages of 12 panchayats through capacity building. Regular meetings and strong vocal participation of women in decision-making.
- Village level institutions (Education Committee, Health Committee, Justice Committee etc.,) formed, functional and active.
- Villages able to streamline schools and health services in their villages through community monitoring.
- 54 villages initiated their own physical works through shramdan.
- A team of more than 50 dedicated, capable Gram Swaraj Sahayaks created.
- 127 villages identified unity in the community as the most important issue in village development, and are taking initiatives to strengthen the community.
- People's Action begun in 64 villages, in terms of social action on (1) corruption & lack of transparency, (2) primary education, (3) health services and (4) forest protection



Funding

A balance of Rs. 3,27,645.79 was carried over from the previous year's funds and an additional amount of Rs.2,00,000 was provided by the PMO as PSI's share. The expenditure incurred during the year was Rs. 4,42,573.

Remarks

The programme had a spin off effect as the neighbouring villagers realized the need for developing a village plan. Association of two block panchayat sarpanches has requested for starting the process in all the pachayats of their blocks.

The biggest achievement of the GSA is the empowerment of the village communities who have now taken development of their village in their own hands. The programme has been able to establish

grass roots democracy, where village organizations like Gram Sabhas and Palli Sabhas have taken central role in development.

The programme is now being well appreciated in the State. Orissa Tribal Empowerment and Livelihood Programme (funded by DFID, IFAD & WHO) has also asked for PSI's help to initiate a similar approach in their programme.

II. VILLAGE INFORMATION SYSTEM

Background

During 2003-04 the Institute began to prepare a GIS-based Village Information System (VIS) for the state of Uttarakhand. The village boundaries of all the 16,000-odd villages and reserved forest areas in Uttarakhand were manually digitized. The state map was geo-referenced using a digitized map of India prepared by the Survey of India. Overlay maps of the major roads and the entire drainage system of Uttarakhand have also been digitized. All the parameters from the 1991 Census data for each village have been attached to the digital base village map. These data cover demographic, natural resources and infrastructure information.

Activities

PSI developed Village Information System (VIS), a revolutionary software application for knowledge-based decision-making. It provides detailed data on every Indian village, district and state. It is a user-friendly Geographical Information System (GIS)-based application that can display data from the 1991 and 2001 Census of India in the form of maps, tables and graphs to present information in a thematic manner. Other databases like the National Education Survey, National Health Survey, National Agriculture Survey, National Handloom Survey, among others, are also being linked to the system. A demonstration model has been developed for the state of Uttaranchal.

PSI's VIS can display geo-referenced maps of any political boundary from the state to the village level. Accurate Census data covering about 200 parameters related to social welfare (including demography), infrastructure and natural resources are attached for each unit. The system allows analysis of all these parameters and their trends at the village, district, state and national levels. It can prepare thematic maps in response to user's queries presented in normal language. This allows for a rapid and visual grasp of the implications in terms of spatial variations. Such thematic maps are effective tools for development programmes/projects planning. They help in making sound decisions that will have a lasting and positive impact on people's lives. The system helps decision-makers to study the current situation, to set precise goals for future action and monitor progress with respect to the desired goals.

Funding

Till now, the development of VIS has been at PSI's own initiative and through its own resources.

Remarks

The VIS is specifically useful for (1) Planners and Policy makers for informed policy decision-making, planning development programmes, planning health & education management systems, disaster response and impact assessment; (2) Administrators for planning and monitoring development programmes, status of health, education, drinking water and other infrastructure, immediate response to disasters and impact assessment; and (3) Researchers and Academicians for studying comparative changes and trends (1991 to 2001) and studying the impact of development programmes

In May 2004, a presentation on VIS was made at Prime Minister's Office, New Delhi. It was well appreciated and the PMO agreed to fund for development of VIS for the entire nation. Before the proposal could be finalized, the government at the center changed and the project was shelved. Efforts were also made to get funding for development of VIS for other states from different agencies like MacArthur Foundation.

A presentation of the VIS was also made to Mr. Kapil Sibal, Minister for Science and Technology, GOI, who appreciated the utility of VIS and requested to make a presentation in a workshop organized by Department of Science and Technology (DST). A presentation was made in the workshop organized by DST after which DST requested PSI to file a proposal for development of VIS for the entire nation. A proposal was filed to DST in February 2005.

END NOTES

Special Projects

As mentioned in the last Annual Report (2003-04), PSI is the coordinating agency in Uttarakhand for the Rejuvenate India Movement (RIM). In this programme, community-based youngsters are selected and trained as Samaj Shilpis. Thereafter, they work in a specific village or a town to mobilize and organize the local community for self-reliant development. Based on the performance of the Samaj Shilpis, PSI gave a modest Fellowship of Rs 1600 per month to Km. Vimla in 2004-05, for motivating and organising Mahila Mandal Dal of village Painj to undertake village development activities. In 2004-05, the programme received a grant of Rs. 97,020 from the India Friends Association (California).

PSI launched a Jal Sanskriti Fellowship Programme in October 2004. It is jointly funded by India Friends Association, USA and PSI. Its objectives are to popularize the concepts of Jal Sanskriti in Uttarakhand and to mobilize communities for protection, restoration and conservation of traditional water harvesting structures on the basis of the region's Jal Sanskriti. Five persons were selected as Jal Sanskriti Fellows for the year 2004-05. They were inducted into the programme at an orientation meeting held on October 9, 2004 in Ufrenkhal, Pauri Garhwal district. The Fellows later attended a 2 days workshop in January on "Community-led Restoration of traditional water harvesting structures in Uttarakhand". The Fellowship awards each person Rs.60,000 per annum, of which Rs.36,000 is an honorarium for personal expenses and Rs.24,000 for work related activities. The Fellows are to popularise the basic concepts of Jal Sanskriti and mobilise at least five communities each, who will renovate and restore their traditional water harvesting structures along with their catchments. The communities will be encouraged to mobilise their internal financial resources to do the work. The fellows have submitted their action plans for a year which would be executed during 2005-06.

During 2004-05, the Institute did not undertake any activities under Himalaya Fund programme, which is supported by Indians for Collective Action (California).

Finances

The total income of the Institute in 2004-05 was Rs. 1,05,12,000 (against Rs. 1,21,12,000 in the previous year). The main source of income was grants amounting to Rs. 94,03,000 (Rs. 1,10,98,000). Of these, Indian grants at Rs. 66,75,000 accounted for 71% of the total; the rest, Rs. 27,28,000, being foreign grants. The investment income decreased marginally from Rs. 4,15,000 in the previous year

to Rs. 3,71,000. Income from the sale of publications, calendars, kits and services amounted to Rs. 5,26,124 showing a gain of 10 % over the past year. Expenses for the year totaled Rs. 1,25,84,000.

The Institute closed five projects, i.e., Hamirpur Watershed Development Programme (HWDP), Decentralized Wastewater Treatment Systems (DEWATS), Uttarakhand Rural Development (URD), Ford Laboratory Fund (FLF) and the Jal Sanskriti (JS) in 2004-05. Three projects will be wound up in 2004-05. These are, the Environment Education Programme (EEP), Tie Off Grant (TOG) for the EQM Group and Tsunami Response (TSU) for the DMR Group.

The Institute needs to urgently begin significant efforts to raise a substantial endowment fund and money for building its campus. It seeks the active involvement of its Board members, General Body members and other well-wishers in these endeavours.

Details of PSI Staff (April 2004 - March 2005)

S.No.	Name	Designation	Date of Joining/Leaving in 2003-04
1	Anita Akoijam	Research Scientist	Joined on 1-9-2004
2	Rakesh Aggrawal	Research & Documentation Officer	Joined on 1-12-2003
3	Basil Anthony	Admin Assistant	
4	Deepak Bawari	Research Assistant	Joined on 2-8-2004
5	Ravi Kumar Bhupati	Research Assistant	Joined on 25-2-2004
6	Ayan Biswas	Research Assistant	Joined on 1-9-2003
7	Krishna C. Bhugani	Program Assistant	Joined on 3-6-2004
8	S.P.Chaturvedi	Research Scientist	Joined on 5-1-2005
9	Prithvi Raj Chauhan	Driver	
10	Ravi Chopra	Director	
11	Salil Das	Program Manager	
12	D.N.Dwivedi	Program Assistant	
13	Shipra Garg	Research Assistant	
14	Anil Kumar Gautam	Research Scientist	
15	Rajesh Gupta	Program Associate	
16	Narendra Jamwal	Program Associate	
17	Pushpa Juyal	Admin Assistant	
18	Rajesh Kumar	Program Manager	
19	Anil Kumar	Office Assistant	
20	Ashish Kothari	Accountant	Left on 21-10-2004
21	Lali	Research Assistant	
22	Heera Lal	Project Assistant	
23	R.K.Mishra	Program Associate	Joined on 16-1-2004
24	Jharna Mukerjee	Program Associate	
25	Basudev Munda	Project Coordinator	

26	Ajay Nautiyal	Research Assistant	
27	Deepak Negi	Librarian	Joined on 4-4-2003
28	Manas Rangan Panda	Program Associate	
29	Rahul Pandit	Program Associate	Joined on 1-2-2004
30	Pushpa Pant	Project Assistant	
31	Surya Prakash	Research Scientist	Joined on 1-7-2004
32	Ram Sevak Prasad	Technical Assistant	
33	Ramesh Rawat	Gardner	Joined on 1-10-2004
34	Sandeep Rawat	Accountant	Joined on 1-11-2004
35	Subash Rawat	Office Assistant	
36	Debashish Sen	Director, CPWD	
37	Rijit Sengupta	Research Assistant	Left on 31-5 -2004
38	Amita Sharma	Project Assistant	
39	Dinesh Sharma	Graphic Artist	
40	Rajesh Sharma	Project Assistant	
41	Rajendra Singh	Research Scientist	Left on 19-10-2004
42	Vikram Singh	Office Assistant	
43	Madan Lal Tiwari	Programme Assistant	
44	Chakardhar Tripathi	Office Assistant	
45	Ramesh Tripathi	Research Scientist	Joined on 3-11-2004
46	Anil Tyagi	Accounts Officer	

PEOPLE'S SCIENCE INSTITUTE
CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD ENDED 31ST MARCH 2005

PARTICULARS	TOTAL AMOUNT	FC AMOUNT	LG AMOUNT	REVENUE AMOUNT	TOTAL AMOUNT
	AS AT 31-3-2005	AS AT 31-3-2005	AS AT 31-3-2005	AS AT 31-3-2005	AS AT 31-3-2004
INCOME					
Bank Interest	44,054.00	11,764.00	29,457.00	2,833.00	27,684.00
Consultancy	-	-	-	-	45,405.00
Donations Received	117,595.00	9,213.00	108,382.00	-	17,000.00
Grants received	9,403,851.54	2,728,242.54	6,675,609.00	-	11,097,850.00
Return on Investments	381,100.14	371,481.70	9,618.44	-	414,938.62
Miscellaneous Receipts	5,148.00	-	415.00	4,733.00	29,067.50
Reimbursement Account	34,171.00	-	34,171.00	-	-
Calendars Receipts	420,890.00	-	-	420,890.00	21,485.00
Posters Receipts	-	-	-	-	17,996.00
Publications Receipts	20,405.00	-	-	20,405.00	251,900.50
Water Testing Kits Receipts	78,379.00	-	-	78,379.00	122,244.00
Water Sampling Charges	6,450.00	-	-	6,450.00	66,539.00
TOTAL (A)	10,512,043.68	3,120,701.24	6,857,652.44	533,690.00	12,112,109.62
EXPENDITURE					
Advertisement Expenses	25,135.00	21,135.00	4,000.00	-	43,100.00
Audit fees	44,080.00	16,530.00	16,530.00	11,020.00	44,080.00
Bank Charges	12,775.33	4,676.33	6,981.00	1,118.00	21,588.50
Boarding & Lodging	250,245.00	13,090.00	237,155.00	-	156,620.00
Books & Periodicals	60,652.00	12,932.00	37,919.00	9,801.00	70,396.40
Community Mobilisation	-	-	-	-	33,034.00
Computer Consumables	46,631.00	13,622.00	26,279.00	6,730.00	47,690.00
Computer Up gradation & Repairs	14,044.00	3,490.00	7,802.00	2,752.00	9,900.00
Publications Expenses	633,941.00	366,400.00	62,750.00	204,791.00	734,253.00
Depreciation	467,773.00	259,536.00	203,254.00	4,983.00	552,494.00
Electricity & Water charges	81,933.00	45,944.00	29,666.00	6,323.00	61,903.00
Entry Point Activities	-	-	-	-	14,100.00
EPF Administration Charges	32,908.00	10,260.00	22,491.00	157.00	30,923.00
EPF Contribution	245,289.00	76,466.00	167,658.00	1,165.00	211,504.00
Exhibitions/Meetings/Workshops	171,475.00	-	140,591.00	30,884.00	95,376.00
Fellowships	787,200.00	150,000.00	637,200.00	-	514,500.00
General Expenses	2,476.00	-	2,476.00	-	3,134.00
Grant to Other Organisations	631,253.00	631,253.00	-	-	265,000.00
Guest House Expenses	9,352.00	-	9,352.00	-	36,827.00
Honoraria/Consultancy	714,214.00	210,300.00	422,580.00	81,334.00	575,762.00
Hospitality Expenses	14,529.00	-	12,144.00	2,385.00	16,382.00
Insurance Charges	15,879.00	2,457.00	13,422.00	-	10,066.00
Laboratory Expenses	151,877.00	132,303.00	19,574.00	-	138,232.38
Water Kits Production Expenses	11,682.00	-	-	11,682.00	-
Local Conveyance	27,026.00	4,832.00	20,714.00	1,480.00	5,422.00
Meeting/ conference/ Workshop	105,171.00	105,171.00	-	-	212,516.00

Nursery & Plantation	-	-	-	-	100,520.00
Office Maintenance	61,915.00	19,203.00	41,876.00	836.00	91,564.00
Photography & Slides	49,559.00	25,514.00	4,313.00	19,732.00	23,531.00
Postage & Courier	67,435.00	15,603.00	14,640.00	37,192.00	101,177.00
Printing & Stationery	138,459.00	51,180.00	77,558.00	9,721.00	97,706.00
Professional Charges	38,551.00	13,000.00	25,551.00	-	21,996.00
Relief Works Expenses	-	-	-	-	312,544.95
Rent	433,900.00	88,800.00	338,100.00	7,000.00	411,050.00
Repair & Maintenance (E)	30,138.00	342.00	29,796.00	-	26,259.00
Repair & Maintenance (G)	15,632.00	5,819.00	9,813.00	-	8,135.00
Research & Documentation	204,766.00	2,617.00	202,149.00	-	26,530.00
Salaries	3,771,360.00	1,167,850.00	2,587,680.00	15,830.00	3,196,710.00
Staff Welfare	32,455.00	14,534.00	17,879.00	42.00	26,361.00
Tax & Legal Fees Expenses	857.00	150.00	607.00	100.00	961.00
TDS Recoverable Written Off	-	-	-	-	-
Telephone & Fax	136,832.50	43,707.00	85,885.00	7,240.50	122,748.20
Training Bridge Finance Written Off	-	-	-	-	14,820.00
Training Material / Expenses	490,408.00	41,520.00	448,888.00	-	260,083.50
Traveling	1,958,291.00	592,148.00	1,305,261.00	60,882.00	1,458,193.00
Vehicle Maintenance	101,416.00	14,129.00	82,399.00	4,888.00	76,896.00
Web Site Expenses	10,200.00	10,200.00	-	-	2,800.00
Grant Refunded	484,894.57	467,317.57	17,577.00	-	-
TOTAL (B)	12,584,609.40	4,654,030.90	7,390,510.00	540,068.50	10,285,388.93
Net Surplus (A-B)	(2,072,565.72)	(1,533,329.66)	(532,857.56)	(6,378.50)	1,826,720.69

For PEOPLE'S SCIENCE INSTITUTE

Date:

Place: New Delhi

RAVI CHOPRA

Director

KANWARJIT S.CHAWLA

Board Member

PSI BOARD MEMBERS 2004-05			
S.No.	Name	Address	
1.	Dr G. D. Agrawal	D-19, Vridha Sewa Sadan Promod Van, Chitrakoot Distt: Satna – 485331 (M.P.)	President
2.	Shri Abhay Bhushan	3838 Mumford P1 Palo Alto, CA94306 USA	Member
3.	Dr B.K. Joshi	217, Indira Nagar – I Dehra Doon – 248006	Dean of Research
4.	Dr Leela Visaria	C/o GIDR Near Gota Char Rasta Gota, Ahmedabad – 380060	Member
5.	Dr K. S. Chawla	Managing Director Chawla Techno Construction Ltd. Punjabi Bhawan 10, Vishnu Digamber Marg New Delhi – 110002	Treasurer
6.	Madhu Sarin	SAHAJ 48 Sector – 4 Chandigarh –160001	Member
7.	Dr Ravi Chopra	Director People's Science Institute 252 Vasant Vihar –I Dehra Doon – 248006	Director, PSI