



# Annual Report

**(2024- 2025)**

**People's Science Institute**  
Dehradun





**People's Science Institute**

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Uttarakhand

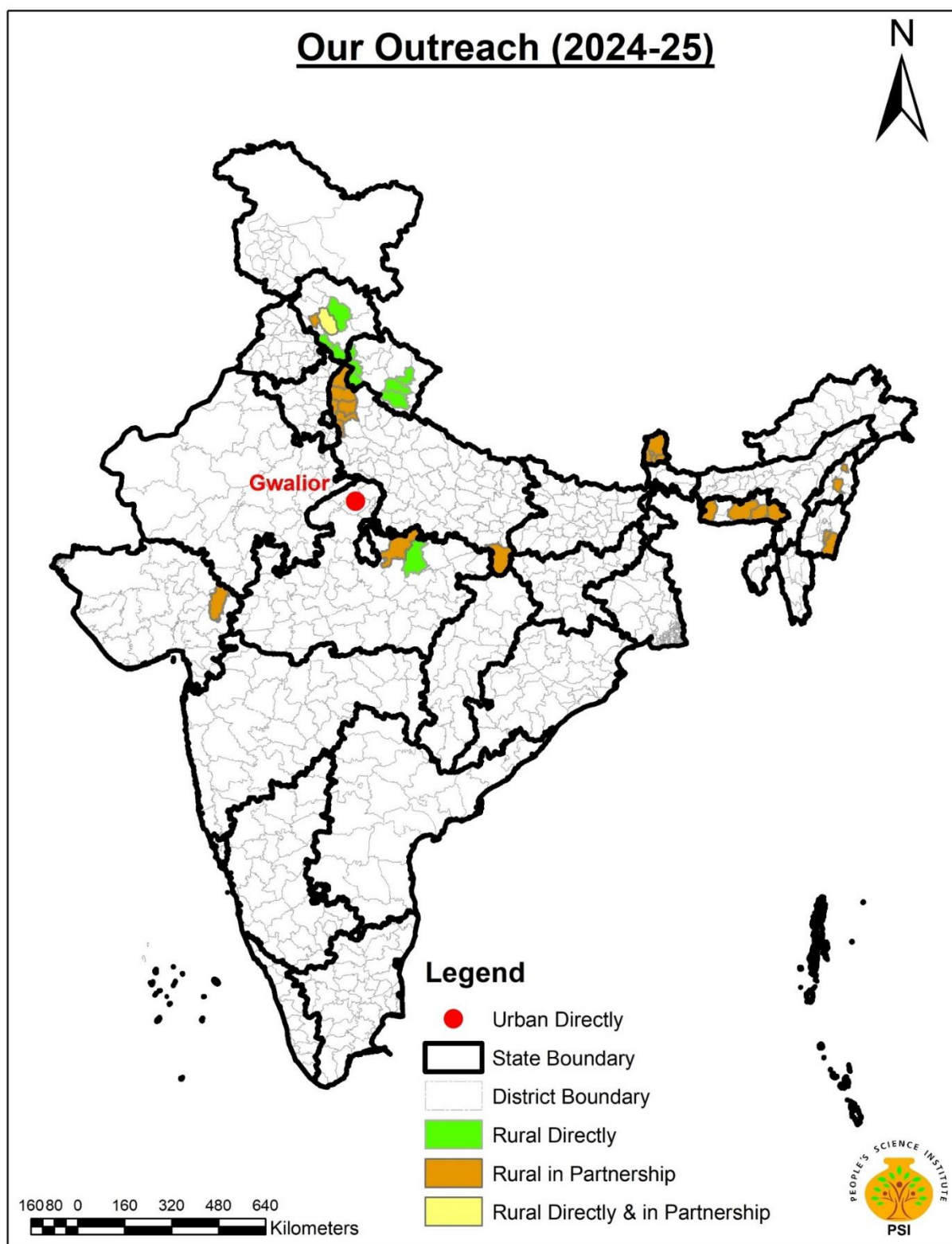
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States – 9

Districts – 35

Villages – 337

Cities/Towns - 1

Rural Households – 16,798

Urban Household - 1200

## I. ABOUT PEOPLE'S SCIENCE INSTITUTE

People's Science Institute (PSI) is registered as a society under the Societies Act (1860) in New Delhi. **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."** At PSI, poverty is understood in terms of shortages of human, social, natural, physical, and financial capitals in communities.

Operationally PSI provides technical and managerial support to communities and organizations that work with them, implements development programs, and undertakes public interest research. The Institute's approach to implementing development projects is a participatory one with empowerment of the underprivileged and self-reliance as key objectives. Its activities are spread all over India. Its current geographical focus is on the Himalayan states and the poverty-ridden Bundelkhand region.

PSI's activities are grouped under four disciplines: (i) Natural Resources Management (NRM), (ii) Disaster Response and Mitigation (DRM), (iii) Environmental Quality Monitoring (EQM), and (iv) Innovative Projects.

In the last 37 years the Institute has become well-known in the voluntary sector for its pioneering work in the fields of community-based natural resources and watershed management for improved livelihoods, promotion of agro ecological practices, geo-hydrology based springshed development, environmental quality monitoring, disaster-safe housing, river conservation and dissemination of appropriate technologies.

PSI has established a special niche for itself by undertaking projects on a large scale by using a systems approach to scale-up community-centered projects from a village to a district level, innovating social processes, administrative procedures, and technologies. It is also recognized for its professional, research-based approach to problem-solving and formulation of policy guidelines. Besides communities and their partner voluntary organizations (VOs), PSI works with research institutions, government agencies, and occasionally donor organizations.

The Institute has a competent staff of socially conscious engineers, scientists, and social workers. It has an eco-friendly campus in Dehradun. It operates two state-of-the-art laboratories: (i) Geographical Information Systems and (ii) Environmental Quality Monitoring. PSI also has a small library with a few thousand books and periodicals.

This annual report (AR) outlines the major activities of 2024-25.

## II. YEAR 2024-25: AN OVERVIEW

In 2024-25, PSI largely worked in four thematic areas i.e. (i) water, food and livelihoods security; (ii) air, soil, and water quality studies, (iii) post disaster response; and (iv) sustainable and inclusive urbanization. In addition, it extended training and field support to different government, non-government and academic institutions mainly on springshed management.

### **Natural Resource Management (NRM):**

PSI executed water, food and livelihoods security projects to benefit 10,219 families in 160 villages of 7 districts of Himachal Pradesh, Madhya Pradesh and Uttarakhand. These projects were supported by LIC-HFL - CSR, NABARD Uttarakhand, Vana Enterprises Ltd., Wipro Cares, Department of Science & Technology (GoI), Medius Earth, Indian Council for Social Sciences Research through IIT-Roorkee, and GiZ.

In the mountain districts of Himachal Pradesh and Uttarakhand, the focus was on NRM for sustainable livelihoods. The activities included treatment of drying springs, increasing access to irrigation facilities, and enhancing crop productivity through agro-ecological practices. Farm- based livelihood activities mainly included crop diversification, vegetables and spices cultivation, fruit and fodder plantations, mushroom cultivation, bee keeping, and poultry. Off -farm livelihood activities included community-based tourism, and women-led micro-



**Water, Food & Livelihoods Security**

enterprises. The project developed infrastructure for collection, processing and marketing in three clusters covering 30 mountain villages. Community-based institutions like SHGs, watershed committees and farmers' cooperatives were formed and/or strengthened. About 1500 benefitting households earned an additional average annual income of Rs. 15,000 – Rs. 30,000 during the year under review (2024-25).

In Bundelkhand, the focus was on further strengthening of institutional processes around market development of naturally produce crops for improving food, nutrition and livelihood security in a socially-just manner. The activities included promoting agronomic practices like SCI, natural farming, establishment of Bio-input Resource Centres and Technology Resource Centres, Seed Bankas, strengthening of village institutions and market linkages to sustain these efforts. The program benefitted 1192 households in 40 villages of Panna district (Madhya Pradesh). The reported increase in annual household income was Rs. 7,000 in 2024-25.

During the year PSI initiated three new multi-year programs in the Himalayan and Bundelkhand regions. They were: (i) Building Community Resilience in 3 villages of Purkul Watershed of Dehradun District; (ii) Enhancing Community Resilience of Small holders through Socio-Technical Adaptations in System of Crop Intensification (SCI) covering 40 villages of Bageshwar district (Uttarakhand) and Panna district (Madhya Pradesh), and (iii) Building climate Resilience in 20 water stressed villages of Panna district. In the long run these initiatives are expected to benefit 1714 families in the selected villages.

PSI, also did scoping studies for Hero MotoCorp Limited to enhance annual ground water recharge to the tune of 22 Lakh Cubic Metres in an area of 200 sq. km. each around the Haridwar and Hallol-Kalol plants in Uttarakhand and Gujarat respectively.

### **Environmental Quality Monitoring (EQM)**

Air, soil and water quality research studies focussed on ecological and health-related projects. They included (i) monitoring surface and ground water quality in the Hindon sub-basin and implementing sustainable agricultural practices; (ii) fluorosis mitigation in Sonbhadra district (Uttar Pradesh); (iii) soil health studies in Chattarpur district (Madhya Praesh) to explore impact of natural farming. The Hindon river studies revealed significant pollution and highlighted the need for community involvement for sustainable agriculture, pollution control, and research to preserve river ecosystems.



**Air, Soil & Water Quality Studies**

### **Disaster Response and Mitigation (DRM)**

The DRM group at PSI with the support of Sir Dorabji Tata Trusts (SDTT), completed the construction of reusable insulated temporary shelters for 60 families in Kullu & Mandi districts of Himachal Pradesh who had been rendered homeless by the 2023 floods. It further initiated livelihoods restoration work benefiting 240 households of two flood affected villages of Kullu district.



**Post-Disaster Response**

### **Innovative Projects**

#### **Inclusive and Sustainable Urbanization:**

PSI supported the Gwalior Municipal Corporation to manage shallow aquifers in the city benefiting 1200 households, under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT 2.0) program of the Union Ministry of Housing and Urban Affairs, through implementation of shallow aquifer recharge measures in three sites including desilting and dewatering of wells, trenches, gabion check dams, circular khal, pond, water collection chamber, filtration chamber, and injection wells.



**Groundwater Recharge in Gwalior**

## Miscellaneous

Apart from the above, PSI extended training and field support to various government, non-government and academic institutions program in the areas of springshed management, fluorosis mitigation, and preparation of Gram Panchayat Development Plans.

The year thus saw PSI contributing to various Sustainable Development Goals (SDGs). They included SDG 1 -- Ending Poverty, SDG 2 -- Ending Hunger, SDG 3 -- Good Health and Well-being, SDG 5 -- Gender Equality, SDG 6 -- Water and Sanitation, SDG 11 -- Sustainable Cities and Communities, SDG 12 -- Responsible Consumption and Production, SDG 13 -- Combat Climate Change and its Impacts, SDG 14 -- Conserve and Sustainably Use Aquatic Resources for Sustainable Development, and SDG 17 -- Partnerships for the Goals. In FY 2026, PSI plans to expand its activities to include climate change, livelihood security and sustainable urbanization.

We extend our gratitude to our well-wishers, knowledge and technical partners, grassroots level organizations, and communities who have been with us during this challenging but exciting journey. Your support and trust in us have stimulated our mission to work towards nation-building based on enhancing productivity, sustainability, equity, self-reliance and inclusivity while promoting people's science in all that we do.



**Training & Field Support**

### **III. PROGRAMME BRIEFS**

**III a Natural Resource Management for Livelihoods Security**

**III b Environmental Quality Monitoring**

**III c Disaster Response**

**III d Sustainable and Inclusive Urbanization**

**III e Training and Field Support**

### III a Natural Resource Management for Livelihoods Security

| S. No. | Project Title                                                                                                                                                                                   | Total Project Period           | Total Budget Amount (Rs.) | Funding Agency                               | Project Partners | Geographical Coverage                                                                                                           |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------|----------------------------------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1      | Promoting Farm and off Farm based Micro-enterprise Development for Livelihoods Security in Western Himalayan Landscape under LIC LIFE Program (Livelihood Initiative for Financial Empowerment) | August 2024 to September 2025  | 30,30,200                 | LIC - HFL -CSR                               | None             | States: Uttarakhand & Himachal Pradesh<br>Districts: Nainital & Solan<br>No. of Villages: 30<br>Beneficiaries: 3,667 households |
| 2      | Watershed Based Springshed Development in Almora district                                                                                                                                       | September, 2022 to Sept, 2025  | 57,43,619                 | NABARD - RO Dehradun                         | None             | State: Uttarakhand<br>District: Almora<br>No. of villages: 2<br>Beneficiaries: 102 households                                   |
| 3      | Watershed Based Springshed Development in Bageshwar district                                                                                                                                    | July 2022 to 15 October 2025   | 57,69,622                 | NABARD - RO Dehradun                         | None             | State: Uttarakhand<br>District: Bageshwar<br>No. of villages: 4<br>Beneficiaries: 560 households                                |
| 4      | Ground Water Recharge in Haljora Watershed through Common Property Resources Management in Haridwar district of Uttarakhand.                                                                    | January 2024 to Mar 2025       | 57,64,066                 | WIPRO Cares                                  | None             | State: Uttarakhand<br>District: Haridwar<br>No. of villages: 5<br>Beneficiaries: 3,034 Households                               |
| 5      | Strengthening the local innovation systems through S&T interventions for enhancing livelihood system efficiency of EWS in villages of Haridwar district, Uttarakhand                            | December 2023 to December 2026 | 2,53,49,500               | Department of Science & Technology           | KVK              | State: Uttarakhand<br>District: Haridwar<br>No. of villages: 15<br>Beneficiaries: 506 Households                                |
| 6      | Building Community Resilience in Purkul Watershed of Dehradun District                                                                                                                          | June 2024 to May 2029          | 1,00,00,000               | VANA Enterprises Ltd.                        | None             | State: Uttarakhand<br>District:- Dehradun;<br>No. of Villages: 3<br>Beneficiaries:- 118 Households                              |
| 7      | A project to plant and maintain 1,000 native tree saplings in Uttarakhand, India                                                                                                                | June 2024 to May 2026          | 1,40,000                  | Hasten Forestry India Pvt Ltd (Medius Earth) | None             | State: Uttarakhand<br>District:- Dehradun;<br>No. of Villages: 1<br>Beneficiaries:- 40 Households                               |

| S. No. | Project Title                                                                                                                                                                                                                                                                                                                            | Total Project Period           | Total Budget Amount (Rs.) | Funding Agency     | Project Partners | Geographical Coverage                                                                                                            |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------|--------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 8      | Enhancing Community Resilience of Small holders through Socio-Technical Adaptations in System of Crop Intensification (SCI): A Systematic Insight from the Rainfed Farms of Bundelkhand and Himalayan Regions of India” under the special Call for Collaborative Research Proposals on Longitudinal Studies in Social and Human Sciences | September, 2024 to Sept, 2029  | 49,52,180                 | IIT Roorkee        | None             | State: Madhya Pradesh & Uttarakhand<br>District:- Panna & Bageshwar;<br>No. of Villages: 40,<br>Beneficiaries:- 1,000 Households |
| 9      | Strengthening of institutional processes around market development of naturally produce crops                                                                                                                                                                                                                                            | September, 2024 to August 2025 | 18,30,416                 | GIZ BKD            | None             | State: Madhya Pradesh<br>District: Panna;<br>No. of villages: 40<br>Beneficiaries: 1,192 households                              |
| 10     | Building climate Resilience in water stressed Panna district of the Bundelkhand Region                                                                                                                                                                                                                                                   | Mar 2025 to Feb 2028           | 3,27,97,535               | R.D.Tata Trust     | None             | State: Madhya Pradesh<br>District: Panna;<br>No. of villages: 20                                                                 |
| 11     | Watershed study at Haridwar for the water conservation project.                                                                                                                                                                                                                                                                          | April 2024 to August 2024      | 7,00,084                  | Hero MotoCorp Ltd. | None             | State: Uttarakhand<br>District: Haridwar;<br>No. of villages: 30<br>Beneficiaries: 580 households                                |
| 12     | Watershed study at Halol                                                                                                                                                                                                                                                                                                                 | January 2025 to Mar 2025       | 700920                    | Hero MotoCorp Ltd. | None             | State: Uttarakhand<br>District: Panchmahal; No. of villages: 33<br>Beneficiaries: 660 households                                 |

## **Livelihood Initiatives for Financial Empowerment (LIFE)**

**LIC Housing Finance Ltd.** supported a project Livelihood Initiatives for Financial Empowerment (LIFE) to promote farm and off-farm microenterprises for livelihood security in the Western Himalaya region. PSI implemented the project in 30 villages and 20 villages of Dhari and Kotabagh blocks of Nainital district (Uttarakhand) and 10 villages of Kandaghat and Solan blocks in Solan district (Himachal Pradesh).

Initially during first two years productivity of the livelihood assets (farm based as well as off-farm) was improved and basic infrastructure like collection centers, processing units and market outlets were developed. Community based supply chain and marketing strategies were developed to collectivize the selling. This resulted in opening of economic benefits to the concerned families through increased production and marketing of vegetable, spices and pulses. Income also started from farm based enterprises like bee keeping, poultry, goatry, mushroom cultivation and off farm enterprises like sewing, knitting, aipan art and homestays. Third year was focused on development of value chain of farm based processed products, Capacity building of FPOs and cluster level institutions so that they can sustain the livelihood activities started and developed under the project.

### **Objectives**

- Strengthening of value chains on agro-processing (fruits, vegetables, spices and pulses).
- Improve the food, nutrition and income security through scaling up of agro-ecological practices in cultivation of vegetable, spices and pulses.
- Improve the income and livelihood of land less and most vulnerable groups through promotion of farm based enterprises like goatry, poultry, honey, dairy and mushroom.
- Formation and capacity building of cluster level institutions (FPOs) like farmers cooperative and women federation.
- Reduce gender-biases in livelihood by building capacity of women groups and establishing micro enterprises for women.
- Enhancing the access to govt. schemes through liaisoning and cluster level workshops

### **Activities**

To achieve the above objectives, in FY 2024-25 PSI's NRM team enabled the implementation of farm-based and off-farm activities in all the 30 selected villages. Institution building and marketing experts and field teams undertook the following activities:

1. Development of business plans for strengthening of the value chains.
2. Capacity building of cluster level institutions like FPOs, Paryatan samiti to ensure sustenance of collective activities in the long run.
3. Organized trainings on product development, quality control, packaging

4. Development of storage and warehouse facilities for the products including Squashes/Pickles/Jam/Chutney/ Pulses/Grains/spices/handicraft developed by FPOs developed under the project and also from other cooperatives.
5. Brand registration and marketing promotion in the fairs under district, state and beyond state.
6. Establishment of marketing outlets at cluster and state level.
7. Sustaining the farm-based (bee-keeping, mushroom cultivation, poultry and goater) and off-farm (sewing, knitting, handicrafts, jute bag making and Aipan art) micro-enterprises established in first and second year.



**Training on product development in Dhari cluster, Nainital district, Uttarakhand**

### Outputs

| S. No. | Activity                                                     | Outputs                                                                                                                                                                                                                                                                                                                                              |
|--------|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.     | Preparation of Business plans                                | After consultation with the producer farmers and institutions an experienced resource person prepared business plans for processed and fresh products for two clusters, Dhari district Nainital and Kandaghat district, Solan.                                                                                                                       |
| 2.     | Cluster and village level Institutions                       | Two FPOs one Paryatan samiti and 82 VLIs (SHGs and FIGs) were active till March 2025. Total members were about 1,200.                                                                                                                                                                                                                                |
| 3.     | Trainings on product development, quality control, packaging | <ul style="list-style-type: none"> <li>• Trained about 61 farmers in on product development, quality control.</li> <li>• Trained about 63 farmers in packaging.</li> <li>• 29 beneficiaries trained in mushroom cultivation and as trainers to extend this activity.</li> <li>• 42 families were instructed in goat rearing</li> </ul>               |
| 4.     | Storage warehouse                                            | <ul style="list-style-type: none"> <li>• 25 products including Squashes/Pickles/ Jam/ Chutney/Pulses/ Grains/ spices /handicraft developed by FPOs from Dhari and Kandghat</li> <li>• 10 products like Tulsi Tea, Herbal tea, grains and pulses were collected from Alaknanda women cooperative Chamoli and Rudra cooperative Uttarkashi.</li> </ul> |
| 5      | Brand registration and marketing promotion.                  | <ul style="list-style-type: none"> <li>• HIM AMRIT Brand was registered.</li> <li>• Agar Swayatt Sahkarita participated in Gramin Bharat Mahotsav Kathgodam.</li> <li>• Madak Ghati Producer Organisation participated in Mother Dairy's SAFAL market in Delhi.</li> </ul>                                                                           |

|    |                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                    | <ul style="list-style-type: none"> <li>• AKSS and Madak Ghati Producer Organisation participated in inauguration of state level market outlet at Dehradun.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 5. | Establishment of Marketing Outlets | <p>Marketing outlets were established in X villages/locations and the total value of sales amounted to over Rs. 39.93 lakhs</p> <ul style="list-style-type: none"> <li>• The vegetables and fruits PUs sold output worth Rs. 3.57 lakhs</li> <li>• 50 largely landless families earned Rs. 1.5 lakhs from sale of chicks, eggs and goats</li> <li>• 29 families sold 300 kg of mushrooms for Rs. 60,000</li> <li>• Women SHGs engaged in off-farm micro-enterprises had sales of Rs. 7.6 lakhs during FY 2024</li> <li>• 1000 farmers reported sales of vegetables, spices and pulses worth over Rs. 12 lakhs</li> <li>• Home stay owners had a gross revenue of Rs. 2.25 lakhs</li> </ul> |

## Outcomes

- Two business plans based on participatory exercises and inputs from members of farmers producer groups and cluster level FPOs from Dhari (Nainital, Uttarakhand and Kandghat (Solan) Himachal Pradesh. Value chains on processing and fresh products were covered under the business plans.
- Two Cluster level Farmers Producer Organisations (FPOs) established with business linkages. Business activities like production and marketing of processed and fresh products started.
- “HIM AMRIT” Brand registered and started business activities.
- The vegetables and fruits production units sold products worth Rs. 3.57 lakhs
- 50 largely landless families earned Rs. 1.5 lakhs from sale of chicks, eggs and goats.



**Distribution of bio inputs to member farmers from Bio Input Resource Center (BRC) Dhari cluster**

- 29 families sold 300 kg of mushrooms for Rs. 60,000.
- Women SHGs engaged in off-farm micro-enterprises had sales of Rs. 7.6 lakhs.
- 1000 farmers reported sales of vegetables, spices and pulses worth over Rs. 12 lakhs
- Home stay owners had a gross revenue of Rs. 2.25 lakhs.
- Overall business of Rs. 2 crore was reported from the project area.



**Processed products in market outlet Dhari cluster,  
Nainital**

## **Watershed Based Springshed Development In Kamyaraula watershed, Almora**

The project “to promote natural resource management activities in Kamyaraula watershed of Almora district of Uttarakhand”, was started in September 2022. The project is supported by NABARD, Regional Office, Dehradun. It is benefiting 103 families in two villages under the watershed.

### **Objectives**

- Revival of drying springs to meet drinking water and minor irrigation needs.
- Undertake soil and water conservation measures.
- Create additional livelihood opportunities for women and vulnerable communities.
- Strengthening of the village-level institutions (VDC and SHG) and watershed committee.

### **Treatment Activities**

- For the conservation of soil and water digging of 425 cu.m. contour and toe trenches was done in the recharge zones of the springs.
- For increasing biomass production in the catchment area 10,000 roots of fodder grasses and fodder trees were planted under vegetative treatment measures.
- For increasing fruit production and farmers income 940 fruit plants like Citrus were planted. 15 mini orchards ( more than 10 plants in a plot) were developed.
- For increasing the irrigated area villagers were guided to construct/repair 835 m. irrigation guhls/canals for improvement of crop productivity in about 6 hectare land.
- Soil erosion was checked and houses, cattle sheds and agriculture land was through construction of retaining walls.
- For checking soil and water erosion and checking of stream area from landslips gabions structures and gabion check dams were constructed.



**Revival of Spring (Naula ) village Kelani**

### **Livelihood Activities for vulnerable groups**

- Seeds of vegetables were distributed to 70 farmers which were grown in 2 hectare land.
- Bio input prepared by selected progressive farmers was supplied to other farmers.
- Spice processing units were established by women group village Kelani.

- Landless, most vulnerable and ultra poor families were supported for poultry and goatry farming.
- Members of women SHGs were given training on sewing.

### **Capacity building of institutions for sustainability**

- Organized meetings, trainings on fruit processing, sewing, knitting, for the village watershed committee, Mahila Mangal Dals, and SHGs.
- Exposure visits were organised in Khirganga watershed project, KVK Kafaligair and Alaknanda Women Cooperative karanparayag Chamoli.

| S. No.   | Activities                                                     | Outputs                                                                                                                                                                                                                                                                                                                                                                              |
|----------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | <b>Treatment Activities</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                      |
| A.1      | Staggered Contour and toe trenches                             | 425 cu.m. staggered contour and toe trenches prepared for soil, water and moisture conservation. This will recharged 4 springs in village Kelani and Kafatzna and Increased spring discharge.                                                                                                                                                                                        |
| A.2      | Grass and fodder Plantation                                    | 10,000 Napier roots and fodder trees were planted for reduced soil erosion, improved water conservation and increased biomass productivity in village Kelani and Kafatzna.                                                                                                                                                                                                           |
| A.3      | Horticultural Plantation                                       | 940 fruit plants were planted for Improving fruit production. After three years fruits will improved nutrition and income security.                                                                                                                                                                                                                                                  |
| A.4      | Irrigation Guhl                                                | 835 m. irrigation guhl constructed /repaired for increasing irrigated area 6 hectare. Which will benefit food and nutritional security of farmers by increasing annual foodgrain production.                                                                                                                                                                                         |
| A.5      | Retaining wall (dry), gabion structures and gabion check dams. | 70m. dry retaining wall and gabion structures constructed to check soil erosion in about 8 hectare land. It will protect houses, agriculture land from land subsidence and landslides.                                                                                                                                                                                               |
| <b>B</b> | <b>Gender and Livelihood development Activities</b>            |                                                                                                                                                                                                                                                                                                                                                                                      |
| B.1      |                                                                | Seeds of vegetable were distributed to 70 farmers for food, nutrition and income security. Bio pinputs supplied through BRC prepared by one group.                                                                                                                                                                                                                                   |
| <b>C</b> | <b>Sustainable develop. Interventions</b>                      |                                                                                                                                                                                                                                                                                                                                                                                      |
| C.1      |                                                                | Training were organised on sewing, fruit processing and pickle making for the capacity building of about 18 members of women SHGs.<br>Exposure visits were organised for about 20 members of VWC, SHGs and FPGs to KVK Kafaligair, Khirganga watershed area and Alaknanda women cooperative Karanparayag, Chamoli on organic farming and SCI, plant protection and fruit processing. |

### **Outcome:**

**Springs Regeneration:** Recharged four springs by digging 425 cu.m. staggered contour and toe trenches increasing the water discharge from 20 to 40 percent.

**Grass and fodder Plantation:** The watershed community planted 10,000 Napier grass slips and fodder trees to promote fodder production on the field bunds of 2 ha farm land. They also established 940 fruit plants.

**Construction of Retaining wall, Gabion wall and Check Dams (GCD):** 70 m retaining wall dry, gabion wall and GCDs will protect 8- 10 ha. land from soil erosion, land slide and reduce the stream velocity and erosion and help of recharge of ground water and springs.

**Irrigation Facilities Enhanced:** Constructed and repaired 835m long irrigation guhls/canals, which will irrigate about 6-8 ha. land and will directly benefit about 70 to 80 farmers. It will help in increasing foodgrain productivity from 30 to 40 percent i.e. 3 to 3.5 tonne per season.

**Fruit plantation:** Farmers have planted 940 fruit plants which will give a return of about 2,000 quintal fruits after three years. About 60 percent of these fruits will be either consumed or distributed by the producer farmers to their relatives (including about 20 percent wastage). Remaining 40 percent will be sold in the market giving a return of about Rs. 15-20 lakh. On an average a farmer growing 10 fruit plants will get Rs. 25,000 to 30,000 annual cash income from sale of fruits.



**Retaining wall dry for the protection from soil erosion and landside**



**Gabion retaining wall for the protection from soil erosion and water conservation**



**Exposure visit on fruit processing to Alaknanda Women Cooperative, Karanprayag, Chamoli**



**Monitoring with VWC members, village Kelani**



**Meeting with VWC members, Kamyaraula**



**Poultry unit Beena devi, village Kelani**



**Goatry unitTulsi devi, village Kelani**

## **NABARD Watershed Based Springshed Development in Khirganga watershed Bageshwar, District**

**The NABARD Regional Office** in Dehradun supported a project to promote natural resource management activities in Khirganga watershed of Bageshwar district of Uttarakhand to benefit 597 families in four villages.

### **Objectives**

- Revive five drying and one dried springs for drinking water and irrigation needs.
- Check soil erosion and conserve water through soil and water conservation measures.
- Create additional livelihood opportunities for women and vulnerable communities.
- Strengthen VLIs and other community-based organizations in the watershed.

### **Activities:**

#### **Treatment Activities**

- For the conservation of soil and water digging of contour and toe trenches was done in the recharge zones of the springs.
- Under vegetative measures for increasing the biomass in the catchment area fodder grasses and fodder trees were planted.
- For increasing the irrigated area villagers were guided to construct/repair irrigation guhls/canals and constructed/ repair storage tanks for improvement of crop productivities.
- For checking soil erosion and protection of houses, cattle sheds and agriculture land retaining walls were constructed
- For checking soil and water erosion and checking of stream area from landslips gabions structures and gabion check dams were constructed.

#### **Livelihood Activities for vulnerable groups**

- Demonstrated SCI method were developed for cultivating crops like Paddy, Wheat, Finger millet, Kidney beans and green peas.
- Bio input resource center was established for the supply of bio inputs to the farmers.
- Inputs like seeds, bio inputs were provided to farmers for vegetable/ spice cultivation and pulse production.
- Units established for the processing of fruits, spices and pickle making.
- Landless, most vulnerable and ultra poor families were supported for poultry farming.
- Members of women SHGs were given training on sewing and knitting
- Training was given on preparation of LED bulbs and establishing unit.

## Capacity building of institutions for sustainability

- Organized meetings, trainings and exposure visits on SCI, natural farming, fruit processing, sewing, knitting, preparation of LED bulbs for the village watershed committee, Mahila Mangal Dals, and SHGs.

| S. No.   | Activities                                                     | Outputs                                                                                                                                                                                             |
|----------|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | <b>Treatment Activities</b>                                    |                                                                                                                                                                                                     |
| A.1      | Staggered Contour and toe trenches                             | 900 no. staggered contour and toe trenches trenches prepaed for soil, water and moisture conservation. This will recharged 4 springs in village Jhopra and Farsali and Increased spring dischsrage. |
| A.2      | Grass and fodder Plantation                                    | 11,000 Napier roots and fodder trees were plated for reduced soil erosion, improved water conservation and increased biomass productivity in village Jhopra, malladesh and Farsali walli.           |
| A.3      | Horticultural Plantation                                       | 1,300 fruit plants were planted for Improving fruit production. After three years fruits will improved nutrition and income security.                                                               |
| A.4      | Irrigation Guhl                                                | 566 m. irrigation guhl constructed /repaired for increasing irrigated area which will benefit food and nutritional security of farmers by increasing annual foodgrain production.                   |
| A.5      | Irrigation Tank (Repair)                                       | 1 irrigation tanks repaired in village Malladesh for increasing storage capacity and increase Irrigated land which will result in Increased crop productivity.                                      |
| A.6      | Retaining wall (dry), gabion structures and gabion check dams. | 116m. dry retaining wall and gabion structures constructed to check soil erosin. Protection of houses, agriculture land from land subsidence and landslides.                                        |
| <b>B</b> | <b>Gender and Livelihood development Activities</b>            |                                                                                                                                                                                                     |
| B.1      |                                                                | Seeds of vegetable were distributed to 84 farmers for food, nutrition and income security. Bio pinputs supplied through BRC prepared by one group.                                                  |
| <b>C</b> | <b>Sustainable develop. interventions</b>                      |                                                                                                                                                                                                     |
| C.1      |                                                                | Three training were organised on sewing knitting and two trainings on pickle making for the capacity building of about 75 members of women SHGs.                                                    |

## Outcome:

**Springs Regeneration:** Recharged four springs by digging 900 staggered contour and toe trenches increasing the water discharge from 20 to 50 percent.

**Grass and fodder Plantation:** The watershed community planted 11,000 Napier grass slips and fodder trees to promote fodder production on the field bunds of 2ha farm land. They also established 1260 fruit plants contributing to bio-diversity.

**Construction of Retaining wall, Gabion wall and Check Dams (GCD):** 116 m retaining wall dry, gabion wall and GCDs will protect 10-15 ha. land from soil erosion, land slide and reduce the stream velocity and erosion and help of recharge of ground water and springs.

**Irrigation Facilities Enhanced:** Constructed and repaired 556m long irrigation guhls/canals, and one storage tank will irrigate about 10 ha. land and will directly benefit about 90 to 100 farmers. It will help in increasing foodgrain productivity from 30 to 40 percent i.e. 3 to 4 tonne per season.

**SCI by 300 farmers in 10 acre land:** SRI and SCI methods were used in the crops like Paddy, Wheat, Finger millet, Kidney beans and Black soyabean. Average increment in productivity shows 35 percent giving additional production of 1.5 tonne.

**Fruit plantation:** Farmers have planted 1,300 fruit plants which will give a return of about 2,000 quintal fruits. About 60 percent of these fruits will be either consumed or distributed by the producer farmers to their relatives (including about 20 percent wastage). Remaining 40 percent will be sold in the market giving a return of about Rs. 20 lakh. On an average a farmer growing 10 fruit plants will get Rs. 25,000 cash income from sale of fruits.



Exposer visit to Alaknanda Women Cooperative Karnprayag,



Training of SHG members on making LED bulbs



**Contour trench village Jhopra and Irrigation tank village Malladesh**



**SRI and SCI plots village Farsali Walli**



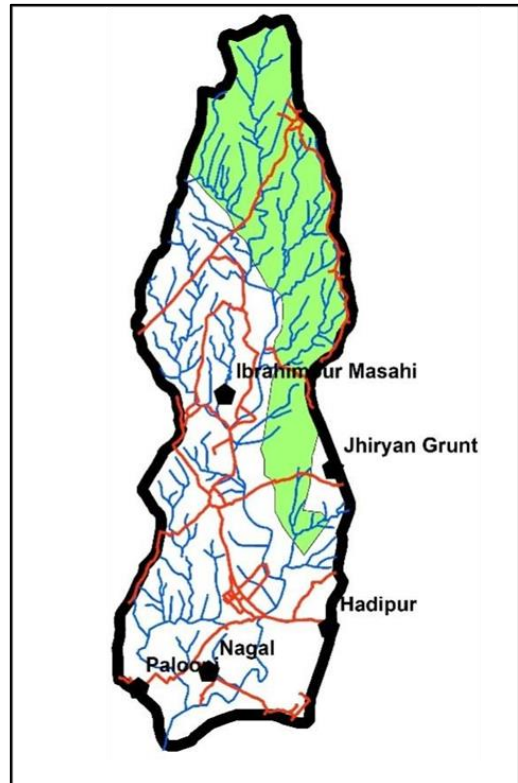
**Gabion retaining wall village Malladesh**



**Gabion check dam for soil and water conservation village Farsali**

## Ground Water Recharge in Haljora Watershed through Common Property Resources Management in Haridwar district of Uttarakhand

The Haljora micro-watershed is part of the Sipla watershed in Haridwar district of Uttarakhand. It is about 16 km from Hetampur (SIDCUL). The mainstream starts from the Sawan Sher shrine and flows around 13 km before joining the Sipla Nala. It is a seasonal river that has water till September. The total area of the watershed is 3,685 hectares and it includes five revenue villages under four gram panchayats — Ibrahimpur Masahi, Palooni, Nagal, Jhiryan Grunt, and Hadipur. The watershed has a dense drainage system, so water flows out quickly and does not stay for long. The soil is mostly loamy to loamy clay, and gullies can be seen where there is less vegetation. The main problems in the area are groundwater depletion, poor water quality, use of chemical fertilizers, soil erosion, encroachment on ponds, climate change, urbanization, and weak village institutions. To address these issues, the People's Science Institute (PSI) implemented the project Ground Water Recharge in Haljora Watershed through Common Property Resources Management in Haridwar District of Uttarakhand. The initiative is supported under the CSR commitment of **Wipro Cares** for a 15-month period from January 2024 to March 2025.



### Objectives

- Promote ground water recharge through drainage line treatment and water harvesting
- Create additional water storage through renovation of community ponds
- Reduce soil and water erosion in the watershed area
- Raise awareness on integrated water management in the project villages
- Establish and strengthen community-based institutions

### Activities

- **Gabion Check Dams:** Built 23 stone-filled gabions across key drainage channels to slow runoff and reduce sediment loss.
- **Sand Gully Plugs:** Gully plugs to stabilize eroded channels and control silt movement. Damaged structures were rebuilt
- **Subsurface Dykes:** 10 earthen dykes along minor drainages to retain soil moisture and enhance local recharge.
- **Rooftop Rainwater Harvesting:** To be installed on selected rural and institutional buildings for collecting rainwater to support irrigation and groundwater recharge.

- **Pond Renovation:** Planned desilting and repair of three ponds — Anganwadi, Neelkanth, and Jhiryan Grunt to restore storage capacity and enhance groundwater recharge potential.
- **Plantation on Bunds:** To plant around 120 trees as guava, lemon, kachnar, neem, etc. Along pond embankments for reducing runoff, improving infiltration, and enhancing local biodiversity.
- **Community Mobilization and Institution Building:** Communities were mobilized to promote water conservation, organic farming, and sustainable pond management, building ownership and awareness. Three Water User Groups (WUGs) and multiple Farmer Interest Groups (FIGs) were formed for local management, capacity building, and training

#### Activity and Output

| S.No. | Activity                                     | Outputs                                                                                                                                                                                                                                                                                                                                              |
|-------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.    | <b>Gabion structures</b>                     | Stone-filled gabions were built in drainage channels to slow runoff and trap sediment. By Q3, 17 gabions were completed. In Q4–Q5, the team repaired all monsoon-damaged gabions and built 6 new ones (3 at Anganwadi Nala, 3 at Padalwala Nala), A total of 23 structures both newly built and repaired done.                                       |
| 2.    | <b>Sand Gully Plugs</b>                      | The construction of 50 sand-filled gully plugs was envisioned to strengthen the Haljora watershed. Of the 50 planned, 44 were finished by Q3. In Q4–Q5, the 40 damaged plugs were rebuilt with sand and cement and 6 new ones added (at Anganwadi Nala), fulfilling the target of 50.                                                                |
| 3.    | <b>Renovation of Community Ponds</b>         | In Q1–Q3, two community ponds at Anganwadi and Neelkanth Factory were renovated, but heavy monsoon rains caused siltation, which was later repaired in Q4–Q5. One more pond at Jhiryan Grunt was also renovated during this period. In total, three community ponds were renovated, contributed to groundwater recharge from June 2024 to March 2025 |
| 4.    | <b>Plantation on pond bunds</b>              | During Q4–Q5, a plantation drive was carried out near all three community ponds. A total of 120 plants — guava, lemon, kachnar, and neem were planted. 50 each at Anganwadi and Neelkanth, and 20 at Jhiryan Grunt. Napier grass was also planted around the ponds to help reduce soil erosion                                                       |
| 5.    | <b>Roof Top Rain Water Harvesting</b>        | As Part of the Q1-Q4 initiative, 4 Rooftop Rainwater Harvesting Structures were installed. These systems are being used for sanitation, irrigation, and groundwater replenishment, with a total storage capacity of 192.8 cum.                                                                                                                       |
| 6.    | <b>Water User Groups (WUGs)</b>              | Three pond-management WUGs were formed by Q3. Monthly meetings were held for maintenance. In Q4–Q5, the WUGs addressed sedimentation and water-quality issues by organizing pond desilting, planting vegetative buffer bunds and collaborating with neighbouring communities.                                                                        |
| 7.    | <b>FIG Formation &amp; Capacity Building</b> | FIGs were set up in every village hamlets. Initial trainings taught sustainable farming practices. In Q4–Q5, farmers received training in organic methods such as crop rotation, compost use, green manures. Two exposure visits to GOT Rishi organic farms gave hands on learning of best practices.                                                |
| 8.    | <b>Meetings &amp; Trainings</b>              | The project held all planned events: 27 village meetings and 45 training sessions (FIGs/WUGs).                                                                                                                                                                                                                                                       |

## Outcomes

The project successfully achieved its planned targets and contributed to improving groundwater recharge, reducing soil erosion, and strengthening local institutions in the Haljora watershed. Through the renovation of community ponds, construction of soil and water conservation structures, and installation of rooftop rainwater harvesting systems, the project helped increase water availability and enhance soil moisture. Capacity building and awareness activities improved community participation and promoted sustainable water management practices. The outcomes demonstrate positive environmental and social impacts, creating a foundation for long term resource management in the region.

- 3 gabion check dams, 50 sand-filled gully plugs, and 10 subsurface dykes constructed or repaired and helped reduce runoff, prevent soil erosion, and enhance groundwater recharge.
- Three ponds and four rainwater harvesting structures added ~ 25,950 m<sup>3</sup> of recharge to the watershed
- 120 trees and napier grass planted around ponds reduced erosion and improved soil moisture.



- **3 Water User Groups (WUGs)** formed for pond management and **multiple Farmers' Interest Groups (FIGs)** strengthened to promote sustainable and organic farming.



- A total of 27 community meetings and 45 training sessions were conducted, covering topics such as natural resource management, pond maintenance, water-use efficiency, and organic cultivation. These efforts increased community awareness, built local ownership, and ensured long-term sustainability of the water resources developed under the project.

## S&T interventions to improve local innovation systems and enhance livelihood system's efficiencies for EWS in Haridwar district

The Department of Science & Technology, under its SUNIL program, launched a three-year project to enhance the livelihood security of Economically Weaker Section (EWS) families across 15 villages in the Bhadrabad block of Haridwar district, Uttarakhand. The initiative introduces Science and Technology (S&T)-based interventions to promote sustainable growth and improve living standards. The project directly benefits 506 EWS households (2,820 individuals). The Krishi Vigyan Kendra (KVK), Dhanauri (Haridwar), served as the project's knowledge partner. Overall, the initiative aims to strengthen livelihoods, diversify income sources, and foster inclusive rural development.

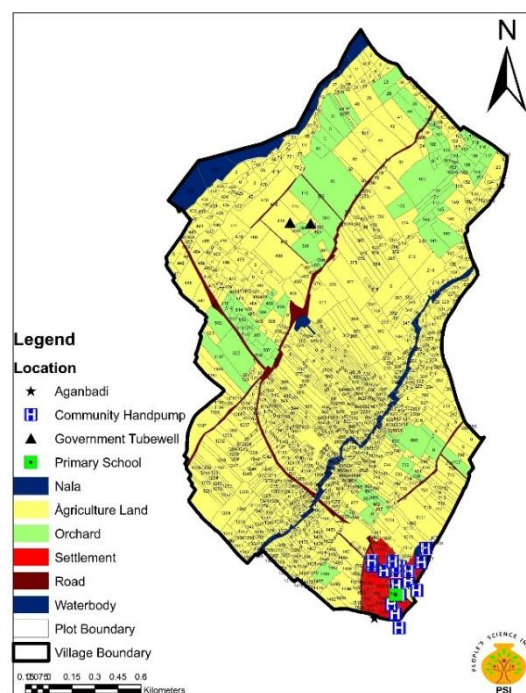
### Objectives

- To understand Local Innovation Systems (LIS) and their role in developing sustainable livelihood security in a rural context.
- To develop a watershed based sustainable livelihood system model for EWS community through S&T interventions and green skill development.
- Strengthen community resilience and future preparedness in rural communities through nudging and LiFE approaches.

### Activities & Outcomes

The important activities done in FY 2024-25 are outlined below.

- Rapid Appraisal of Local Innovation Systems (RALIS) applied in 15 villages is helping to identify local innovation system which can be strengthened to enhance the efficiency of livelihood systems of EWS.
- GIS based thematic maps created for spatial representation e.g. village level maps-land use, contour, slope maps, household's location of EWS, soil type, irrigation sources, cropping pattern infrastructure maps.
- Developed crop-wise Manual for Packages of Practices (PoPs) for Black Gram, Green Gram, Okra, Sorghum, Pearl Millet, Sugarcane, Sponge Gourd, Wheat, Mustard and Tomato to enhance agricultural productivity using scientific farming techniques.
- Using the System of Crop Intensification (SCI) technique, 122 agro-ecological plots of ten different types of crops were established on approximately 17 hectares of land, benefiting 67 farmers from eight villages.



**Infrastructure map of Meerpur Muwazarpur**

- Installed drip irrigation systems at GFIC–JROF and one farmer’s field in Hazara Grant, irrigating 1.38 ha and promoting water-efficient practices.
- Soil health assessments were conducted for 123 samples, and 73 soil health cards were distributed to farmers. These helped them understand their soil condition, use fertilizers properly, and improve crop yields sustainably.
- A workshop was organized at the BDO office to raise awareness among rural communities about various government schemes and programs. Officials from departments such as Agriculture, Animal Husbandry, Cooperatives, Sericulture, and Social Welfare shared detailed information on scheme benefits and implementation to help farmers and villagers access available opportunities.



- Completed 80% renovation work at one pond (Sohalpur Sikroda). Identified additional ponds for rejuvenation and design prepared for NBS-based greywater treatment structures such as leach pits and constructed wetland.

**Stakeholders Workshop on Govt, Schemes**

- The Grameen Facility cum Innovation Center (GFIC) at JotRishi Organic Farms, Kota Muradnagar, supports EWS farmers by providing farm machinery on rent, demonstrating agro-ecological practices, maintaining a seed and fodder bank, and producing bio-enzymes and other bio-formulations.



**GFIC at JROF**

- Nine Farmers’ Interest Groups (FIGs) with 126 members have been formed across seven villages. Members are now equipped to make informed decisions and contribute to developing market linkages after receiving technical support from experts.
- Six livestock health camps and awareness programs in collaboration with BAIF and the Department of Animal Husbandry, Bahadrabad (Haridwar).
- Total 24 training program organised in various topics such as SCI, FIG operation, preparation of bio-inputs with exposure visit, organic wheat production, sugarcane cultivation by trench method, Aipan art, cow dung products and Napier cultivation

## Findings/Outcomes

- Rapid Appraisal of Local Innovation Systems (RALIS) applied in 15 villages is helping to identify local innovation system which can be strengthened to enhance the efficiency of livelihood systems of EWS. Observation was that, In agriculture the bunds and kyaris are being prepared for water conservation, use of indigenous tools (*khurpi*, *kasir*, *patta*, *udd*) etc. and eco-friendly pest control methods using neem leaves, ash, and natural deterrents,

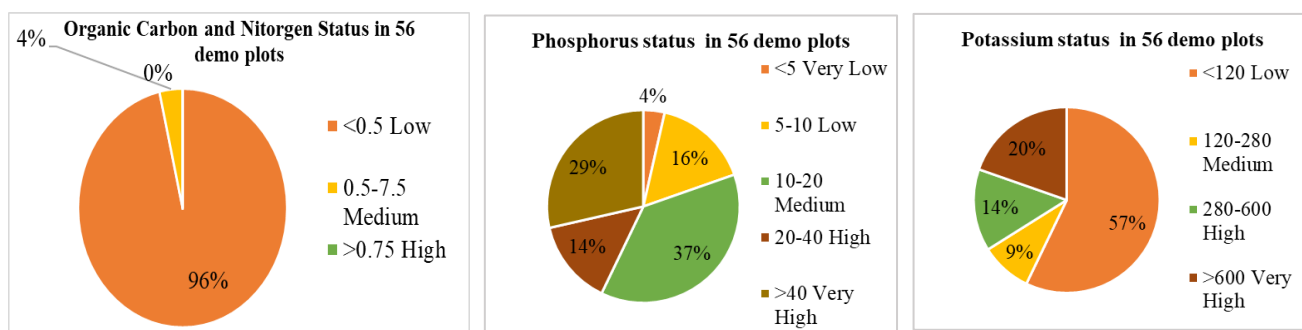
intercropping with pulses helps optimize soil use. In livestock management, local remedies such as *Dhak ke pappad*, *Mukamar*, and *Gumma ghas* are used to treat cattle ailments, while cow dung and its cake (*kanda*) serve as fuel and manure. For plant protection, farmers use traditional methods like raw liquor (*deshi daru*) and neem-garlic sprays to control pests naturally, while coriander intercropping helps repel rats. Though some use naphthalene balls for storage pests, this practice is discouraged due to its toxicity.

- A cost-benefit analysis of improved Package of Practices (PoPs) adopted across 10 crops i.e. Black Gram, Green Gram, Cucumber, Okra, Pearl Millet, Sorghum, Sponge Gourd, Wheat, Mustard, and Tomato. Results revealed a 13–35% increase in crop productivity among EWS households. The adoption of PoPs contributed to increased farm incomes and reduced market dependency, particularly for pulses and vegetables.



Average Cost-Benefit ratio of Okra crop (18 plots)

- 10 % (about 17 ha) of farmlands of EWS has been covered under the chemical free SCI technique.
- Low organic carbon, nitrogen and potassium observed in more than 50% of demo plots. Phosphorus was observed medium to high in 80% of the samples.

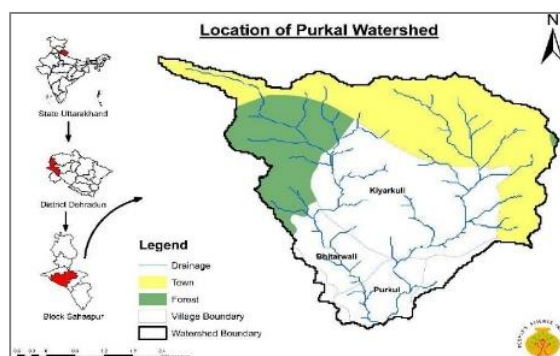


### Soil Health Status of Demonstrated Plots

- 118 cattle keepers across 9 villages get benefited from livestock health camps and awareness programs. Overall improvement observed, including increased appetite, recovery from bloat, diarrhoea, and minor ailments, along with better overall health and slight increase in milk yield.
- Skill development trainings provided to 50 women members of SHGs and working on establishment of market linkages

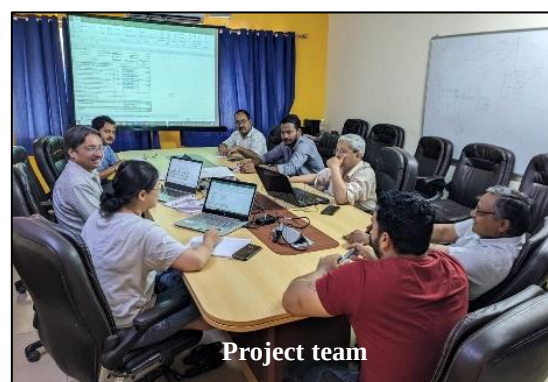
## Building Community Resilience in Purkul Watershed of Dehradun District

With financial support from **VANA Six Senses**, PSI is working with 272 households in the Purkul Watershed, located in Sahaspur block of Doon Valley, Dehradun (Uttarakhand). Covering 10 hamlets across 3 Gram Panchayats, the project focuses on improving livelihoods through plantations, kitchen gardens, orchards, and soil-water conservation, while raising sustainability awareness among women and local communities.



### Objectives:

- Address gaps in water, food, fodder, and livelihoods through need-based planning.
- Implement soil conservation and rejuvenate drying springs.
- Promote climate-resilient agro-ecological practices.
- Assess and strengthen Village Level Institutions.
- Support farm and off-farm livelihoods, focusing on vulnerable and landless households.
- Develop infrastructure for collection, processing, and marketing of local produce.



### Activities:

- **Water Resource Management:** Spring rejuvenation, canal repair, pond desilting, and construction of distribution chambers.
- **Community Plantation:** Community-led plantation initiatives.
- **Farm-based Interventions:** Green waste management through vermicomposting, establishment of kitchen gardens, fruit plantations, and fencing of farmland/plantation sites.
- **Capacity Building:** Trainings for project team, watershed committee, and WUG members; seasonal trainings on vegetables/spices; and farmer/SHG trainings on organic bio-inputs.

### Outputs:

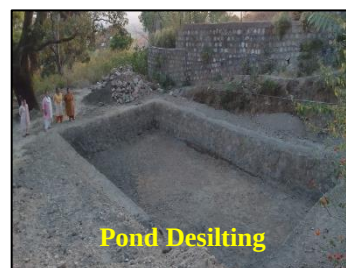
**Spring Rejuvenation:** Hydrogeological surveys guided trenching works—160 trenches over 1 ha at Dhakar Pani (Kherani) and 260 trenches over 2 ha at Kandriyana—within identified catchment areas.



**Canal:** 350 m of irrigation canals were constructed and repaired in Kyarkuli, benefiting ~100 households by irrigating 20 bighas (5 ha) of land for both consumption and surplus sale of vegetables.

**Pond Desilting:** Restored pond capacity and enhanced groundwater recharge; pond dimensions – 52' × 43' × 5'.

**Distribution Chambers:** An artificial structure that stores excess rainwater and gradually releases it for irrigation or household work during dry periods.



**Community Plantation:** In 2024, 34 farmers planted 1,300 trees (oak, bay leaf, gooseberry, wild pomegranate, Kagzi lemon) over 1.5 ha in Bansagad Khadar, improving water management, soil health, and biodiversity and in Fruit Plantation 14 households across 7 villages planted 96 mango, 67 litchi, 12 guava, 79 apple, and 79 plum saplings, supporting food security, income, and ecological sustainability.



**Green Waste Management:** Vermicomposting was introduced with 7 pits (2.44 × 1.22 × 0.91 m, 2 chambers) set up across 5 villages in the Purkul watershed. Organic waste is processed by earthworms into nutrient-rich compost, with “worm tea” collected as natural fertilizer.

**Kitchen Garden:** In Oct 2024, 45 kits were distributed in the Purkul watershed, with harvests including 23 kg fenugreek, 25 kg radish, 11 kg cauliflower, 26 kg rai, and 12 kg coriander, while others produced ~4–5 kg/0.01 ha. In Mar 2025, 41 households also received 500 g French bean seeds in selected villages.



**Fencing:** GI wire mesh fencing was completed at Choti Bhitrawali (314 m, 2.3 ha), Bansagad Khadar (60 m, 1.5 ha), and Kandriyana (511 m, 1 ha) to protect farmland and plantations. Net fencing (500 m, 0.15 ha each) was installed at Kyarkuli and Bansagad Khadar to safeguard kitchen gardens and delicate plants.



**Capacity Building:** Fostered community ownership and sustainable resource use among farmers and local institutions.

- **CRP Training:** 6 CRPs trained at PSI, Dehradun on agriculture, mobilization, technology, and reporting across 9 villages.
- **Village Development Committees:** 9 committees formed with 90 members; CRPs guided water management and project participation.
- **Watershed Committee Training (Jan 2025):** Members trained on watershed management, sustainable farming, and community-led solutions.



- WUG Training: Formed WUGs for equitable spring water distribution, gender-inclusive decisions, and spring maintenance; irrigation supports livelihoods.
- Vegetable & Spice Training (Oct 2024 & Mar 2025): 43 and 72 farmers trained on crop spacing and cultivation techniques for productivity and sustainability.
- Bio-input & Vermicompost Training (Nov 2025 & May 2025): Farmers trained on Jeevamrit, Agniashtra, and vermicomposting; each received 1 kg *Eisenia fetida* for organic fertilizer production.



## Planting 1,000 Native Trees

Uttarakhand, with its diverse landscapes and rich biodiversity, confronts environmental threats due to factors such as deforestation, urbanization, tourism and other development projects. Implementing tree plantation drives becomes crucial to preserve the natural beauty of the region and counteract these challenges. **Medius Earth** supported a project **Planting 1,000 Native Trees** to improve the biodiversity of the selected plantation area. In the month of June, 2024 Bansagad Khadar under Bhitrawali panchayat district, Dehradun was selected as the project area. After a meeting with the village level committee, a 2 hectare degraded plot in community forest land was selected for the intervention.

In the month of July 2024, a community plantation drive was launched. The initiative was successfully carried out with the active participation of local community specially Parvati samooch, making it a collective effort for environmental conservation and livelihood development.

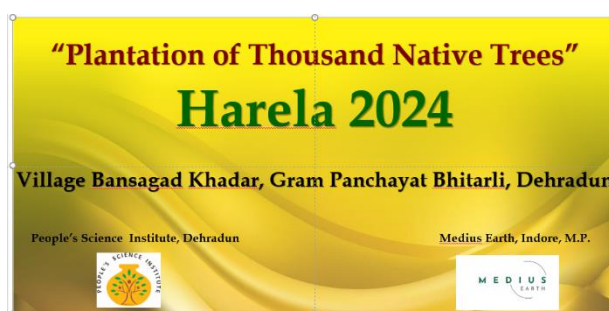
### Objectives:

- Increase the availability of fodder and biomass.
- Environmental (soil and water) conservation
- Biodiversity conservation

For successful tree plantation in Uttarakhand, it is essential to choose **native trees species** adapted to the local soil and climatic conditions. The activities started from June 2024.

### Activities

- Meeting with the villagers and selection of site for the plantation
- Formation/ Strengthening of village level institution which can take responsibility of planning, implementation and monitoring of the plantation.
- Capacity building of the women group on plantation methods, monitoring and maintenance and protection of the plantation.
- Arrangement of the saplings of the native plants suggested by the women group.
- Plantation drive (pit digging, and planting the plants).
- Monthly meetings of the women group and take action on protection and maintenance of the plantation.
- Monitoring of survival of plants.
- Planning for the gap filling
- 



Protection wall and wire fencing prepared for the protection of plantation area

### Output:

As per plan 1,300 native plants were planted (1,070 in community land and 230 in private land). Details of activities and output is given in table -1.

Table -1: Activities and Output

| S. No. | Activity                                   | Outputs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.     | Meetings with the villagers                | Series of main meetings and many small group meetings were organised:<br>a. Initial discussion and taking willingness and proposal for plantation.<br>b. Formation of a user group and taking responsibility of the plantation program by Parvati SHG.<br>c. Final site selection and selection of native tree species for plantation<br>d. Pit digging and plantation work during Hariyali vestival.<br>e. Visit to plantation site at regular interval and maintenance of the plantation (weeding, manuring etc.) |
| 2.     | Selection of native species for plantation | Five species were finalised after meetings and discussion with villagers: Oak, Anwla, Tejpatta, (Bay leafe, (Citrus lemon), Neembu and Dadim (Pomogranate). Fruit fodder as well as medicinal plants were selected as native trees.                                                                                                                                                                                                                                                                                 |
| 3.     | Pit digging and plantation drive           | Total 1,300 plants of five native species were planted. Oak – 700, Tej patta (Bay leaf) - 270, Kagji neembu (Citrus lemon) -200, Aanwla (Phyllanthus emblica) – 100, Dadim ( wild Pomegranate ) -30. Out of 1,300 plants 1,070 were planted in community land while 230 (Citrus and Pomegranate) were planted in private land.                                                                                                                                                                                      |
| 4.     | Maintenance of plantation by women group   | Members of Parvati samoooh organised regular monthly meetings, visited the plantation area. Weeding and manuring was done whenever required.. PSI helped the villagers in construction of protection wall and wire fencing for protection of the plantation area.                                                                                                                                                                                                                                                   |
| 5      | Monitoring visits                          | Regular monitoring visits were done by members of Parvati samoooh and required action were taken.<br>PSI team also visited the plantation area for monitoring and review and organised meetings with villagers as well as members of Parvati samoooh. Monitoring visits were also done by Six senses Vana team.                                                                                                                                                                                                     |
| 5.     | Gap filling                                | After monitoring of survival meeting was organised by PSI and Parvati samoooh and it was decided that 600 new plants will be planted in August 2025.                                                                                                                                                                                                                                                                                                                                                                |

### Outcome:

In the month of December 2024 counting of the survival of the plants was done jointly by members of PSI team and members of Parvati SHG. The results of the counting in plantation area shows maximum 92 percent in Kagzi nimboo (Citrus lemon), followed by 85 percent survival in Anwla while minimum survival 56 percent was found in Tejpata (Bay leaf). Overall survival rate was 68 percent. Details of the survival is given in table -2.

Table -2: Survival of plants in December,2024.

| S. No. | Native Plant                | No. of Plants | Plants Survived | Survival % |
|--------|-----------------------------|---------------|-----------------|------------|
| 1.     | Oak                         | 700           | 447             | 64         |
| 2.     | Bay Leaf (Tejpatta)         | 270           | 150             | 56         |
| 3.     | Amla (Phyllanthus emblica)  | 100           | 85              | 85         |
| 4.     | Dadim (Wild Pomegranate)    | 30            | 25              | 83         |
| 5.     | Kagzi Nimboo (Citrus lemon) | 200           | 183             | 92         |
|        | <b>Total</b>                | <b>1,300</b>  | <b>890</b>      | <b>68</b>  |

The species wise variation in survival may be influenced by factors like climatic conditions, soil quality, organic manure, moisture conservation and weeding etc. By understanding these survival patterns, we can improve future plantation strategies, ensuring better growth, sustainability, and ecological balance in both community and private lands.

### Photographs



**Visit of Titan CSR Team village Bansagad**



**Monthly Review meeting with Community Resource Persons village - Bhitrawali**



**Visit of Director PSI and team village Bansagad**



**Maintenance work in plantation area village Bansagad**



**Growth of 3 month old Tejapatta (Bay Leaf) and Dadim (Wild Pomogranate) plants**

## **Strengthening of institutional process around market development of naturally produce crop in Shahnagar block of Panna district MP**

### **Objectives-**

- Strengthening production systems for natural farming while simultaneously facilitating development of markets for Naturally farmed produce through formation of FPCs in Panna district, Madhya Pradesh.
- Operationalization of Bio-input Resource Centers (BRCs) and Technical Resource Centers (TRCs) in the direct area of intervention as well as supporting similar initiatives through knowledge dissemination in other districts of the state.
- Development of seed banks to promote use of traditional/indigenous seed varieties in order to support natural farming production systems and in turn principle of biodiversity under agroecology.
- Facilitating convergence of government schemes for enhancing last mile delivery of relevant programs to beneficiaries.

### **Activity and output-**

Village meeting and farmer training organized regarding Natural farming, in 40 villages of Panna district MP 512 farmer adopt Natural farming and 1010 farmer adopt Natural farming in Rabi season. Farmer practiced Natural farming in Maize, Pigeon pea, paddy in Kharif season and in Mustard, Chana, Wheat in Rabi season. FIG meeting conducted in these 40 village regarding market development, communication established with the organizations which is involved in marketing of Naturally grown produce like Targuwan agro producer company limited, Ket betwa farmer producer company limited. Small unit for Shorting grading of naturally grown produce established in birampura and in Siharan. Meeting conducted with 92 FIG regarding marketing of naturally grown produce.



2 New Bio input Resource center establishen 1 in siharan and 1 in Shahpur khurd. Training organized for BRC committee members regarding quality maintaining and financial management, cost bebenefit analysis done for 3 BRC and these BRC generate net profit in their first year like Siharan BRC generate net profit of 36110 Rs. And Sijahti BRC generate 36670 Rs. And BRC of Umaria Village generate net profit of 35120 Rs. In year 2024-25. These BRC helping farmers to adopt



Natural farming easily and got good relust from initial period of adopting natural farming.

Regarding strengthening of Seed bank in 40 village FIG meeting organized and knowledge provided regarding

management of Seed bank, Technical support provide regarding seed conservation, CDB established in Siharan for 10 traditional variety of Wheat and 15 traditional variety of paddy, Farmer exposure organized in these CDB and farmer preferred variety seed provided in these seed banks, Bansi is the most farmer preferred variety so seed production started for this variety. During farmer exposure in these seed banks farmer decided to establish CDB for mustard also.

Now 40 villages have their own vegetable seed bank and in these seed banks

Traditional and local variety available for 15 to 20 vegetables. Due to these seed banks farmer are able to grow 10 to 20 vegetables in their kitchen garden. Team member demonstrated these seed banks in different platform in different places like Delhi, Jhansi, Benglore.

Regular meeting organize with government department like agriculture department at district level and block level, with Horticulture department, state rural livelihood mission. 250 farmer enrolled under NMNF from these village. These government official visited farmer fields, TRC, BRC and got good impression of such innovative approack like cow dung pot making practices. Farmer also participated in KVKs meeting and got technical support from KVKs. DDA visited BRC and TRC and promised to support through the department schemes.



## **Building Climate Resilience in Water Stressed Panna District of the Bundelkhand Region.**

### **Objectives-**

- Empowering 20 project villages through community-led sustainable water resources management, ensuring water security for 2900 households.
- Enhanced food, nutrition and livelihoods for 2000 farmers.
- Advancing gender empowerment for 1200 women.

### **Activity and output**

Finalizing of Program Area- 20 water stressed village in Shahnagr blok of Panna districk finalyzed, Project area map prepared, Field office settled in the convenient location in Shahnagar Panna MP.

Team selection and Program orientation- 3 Cluster coordinator selected for the respective 3 cluster, 5 VRP selected, Team orientation done for program objectives like rain water harvesting, soil moisture conservation, agro ecological practices, community based institution.

Baseline survey done by third party evaluator- Baseline survey is very important to evaluate actual achievement, hence baseline survey done by the independent third party evaluator. For the base line survey community meeting organized, individual Household survey done. After compilation of data base line survey data regarding current productivity, water availability in these 20 village, situation of current livelihood analyzed.



## **Comprehensive Watershed Assessment Report preparation of Haridwar (Uttarakhand) and Halol-Kalol (Gujrat)**

Hero MotoCorp partnered with People's Science Institute to undertake comprehensive watershed assessments across their manufacturing locations in Haridwar District (Uttarakhand) and Halol-Kalol Region (Gujarat) as part of their sustainable responsibility initiatives. This collaboration focused on addressing water security challenges around industrial facilities while supporting rural communities dependent on the same water resources. The project aimed to balance industrial water demands with ecological restoration needs in two different locations of I.

### **Objectives**

- Establish comprehensive water security frameworks across diverse geographical contexts covering 45,179 hectares in Haridwar's alluvial plains formed by rivers from lower Himalayas and Shivaliks, and 20,086 hectares in Gujarat's industrial plains
- Support Hero MotoCorp's manufacturing operations at both locations through industrial sustainability measures that ensure long-term water availability while balancing manufacturing growth with community development
- Revitalize degraded pond systems across both regions, targeting freshwater collection and greywater management for enhanced groundwater recharge in diverse geological settings
- Create location-specific water management strategies addressing Haridwar's monsoon-dependent agriculture versus Gujarat's drought-prone industrial landscape through regional adaptation approaches

### **Activities**

- Analysed 103 water samples in Haridwar and 27 samples in Gujarat from diverse sources including hand pumps, tube wells, open wells, ponds, and surface water bodies using standardized testing protocols
- Conducted advanced testing for 18 heavy metal parameters using ICP-MS technology alongside standard physio-chemical and bacteriological analyses to understand contamination patterns
- Assessed 68 ponds in Haridwar (29 freshwater, 39 greywater systems) and 60 ponds in Gujarat for restoration potential through detailed engineering feasibility studies
- Applied SCS-CN rainfall-runoff modelling showing runoff percentages across different watersheds in both locations



**Water quality sampling and monitoring for village pond in Halol (Gujrat)**

- Collected and analysed 69 soil samples in Haridwar and 31 samples in Gujarat using ICAR-approved Harvesto Soil Testing Kit for comprehensive soil health mapping.
- Evaluated pH, electrical conductivity, organic carbon, and nutrient content across agricultural lands, orchards, and pond catchment areas in both regions
- Calculated drainage densities indicating porous, permeable substrates suitable for groundwater recharge in both locations
- Determined bifurcation ratios indicating moderate flood risks across watershed networks through hydrological analysis
- Analysed livelihood patterns agricultural dependence with emerging industrial employment opportunities in both regions.



**Community engagement for field survey**

### **Outcomes**

- Identified 14 fresh water and 25 grey water ponds along with 68 locations with rooftop rainwater harvesting structures in Haridwar and 34 ponds in Gujarat for immediate restoration.
- Calculated total annual groundwater recharge capacity of 550,265 cubic meters in Haridwar and 1.67 million cubic meters in Gujarat through pond rejuvenation interventions
- Revealed 96-99% of soil samples showing critically low organic carbon levels, necessitating organic matter enhancement programs across both regions
- Prepare comprehensive mapping report of both watershed areas.

### III b Environmental Quality Monitoring

| S. No. | Project Title                                                                                        | Total Project Period          | Total Budget Amount (Rs.) | Funding Agency                                                      | Project Partners                                                                                                                          | Geographical Coverage                                                                                                                          |
|--------|------------------------------------------------------------------------------------------------------|-------------------------------|---------------------------|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | Co-creating Sustainable Agri-Water Use in the Hindon sub-basin –A Multi Scale Participatory Approach | February 2022 to January 2027 | 84,39,535                 | Indian Institute of Science Education and Research (IISER) Kolkata) | Netherland Partners: Wageningen University and Research (WUR) and Utrecht University (UU), Indian Partners: IISER-K, ICAR-IIFSR and IIT-R | State: Uttar Pradesh<br>Districts- Saharanpur, Muzaffarnagar, Shamli, Meerut, Baghpat, Ghaziabad and Gautam Budhha Nagar<br>No. of Villages: 8 |
| 2      | Development of GP wise Sustainable Natural Recourse Management Plan Banwasi Seva Ashram              | December 2022 to March 2025   | 5,00,000                  | Banwasi Sewa Ashram                                                 | None                                                                                                                                      | State: Uttar Pradesh<br>District: Sonbhadra<br>No. of Villages: 2<br>Beneficiaries:100 Households                                              |
| 3      | Soil testing in gaurihar block of chhatarpur district in Madhya pradesh                              | July 2024 to September 2024   | 244850                    | DSC Foundation, Ahmedabad                                           | None                                                                                                                                      | State-Madhya Pradesh<br>Districts- Chhatarpur<br>No. of Villages: 17,<br>Beneficiaries:- 150 Households                                        |

## Co-creating Sustainable Agri-Water Use in the Hindon Sub-basin –A Multi Scale Participatory Approach

The Hindon sub-basin, located in the north-western Uttar Pradesh region of the Ganga basin, faces significant water depletion due to over-extraction and pollution from agricultural, industrial, and domestic activities. To address these challenges, PSI is participating in a five-year (2022–27) multi-institutional research programme led by IISER Kolkata, funded by the Department of Science and Technology (DST), Government of India, focusing on assessing agriculture's contribution to water quantity and quality issues. The study is being carried out in a participatory manner involving farmers and other stakeholders to co-develop a shared vision for sustainable regional development and its implementation.

### Objectives

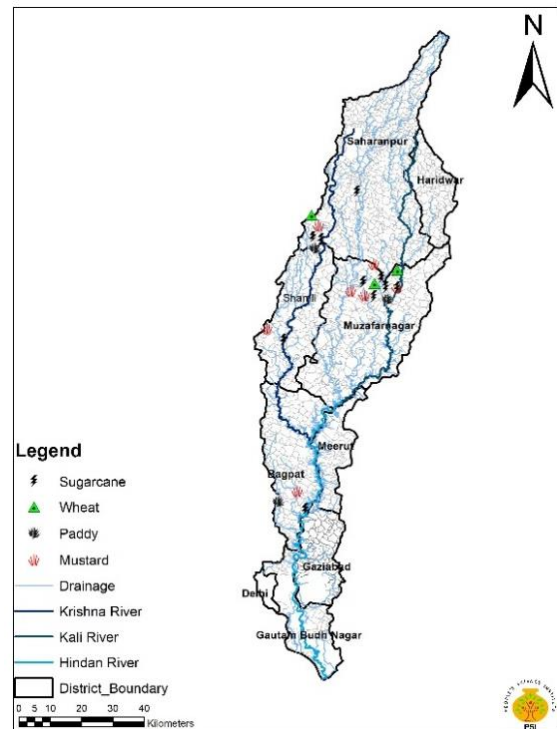
The specific objectives of PSI's contribution in the programme are:

- Assessing the contribution of agricultural practices to water depletion and pollution in the Hindon sub-basin
- Participatory formulation of agricultural strategies to alleviate pressures on the river system, while ensuring productivity and competitiveness.
- Identifying and involving relevant stakeholders to guide and support the implementation of corrective measures for reducing pollution in the River Hindon sub-basin.

### Activities

The important activities done in FY 2024-25 are outlined below:

- PSI's team conducted PRA and household surveys in a village within the Hindon sub-basin to assess local cropping patterns, use of agricultural chemicals, and their impacts on water quality, health, and the economic viability of farming practices.
- A total of 19 demonstration plots showcasing agro-ecological practices were established across six villages in four districts, covering approximately 2.0 hectares of land. Of these, sugarcane demonstrations accounted for 5 plots, covering around 0.7 hectare. Wheat and Paddy were demonstrated in three plots each, collectively covering another 0.6 hectare. Additionally, mustard was demonstrated on eight plots, covering approximately 0.7 hectares of land. These demonstrations provided practical insights into sustainable farming methods, emphasizing resource efficiency and productivity



**Agro-ecological demonstration farms in Hindon-sub basin**

- Physico-chemical-bio monitoring conducted at 22 different stations all along the Hindon river and its tributaries and canals.

- In an effort to enhance water quality monitoring and empower local communities, a comprehensive training program was initiated across seven villages within four districts.



**Water Quality Monitoring of Hindon river at Baraut, Baghat**

- Comprehensive capacity-building training has been conducted to provide hands-on experience in preparing essential agricultural products, such as bio-pesticides (Agnyastra) and various organic fertilizers and fungicides such as Jeevamrit, Neemastra, Matka Khad, and Beejamrit etc.
- An information-sharing workshop was conducted in easy-to-understand manner at Bhanhera Khemchand village, Nanauta Block of Saharanpur district, to discuss the sources of pollution and the current state of the local water resources.



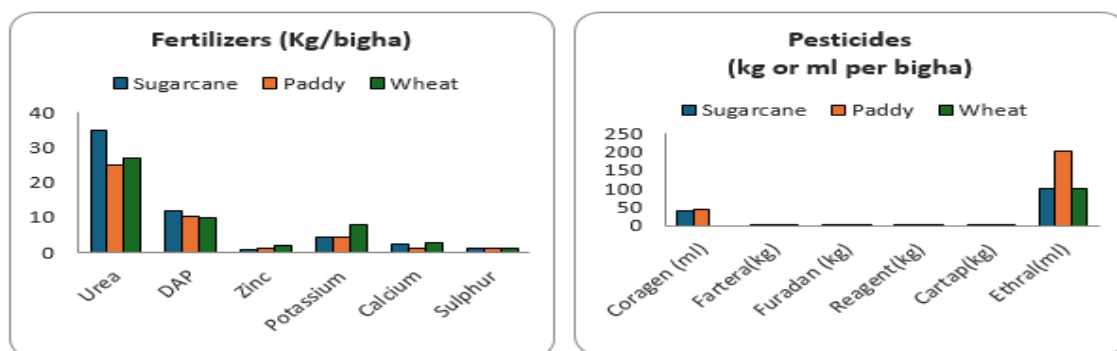
**Training on preparation of bio-inputs**



**Information sharing workshop at Bhanhera Khemchand**

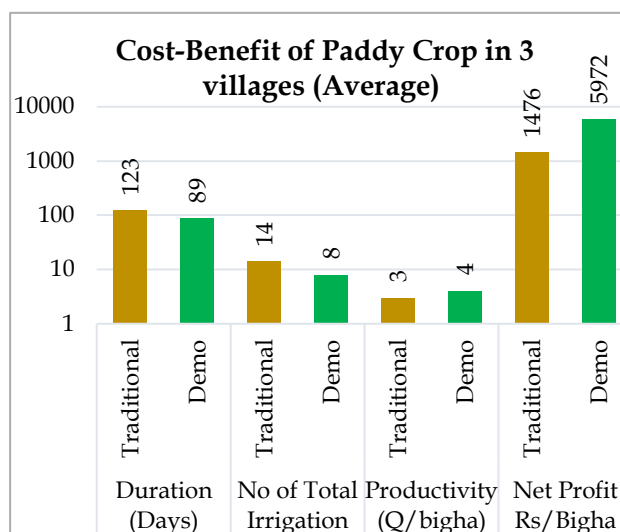
### **Key Findings:**

- PRA and survey results indicate that most farmers in the Hindon Basin are small and marginal, highlighting the prevalence of smallholder farming. Sugarcane cultivation relies heavily on chemical inputs, including fertilizers (urea, DAP, zinc, potassium, calcium, sulfur) and agrochemicals such as Coragen, Fartera, Furadan, Reagent, Cartap, and Ethrel. This heavy dependence on chemicals raises concerns for both environmental and human health in the region.
- The community depends heavily on groundwater for water-intensive crops, highlighting the need for sustainable agricultural water management; a plan is being developed for three blocks in the Hindon sub-basin.



**Fertilizer and Pesticide uses in (Kg/Bigha) at Bhanhera Khurd village**

- The demonstrations on paddy cultivation showed significant reductions in total cost and number of irrigations per bigha, along with a shorter cropping duration. Despite these reductions, about 33% overall production levels increased, highlighting the potential of agroecological practices to enhance both efficiency and sustainability in farming.
- These improvements were achieved through SRI-based cropping systems and the selection of crop varieties that use less water and yield more in shorter durations.
- Bio-monitoring revealed a complete absence of benthic macroinvertebrates at all 22 stations along the Hindon, Krishni, Kali, and Yamuna rivers, indicating extremely poor water quality. As per CPCB classification, these rivers fall under Class E—severely polluted and unfit for aquatic life.
- Over 300 students, youth, and farmers were trained to identify and address water pollution in the Hindon Basin, enhancing their skills in seasonal monitoring and promoting awareness and responsibility for sustainable water management.
- Around 95 farmers from seven villages across four districts received training on preparing organic inputs and were encouraged to shift from conventional chemical-based farming to more sustainable practices, including reduced-input, natural, and organic farming. This environmentally friendly approach promotes soil health, enhances sustainability, and supports the well-being of farmers and their communities.
- During the information-sharing workshop, participants discussed major contamination sources like chemical use, runoff, and waste disposal, and shared concerns about water pollution's impacts. They identified high TDS near Nanauta due to dairy wastewater and urged cleaning the Krishni River and improving treatment facilities.



**Cost Benefit of Paddy**

## Fluorosis Mitigation in Selected Villages of Sonbhadra District

Villages around the Banwasi Sewa Ashram in Sonbhadra district (U.P.) are severely affected by dental and skeletal fluorosis, a result of prolonged exposure to excessive fluoride mainly through drinking water and food. The condition arises when water sources and food crops, often irrigated with fluoride-rich water, contain high levels of fluoride. Continuous intake of such water and food can deform bones and, in severe cases, cripple individuals. This project was supported and funded by the Banwasi Sewa Ashram, Sonbhadra district.

### Objectives:

- To identify safe sources of drinking water in selected 2 villages Manbasa, and Kataundhi
- Prepare plans and their implementation to reduce the prevalence of fluorosis in the selected villages through providing safe drinking water and nutritional interventions.
- Involve village health sanitation and nutrition committee (VHNC) of local body in all the process and promote local governance ownership.

### Activities:

A team of PSI's scientists conducted the following major activities in Manbasa and Kataundhi villages of Sonbhadra district, during FY 25:

- Estimation of fluoride concentration in drinking water and urine as well.
- Selection of 100 households/individuals based on water and urinary fluoride report.
- Fluoride removal kits (Watsan) were provided to 42 families and their performance is being regularly monitored.
- Establishment of 35 kitchen garden (PoshanVatika) which grow calcium rich vegetables such as Cucumber, Bottle-gourd, bitter gourd, brinjal, green leafy vegetables and some fruit plants, tomato, coriander.
- Capacity building to community for monitoring the kit based water quality especially fluoride concentration.



**Skeletal Fluorosis**

### Outcomes:

#### 1. Health Survey:

252 HHs in Manbasa and 440 HHs in Kataundhi were surveyed. Total 3554 persons are covered in the survey as shown in Table 1 and 2.

**Table 1 Manbasa:**

| SN | Description | Values |
|----|-------------|--------|
|----|-------------|--------|

|    |                                                            |      |
|----|------------------------------------------------------------|------|
| 1. | Number of HHs surveyed                                     | 252  |
| 2. | Number of persons surveyed                                 | 1318 |
| 3. | Number of persons affected with Serious dental Fluorosis   | 143  |
| 4. | Number of persons affected with Serious Skeletal Fluorosis | 124  |

**Table 2 Kataundhi:**

| SN | Description                                                | Values |
|----|------------------------------------------------------------|--------|
| 1. | Number of HHs surveyed                                     | 440    |
| 2. | Number of persons surveyed                                 | 2236   |
| 3. | Number of persons affected with Serious dental Fluorosis   | 409    |
| 4. | Number of persons affected with Serious Skeletal Fluorosis | 360    |

## 2. Fluoride concentration in drinking water sources:

Total 78 water sources were tested in Manbasa and 61 water sources in Kataundhi as mapped in Fig 1 and 2.

Fluoride concentration varied between 0.858-7.93 mg/L in Manbasa while 0.178-8.51 mg/L in Kataundhi. Also these data representing house wise dependency on water sources (Hand pump, Well, Tube well and RO plant etc).

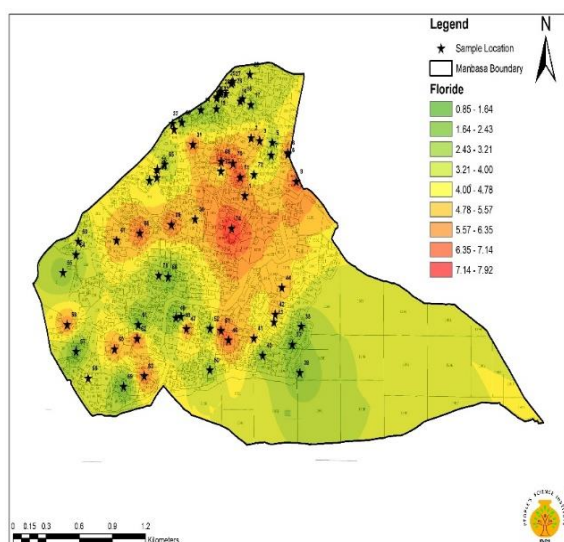


Fig-1

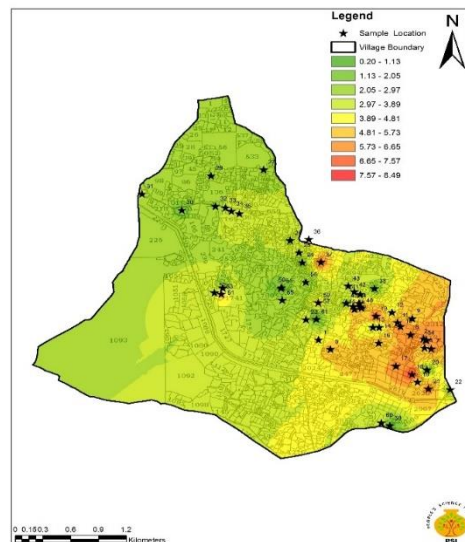


Fig-2

## 3. Urinary Fluoride testing:

Urine samples were collected from 169 persons in Manbasa and 153 persons in Kataundhi and tested for Fluoride concentration. Based on the survey, urinary fluoride was tested at those places where cases of dental and skeletal fluorosis were found. Striking results are summarised below:

**Table 3: urinary fluoride data**

| Village   | Urinary Fluoride (>10 ppm) | Urinary Fluoride (5-10 ppm) | Urinary Fluoride (1.5-5 ppm) | Urinary Fluoride (<1.5 ppms) |
|-----------|----------------------------|-----------------------------|------------------------------|------------------------------|
| Manbasa   | 24 persons (14.20%)        | 71 persons (42.01%)         | 69 persons (40.82%)          | 5 persons (2.95%)            |
| Kataundhi | 23 persons (15.03%)        | 61 persons (39.86%)         | 67 persons (43.79%)          | 2 persons (1.30%)            |

### Recommendations:

- Regular testing of water quality and urinary fluoride is essential, as it clearly reflects the level of fluoride exposure in the human body.
- Government involvement is vital to expand and replicate these initiatives in other regions.
- Ongoing education and counselling are needed to encourage affected individuals, who often lose motivation due to health issues, until lasting behavioural changes are established.



### Soil Health Status of Chhatarpur District, Madhya Pradesh (Bundelkhand Region)

An extensive soil health study was carried out in 17 villages of Gaurihar Block, Chhatarpur District, Madhya Pradesh, to assess soil quality and the impacts of pond silt application and natural farming. The study was financially supported by the Development Support Centre, India.

### Objectives

- Assess the current soil health status in the study area.
- Evaluate the impact of pond silt application on soil health.
- Analyse the effects of natural farming on soil health.

### Activities & Outputs

- Local support teams from Arunodaya sansthan were trained in soil sampling procedures.
- A total of 150 samples were collected from four land types and analysed at a temporary laboratory in Shahnagar, Panna (M.P.):

**A:** Silt-Yes, Natural Farming-Yes (50)

**B:** Silt-No, Natural Farming-No (50)

**C:** Silt-Yes, Natural Farming-No (25)

**D:** Silt-No, Natural Farming-Yes (25)

- Samples were tested for pH, EC, organic carbon, nitrogen, phosphorus, potassium, zinc, iron, sulphur, copper, manganese, and boron.
- Results were analysed in three groups: (1) Silt vs non-silt, (2) Natural vs chemical farming, and (3) Combined effects of silt, no silt, natural, and chemical farming.
- ANOVA was applied to determine statistical significance.
- For overall soil health assessment, a ranking method was also used, assigning higher ranks to desired pH, EC, and nutrient values.

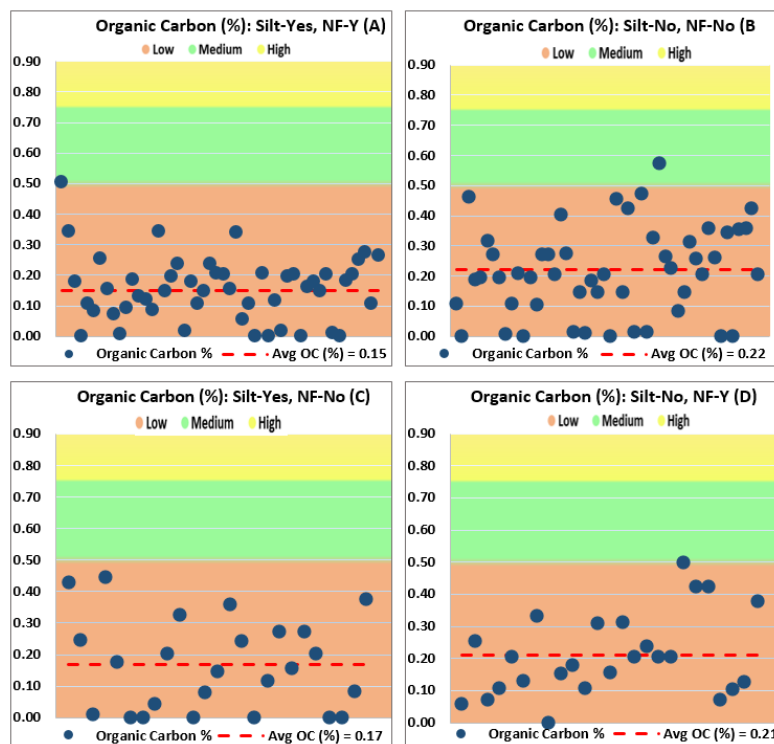


**Soil Sample Analysis**

### Findings/Outcomes

- About 80% of samples across all groups had moderately alkaline pH (7.0–8.0). EC values indicated non-saline soils (<0.4) with no major differences among categories.
- Nearly all samples had low organic carbon (<0.5%) and nitrogen (<280 kg/ha) levels, with no significant variation across groups.
- The highest phosphorus levels occurred in Category ‘A’ (silt + natural farming), followed by ‘B’, ‘D’, and ‘C’.

- Potassium was highest in Category 'B' (chemical, no silt), though excess K may reduce calcium and magnesium availability.
- Soil samples across all four categories showed micronutrient deficiencies- 100% in sulphur (<10 mg/kg), 91% in iron (<14 mg/kg), 90% in boron (<0.5 mg/kg), and 69% in manganese (<2.5 mg/kg). However, copper and zinc were sufficient in 99% (>0.72 mg/kg) and 75% (>1.3 mg/kg) of samples, respectively.



Organic carbon (%) in different soil types

Table- ANOVA results showing level of significance (P Value)

| Parameter      | Silt Vs Non Silt | Natural Vs Chemical farming | Farming Vs Category A Vs B Vs C Vs D |
|----------------|------------------|-----------------------------|--------------------------------------|
| pH             | 0.979            | 0.998                       | <b>0.003</b>                         |
| EC             | 0.202            | 0.657                       | 0.477                                |
| Organic Carbon | <b>0.012</b>     | 0.232                       | 0.090                                |
| Nitrogen       | <b>0.011</b>     | 0.179                       | 0.080                                |
| Phosphorus     | 0.958            | 0.927                       | 0.399                                |
| Potassium      | <b>0.012</b>     | <b>0.001</b>                | <b>0.003</b>                         |
| Sulphur        | <b>0.011</b>     | <b>0.016</b>                | <b>0.020</b>                         |
| Zinc           | 0.835            | 0.141                       | <b>0.032</b>                         |
| Iron           | 0.262            | 0.060                       | <b>0.028</b>                         |
| Manganese      | 0.114            | 0.097                       | 0.361                                |
| Boron          | 0.760            | 0.947                       | 0.545                                |
| Copper         | 0.523            | 0.592                       | 0.221                                |

- Comparing silt vs non-silt groups, non-silt soils performed better in organic carbon, nitrogen, potassium, sulphur, iron, and copper; ANOVA confirmed significant differences in organic carbon, nitrogen, potassium, and sulphur.
- Comparing natural vs chemical farming, chemical farming showed higher nitrogen, potassium, sulphur, manganese, and copper, with significant differences in potassium and sulphur.

- Among the four categories, ‘B’ (no silt, chemical farming) showed higher values of organic carbon, nitrogen, phosphorus, potassium, sulphur, and boron. ANOVA indicated significant differences in pH, potassium, sulphur, zinc, and iron.
- Overall, soils under chemical farming without silt had higher nutrient levels, possibly due to initial low fertility in silt-applied and natural farming plots where practices were recently adopted. However, ranking results suggested better overall soil health in silt-applied and natural farming plots.
- The effects of natural farming generally become evident over a longer period. Hence, to accurately assess the impact of pond silt application and natural farming practices, a longer-term study was recommended, incorporating data on pond silt nutrient content, duration of practices, and types of inputs used.

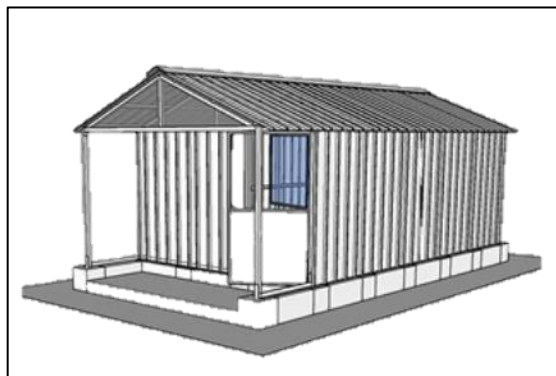
### III c Disaster Response

| S. No. | Project Title | Total Project Period | Total Budget | Funding Agency | Project Partners | Geographical Coverage |
|--------|---------------|----------------------|--------------|----------------|------------------|-----------------------|
|--------|---------------|----------------------|--------------|----------------|------------------|-----------------------|

|   |                                                                                                                                           |                                 | Amount<br>(Rs.) |                        |           |                                                                                                        |
|---|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------|------------------------|-----------|--------------------------------------------------------------------------------------------------------|
| 1 | Prototyping disaster response shelters: A project to develop & deploy temporary shelters in response to the Himachal Pradesh floods, 2023 | December 2023 to September 2024 | 86,09,000       | Sir Dorabji Tata Trust | MVS, RTDC | State: Himachal Pradesh<br>District: Kulu, Mandi<br>Villages: 12<br>Beneficiaries: 60                  |
| 2 | Small Grant for Flood Affected Regions In Himachal Pradesh                                                                                | June 2024 to Aug 2025           | 9,97,200        | Sidhwa Trust           | None      | State: Himachal Pradesh<br>District:- Kullu<br>No. of Villages: 2<br>Beneficiaries:- 240<br>Households |

## Temporary Shelter Project in Kullu and Mandi Districts

The Temporary Shelter Project, proposed by PSI with support from TATA Trusts, aimed to give safe and strong temporary houses to people affected by disasters in Kullu and Mandi districts for two years. ABLA designed and supervised the project, bringing in skills in architecture and community work. The project also worked with local NGOs SAHARA in Kullu and RTDC in Mandi to carry out surveys and collect important feedback from the communities. Under this project, temporary shelters were constructed in 12 villages across five panchayats in Mandi and Kullu districts.



### Activities

- **Prototype and design:** A shelter prototype was developed, and a detailed assembly handbook was created to explain its features and how to assemble and disassemble shelter components.
- **Site Visits:** 9 person-site visits were conducted to ensure seamless project execution, gather feedback, and identify areas for improvement.
- **Shelter construction:** Based on the design, 60 temporary shelters were built 33 in Kullu and 27 in Mandi to serve as two year homes for affected families.



- **Community engagement:** Training sessions and group discussions were held with beneficiaries to demonstrate shelter features, assembly methods, and maintenance.
- **Shelter Inspection:** Regular visits to multiple shelters enabled the team to Evaluate joinery details and structural integrity . Identify potential issues and implement corrective measures. Refine design elements for improved functionality.

Table -1: Activity and Output

| S.No. | Activity                    | Outputs                                                                                                                                                                     |
|-------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.    | <b>Prototype and Design</b> | A shelter prototype was developed, and a detailed assembly handbook was created explaining the design, features, and step-by-step assembly and dismantling process.         |
| 2.    | <b>Site Visits</b>          | A total of 9 site visits were carried out to ensure seamless project execution, gather feedback, and make on-site improvements where needed.                                |
| 3.    | <b>Shelter Construction</b> | 60 temporary shelters were built 33 in Kullu and 27 in Mandi providing two-year housing to affected families                                                                |
| 4.    | <b>Community Engagement</b> | Training sessions and group discussions were conducted with beneficiaries to explain shelter features, assembly, and maintenance, encouraging local participation.          |
| 5     | <b>Shelter Inspection</b>   | Regular inspection visits were made to check joinery quality and structural safety. Design elements were refined and minor issues corrected to improve overall performance. |

**Outcomes:** The project had a clear positive impact. It provided 60 families with safe, durable shelters, greatly improving their housing security after the floods. Involving local people in training and decision-making helped build community resilience and practical skills. The collaborative approach—PSI, ABLA, local NGOs, and authorities ensured the shelters met real needs. Overall, this experience shows how well planned temporary housing can support disaster recovery, giving families stability and time to rebuild permanent houses.

#### Beneficiary Stories:

- Khube Ram (Mandi): Lost his house and belongings in the flood disaster. After months in makeshift housing, his family received a new temporary shelter in early 2024.
- Room Prakash (Mandi): His home was destroyed and family displaced. Received a new shelter by April 2024.
- Tara Devi (Kullu): Initially stayed in a crowded relief tent after her home was washed away. Her new shelter with a toilet was completed in April 2024, providing safety and privacy.



- Ruki Devi (Kullu): A widow who lived in a shared hall for months Lacking toilet. Received a new shelter in April 2024, allowing her to live independently and work without safety concerns.

## **Project: Small and Immediate Livelihood Regeneration Grant For the Disaster Affected**

### **Regions in Himachal Pradesh**

Relentless monsoon rains across northern India in 2023 have led to severe flood events. The floods have hit the hardest in the mountain state of Himachal Pradesh, where runaway road building exacerbated landslides. In Banjar Block district Kullu large number of families lost their houses completely due to flash floods and landslides.

With the support of Tata trust (SDTT) Mumbai, PSI constructed 33 insulated temporary shelters for the selected families who have completely lost their houses in these floods. Sidhwa Trust facilitated Meharnosh Donations for the approval of small grant project for the post disaster livelihood development of affected families in Bandal and Jhutli villages/wards of Sarchi panchayat. Project was started from 1<sup>st</sup> June, 2024. On the request of PSI project was extended for three months i.e. up to 31<sup>st</sup> August.

### **2. Objectives:**

- Enhancing food and livelihood security through increased productivity of natural, human and social capital.
- Planned economic development through a process of participatory micro-planning focussing on farm based, off farm and natural resource management activities.
- Village level institution building and strengthening of the existing community based institutions.
- Convergence with on-going rural development schemes of the government.

### **3. Activities:**

To achieve the above objectives, in FY 2024-25 PSI's NRM team enabled the implementation of farm-based and off-farm livelihood generation activities two villages ( Bandal and Jhutli) under Sarchi panchayat. With the help of local partner organisation SAHARA PSI team undertook the following activities:

**3.1. Village level microplanning:** Detailed PRA and microplanning of three wards of two villages. Total number of families in Bandal and Jhutli wards are 163 (55 in Jhutli and 108 in Bandal) and population is 763. About 15 percent of the families are from SC community.

**3.2. Community mobilisation:** Development of village facilitators for community mobilisation, monitoring and handholding. Institutions like Mahila Mandals, SHGs and Bee keeping, fruit and natural farming groups were formed and strengthened (see table-1).



**PRA and Microplanning exercise by PSI team**

**Table -1: Details of Institutions developed**

| Sr. No. | Institutions             | Number    | Members    |
|---------|--------------------------|-----------|------------|
| 1       | Mahila Mandals           | 2         | 20         |
| 2       | SHGs                     | 2         | 19         |
| 3       | Bee keeping group        | 1         | 15         |
| 4       | Fruit cultivation groups | 1         | 16         |
| 5       | Natural farming group    | 4         | 94         |
| 6       | Medicinal farming group  | 1         | 15         |
|         | <b>Total</b>             | <b>11</b> | <b>179</b> |

**3.3 Capacity building:** Capacity building of PSI, SAHARA Team and village facilitators. Training and exposure of village level institutions, farmers and village facilitators, cluster level workshop for the convergence with govt. departments.

**3.4 NRM activities:** Soil and water conservation activities, construction of protection walls, fodder and grass plantation, spring recharge.

**3.5 Farm based livelihood activities:** Agro-ecological practices, cultivation of vegetables, pulses, medicinal farming, kitchen gardens, fruit plantation and seed bank and bio input resource center.

**3.6 Farm based micro enterprises:** Villagers stressed on replacing poultry and goatry activities with bee keeping. Interested 18 farmers were trained by experts in GBPHE and Deen Dayal Bee Farm. Some of these farmers were already doing bee keeping. The inputs given by experts during trainings helped them in solving the problems. At the end of training 1 bee box, six, six frames and some accessories were given to 15 participants.



**Protection walls for soil conservation**



**Distribution of Pea seeds to SHG members in Kosonali hamlet of village Bandal**



**Training of bee farmers by experts**

**3.7 Off farm enterprises for women:** Women from two SHGs (Nari shakti SHG Koshonali and Devta Khodu SHG nichla Bandal) took one month long training on sewing. Sewing machines, cloth and other accessories were given to both the groups. Out of these 20 trained women 8 women prepared clothes for their family. 2 women became sewing trainers.



**Training of women group members on Sewing**



**Production of cloths by women group members after on Sewing training**

#### 4. Output: Table -2: Activity wise Output

| S. No. | Activity                         | Output                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.     | Village level micro-plans        | Micro plans of two villages/ wards (Bandal and Jhutli) of Sarchi panchayat prepared. Other two hamlets Koshonali under bandal and Talhar under Jhutli were also covered during PRA and planning exercises. Micro-planning activities conducted during PRA and village level planning are: <ul style="list-style-type: none"> <li>• PRAs (on ward basis)</li> <li>• Wealth Ranking</li> <li>• Social and Resource Mapping</li> <li>• Problem Ranking (based on livelihood)</li> <li>• Identification of possible interventions</li> </ul> |
| 2.     | Community mobilization           | Local people were identified as village facilitators. They were trained and involved in organizing village level meetings, identification of beneficiaries under different farm and off farm livelihood activities, data gathering and handholding support. This helped in increased community participation in project activities.                                                                                                                                                                                                      |
| 3.     | Capacity building                | Capacity of PSI, SAHARA (local partner organization in Banjar Kullu) team and village facilitators built. Training and exposure visits organized for village level institutions, farmers and village facilitators. Cluster level workshop organized for the convergence with govt. departments. Two day farmers training on cultivation of medicinal plants organized in G B Pant Institute of Himalayan Environment Kullu.                                                                                                              |
| 4.     | NRM Activities                   | For soil and water conservation activities three protection walls constructed in village Bandal. For the recharging of springs construction of trenches and plantation of fodder fodder and grass and grass done in the catchment of two springs.                                                                                                                                                                                                                                                                                        |
| 5      | Farm based livelihood activities | 80 farmers adopted SCI method in Pea cultivation in one bigha (800 sq.m.) plot each). 15 farmers grown Kidney beans as cash crop. About 700 fruit plants were planted by 160 farmers. Apple, Pear, Citrus lemon and Persimmon were planted. Out of 160 farmers 10 farmers planed 30 plants and developed mini orchards.                                                                                                                                                                                                                  |

| S. No. | Activity                       | Output                                                                                                                                                                                                                                                                                                                     |
|--------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        |                                | After taking training on cultivation of medicinal plants 15 farmers were given seeds of Kuth which they shown in their farm in March. Transplantation will be done after six month                                                                                                                                         |
| 6.     | Farm based micro enterprises   | 18 farmers were selected for bee keeping. In first round they were trained in G B Pant Institute of Himalayan Environment Kullu while in second round training was given in Deen Dayal Bee farm Kardasu near Kullu. One bee box, 6 frames and one protection kits were distributed to each farmer.                         |
| 7.     | Off farm enterprises for women | 20 women from two SHGs from Koshonali and nichla Bandal took one month long training on sewing. Sewing machines, cloth and other accessories were also given to both the groups. Out of trained women 8 women prepared clothes for their family. 2 women earned income for their families and also became sewing trainers. |

## 5. Outcomes

A participatory planning process was followed by institution building process and capacity building of farmers and institutions.

Under farm based livelihood Pea farming adopted by 79 farmers which gave a return of Rs.2.67 lakhs. Equal amount was consumed by the producer farmers. Total 900 fruit plants were directly distributed to 150 interested farmers which will give an income of Rs.1,50,000 in 2027 and Rs. 3,00,000 in 2028 onwards. In addition mini orchards (30 fruit plants in a plot) developed by 10 farmers will give a return of about Rs.4.75 lakh ( Rs.47,500 per farmer per year) in 2027 and Rs.9 lakh in 2028 onwards. 15 trained farmer have grown nursery of medicinal plan Kuth in 45 hectare land which will be extended to 90 hectare. This will give a return of Rs. 4 lakh after three year i.e. from 2028 onwards.

Under farm based micro enterprise bee keeping adopted by 15 trained farmers. Each farmer have started earning earn Rs. 2,500 annually from two bee boxes which they will extend to 5-10 boxes each and are expected to earn Rs. 5,000 in 2027 and above 10,000 2028 onwards. About 20 members of SHGs were trained in sewing. Most of them started sewing of cloths for their families. Some of them started earning from sewing of cloths for other women from their villages while two of them have become trainer.

**Table -3 : Outcome of different Farm and off farm Livelihood Activities**

| S. No. | Livelihood activity  | Units (Number/ Area) | No of beneficiaries | Total income till August, 2025 | Expected Annual income Rs. (August, 2027) | Expected Annual income Rs. (August, 2028) |
|--------|----------------------|----------------------|---------------------|--------------------------------|-------------------------------------------|-------------------------------------------|
| 1      | Pea farming          | 15 hectare           | 79                  | 2,67,562                       | 2,67,562                                  | 2,67,562                                  |
| 2      | Fruit plants         | 900 plants           | 150                 | 0                              | 1,50,000                                  | 3,00,000                                  |
| 3      | Mini orchards        | 475 plants           | 16                  | 0                              | 4,75,000                                  | 9,00,000                                  |
| 4      | Medicinal plants     | 45 hectare           | 15                  | 0                              | 0                                         | 4,00,000                                  |
| 5      | Kidney beans farming | 3.7 hectare          | 15                  | 67,500                         | 67,500                                    | 67,500                                    |
| 6      | Bee keeping          | 30 boxes             | 15                  | 75,000                         | 3,00,000                                  | 5,00,000                                  |
| 7      | Sewing               | 2 groups             | 36                  | 9,550                          | 30,000                                    | 50,000                                    |

|  |              |  |            |                 |                  |                  |
|--|--------------|--|------------|-----------------|------------------|------------------|
|  | <b>Total</b> |  | <b>150</b> | <b>4,19,612</b> | <b>12,90,062</b> | <b>24,85,062</b> |
|--|--------------|--|------------|-----------------|------------------|------------------|

### III d Sustainable and Inclusive Urbanization

| <b>S. No.</b> | <b>Project Title</b>                                        | <b>Total Project Period</b>   | <b>Total Budget Amount (Rs.)</b> | <b>Funding Agency</b>               | <b>Project Partners</b>                   | <b>Geographical Coverage</b>                                                            |
|---------------|-------------------------------------------------------------|-------------------------------|----------------------------------|-------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------------|
| 1             | Shallow Aquifer Management for Gwalior city Under AMRUT 2.0 | February 2022 to October 2023 | 15,00,000                        | National Institute of Urban Affairs | ACWADAM and Gwalior Municipal Corporation | State: Madhya Pradesh<br>City:- Gwalior<br>Beneficiaries:-<br><b>1200</b><br>Households |

## Shallow Aquifer Management for Gwalior City under AMRUT 2.0

Under AMRUT 2.0 (Atal Mission for Rejuvenation and Urban Transformation), Gwalior is one of the 10 cities selected for shallow aquifer management. Due to excessive groundwater exploitation, the water table is declining, and demand is rising with the city's rapid growth. To address this, a groundwater contour map was created using data from 3,000 water bodies provided by the Gwalior Municipal Corporation. Twenty sites were surveyed for aquifer recharge. Selected three sites—Janak Taal Hills, Lakshiganj Hills, and Senapati Hanuman Mandir—for aquifer recharge.

### Objectives:

- Enhance the practical and action-oriented knowledge of city stakeholders on scientific management of shallow aquifers.
- Demonstrate the use of recharge wells, rainwater harvesting and water conservation structures to revive and rejuvenate depleting shallow aquifers.
- Explore avenues to scale up the pilot to the rest of the city.

### Activities:

- Engaged with government and non-government agencies in Gwalior city to assess the current situation of shallow aquifers and gather valuable insights.
- Organized a workshop to disseminate the significance of the AMRUT program for Gwalior city and foster awareness and collaboration.
- Conducted comprehensive surveys to assess hydrogeological aspects and engineering feasibility, identifying suitable pilot sites for shallow aquifer recharge initiatives.
- Prepared a detailed technical report outlining the management strategies for shallow aquifers, incorporating findings from the surveys and site assessments.
- Engaged with civic authorities to discuss project progress, ensuring alignment with civic initiatives.
- Installed monitoring systems at selected sites to track the progress and effectiveness of shallow aquifer recharge activities, enabling data-driven decision-making.
- Selected three sites for shallow aquifer recharge.
- Started implementation work at two sites.



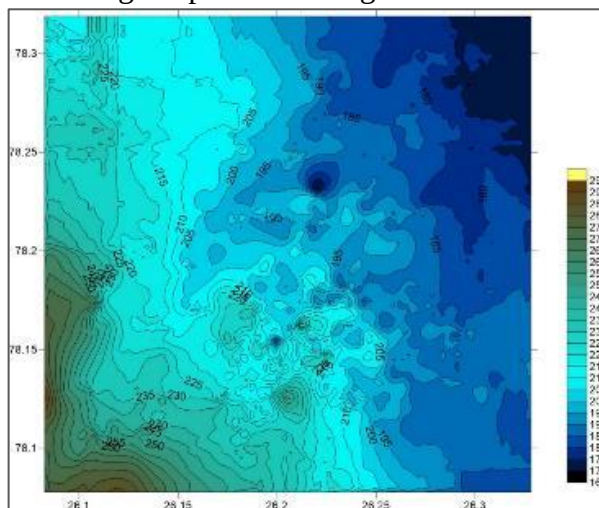
Hydrogeological and engineering survey at Lakmiganj.

- **Key Findings:**

**Geological Assessment of Hydrological Prospects:** Comprehensive geological analysis of Gwalior to assess its hydrogeological potential and gain practical insights into its water resources.

**Capacity Building and Stakeholder Engagement:** Introduced over 100 professionals from different government departments and NGOs to shallow aquifer management, enhancing awareness and collaboration for water resource initiatives.

**Aquifer Mapping for Groundwater Movement:** Implemented aquifer mapping to understand groundwater dynamics within and around Gwalior city, facilitating informed decision-making on water management strategies.



Groundwater level map of Gwalior city

**Groundwater Level Mapping:** Created a groundwater level map of Gwalior city using data from 3000 water bodies supplied by Jal Nigam Gwalior. The map revealed disparities, with the Northeast region displaying the lowest groundwater levels and the Southwest exhibiting the highest levels.

**Identification and Intervention at Aquifer Recharge Sites:** Identified 17 potential shallow aquifer recharge sites in Gwalior city, finalizing 3 sites for intervention. Thorough design and estimation were conducted, taking into account the urban landscape for effective implementation.

**Implementation of Shallow Aquifer Recharge Measures:** Three sites were selected for the implementation, which include desilting and dewatering of wells, trenches, gabion check dams, circular khal, pond, water collection chamber, filtration chamber, and injection wells. Water level recorders were installed to understand the effect of recharge measures.



**Recognition and Publication:** The groundwater level map received acclaim from the Ministry of Urban Affairs and was published in the Gwalior Groundwater Booklet, recognizing the significance of the findings in urban water resource planning.



### III e Training and Field Support

| S. No. | Project Title                                                                                                                                                                                                   | Total Project Period          | Total Budget Amount (Rs.) | Funding Agency                                             | Project Partners | Geographical Coverage                                                                                     |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|---------------------------|------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------|
| 1      | Preparation of DPR                                                                                                                                                                                              | December 2023 to April 2024   | 1,20,000                  | NABARD Manipur                                             | None             | State: Manipur<br>District: Tengnoupal and Thaubal<br>No. of Villages: 4<br>Beneficiaries: 258 Households |
| 2      | DPR Preparation of Bhagwara, Samirpur Watershed FIP Project                                                                                                                                                     | December 2023 to October 2024 | 2,06,445                  | Manav Vikas Sansthan                                       | None             | State: Himanchal Pradesh<br>District: Hamirpur<br>No. of Villages: 17<br>Beneficiaries: 595 Households    |
| 3      | Preparation of DPR for rejuvenation of spring in the sanction project area falls in Balh Development Block.                                                                                                     | Jul-25                        | 1,23,900                  | Ambuja Cement Foundation                                   | None             | State: Himanchal Pradesh<br>District: Mandi<br>No. of Villages: 5<br>Beneficiaries: 200 Households        |
| 22     | 1) Springshed Development and Management Project for Zunheboto District Nagaland<br>2) Mitigation of Flood and River Bank Erosion in Pachi River (A Tributary of Dikhu River) Through Integrated Catchment Area | February 2025 to              | 44,34,000                 | Department of Soil & Water Conservation, Govt of Nagaland. | None             | State: Nagaland<br>District: Longleng & Zunheboto<br>No. of villages: 24<br>Beneficiaries: 2,500 HHs      |

| S. No. | Project Title                                                                                                              | Total Project Period        | Total Budget Amount (Rs.) | Funding Agency                              | Project Partners          | Geographical Coverage                                                                                                                                       |
|--------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------|---------------------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | Treatment with Bio-Engineering Approach, Longleng District, Nagaland                                                       |                             |                           |                                             |                           |                                                                                                                                                             |
| 23     | Community based forest management and livelihood improvement in Meghalya (MEG LIFE)                                        | November 2023 to May 2027   | 57,39,291                 | Central Himalyan Rural Action Group (CHIRAG | PRASARI, HUCWARM, ACWADAM | State: Meghalaya<br>Districts- North Garo, West Garo, East Jaintia, East Khasi, South West Khasi<br>No. of Villages: 12<br>Beneficiaries: 402<br>Households |
| 24     | Springshed Management CAD at Mangan & Gangtok, Soreng & Namchi District, Sikkim                                            | February 2025 to March 2025 | 6,50,000                  | Water Resource Department, Gangtok, Sikkim  | None                      | State: Sikkim<br>District: Mangan, Gangtok, Soreng, Namchi<br>No. of Villages: 4<br>Beneficiaries: 295 HH                                                   |
| 25     | Three Days training program on Hydrogeological study and potential recharge area identification for springshed Management. | Jan-25                      | 103840                    | NABARD-RO , Himachal Pradesh                | None                      | State: Himanchal Pradesh<br>District: Sirmaur<br>No. of participants: 23                                                                                    |
| 26     | Conducting four days' training for field staff and officers in the field of soil-moisture at Rampur Mandi Training         | Dec-24                      | 118000                    | Forest Department, Chakrata                 | None                      | State: Uttarakhand<br>District: Dehradun<br>No. of participants: 27                                                                                         |

| S. No. | Project Title                    | Total Project Period | Total Budget Amount (Rs.) | Funding Agency | Project Partners | Geographical Coverage                                               |
|--------|----------------------------------|----------------------|---------------------------|----------------|------------------|---------------------------------------------------------------------|
|        | Centre from 19-22 December 2024. |                      |                           |                |                  |                                                                     |
| 27     | Training                         | Mar-25               | 50,000                    | ACWADAM        | None             | State: Uttarakhand<br>District: Dehradun<br>No. of participants: 15 |

## **Watershed-based Springshed Development Program for WWAGS, Imphal, Manipur**

The Wangjing Women and Girls Society (WWAGS) is based in Wangjing village, Thoubal district, Manipur. PSI extended technical support to it for implementing a watershed-based springshed program to improve water and food security across four villages in Thoubal and Tengnoupal districts. This collaboration with WWAGS opens up new opportunities for engagement and strategic partnerships for sustainable resource management in Manipur.

### **Objectives:**

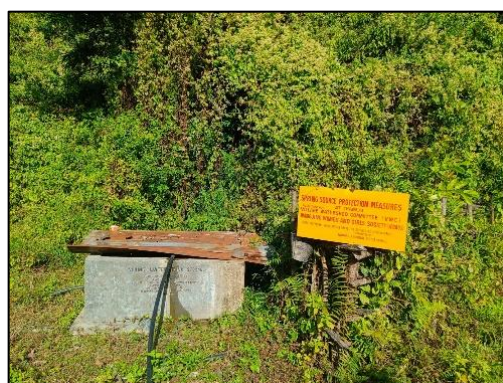
- Preparation of hydrogeological and engineering reports for 14 springs in 4 villages of Tengnoupal & Thoubal districts in Manipur.

### **Activities:**

- Conducted hydrogeological and engineering surveys in 4 villages of the selected districts, Tengnoupal & Thoubal, Manipur.
- Collected primary social and agricultural data of the villages.
- Prepared a hydrogeological report and identified the recharge area of 14 springs.
- Prepared engineering estimates and designs for the recharge activities.

### **Outcomes:**

- The project will benefit 258 households in 4 villages, with a total population of 1526.
- It will increase in spring water discharge, reduce soil erosion, increase soil moisture and biomass productivity.



## **DPR preparation of Bagwara Samirpur Watershed, Hamirpur District, (H.P.)**

People's Science Institute (PSI) provided technical assistance for two NABARD-funded watershed development projects in Himachal Pradesh. Manav Vikas Sansthan secured funding for the Samirpur-Bagwara Watershed project in Hamirpur district, while Ambuja Foundation implemented the Brikhmani Springshed development project. Both initiatives address water security challenges in the Indian Himalayan Region through scientific assessment and community-driven solutions, focusing on spring rejuvenation and sustainable water management from 2024 to 2028.

### **Objectives**

- Improve soil health and tackle water scarcity in the Samirpur-Bagwara Watershed (Bamson block, Hamirpur district), located within the Kunah Khad catchment of the Beas River.
- Revive springs in the Brikhmani area by applying scientific methods to understand local hydrogeology and enhance natural recharge processes.
- Mitigate climate change impacts by restoring natural ecosystems and increasing livelihood opportunities for mountain communities.
- Ensure access to safe drinking water, better sanitation, and higher farm productivity to reduce outmigration from hill regions.

### **activities**

- Conducted extensive hydrogeological mapping using GPS and Brunton compass to identify spring recharge areas, geological formations, and groundwater movement patterns.
- Performed detailed assessments of 8 springs with discharge measurements, water quality parameters, and geological characterization.



**Field visit with villagers for engineering feasibility Bilaspur District (HP)**



**Water quality monitoring of spring at Brikhmani Springshed, Mandi District (HP)**

- Engaged watershed communities through meetings and Participatory Rural Appraisal exercises to identify key water resource issues.
- Prepared comprehensive topographic maps including drainage analysis, slope mapping, land use classification, and soil characterization.

- Designed site-specific soil and water conservation measures with detailed cost estimates for proposed interventions.
- Collected watershed survey data on topography, soil types, water resources, and vegetation patterns across both project areas.

### **Outcomes**

- Prepare Detailed Technical Report and Project Report of watershed and springhsed project at different locations.
- Established community-based institutional frameworks for watershed management and spring protection activities.

## Springshed Development and Management Project for Zunheboto District, Nagaland

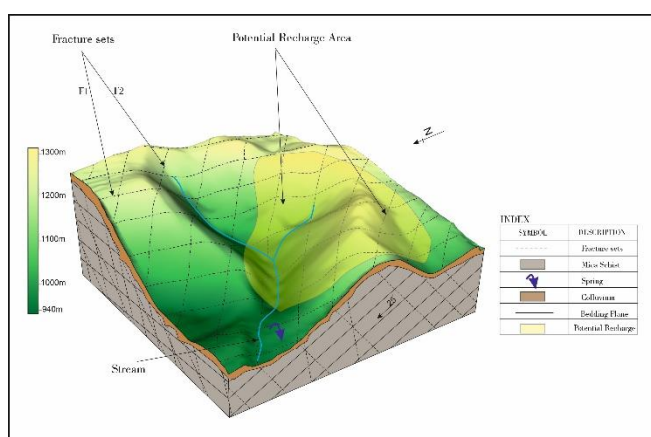
The Soil Conservation Department in Kohima, Nagaland, is actively collaborating with the Brahmaputra Board on initiatives aimed at rejuvenating rivers and springs. Recognizing the importance of expertise in this area, the Soil Conservation Department sought assistance from the People's Science Institute (PSI) to gain insights into effective spring rejuvenation methodologies. In response, PSI provided invaluable technical support, enabling the Soil Conservation Department to successfully identify recharge areas and treatment measures for 62 springs in the Zunheboto district.

### Objective:

- Preparation of Detailed Technical reports for 62 springs from 16 villages of Zunheboto District.
- Capacity building of the ground staff of the Soil Conservation Department on the implementation of treatment structures.

### Activities:

- Conducted hydrogeological and engineering surveys to identify recharge areas and treatment structures of 62 springs in Zunheboto district.
- Handholding of ground staff for implementation of treatment/recharge structures.
- Prepared village wise Detailed Technical Reports for Springshed Development and Management for 16 villages.



### Outcomes:

- Project will directly benefit 1900 Households (10,000 population) of 16 villages of Zunheboto District of Nagaland.
- It will increase in spring water discharge, reduce soil erosion, and increase soil moisture and biomass productivity.

## **Community-based Forest Management and Livelihood Improvement in Meghalaya (MEG LIFE)**

The Government of Meghalaya continues to implement the MEG LIFE Project to promote community-based forest management and strengthen local livelihoods. Springshed management remains a key component of this initiative. The People's Science Institute (PSI), as a consortium partner led by CHIRAG, is supporting the Meghalaya Basin Development Authority (MBDA) in accelerating project implementation and building technical capacity within MEG LIFE. During the current year, PSI has assisted in preparing detailed technical reports and organizing advanced capacity-building programmes to enhance the field staff's understanding of springshed management and participatory approaches.

### **Objectives**

- Preparation of 12 Springshed Treatment Plans (STPs), including hydrogeological mapping and identification of critical and vulnerable springs in the districts of East Jaintia Hills, East Khasi Hills, South West Khasi Hills, North Garo Hills, and South Garo Hills.
- Review and technical support to ensure the quality and scientific validity of treatment plans prepared by MEG LIFE teams.
- Capacity building of selected representatives from State, District, and Block Project Management Units through practical training on springshed assessment, survey techniques, and participatory planning tools for preparation and implementation of STPs.

### **Activities**

- Compiled a detailed inventory of springs in the identified villages across the five project districts and selected one spring from each area for treatment based on community needs, accessibility, and dependence.
- Conducted extensive data collection on parameters including geology, physiography, land use, and water quality to understand hydrogeological conditions and recharge characteristics of the selected springs.
- Prepared 12 Detailed Technical Reports (DTRs), providing in-depth analysis of each spring's hydrogeological features, degradation causes, treatment requirements, and proposed interventions for sustainable recharge and flow improvement.
- Organized an intensive 8-day training programme on Springshed Management for 70 participants from the MEG LIFE project (under MBDA). The training included both



**Village level meeting under MegLIFE project in North Garo Hills District**

classroom and field-based sessions, covering topics such as spring typology, hydrogeological mapping, data collection methods, and treatment planning.

- The programme also integrated Participatory Rural Appraisal (PRA) tools to help field teams identify key water sources, understand community water use patterns, and plan context-specific interventions.

### **Outcomes**

- Springshed mapping and inventory led to the identification and detailed assessment of 12 priority springs across the project districts, ensuring interventions are aligned with community water requirements and environmental priorities.
- The Detailed Technical Reports provided actionable insights into the treatment and conservation needs of each spring, guiding project teams in implementing effective recharge measures and managing local water resources.
- Trained participants are now equipped to carry out field assessments, prepare treatment plans, and monitor outcomes independently, contributing to long-term sustainability and community ownership of spring resources.
- The project continues to strengthen the foundation for community-driven water resource management across Meghalaya, promoting ecological restoration and resilient rural livelihoods through scientifically guided springshed interventions



**Classroom session of Springshed Management Training program at Shillong**



**Field session of Springshed Management Training program**

## **Springshed Development and Management Project for Mangan & Gangtok, Soreng & Namchi District, Sikkim**

The Springshed Development Project was initiated by the Water Resources Department of Gangtok, Sikkim, with funding supplied by the Brahmaputra Board. The People's Science Institute provided technical assistance to the Water Resources Department for the implementation of the springshed project over 2800 m above sea level. This included the preparation of springshed development reports for six springs located across four districts: Mangan, Gangtok, Soreng, and Namchi in Sikkim.

### **Objective:**

- Preparation of Detailed Technical reports for 6 springs from 5 villages of Mangan, Gangtok, Soreng, and Namchi District of Sikkim.

### **Activities:**

- Conducted hydrogeological and engineering surveys to identify recharge areas and treatment structures of 6 springs in Mangan, Gangtok, Soreng, and Namchi District of Sikkim.
- Handholding of ground staff for implementation of treatment/ recharge structures.
- Prepared village vis Detailed Technical Reports for Springshed Development and Management for 6 springs.

### **Outcome:**

- The project will directly benefit 295 households with a population of 1800.
- Increased water availability from the springs will reduce stress from the local water supply system, as 70 hotels, a school and a health centre can be connected to the spring water.



## **4-days training on Springshed Management conducted for officials of Chakarata Forest Division (Uttarakhand)**

As part of the year's capacity-building initiatives, a four-day Soil and Moisture Conservation (SMC) training was delivered in collaboration with People's Science Institute at Rampur Mandi (Kalsi) from 19–22 December 2024. The programme targeted field staff of the Chakarata Forest Division to strengthen practical skills in watershed and springshed management and to support on-ground conservation interventions across the division.

### **OBJECTIVES**

- Improve understanding of watershed and springshed concepts and their role in local water security.
- Build practical skills for planning, designing, and estimating SMC structures (check dams, contour trenches, diversion drains, etc.).
- Enable participants to identify recharge areas, conduct field surveys, and use simple GIS tools for watershed delineation.

### **ACTIVITIES**

- Classroom sessions covering SMC principles, structure types, selection criteria, and calculation of Bill of Quantities.
- Field exercises in multiple forest ranges covering slope measurement, site selection, cross-section and spillway design for check dams, layout and excavation of staggered contour trenches, and evaluation of existing brushwood structures.
- Practical demonstration of watershed delineation using Google Earth Pro and Survey of India topo-sheets, plus simple rainfall measurement techniques.



**Field session of treatment measures under Springshed Development**

### **OUTCOMES**

- Participants gained confidence in selecting appropriate structures for site-specific conditions and in preparing basic design estimates.

## VI. FINANCIAL REPORT

### Project Wise Financial Statement (2024-25)

| S. No. | Project                                                                                                                                                                                                                                   | Funding Partner                              | Opening Balance (Rs.) | Income (Rs.) | Utilization (Rs.) | Balance (Rs.) |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------|--------------|-------------------|---------------|
| 1      | Promoting Farm and off Farm based Micro-enterprise Development for Livelihoods Security in Western Himalayan Landscape under LIC LIFE Program (Livelihood Initiative for Financial Empowerment)                                           | LIC - HFL -CSR                               | 87,438                | 25,38,473    | 14,69,215         | 11,56,696     |
| 2      | Watershed Based Springshed Development in Almora district                                                                                                                                                                                 | NABARD -RO Dehradun                          | (2,38,965)            | 5,22,000     | 3,36,002          | -52,967       |
| 3      | Watershed Based Springshed Development in Bageshwar district                                                                                                                                                                              | NABARD -RO Dehradun                          | 12,352                | 3,48,000     | 3,50,847          | 9,505         |
| 4      | Ground Water Recharge in Haljora Watershed through Common Property Resources Management in Haridwar district of Uttarakhand.                                                                                                              | WIPRO Cares                                  | (8,615)               | 37,70,732    | 37,62,117         | -             |
| 5      | Strengthening the local innovation systems through S&T interventions for enhancing livelihood system efficiency of EWS in villages of Haridwar district, Uttarakhand                                                                      | Department of Science & Technology           | (8,39,978)            | 57,53,548    | 49,13,570         | -             |
| 6      | Building Community Resilience in Purkul Watershed of Dehradun District                                                                                                                                                                    | VANA Enterprises Ltd.                        |                       | 10,00,000    | 7,33,450          | 2,66,550      |
| 7      | A project to plant and maintain 1,000 native tree saplings in Uttarakhand, India                                                                                                                                                          | Hasten Forestry India Pvt Ltd (Medius Earth) | -                     | 98,000       | 1,02,160          | (4,160)       |
| 8      | Enhancing Community Resilience of Small holders through Socio-Technical Adaptations in System of Crop Intensification (SCI): A Systematic Insight from the Rainfed Farms of Bundelkhand and Himalayan Regions of India” under the special | IIT Roorkee                                  |                       | 20,00,000    | 1,07,811          | 18,92,189     |

| S. No. | Project                                                                                                                                                                                                                                                                              | Funding Partner                                                     | Opening Balance (Rs.) | Income (Rs.) | Utilization (Rs.) | Balance (Rs.) |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------|--------------|-------------------|---------------|
|        | Call for Collaborative Research Proposals on Longitudinal Studies in Social and Human Sciences                                                                                                                                                                                       |                                                                     |                       |              |                   |               |
| 9      | Building climate Resilience in water stressed Panna district of the Bundelkhand Region                                                                                                                                                                                               | R.D.Tata Trust                                                      |                       | 90,46,005    | 1,96,357          | 88,49,648     |
| 10     | Co-creating Sustainable Agri-Water Use in the Hindon sub-basin –A Multi Scale Participatory Approach                                                                                                                                                                                 | Indian Institute of Science Education and Research (IISER) Kolkata) | (13,687)              | 1,30,942     | 15,17,255         | (14,00,000)   |
| 11     | Prototyping disaster response shelters: A project to develop & deploy temporary shelters in response to the Himachal Pradesh floods, 2023                                                                                                                                            | Sir Dorabji Tata Trust                                              | 34,11,486             | 20,695       | 34,32,181         | 0             |
| 12     | Small Grant for Flood Affected Regions In Himachal Pradesh                                                                                                                                                                                                                           | Sidhwa Trust                                                        |                       | 997200       | 522050            | 4,75,150      |
| 13     | Preparation of DPR                                                                                                                                                                                                                                                                   | NABARD Manipur                                                      | 56,056                | 0            | 1,04,985          | -48,929       |
| 14     | 1) Springshed Development and Management Project for Zunheboto District Nagaland<br>2) Mitigation of Flood and River Bank Erosion in Pachi River (A Tributary of Dikhu River) Through Integrated Catchment Area Treatment with Bio-Engineering Approach, Longleng District, Nagaland | Department of Soil & Water Conservation, Govt of Nagland.           | -                     | 17,73,600    | 6,88,638          | 10,84,962     |
| 15     | Climate Smart Drought Mitigation and Livelihood Enhancement                                                                                                                                                                                                                          | Ajim Premji Philanthropic Foundation (APPF)                         | 74,136                | 0            | 74,136            | -             |
| 16     | Upscaling farming Aligned with Nature across Agro-Ecologies in MP                                                                                                                                                                                                                    | Bharat Rural Livelihood Foundation (BRLF)                           | 3,758                 | 0            | 3,758             | -             |
| 17     | Evaluating PMAY-Urban's Contribution in Uplifting Housing Satisfaction, Socio-Economic conditions and improving Disaster                                                                                                                                                             | IIT- Roorkee                                                        | (2,40,468)            | -            | -                 | (2,40,468)    |

| S. No. | Project                                          | Funding Partner                      | Opening Balance (Rs.) | Income (Rs.) | Utilization (Rs.) | Balance (Rs.) |
|--------|--------------------------------------------------|--------------------------------------|-----------------------|--------------|-------------------|---------------|
|        | Resilience in Uttarakhand                        |                                      |                       |              |                   |               |
| 18     | Participatory Springshed Management              | Soil & Water Conservation Department | 5,33,426              | 0            | 5,33,426          | -             |
| 19     |                                                  | Wheels Global Foundation             | (1,34,948)            |              |                   | (1,34,948)    |
| 20     | Environment Education program & Service Projects |                                      | 83,917                | 36,99,784    | 39,49,066         | (1,65,365)    |

PSI's balance sheet and consolidated income and expenditure account for 2024-2025, ending March 31, 2025 are attached as Annexures 1a and 1b.

During the year the Institute generated grants worth Rs. 2,79,53,761 and donations worth Rs. 15,16,933. Other receipts from bank interest, consultancies, sale of products and publications amounted to Rs. 70,48,190. Adding the opening balance and other incomes the total income for 2024-2025 amounted to Rs. 3,92,20,881. The Institute spent Rs. 2,83,12,428 leaving a balance of Rs. 109,08,453. Unutilized grants carried forward amounting to Rs. 1,18,53,228, the amount transferred to the capital fund is Rs. 7,31,592 & Gratuity fund-3,00,000.

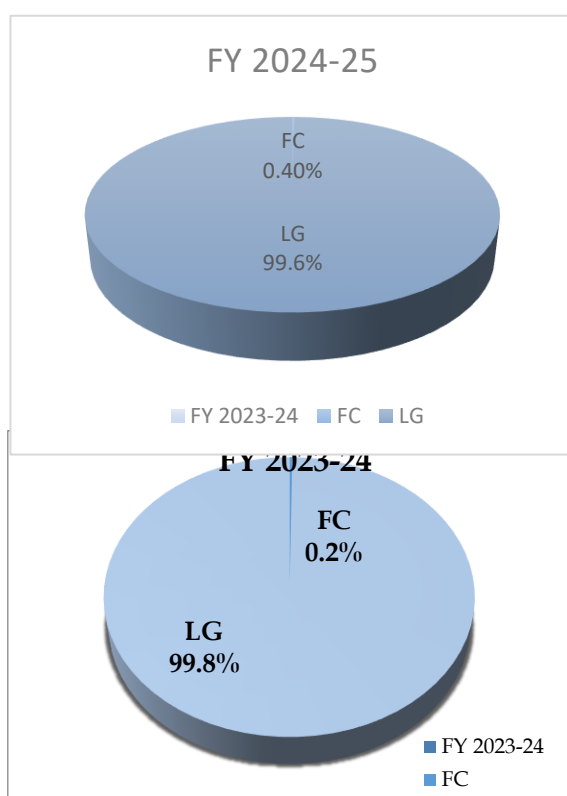
The pie-charts below show the sourcing of income from local grants & donations and foreign grants & donations for 2024-2025 & the previous year.

The main donors for local and foreign grants for 2023-24 are listed below.

R.D.Tata Trust, **LIC HFL**, , BRLF, **Wipro Cares**,

**Department of Science & Technology**, Sir Dorabji Tata Trust, NABARD - Uttarakhand, NABARD – Himachal Pradesh, Forest Department, **IISER Kolkata**, **IIT Roorkee**, **Vana Enterprises Limited**, Manav Vikas Sansthan, NEIDA, Uttarakhand, GIZ India, Ambuja Cement Foundation, ACWADAM, Hero MotoCorp Ltd.. Banwasi Sewa Ashram, National Institute of Urban Affairs, IIT Roorkee, Irrigation and Water Resource Department - Mizoram, Central Himalyan Rural Action Group (CHIRAG), Hasten Forestry India Pvt Ltd (Medius Earth), The Executors of the Estate of Late Mehernosh J Engineer, Department of Soil & Water Conservation, Govt of Nagland. Irrigation and Water Resource Department – Sikkim, DSC Foundation.

PSI is thankful to all of them for their support.



## VII. EXECUTIVE BOARD 2024-25

|                              |                       |                                 |
|------------------------------|-----------------------|---------------------------------|
| <b>Prof. Shambu Prasad</b>   | Chairperson           | Rural Management                |
| <b>Prof. Janki Andharia</b>  | Treasurer             | Disaster Management             |
| <b>Dr. Kshama Metre</b>      | Member                | Medical Practitioner            |
| <b>Dr. Himanshu Kulkarni</b> | Member                | Hydrologist                     |
| <b>Dr. Sumit Sen</b>         | Member                | Prof. (Hydrology), IIT- Roorkee |
| <b>Dr. Malavika Chauhan</b>  | Member                | Independent Consultant          |
| <b>Dr. Debashish Sen</b>     | Director (Ex-Officio) | Scientist                       |

## VIII. PSI STAFF 2024-25

| S. No. | Name                    | Date of Joining | Date of Leaving |
|--------|-------------------------|-----------------|-----------------|
| 1      | Abhishek                | 01.04.2018      |                 |
| 2      | Adarsh Shukla           | 01.08.2018      | 31.07.2024      |
| 3      | Akhilesh Chandra Shukla | 01.01.2024      | 30.09.2024      |
| 4      | Amit Petwal             | 01.11.2016      |                 |
| 5      | Amit Singh              | 01.04.2022      |                 |
| 6      | Anil Kumar Gautam       | 01.03.2002      |                 |
| 7      | Arvind Nigam            | 06.06.2017      |                 |
| 8      | Debashish Sen           | 01.03.1988      |                 |
| 9      | Deepshika Dhasmana      | 01.10.2024      |                 |
| 10     | Diksha Upadhyay         | 01.01.2024      |                 |
| 11     | Dinesh Sharma           | 02.10.1997      |                 |
| 12     | Iqbal Ahmad             | 01.02.2020      |                 |
| 13     | Kajal                   | 01.07.2021      |                 |
| 14     | Khasti Devi             | 01.05.2018      |                 |
| 15     | Kuldeep Prasad Uniyal   | 20.12.2023      | 31.12.2024      |
| 16     | Manoj Kumar             | 10.07.2006      |                 |
| 17     | Naveen Gusain           | 02.04.2018      |                 |
| 18     | Neelam Bisht            | 01.04.2023      |                 |
| 19     | Prem Narayan            | 01.11.2018      |                 |
| 20     | Priyank Bharti          | 01.04.2019      |                 |
| 21     | Priyanshu Gupta         | 11.05.2022      |                 |
| 22     | Puran Bartwal           | 03.01.2011      |                 |
| 23     | Pushpa Juyal            | 21.12.1992      |                 |
| 24     | Ram Sewak Prasad        | 01.11.1994      |                 |
| 25     | Sandeep Gussain         | 02.04.2018      |                 |
| 26     | Sanjay Uniyal           | 01.11.2017      |                 |
| 27     | Sharad Yadav            | 01.05.2017      |                 |
| 28     | Shyam D. Yawle          | 15.04.2021      |                 |
| 29     | Srishti Meher           | 01.05.2023      | 31.08.2024      |
| 30     | Subhash Singh Rawat     | 01.06.2002      |                 |
| 31     | Vikram Singh            | 01.02.2000      |                 |

| S. No. | Name             | Date of Joining | Date of Leaving |
|--------|------------------|-----------------|-----------------|
| 32     | Vinod Niranjana  | 15.01.2014      | 30.06.2024      |
| 33     | Vishal Choudhari | 17.03.2023      |                 |

### IX. INTERNSHIP 2024-25

| S. No. | Name of the Intern   | College/ University                                                   | Internship Period                                                  | Project Allocated                                                                                                                                                                                              |
|--------|----------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.     | Sawat Mohapatra      | SPJIMR, Mumbai                                                        | March 6, 2024 to April 4, 2024                                     | Agricultural Practices and Agri-Chemical Usage in Mukari: Assessing Impacts of Local Farming on the Ecology                                                                                                    |
| 2.     | Tanay Kejriwal       | SPJIMR, Mumbai                                                        | March 6, 2024 to April 5, 2024                                     | Promoting climate smart drought mitigation, natural farming and cultivation of tropical grasses that produce essential oils to enhance livelihood security of small and marginal farmers in Bundelkhand region |
| 3.     | Prajwal Thakre       |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 4.     | Abhishek             | University of Petroleum & Energy Studies -                            | June 1, 2024 to July 31, 2024                                      | Data entry and analysis of household survey data to estimate livelihood gaps for four villages in Bahadrabad district of Haridwar                                                                              |
| 5.     | Aryan Verma          |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 6.     | Aadya Gupta          |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 7.     | Shreya Gupta         |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 8.     | Himanshu Verma       | Govind Ballabh Pant Social Science Institute Prayagraj, Uttar Pradesh | June 10, 2024 to July 31, 2024                                     | Case Study of The EWS Families in Haridwar District of Uttarakhand                                                                                                                                             |
| 9.     | Pankaj Pandey        |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 10.    | Shoeb Akhtar         |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 11.    | Arghya Chaudhuri     | IRMA                                                                  | October 7 <sup>th</sup> , 2024 to November 24 <sup>th</sup> , 2024 | Marketing for products prepared by the village institutions                                                                                                                                                    |
| 12.    | Ranjeet Kumar        |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 13.    | Insha Usmani         | IRMA                                                                  | October 7 <sup>th</sup> , 2024 to November 24 <sup>th</sup> , 2024 | Farmers selection for Rabi crops Facilitate sewing training for Mahila Mangal Dals                                                                                                                             |
| 14.    | Kanika Sharman       |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 15.    | Anubhav Kumar Pandey | Xavier Institute of Social Service (XISS), Ranchi                     | April 22, 2024 to June 21, 2024                                    | “Livelihood gap estimation of EWS families in Bahadrabad block of Haridwar”                                                                                                                                    |
| 16.    | Satyam Divyansh      |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 17.    | Vicky Kumar          |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 18.    | Anushka Kumari       |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 19.    | Pushpa Kumari        |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 20.    | Rukhsar Khatoon      |                                                                       |                                                                    |                                                                                                                                                                                                                |
| 21.    | Bhavya               |                                                                       |                                                                    |                                                                                                                                                                                                                |

| S. No. | Name of the Intern   | College/ University                | Internship Period                                               | Project Allocated                                                             |
|--------|----------------------|------------------------------------|-----------------------------------------------------------------|-------------------------------------------------------------------------------|
| 22.    | Arpita Sarkar        | XIM University, Bhubaneswar Odisha | November 28, 2024 to January 13 <sup>th</sup> 2025              | Impact assessment of LIC HFL Life supported project                           |
| 23.    | Harsimarpreet Kaur   |                                    |                                                                 | Exploration of Local Innovations in Bahadarabad Block, Haridwar               |
| 24.    | Archita chandak      |                                    |                                                                 |                                                                               |
| 25.    | Abhishek Diwedi      |                                    |                                                                 |                                                                               |
| 26.    | Laxmi Narayan Mittal |                                    |                                                                 |                                                                               |
| 27.    | Kartik Jeewan        | SPJIMR, Mumbai                     | January 6 <sup>th</sup> , 2025 to January 17 <sup>th</sup> 2025 | Comparative Cost-Benefit Analysis under SCI vs Conventional method of Farming |
| 28.    | Suraj Choudhary      |                                    |                                                                 |                                                                               |

## X. BALANCE SHEET 2024-25

| PEOPLE'S SCIENCE INSTITUTE                  |      |                    |                    |                    |                    |
|---------------------------------------------|------|--------------------|--------------------|--------------------|--------------------|
| ITBP Road, P.O.Kanwli, Dehradun-248001      |      |                    |                    |                    |                    |
| AUDITED BALANCE SHEET AS AT 31st MARCH 2025 |      |                    |                    |                    |                    |
|                                             |      |                    |                    |                    | Amount in Rs.      |
| CORPUS / CAPITAL FUND AND LIABILITIES       | SCH. | 2024-25            |                    |                    | 2023-24            |
|                                             |      | LG                 | FC                 | Total              | Total              |
| (a) Endowment Fund                          | A    |                    | 5,97,837           | 5,97,837           | 5,97,837           |
| (b) Campus Fund                             | B    | 2,20,230           | 36,85,298          | 39,05,528          | 39,05,528          |
| (c) Reserve & Surplus                       | C    | 60,22,370          | (11,75,162)        | 48,47,208          | 68,23,574          |
| (d) Fixed Asset Fund                        |      | 86,99,886          | 1,63,07,174        | 2,50,07,060        | 2,71,71,817        |
| (e) Grant (to the extent Unutilised)        | D    | 1,18,53,228        |                    | 1,18,53,228        | 27,01,992          |
| (e) Community revolving Fund                |      | 9,95,000           |                    | 9,95,000           | 75,000             |
| (e) Current Liabilities                     | E    | 4,78,483           |                    | 4,78,483           | 13,75,278          |
| (f) Staff Gratuity Fund                     |      | 31,97,654          | 3,58,671           | 35,56,325          | 32,56,325          |
| <b>Total (Rs.)</b>                          |      | <b>3,14,66,851</b> | <b>1,97,73,818</b> | <b>5,12,40,669</b> | <b>4,59,07,351</b> |
| <b>Assets</b>                               |      |                    |                    |                    |                    |
| <b>(a) Non Current Assets</b>               |      |                    |                    |                    |                    |
| Fixed Assets                                | F    | 86,99,886          | 1,63,07,174        | 2,50,07,060        | 2,71,71,817        |
| <b>(b) Current Assets</b>                   |      |                    |                    |                    |                    |
| Cash and Cash Equivalents                   | H    | 51,71,918          | 12,87,917          | 64,59,835          | 45,21,682          |
| Other Current Assets                        | I    | 8,90,120           | 23,494             | 9,13,614           | 27,86,865          |
| Investments                                 | G    | 1,67,04,927        | 21,55,233          | 1,88,60,160        | 1,14,26,987        |
| <b>TOTAL (Rs.)</b>                          |      | <b>3,14,66,851</b> | <b>1,97,73,818</b> | <b>5,12,40,669</b> | <b>4,59,07,351</b> |

For Singh Satish & Associates

Chartered Accountants

FRN: 032138N

SATISH KUMAR SINGH

Digitally signed by SATISH KUMAR SINGH Date: 2025.16.26 11:06:53 +0530'

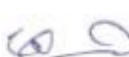
Satish K. Singh

FCA; BCOM(H)

Membership No. 526351

Place: New Delhi

For People's Science Institute



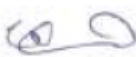
Prof. Shambu Prasad.

President



Dr. Debashish Sen

Director

| PEOPLE'S SCIENCE INSTITUTE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |                    |                 |                    |                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------|-----------------|--------------------|--------------------|
| ITBP Road, P.O.Kanwli, Dehradun-248001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |      |                    |                 |                    |                    |
| AUDITED INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH 2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |                    |                 |                    |                    |
| Amount in Rs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      |                    |                 |                    |                    |
| INCOME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Sch. | 2024-25            |                 |                    | 2023-24            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      | LG                 | FC              | Total              | Total              |
| Donations & Project Grants                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | J    | 2,94,70,694        | -               | 2,94,70,694        | 4,29,19,465        |
| Interest Income                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | K    | 7,94,237           | 1,51,259        | 9,45,496           | 9,26,547           |
| Environment Education and Services Receipts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | L    | 50,67,563          | -               | 50,67,563          | 85,63,563          |
| Other Income                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | M    | 10,35,137          | -               | 10,35,137          | 3,33,679           |
| <b>TOTAL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | <b>3,63,67,631</b> | <b>1,51,259</b> | <b>3,65,18,890</b> | <b>5,27,43,254</b> |
| Grant Unutilised C/f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |      | 27,01,991          | -               | 27,01,991          | 3,44,454           |
| <b>Total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | <b>3,90,69,622</b> | <b>1,51,259</b> | <b>3,92,20,881</b> | <b>5,30,87,708</b> |
| <b>EXPENDITURE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |                    |                 |                    |                    |
| Expenditure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |                    |                 |                    |                    |
| Program Expenses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | N    | 2,38,17,298        | -               | 2,38,17,298        | 4,67,51,163        |
| Administrative Expenses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | O    | 44,95,130          | -               | 44,95,130          | 50,15,743          |
| <b>Total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | <b>2,83,12,428</b> | <b>-</b>        | <b>2,83,12,428</b> | <b>5,17,66,906</b> |
| <b>Excess of Income over Expenditure</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      | <b>1,07,57,194</b> | <b>1,51,259</b> | <b>1,09,08,453</b> | <b>13,20,802</b>   |
| Less :Transfer to Unutilised Grant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      | 1,18,53,228        | -               | 1,18,53,228        | 27,01,992          |
| Less: Transfer to Gratuity fund                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      | 3,00,000           | -               | 3,00,000           | -                  |
| Less : Fixed assets purchased during the year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |      | 7,31,592           | -               | 7,31,592           | 21,99,669          |
| <b>Net Excess of Income over Expenditure</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |      | <b>(21,27,625)</b> | <b>1,51,259</b> | <b>(19,76,366)</b> | <b>(35,80,859)</b> |
| <div> <div> For Singh Satish &amp; Associates<br/>Chartered Accountants<br/>FRN: 032138N<br/>SATISH KUMAR SINGH<br/>Digitally signed by SATISH KUMAR SINGH<br/>DN: cn=SATISH KUMAR SINGH, o=03/01/2021 10:26:11, 1.1.1.2.2.1=032138N </div> <div> Satish K. Singh<br/>FCA; BCOM(H)<br/>Membership No. 526351<br/>Place: New Delhi </div> </div> <div> For People's Science Institute<br/> <br/> Prof.Shambu Prasad.<br/>President </div> <div> <br/> Dr.Debashish Sen<br/>Director </div> |      |                    |                 |                    |                    |