







उन्नत भारत अभियान UNNAT BHARAT ABHIYAN

शिक्षित भारत-सक्षम भारत-स्वच्छ भारत

स्वावलम्बी भारत-संपन्न भारत





Waste Management



Artisians, Industries and Livelihood





Sustainable Energy

सभी को मिलाकर गॉवों के विकास के लिए ज्ञान अनुभव और संसाधन का समन्वय, ग्रामीण विकास के लिए

गॉव एवं परिवार सर्वेक्षण रिर्पोट



Submitted by:

HIWAL Society, Dehradun, Uttarakhand.

1. Introduction

Unnat Bharat Abhiyan is inspired by the vision of transformational change in rural development processes by leveraging knowledge institutions to help build the architecture of an Inclusive India.

The Mission of Unnat Bharat Abhiyan is to enable higher educational institutions to work with the people of rural India in identifying development challenges and evolving appropriate solutions for accelerating sustainable growth. It also aims to create a virtuous cycle between society and an inclusive academic system by providing knowledge and practices for emerging professions and to upgrade the capabilities of both the public and the private sectors in responding to the development needs of rural India.

Goals

- To build an understanding of the development agenda within institutes of Higher Education and an institutional capacity and training relevant to national needs, especially those of rural India.
- To re-emphasize the need for field work, stake-holder interactions and design for societal objectives as the basis of higher education.
- To stress on rigorous reporting and useful outputs as central to developing new professions.
- To provide rural India and regional agencies with access to the professional resources of the institutes of higher education, especially those that have acquired academic excellence in the field of science, engineering and technology, and management.
- To improve development outcomes as a consequence of this research. To develop new professions and new processes to sustain and absorb the outcomes of research.
- To foster a new dialogue within the larger community on science, society and the environment and to develop a sense of dignity and collective destiny.

In line with these goals, Tula's Institute Dehradun identified 5 villages namely Podwala, Mehre ka Gaon, Dhoolkot Mafi, Ramgarh and Bhoodpur in Sahaspur block of Dehradun District. For identification of the available natural resources in the above mentioned villages Tula's Institute, Dehradun conducted village and household survey in collaboration with HIWAL Society, Dehradun. Members from HIWAL Society was visited the above mentioned villages from 3/04/2023 to 14/04/2023 and conducted Village &household survey.

2. Project Area:

The Villages Podwala, Mehre ka Gaon, Dhoolkot Mafi, Ramgarh and Bhoodpur are located in Sahaspur block of Dehradun District, Uttarakhand. The Geographical location of villages are longitude 77°54′0″ - 77°54′30″E, and latitude 30°20′0″-30°20′30″N.



2.1 Podwala

Podwala is a small Village/hamlet in Sahaspur Block in Dehradun District of Uttarakhand State, India. It comes under Rajawala GramPanchayath. It is located 16 KM towards west from District head quarters Dehradun. 6 KM from Sahaspur. 17 KM from State capital Dehradun.

Podwala Local Language is Hindi. Podwala Village Total population is 310 and number of houses are 68. Female Population is 54.5%. Village literacy rate is 80.6% and the Female Literacy rate is 41.9%.



2.2 Mehreka Gaon

Mehreka Gaun village is located in Vikasnagar tehsil of Dehradun district in Uttarakhand, India. It is situated 23km away from sub-district headquarter Vikasnagar (tehsildar office) and 15km away from district headquarter Dehradun. Dhoolkot Mafi is the gram panchayat of Mehreka Gaun village.



The total geographical area of village is 75.34 hectares. Mehreka Gaun has a total population of 798 peoples, out of which male population is 428 while female population is 370. Literacy rate of Mehreka gaun village is 64.79% out of which 73.36% males and 54.86% females are literate. There are about 153 houses in mehreka gaun village.

2.3 Dhoolkot Mafi

Dhulkot Mafi village is located in Vikasnagar tehsil of Dehradun district in Uttarakhand, India. It is situated 22km away from sub-district headquarter Vikasnagar (tehsildar office) and 16km away from district headquarter Dehradun. The total geographical area of village is 103.41 hectares. Dhulkot Mafi has a total population of 747 peoples, out of which male population is 371 while female population is 376. Literacy rate of dhulkot mafi village is 79.38% out of which 85.18% males and 73.67% females are literate. There are about 152 houses in dhulkot mafi village.



2.4 Ramgarh

Ramgarh village is located in Vikasnagar tehsil of Dehradun district in Uttarakhand, India. It is situated 20km away from sub-district headquarter Vikasnagar (tehsildar office) and 20km away from district headquarter Dehradun. Shesambada is the gram panchayat of Ramgarh village. The total geographical area of village is 825.41 hectares. Ramgarh has a total population of 1567 peoples, out of which male population is 815 while female population is 752. Literacy rate of Ramgarh village is 58.82% out of which 69.32% males and 45.71% females are literate. There are about 260 houses in Ramgarh village.



2.5 Bhoodpur



Bhoodpur is a habitation of Revenue Village East Hope Town of Vikasnagar Tahsil and East Hope Town Gram Panchayat. Bhoodpur is 17 Km from Block Headquarter Sahaspur and 21 Km from district headquarter Dehradun. In Bhoodpur there are 116 Buksa households with the population of 585, of which 318 (54.36%) are males while 267 (45.65%) are females. Average family size is 5.04. Population of children with age 0-6 is 69 which make up 11.79% of total population of which 36 are female and 33 are male.

Literacy rate of Buksa people in Bhoodpur village is 61.63% which is lower than 73.88% of tribal literacy rate of the Uttarakhand. Male literacy stands at 70.18% while female literacy rate is 51.08%. The actual population which is continuing education is 30.23% of which 14.34% are females and 15.89% are males.

3. Climate and Rainfll

The district has within its limits lofty peaks of the Outer Himalayas as well as the Dun Valley with climatic conditions nearly similar to those in the plains. The temperature depends on the elevation. The climate of the district, in general, is temperate. In the hilly regions, the summer is pleasant but in the Doon Valley, the heat is often intense. The temperature drops below freezing point not only at high altitudes but also even at places like Dehradun during the winters, when the higher peaks are under snow.

The district receives an average annual rainfall of 2073.3 mm. Most of the rainfall is received during the period from June to September, July and August being the wettest months. The region around Raipur gets the maximum rainfall, while the southern part receives the least rainfall in the district. About 87% of the annual rainfall is received during the period June to September.

4. Doon Gravels

The intermontane valley portion, of district Dehradun, is underlain by alluvial fan deposits. The sediments descend from the Lesser Himalayan front as well as well as the North facing Siwalik hill slopes. These fan deposits are called as 'Doon Gravels' and characterized by boulders and pebbles embedded in sandy and silty matrix. The clasts are mainly composed of quartzite, sandstone and phyllite, which are mainly derived from the Krol belt of the Himalayas Pebbles from Siwalik conglomerates are also present in the Doon Gravels. Doon Gravels are highly porous and they have a significant permeability. Groundwater occurs under unconfined and semi confined conditions. The saturated granular zones occur in a depth range between 35.50 and 138.68 m bgl. The piezometric head ranges from 20.0 to 125.0 mbgl. Transmissivity varies from 1648.0 to 3500.0 m²/day while the field permeability ranges from 5.86 to 104.0 m/day. The discharge from the tubewell varies from 600 to 3000 lpm for a tapped thickness of 30 to 50 m with a drawdown of 2 to 7 m. The hydraulic conductivity, in the district, varies from 13 to 583 m/day.

5. Village and Household Survey:

The members of the HIWAL Society Mrs. Kiran Negi and Dr. Deepika Dimri visited all selected villages and conducted the village & household survey. The households were selected on the basis of random purposive sampling method especially the BPL families of the villages, SC, ST community. Around 25 to 40 households in each village were visited for the purpose of the data collection. The society members visited every village and interview the household owner with the help of pre-tested structured questionnaires.











Unnamed Road, Shisham Bara, Uttarakhand 248007, India Lat 30.322244°

Long 77.886062° 07/04/23 11:59 AM GMT +05:30

Google



Shisham Bara, Uttarakhand, India Unnamed Road, Shisham Bara, Uttarakhand 248007, India Lat 30.322265° Long 77.886052° 07/04/23 12:00 PM GMT +05:30

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5.1 Problem identified in villages during survey work

1. Water scarcity in Bhoodpur and Ramgarh villages

This report focuses on the problems of water scarcity in Bhoodpur and Ramgarh villages. During the survey, it was found that a significant number of households in Bhoodpur village do not have their own water connections. Most of the households rely on nearby water sources, such as hand pumps, for their daily water needs. Some of the community family has to walk long distance to get access to water. The water from hand pumps is not frequently tested for its quality. The lack of water testing can also lead to the spread of water-borne diseases, such as Cholera, typhoid and dysentery. Furthermore, the absence of regular water testing can result in a lack of awareness among the community about the quality of the water they are consuming. During survey, it was also observed that many people were not aware of the importance of clean and safe water, and potential health hazards associated with drinking contaminated water.

2. Livelihood Problems

Maximum households in the selected villages engaged in unskilled labor work. They also have land for agriculture purpose so this is the other source of income for the households.

The lack of employment opportunities has serious implications among Buksa community and other Scheduled caste (SC) identified households' economic and social well-being. In some households, poverty rate is high and many households sometimes struggle to meet their basic needs. The buksa community also raises silkworms for livelihood and sold them.

3. Solid waste management

During the survey, it was found that some households in Bhoodpur, Ramgarh and Podwala are facing a problem of solid waste management. In Mehreka gaon, there is no municipal waste collection vehicle that operated in the village area.

4. Roads Conditions

During the survey work, it was observed that the condition of roads in some villages (Podwala, Bhoodpur and Ramgarh) were not satisfactory.

5. Government Schemes

In some of the villages, Villagers are not aware about the government schemes and they do not get benefits of it.

6. During the survey work, villagers reported that the quality of agriculture soil is not good. It was recommended that the soil should be tested and the results of the analysis should be communicated to the villagers to raise awareness.

5.2 Major Natural Resources:

Wheat, Sugarcane, Maize, Mango, Sal

Kari patta, Aamla

6. **Recommendations**:

- 1. To address the problem of unemployment in the Buksa and other community, the following solutions are proposed:
- (A) **Skill Development**: The community members can be provided with training and skill development programs to enhance their employability in various sectors such as:
- **1. Automatic Sewing machine:** Introduction of sewing machine to the "Households identified as low-income" as a way to increase their livelihood source. For this, we will conduct training sessions for women of the identified communities on how to use sewing machines.
- ✓ However, maximum women in Bhoodpur and Ramgarh villages have experience in sewing and can potentially use this skill to enhance their livelihood source. By providing access to sewing machines and training in more advanced techniques, these women can further develop their skills and increase their income.

2. Packaging materials/envelope

Providing training to identified women on different types of packaging materials, as well as how to package products effectively using these materials. The women can help them develop a valuable skill that can be used to enhance their livelihoods as part of small scale industries.

3. LED bulb making training

LED bulb making business for women of the Buksha community can provide them with employment opportunities, promote gender equality, and contribute to the development of the local economy. Additionally, it can also promote sustainable energy practices and help reduce carbon emissions.

4. Establishment of Powder making machinery

Women from the Buksha community can be trained and employed in the washing powder making process. This business can provide them with employment opportunities, promote gender equality, and contribute to the development of the local economy. Additionally, it can also promote sustainable practices by using eco-friendly ingredients in the washing powder.

5. Provide training on health and hygiene

- Conduct training sessions on menstrual hygiene management, including how to use and dispose of sanitary pads properly, and other best practices for maintain personal hygiene.
- ✓ Providing sanitary pad making machine can help rural women produce their sanitary pads, which can reduce the cost of these products and make them more accessible.
- 6. Villagers have to get knowledge about government schemes and get benefits of schemes.

By increasing the knowledge of the villagers about the government schemes and programs, they can take advantage of various welfare initiatives such as education, healthcare, social security, and employment. This will also help in the development and overall progress of the villagers of the project area.

7. Roof top rain water harvesting and artificial recharge techniques may be adopted in these villages.

Implementing rooftop rainwater harvesting and artificial recharge techniques under the Unnat Bharat abhiyan can provide significant benefits for the Buksa community in the project area.

- 1. Conserves water: The rooftop rainwater harvesting system helps to conserve rainwater, which can be used for various domestic and agricultural purposes. This reduces the dependence on groundwater and surface water sources, which are often scarce in the region.
- 2. Increases water availability: Artificial recharge techniques help to recharge the groundwater levels and increase the availability of water in the area. This can help to meet the water needs of the Buksha community during the dry season when water is scarce.
- 3. Enhances agricultural productivity: Rainwater harvesting can be used for agricultural purposes, providing the community with an additional source of water for irrigation. This can enhance agricultural productivity and contribute to the overall development of the community.

8. Use of smokeless chullahs

The Buksha community in Uttarakhand, like many other rural communities in India, traditionally uses chullahs or cookstoves that burn biomass fuels such as firewood or cow dung cakes for cooking. However, these traditional can produce high levels of indoor air pollution and have adverse health and environmental impacts. In contrast, smokeless chulhas or improved cookstoves can provide several benefits to the Buksha community.

1. Gender empowerment: Smokeless chulhas can provide a safer and healthier cooking environment for women, allowing them to spend more time on other

productive activities such as education, skill development, or income-generating activities.

- 2. Improved indoor air quality: Smokeless chulhas produce less smoke and harmful emissions, which can improve indoor air quality and reduce the risk of respiratory diseases among women and children who are the primary users of cooking stoves.
- 3. Reduced fire hazard: Traditional chullahs can be a fire hazard due to their open flames. Smokeless chulhas have enclosed cooking chambers, reducing the risk of accidental fires.

(B) We also propose to conduct "Collecting and testing of water samples from hand pumps and soil samples from agriculture fields and creating awareness among villagers about Water and Soil Quality Assessment" with following objectives:

- 1. To collect water and soil samples from the selected villages
- 2. To test the water and soil samples for various parameters
- 3. To create awareness among villagers about the importance of safe drinking water and the results of soil quality assessment