Annual Progress Report

Name of the Project: Mitigating Drought through Sustainable Agriculture (MSDA) inBundelkhand

Project period – 2020 to 2023

Reporting period: October 2021 to September 2022

Project Area: Bundelkhand, UP

Old villages (2) – Gahara, Sighanpur Baghari

New villages (3) - Surha, Pindari,Parsaha

Implementing Organization: Gramin Vikas Vigyan Samiti (GRAVIS)

Funded by: People for Progress in India (PPI), USA

Background

Gramin Vikas Vigyan Samiti (GRAVIS) or Center of People's Science for Rural Development was founded in 1983 by a group of Gandhian development activists in the Thar Desert of India. The organisation was formed in order to organise rural development activities in the remote parts of Thar Desert. The organisation has great faith in working on issues related to human development, equality and rural empowerment with active participation of communities of the region where it functions. In the beginning, it started its work in a cluster of 20 villages of Jodhpur district in Rajasthan. At present, GRAVIS works in more than 1700 villages of 10 districts of the Thar Desert of Rajasthan, India, and in Uttarakhand and Uttar Pradesh States covering a population of about 1.6 million people.

The philosophy of "Sarvodaya" - all rising, but the last person first - is the foundation for GRAVIS' strategy and approach to their work. Accordingly, GRAVIS works for the collective ascension of men, women, and children, regardless of economic situation, caste or religion. GRAVIS works toward the rehabilitation of the rural community, enabling village ownership and control over its environment, institutions, and relations.

GRAVIS focuses its efforts on the restoration of dwindling natural resources and on the promotion of marginalized groups. It believes in blending the traditional wisdom with new techniques to create long-term, sustainable and cost-effective means for improving the lives of rural inhabitants. In order to achieve its overall goal of creating self-reliant village communities, it strives to involve the local communities in its programmes and interventions, train and build their capacities further and develop community ownership.

GRAVIS has been working with the support of PPI for a long period in areas of drought mitigation, health, water safety and COVID relief. Mitigating Droughts through Sustainable Agriculture (MDSA) is a project that aims on mitigating drought conditions and on improving farming practices in Bundelkhand region of U. P. in India. The first phase of the project was successfully implemented between 2017 and 2020. The progress report was shared with PPI.

Since the need in that area is so high, a new phase was planned for 3 years having some old villages with some new villages. The second phase of MDSA was started in October 2020 after PPI approval.This phase is also for three years and has following objectives: Objectives

- Enhance food and fodder availability and reduce the impact of drought in the project area through

1) Promoting sustainable agro-horticulture practices
2) Indigenous seed conservation in seed banks
3) Introducing farmers' cooperative based crop irrigation
4) Promoting the use of composted FYM as bio fertilizer

- Improve the nutritional profile through kitchen gardens and training sessions
- Strict division of animal rearing grounds and agricultural farms and fencing off fields from wild animals and livestock
- Facilitate water conservation and availability of clean water sources
- Advocate for sustainable and long-term drought mitigation through networking and dialogues

- Women empowerment through mobilization, trainings and enterprise development
- Facilitate the process of community development by formation and capacity building of community-based organizations.

Now the second year is completed with good outputs. Project activities were partially disrupted due to COVID-19 restrictions in early 2022. But we resumed work later and completed all targets. We also used all COVID guidelines during implementation of activities

This report provides details of work done between October 2021 and September 2022.

Activities implemented in 2021-22

The following interventions have been carried out during this reporting period to achieve the goal and objectives of the project.

1. Backyard Nutrition Gardens

In the reporting period, the selection process of 10 beneficiaries was done through Village Development Committees (VDC) and orientation sessions were also organized to guide all beneficiaries on setting up and maintaining nutrition gardens. In these meetings, we told all the beneficiaries that which time is the right one for plantation and how to look after of these gardens.

For setting up these nutrition gardens we provided fencing material to each family. After completing the fencing work, we provided good quality of 20 fruit plants such as pomegranate, lemon, bush plum, guava, etc. We also provided some vegetable seeds to the beneficiaries to improve their nutritional intake.

Bhaiya Lal in his nutrition garden

Resource persons from agriculture and horticulture departments, as well as health department representatives also visited the gardens and provided their inputs. A total of 20 such units are set up under the project till date.

2. Nutrition Education Sessions

5 Nutrition sessions were organized at the community level in each project village, in which a total of 88 villagers participated. Purpose of these sessions was to create awareness about healthy living by adopting good diet habits. In every session, we invited resource person from health department to educate community about the importance of nutrition and health. Resource person explained about the nutritious food in which fruits and vegetables are very important to include in daily meal.

For these sessions, we also approached ANM, Asha worker and *Anganwadi* workers to participate and provide the local knowledge on nutrition to community. Through these sessions, we tried to change their own daily dietary routine behavior which is related to their health. Participants showed positive response towards these sessions as before they did not have such information on nutrition and health. Through IEC materials, we tried to deliver our messages effectively in the community. 10 such sessions have been organized in 2 years of the project, which are all well received.

Villagers participating in the village level nutrition session

3. Contour farm bunding (dyke or *khadin*)

5 *Khadins* have been constructed under the project in the villages during the reporting period. We also distributed some of the seeds to farmers. This year also, the rain was delayed and there was low rainfall in this region overall. The structures of *khadin* help in retaining moisture and in having lush green crop and leads to harvest of good amount of production for their families and the surplus can be sold in the market. Each farmer is hoping, they will harvest about 2.0 to 2.5 times more production in terms of food grains and fodder. *Khadins* are very effective for rainfed farming. Total 10 *khadins* have been constructed till date under the project.

List of *khadin* beneficiaries: -

1. Shri. Laldiwan s/o Shri Vrindawan
2. Smt. Halki w/o Shri Mool Chand
3. Smt. Sukhdani w/o Shri Sidhraj
4. Smt. Rajnee w/o Shri Bhramdatt
5. Shri Narendra s/o Shri Ramsnehi

A khadin under construction

Khadin farm filled with water after rain

4. Fencing of farm fields

Project provided fencing materials to the 5 selected farmers to save their crops from abandoned animals. After receiving the fencing material, all the selected farmers were very happy because now their crops will be saved from damage. Now they are hopping to harvest their full crop with no damage or loss caused by animals for the first time. To reduce the cost of labor, all farmers contributed their time and efforts in assembling the pillars all around the farm land and also worked while fencing their farm land. Farm fencing is a big need in Bundelkhand area to protect from animals.

Fencing farms

5. Renovation of community Pond

This year, one community pond was renovated. Through this pond renovation, needy farmers will get support for agricultural / irrigation purpose and also for domestic use. This pond will directly benefit 40-50 small and marginal farmers families through using rainwater in their crops to increase the production. The pond was full of rain water after the renovation work was completed and after monsoon. Farmers are very satisfied with increased water availability.

Renovated pond with rainwater

6. Community seed Bank

3 Community Seed Banks (CSB) were set up in year 1 to support the farmers who are unable to buy seed from the market. After VDC selection of needy farmers, they were provided good quality of seeds in monsoon season, which they have to return back after having good crop production in their own farm land. The CSBs have a set of rules to run this in long way independently and more farmers will access good quality of indigenous different type of crops seed with in the village on time and without any risks.

Seeds were preserved with traditional methods by organic means. Overall, the CSBs are well maintained and are proving to be of great help.

7. Construction of compost pits

10 compost pits were created during this reporting period. The compost pit dimensions are 10ft x10ft and 3ft depth with all walls constructed with cement and bricks to ensure retention of moisture in the pit which helps to allow composting.

This compost pits enrich soil, help in retaining moisture and suppress plant diseases and pests. It reduces the need for chemical fertilizers. After getting positive results of these compost pits,

some farmers have started making this compost pits to add value through making such use full structure.

A compost pit

8. Training on water quality

5 training were organized during this reporting period and 93 villagers actively participated in these trainings sessions on water quality. During these sessions, we discussed about the source which they are using for drinking purpose. Mostly, they all are dependent on hand pump water for drinking without any filtrations, which is not good for health, due to fluoride and iron contents as well.

We shared the different methods of water filtration and how they can get safe water for drinking purpose. They can also harvest rain water like Thar population does. We introduce bio-sand water filter for water filtration and provided them orientation on bio sand filters.

The trainings were well received and villagers showed keen interest in the topic. It is hoped that such trainings will improve water quality.

Community members participating in training session on water quality

9. Water absorption and recharging Pits

10 Water absorption and recharging pits were constructed in this reporting period. The pits were constructed nearby hand pumps. Purpose of construction of these pits is to capture and harvest waste water which earlier was spread over the ground. Due to which, lots of mosquitoes were breeding there and hand ump area was muddy and dirty. After these pits are set up, all-waste water goes into recharge pits.

Recharge pit are 1 meter in length and width and are 0.5 meter deep. The hand pump area is now clean and villagers are very satisfied.

A recharge pit

10. VDCs and SHG

In each project village, there is a VDC and a Self-Help Group (SHG). There is gender equality in these groups with half female members and there is representation of different castes. They all are actively contributing to all aspects of the project. During the reporting period, trainings for VDCs and SHGs were organized in 3 new villages.

VDCs and SHGs also took active part in

- Selection of all beneficiaries
- Monitoring construction work at sites
- Management of CSBs
- Organizing community event on occasions like World Health Day, International Women Day and World Food Day
- Meeting with village level Govt bodies

Impact

After 2 years, the project has achieved the following impact

- Nutritional profile of communities is enhancing
- Crop production is improving – leading towards better health and better incomes
- Gender equality is enhancing
- Water availability and quality for consumption (drinking water) will improve with ponds and through greater knowledge
- Strong VDCs and SHGs are functional which will lead to sustainability and community ownership

Future plans

Next year of the project will be the third year. Our focus will be on

- Completing all constructive work (Nutrition Gardens, Dykes, Ponds)
- Further improving water availability and water quality
- Enhancing local knowledge through trainings
- Strengthening VDCs and SHGs