

Progress Report

Name of Project: Mitigating Drought through sustainable agriculture (MSDA) in Bundelkhand

Project period – 2020 to 2023

Reporting period: October 2020 to September 2021

Project Area: Old villages – Gahara, Sighanpur Baghari and New Villages:Surha, Pindari, Parsaha

Implementing Organization:Gramin Vikas Vigyan Samiti (GRAVIS), India

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

Background

GRAVIS has been working with the support of PPI for a long period in areas of drought mitigation, health, water safety and COVID relief. MSDA 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 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 also planned for 3 years having some old villages also some new villages. Second phase started in October 2020 after PPI approval. This phase is also three years. Now first year is completed and below given work in year was done. Project activities were disrupted between April and July 2021 due to COVID. But we resumed work later and completed mostly year 1 targets. We also used all COVID precaution like masks and distancing while implementing the activities.

Activities implemented

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

1. Backyard Nutrition Gardens

During first year of this project, we select the 10 poor and backward families in the village development committee (VDC).We organized a orientation meeting to these beneficiaries about establishment, plantation of the plants, use of these plants and care of these plant i.e

composting, hoeing, ploughing, weeding, pruning of plants, watering of plants and the timing. We provided fencing material to each family to protect the unit from wild and free grazing animals. The fencing will be put by beneficiaries themselves at surrounding the unit as per layout of the unit. After fencing we provided good quality of 20 fruit plants such as pomegranate, Lemon, bush plum, Guava, etc. The units will be established with the consultation and guidance of the resource person who came from agriculture and horticulture department. The result is presently the all units of nutrition garden are very well. The farmers are growing seasonal vegetable in between the plants and getting fresh green vegetable which are pure organics. Now the family eating fresh and nutritive vegetable which helps to increased health and also support to family income due to avoid market expenditure which earlier spent on buying occasionally from markets or most of time eat the meals without green vegetable. Now they are happy to received such wonderful support to establish this nutrition garden at their home.



A woman in nutritional garden; we can see the healthy plants of fruits trees with her

2. Nutrition Education Session

During this reporting period, the 5 Session have been organized in each project villages. During the session in every session 10 farmers participated. During this session the resource person came from Horticulture department and educates farmers on basic concepts of health and nutrition. They have explained about nutrition's every day in the form of fruits and vegetables for good health. So, we tried to link with government for further use of the govt. human resources as well their different schemes for widely access in the community and get benefits.

During this session we also link ICDS village level staff to widely spread the nutrition programme which is provided to the below 2-year children, pregnant and lactating mothers as well for adolescent girls at these centers. Through these discussions every family should know the value of the nutrition education and will try to adopt to change their own behavior and also try to adopt in practical at their daily routine. The participants are very much happy to receive such information on the dietary, calorie, fat, protein, fibers, hemoglobin, iron, minerals, etc. We also disseminate the information about COVID-19 to the community

members to protect themselves and other to follow the guidelines of COVID-19. We use the poster in local languages with pictorial, which is easier to understand them.



Villagers participating in the village level nutrition session

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

Dyke or *Khadin* are small structure for collect rainwater to increase the moisture of farmland. In Bundelkhand region there is uncertain and very low rainfall. So, in this context the *khadin* is very good techniques to harvest rains and ensure the good crop harvest in same field due to increase the moisture constants. This structure also helps to stop top fertile soil erosion and help to increased soil fertility. The soil fertility helps to improved crop production in terms of grain and fodder. Family will use the grain for domestic consumption and fodder for their animal. Hence no migration in these families due to availability of sufficient food grain and fodder.

During this reporting period 5 *Khadin* have been constructed under the project in the villages. We have distributed some of the seeds to farmers. The rain was delayed and low rainfall in this region. The structure of *khadin* help on having lush green crop and lead to harvest of good amount of production for their families and surplus can sale in the market. Each farmer hoping, they will be harvest 1.5 to 2.0 time more production in terms of food grains and fodder. These crops will be harvested in November. So, actual amount of production will be shared in next report.

List of beneficiaries: -

1. Shri. Narender ramsahani s/o Sh.Santa Ram, Surha
2. Smt. Neelam w/o sh. Pana Lal, Surha
3. Smt. Rajkumar w/o Sh.Nirpal, Surha
4. Smt. Sidh w/o Sh. Anil Kumar, Surha
5. Smt. Rajni w/o Sh. Bram Datt, Parsa



Farmer with his lush green crops at his khadin, which sown after construction of khadin at his farm land

4. Fencing of farm fields

In that area, there is severe damaged of crops in farming land by livestock and farmers can not be harvest crops in their farm land. So, we tried to establishment a model to protect and secure their crops from wild and abandoned animals. GRAVIS provided the barbed wire for fencing in group of 5 scheduled (Dalit) caste farmers to reduce the cost of the fencing and farmers involve their own labor and pillar to putting at farming land surrounding field and tied the wire with these polls. Now these farmers farming land are fully fenced and protect from the animals. Farmers are very much happy to received such valuable support from the project during this session and hoping to harvest good crop yield first time at their same field.

5. Renovation of community Pond

In the Surha village near Hanuman temple, Project has renovated community pond to support and help poor farmer for life saving irrigation purpose. This pond directly supporting to 10 small and marginal farmers through using rainwater in their crops to increased production. After this renovation work the pond is with full of rain water. This pond also help to adaptation of climate change which we saw this year, because rains came recently in later on in September month, but this shower we captured in this pond, so this water will be used in during Rabi session (winter crop) to grow different variety of crops.



After renovation of this pond having rain water at village Surha in Mohaba

6. Community seed Bank

During this project we provided improved high quality of seeds for needy poor farmers through this community seed bank (CSB). The Poor farmers were selected by VDC based on crops seeds and selection criteria. The farmers return back some quantity of seeds from their own farm production to CSB, which agreed unanimously to increased seeds quantity in the existing CSB. The CSB 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.

The seed stored to follow all safety with air-tight sealed and waterproof containers. We add some *neem* into the seed's storage containers to avoid any insects to harm.

7. Construction of compost pits

During this project reporting period, 10 compost pits constructed to making farm yard manure and other reduces converted in to compost manure. The compost pit dimensions are 10ft x10ft and 3ft depth all walls constructed with cement and bricks to ensure retention of moisture in the pit which help to convert in to composting.

The compost is very good for farming to improved soil fertility and increased the moisture contents in the soil which help to increase the crop production. Farmers started to making compost through this model and happy to received such support. Now neighboring farmers also looking to start making such meaningful structures themselves to convert their own animal's dung to add value through making compost.

8. Training on water quality

During this reporting period of time, we organized 5 trainings sessions on water quality. Presently people depended on use hand pump water for drinking without any filtrations. so, in this case it is not good for health, due to fluoride and iron contents as well. We teach the

community about alternate source of potable water and how can effectively use to purify your own water. We also share the Rajasthan case study how Thar people harvest rain for drinking purpose which is safer and good for health without any fluoride contents. Its technology called household *taanka* and percolation well. People now understand about contamination of water and will use the water after cleaning and filtrations and will not use the hand pump water which is mixed with nearby wastewater flow. Bio-sand water filters technology is also explained.



Community members participating in session on water quality

9. Water absorption and Recharging Pits

During this period, we constructed 3 new Water absorption and recharging pits nearby hand pumps. These pits now capture to harvest this west water which earlier spread over the ground lots of mosquitoes breeding there and dirtiness surrounding the hand pumps. The all-waste water goes into recharge pits. After these pits the west water use to animals and kitchen gardens. Recharge pit is 1mtr length x 1mtr wide x 0.5mtr deep.



Absorption pit

Now people see these innovative and people friendly techniques first time to secure and safe site near by hand pump and make mosquitoes breeding free space and allow to use for constructive way.

10. Formation and Training of VDC and SHG

During this period, we formed 3 VDCs (village development committee) in 3 new villages and 3 SHG (self Help Group) in 3 new villages. They are all given training and they are all working actively with project activities. In old villages, existing VDC and SHG are also working. Each VDC has about 10 members, half men and half women. Each SHG has about 15 women.

They share responsibility for selection of beneficiaries, action sites, quality of work and timely completion of work on ground as per plan and this type of monitoring of project activities review in every monthly meeting. They discuss all the issue and topics regarding project in their meetings.



Orientation for SHG members

11. COVID support

In project villages, GRAVIS distributed 100 family food supplies kits to 100 poorest families (through various donations, PPI COVID support was used in Rajasthan). That was a very needy support at a time of severe crisis.

Next year plan

Second year of project will start in late October, 2021 after review of report. We will implement all activities planned for year 2 between October 2021 and September 2022. We hope this year COVID situation will be normal.