

# Gram Vikas Nav Yuvak Mandal

Village Laporiya, Block Dadu, Dist. Jaipur, Rajasthan 303008

## Ensuring Sustainable Livelihoods for Locals from Risks and Effects of Climate Change Variability on Agriculture Production

Period: 20 October 2013 to 19 October 2016 | Code: IND/SGP/OP5/Y3/STAR/2013/21/RAJ04

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The area covered under this project has come under stress on account of impact of climate related changes as a result of which incidence of migration has increased. With water not available, other natural resources have come under pressure. The project took an integrated approach by developing interventions around sustainable livelihoods backed by efforts directed at sustainable development through improved land, water and livelihood management practices.

### Background

The rural landscape of India, particularly a location such as Rajasthan, is fraught with high incidence of poverty resulting in rampant food insecurity and malnutrition. The situation of natural resource is no better with most project villages experiencing a high extent of resource decline over the years. It is not surprising to have a high incidence of migration that may help meet financial needs but at the expense of poor social impact on family, and neglect of natural resource in such locations given lack of hands available to contribute to its upkeep.

This is the setting in which the project covering 8 poor villages of Dudu block of Jaipur District worked to build opportunities for beneficiaries by developing their source base and introducing new technologies. 2,100 families reside in these villages with 30% of households belonging to SC and ST followed by 45% of other backward classes who are least touched by development efforts.

### Objectives

1. Developing the resource base and capacity of communities to cope with adverse weather conditions brought on by effect of climatic change.
2. Managing people's institutions on a self-sustained basis leading to a productive and well managed system being established.

### Implementation Process

The proposed project aimed at developing capacity of community participants to responsibly manage their natural resource thus creating sustainable livelihoods adapting to situation created by climate change. Interventions were planned to regenerate common resources like water structures, wasteland, and pastureland with the project also intending to improve agriculture practices. This was made possible by building capacity of the community to cope with climate change by inculcating suited practices that are sustainable. The major emphasis besides improving agriculture production would be on supporting and supplementing existing farm based livelihoods, and addressing needs of livestock management. All this was driven by community action, giving efforts the needed social impetus, and also helping develop improved ownership within them.

The project promoted participatory management by mobilizing and facilitating community members to identify livelihoods and appropriate interventions needed. The village development plan was based on a community plan developed by incorporating expert's advice translating into a set of activities. To solicit support from the community and maintain democratic values, participants were organized into various community based organizations. These community based organizations were further capacitated on aspects of local relevance.

Community values and cooperative principles were

institutionalized amongst community members to bring sustainability to the created organization even beyond completion of the project. The project focussed on livelihood options based on proven models with agriculture based activity providing the major thrust.

### Innovation Applied

GMVNL's efforts have helped popularise the *Chauka* (square) system that is a method for harvesting rainwater useful in arid areas whose only source of water are the monsoon rains. The system works by building a series of square shaped embankments that have 9" high bunds on three sides with one side left open to allow rainwater to fill the structure as well as overflow. As one structure fills, the overflow spills to the next *Chauka* and so on. By retaining the rainwater in this way it helps prevent soil erosion and recharges the surface water enabling grasses to thrive.

### Lessons Learnt

- With a gradual shift to non-land based livelihoods, keeping the interest of community alive to issues of land and natural resource management will become increasingly difficult. This needs to be taken note of and efforts encouraging engagement need to be devised.
- The *Chauka* system of rain water harvesting may find relevance in similar regions and could be encouraged across other SGP projects.
- Given the project location, land value has escalated since 2005 and land grabbers have turned to occupying common land and legalizing it for their own interest. Anti-social elements lead this effort and they have the support of corrupt political leaders and government functionaries. Such efforts need to be thwarted if interests of the poor are to be protected and GMVNL has been able to successfully vacate 45 ha. Of affected land.

### Way Forward

- *Kair* (*Caparisdesidua*) is a native tree to Laporiya that has medicinal value for humans and animals though in the recent past had lost its appeal to the local community. Typically found in desert regions it is drought resistant and good for creating soil moisture. It was suggested to try to grow its saplings, something that the VDC members felt confident to about devising a way. If this is successful, it will throw open good livelihood possibilities as it has a ready demand as a medicinal plant and also useful to make pickle.
- While GMVNL has been advocating and advising the construction of *Chaukas*, the effort needs to gather momentum since it could address water needs in many regions that have come under stress.
- With increased availability of water, efforts towards fodder development and vegetable growing could gain momentum to better meet local needs of food security.



Series of Chauka tanks being built

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