

Village visits

The core work in Dungarpur district, since the last year or so, has been to build a rapport with villagers in Manatgaon (a hamlet of Chundawada panchayat in Bicchiwada block) and develop a first hand and close understanding of the village and its people, and especially of its agricultural systems. This process has continued into the last six months of this reporting period as well.

The rapport building process involves participating in regular social occasions of the village such as its festivals, weddings, funerals etc, as well as meetings organised by the villagers themselves to resolve their disputes, discuss economic issues such as the forest land rights, re-distribution of forest produce and so on. It means living in the village, observing and participating in ongoing activities in the village, but without organising separate meetings for the purpose or doing written surveys, just being present in the background.

I have made initial visits to some other villages in the region, mainly in Dungarpur and Bicchiwada block, and the plan in the coming months, is to start a similar rapport building process in 2-3 more villages.

Working relationship with Sambhaav

The process of preparation for taking up work on water/land, is guided by my working relationship with Farhad (Sambhaav Trust), who plays the role of a mentor at a personal level, apart from other technical and institutional support. I have been meeting in touch with Farhad regularly on a monthly basis to discuss work and other updates, and Farhad in this period has also made a couple of visits to Dungarpur.

Sambhaav has been working since 15 years in Western (Jaisalmer, Barmer) and Eastern Rajasthan (Nagaur, Alwar, Jaipur, Dausa), on water /environmental issues. The process of preparation and building the work in Dungarpur, draws from this past experience.

Visiting work done by Sambhaav

As part of building my own understanding of doing work on water/land, I have made a 12-day visit to Jaisalmer, to understand the work done by Sambhaav since the last 4 years, with the local people, on reviving talaabs (lakes), beris (similar to a well), tandas (cluster of beris), khadin (desert system of agriculture), kuans (wells), which are the traditional time-tested water harvesting systems of the desert. These are highly localised depending on the physical and social situations from place to place.

A high point of this visit was getting to spend time with Chattar Singh (Sambhaav team member working there) and Anupam Mishra ji, who both have a deep sense of the desert way of living and of water, and to discuss in detail, the social, technical and other details of how the work is being done.

I have also made a brief 3-day visit to Jaipur, and interacted with the Sambhaav team working in Eastern Rajasthan. In-depth field visits to this region will also follow.

This process of learning will continue in the coming months through more visits and living with the local Sambhaav team members in each region.

Experiments in agriculture

In this agricultural Kharif season (Jul – Nov 2009), I have taken up two sets of experiments - with paddy and cotton, with a few farmers. The idea was to gain some direct farming experience for my own learning such as learning to make organic preparations, repellents, sowing paddy etc, as well as to understand the local agricultural context first hand, and to observe results first on a small scale.

Trials in paddy were initially planned with 5 farmers, but could be taken up with only 2 (who had access to protective tube well irrigation), due to the delayed and insufficient rains. Traditionally, paddy is sown either by direct seeding at close spacing or by first raising a 25-30 day nursery and then transplanting at close spacing of 3-4 inches. While transplanting, the mud is washed off the roots and seedlings are planted, about 4-6 hours after they are uprooted. Whenever water is available, flooding of fields is practiced.

The trials undertaken focused on altering some of these practices based on the experiences of SRI paddy farmers. Planting was done at 16-day (9 days earlier) and 12-day (13 days) respectively, transplanting within ½ hour of uprooting, not flooding but keeping the field just wet enough, planting at a spacing of 12 inches, keeping the mud of the roots intact (so that the plant assumes it has not be uprooted) and finally using organic preparations such as butter milk and panchagavya made from locally available inputs such as cattle dung and urine.

These changes expectedly helped the plant perform better. Tillering improved from an average of 5 to about 30-40 per plant. In the case of the first farmer (16-day), the grain yield was similar to conventional field, whereas the straw yield was 10% more. In the second farmer (12-day), no yield was achieved in the conventional field which completely failed due to moisture stress, and the only paddy for that family achieved was from the trial field. The ideal age of transplanting is 8-10 days (2-leaf stage), and in the first farmer's case, the yields could have been more if planted earlier. Also preparing a nursery bed with loose soil, helps easy uprooting and thus less damage to root, but this could not be done this season. These trials have helped learn several practical details about paddy, and will lay the ground for further experiments, a lot more can be done.

The second set of experiments focused on Cotton. Since the last 3 years, farmers have been growing Bt Cotton for the seed (not fibre), which is eventually repacked and sold to end-cotton farmers who grow it for the fibre. Even though the hyped Bt technology is supposed to prevent pest attack of boll worm and related caterpillar family insects and save the farmer the cost of pesticides, in reality this is not true for this region. Farmer's cotton fields here, suffer extensive attack from the caterpillar pest, for which they undertake 5-6 pesticide sprays spending up to Rs. 5000 / plot, depending on extent of attack.

The trials were focused on replacing use of pesticides with non-chemical pest repellents, which were made from plants available within the village which had pest repelling properties, apart from the use of organic preparations such as panchagavya and jeevamrutham. The trials were successful in controlling pests (not just bollworm/caterpillar insects) but also other pests. 2 farmers who were convinced about trying these alternatives from the beginning, managed to save the entire cost of pesticides, while 2 others were not convinced in the beginning and shifted midway only when the conventional pesticide sprays refused to control the bollworm pest attack.

In the light of the current Bt Brinjal debate ongoing in the country, it is important to state here from the experiences of the Bt Cotton farmers in Dungarpur, and Manatgaon in particular, that:

1. Bt failed to protect their Cotton plants from pests, even the targeted boll worm/caterpillar pest.
2. In spite of purchasing expensive Bt seeds, they still had to spend on pesticides, apart from affecting their soil's and their own health.
3. Pest repellents made from locally available inputs, could control (not one but all) pests by simply repelling and building plant health, instead of killing only one family of pests. Hence, these alternatives can save input costs for farmers, and also protect soil and their health.
4. Cottonseed production based on suitable hybrid (non-Bt) varieties, with plant based repellents for pest control can be a more safer and economically viable option.
5. Lastly, regardless of the Government's approval or disapproval of such farming

technologies, the core work that needs to be done is in building alternatives to these technologies at the farmer's level. If farmers decide on and build their own system for saving and accessing good quality seeds and other inputs, then no matter how many other external non-farmer controlled inputs/systems are promoted, the farmer need not be affected by them, if he/she chooses not to.

These efforts were guided with technical inputs from Gunasekaran and Selvam, who are both organic farmers since the last 10-15 years in Erode region of Tamil Nadu. Their support will continue in the coming seasons, in the context of the work on agriculture, albeit from a distance. These small scale trials and the learnings will be the basis for discussions with more farmers, in the coming seasons.

With regard to the alternatives to Bt Cotton, I participated in a training on Hybrid Cottonseed production organised by CSA Hyderabad in November 2009, which helped to get some technical understanding of the alternatives available. Details of the training are here: www.csa-india.org/Training_on_Cotton_seed_production.pdf (file is dated incorrectly).

Research and documentation work on water/agriculture

Considerable amount of research material on water/agriculture has been collected in this period, in print/electronic form, from several sources, and this process will continue. Reading and reflection is part of the design of the learning process, and I have started this work on selected material based on inputs from Farhad, Selvam and other friends. This material can be shared with those interested.

Extensive documentation work is being planned of the work being done on water/environment, by Sambhaav and other groups/people associated with them, with guidance from Farhad and Anupam Mishra ji. Some of this work is being done in collaboration with www.indiawaterportal.org, which is an initiative of Arghyam Trust (www.arghyam.org), who also happen to closely work with Sambhaav. This will simultaneously help me learn about doing work on water/environment, and also help create documentation useful for anybody else interested in learning about doing work on water/environment.

Building links with local groups

I have also been building a relationship with the Vagad Mazdoor Kisan Sangathan (VMKS), who are a local group of farmers, working on rights based issues and government programs (forest rights, nrega etc). This has been through attending some of their forum meetings at district and block level, and supporting in admin tasks wherever possible, including helping taking up a NREGA study in Dungarpur, organised by NIRD Hyderabad, in this period. The members of the group are all local farmers, and the friendships developed with the individual members, will help in building the land/water work, whenever the time comes.

In collaboration with Greenpeace, VMKS and Astha Sansthan, I helped in organising a public consultation on fertiliser subsidy reforms in Udaipur. This link here gives details of this meeting: <http://www.greenpeace.org/india/news/rajasthan-farmers-demand-suppo>

In the lead up to the Bt Brinjal debate and public consultations organised by MoEF, I also worked with VMKS, to send a petition to the MoEF, on behalf of its 15,000 members, demanding a ban on Bt Brinjal, in light of the experiences of South Rajasthan's farmers, ie the failure of Bt Cotton to control pest resistance.

Further, 3 members from VMKS (apart from me) participated in the Bt Brinjal public consultation, organised in Ahmedabad on 19th January 2010. 2 of the VMKS members were Cottonseed farmers themselves, and got an opportunity to speak at the meeting. They stated their experiences with Bt Cottonseed (issue of pest resistance and failure of Bt to control boll worm, and declining yield of upto 20% every year) to the MoEF minister.

With the local villagers, Sambhaav, Selvam/Gunasekaran or VMKS, the general approach of

working together has been informal, like building a long term friendship, rather than as a formal partnership. This will serve as a solid basis for building up the work as we go on.

Work with Asha volunteers

Based on the interest of the Asha volunteers on the conference call organised in July 2009, to support and be involved in the work in Dungarpur beyond funds support, some research and documentation tasks

(<http://sites.google.com/site/nrmresources/home/task-list>) were drawn up and shared with the group. This included setting up a resource page on water/land/environment issues. Some initial progress was made on the resource page:

<http://sites.google.com/site/nrmresources/home> , but a lot more can be done. No progress on the other tasks could be done.

The Bt Brinjal issue was discussed with volunteers, and a conference call of interested volunteers was organised with Selvam to understand the issue better. Following this, a lot of research and reading material on the issue, was shared with the group, with the idea to set up a resource and take action page (somewhat like AID has managed to do through www.brinjal.org). After an initial enthusiastic response however, further campaign action could not be organised.

Sharad from NYCNJ visited Dungarpur for a couple of days in August 2009, during we visited Manatgaon and also discussed NYCNJ's Jhabua work, as well as the resource page and tasks list for volunteers. Sharad's report of the visit is here (includes some pics taken by him):

<http://sites.google.com/site/projectjhabua/visit-jhabua/j>

The fellowship page was created and is put up at: www.ashanet.org/projects/project-view.php?p=1035 . It needs to be updated to reflect recent changes.

A lot more details of the work, can be discussed through a conference call, based on interest of the volunteers.

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