# WORK UPDATES FROM APR 2017 – MAR 2018

## Local work in Dungarpur

My work in Dungarpur is focussed on conserving soil and water by building / reviving ponds, in collaboration with the Vagad Mazdoor Kisan Sangathan (VMKS), which is a community-based organisation of adivasi farmers and labourers in Dungarpur district founded and working in the district since 1997.

6 new ponds were built in this period and 1 new pond built in 2016-17 was repaired. The new ponds were built in Rampur (3), Lolakpur (1) and Kodiyagun (2) villages, while the new pond built in Dolvar last year was repaired. The photos of the ponds (process + results) is available here: https://drive.google.com/open?id=1VmUtX7Dab8In8wIY0Eqc4Uc9AdWsr_Sr.

The ponds will help improve the surface and groundwater availability in its vicinity, which will be accessed by farmers through wells, bore-wells and hand pumps for irrigation and drinking for themselves and their livestock. Farms downstream of the pond will also get sub-soil moisture that will help them grow crops with little or no external irrigation.

The decision to make ponds at a particular site in the village is first taken at the district level forums (called Aam Sabha) of the VMKS, and then at village level forums (called Gaon Sabhas). It takes about 6-12 months of preparation for the work to happen in a village and about 1-2 months for the work to complete once it is started. Farmers contribute atleast 35-40% of the cost of the ponds in the form of labour or material. In most cases, farmers who live in and around the pond and will benefit from it, contribute labour to make the pond.

Overall, since the first ponds built in 2012-13, 14 new ponds have been built in 7 villages over a period of 6 years. 2017-18 was hence a significant year in terms of volume of work done – 7 out of 14 ponds were built in this one year.

This is a result of the effort put in and process followed over the last few years, particularly of consistently sharing the progress and plan of work every 1-2 months in district-level forums/meetings of the VMKS. The on-ground results and the process of work done in previous years has also helped newer farmers in newer villages gain confidence and trust to come forward to take up the work in their own village.

For the coming year, there is already a list of villages (Eg.: Doja, Selaj, Nareli etc) who are ready to take up new work, though I will continue to take up exploratory visits to newer villages based both on direct requests and those that come up in the district-level and other forums of the VMKS.

## Regional work in Rajasthan

My work in the rest of Rajasthan is through Sambhaav, and focuses on supporting local teams working on soil and water conservation with farmers and pastoralists in Alwar, Jaipur, Dausa, Nagaur, Jaisalmer and Barmer districts, through on-ground visits, meetings and overall coordination with local team members.

Some work done during this period entirely through locally raised contributions from farmers and pastoralists and with support from Government programmes raised through the Gram Panchayats is listed below region-wise.

**Ramgarh, Jaisalmer**

*Illustration 1 Wheat and a beri (in the foreground) in a khadin in Ekalpar*

This area gets the least rainfall in the country averaging about 150-200 mm. Work here is ongoing in about 25 villages of the region, and is focussed on reviving or building water harvesting systems for drinking for humans and livestock, as well as for agriculture.

About 10 small *khadins* were built in Sonu, Sherawa villages with support from the Gram Panchayat.

A large lake near Bijrasar *khadin* covering nearly 12 bigha (4.5 acres) was built with support from GREF (BRO). Irrigation from this lake helped to grow about 850 quintals of mustard this season.

Across 10-15 villages, farmers and pastoralists built several small ponds called *tobas* and *beris* in the IGNP region, which provided water for their livestock especially during summer.

Farmers on Ramgarh-Netsi road built *khadins* using their own sources of funds.

Overall, about 50 *khadins* in Ekalpar, Dablapar, Netsi, Hema, Ramgarh, Raghwa, Sehuwa, Joga and other villages, averaging about 800 hectares in land area, produced about 5000 quintals of bengal gram, mustard, arugula and wheat this year.

Note:

A *khadin* is an agricultural system that is jointly owned and managed by several villages or farmers from a village, that harvests and stores rainwater. Crops are then grown using the soil moisture that is stored within the *khadin*. It also recharges groundwater within and downstream of the *khadin*.

A *beri* is a well-like structure that taps rainwater stored below the ground in the form of soil moisture (called *rejani* locally), over an impermeable rock layer, similar to groundwater stored in a perched aquifer (aquifer within an aquifer).

**Rajgarh block, Alwar**

This area lies east of the Aravalis, and receives an average rainfall of about 600-650 mm. Work here is ongoing in about 65 villages in the pockets surrounding the Nanduwali and Sakatwali river, and is focussed on the conservation of land, water, forest and pastures, for the benefit of drinking water for humans and livestock and irrigation for agriculture.

Nanduwali I region:

*Illustration 2: New johad (pond) built in Losal Gurjaran and Losal Brahmanan*

In Losal Brahmanan and Losal Gurjaran villages, farm bunds were built over 10 hectares of land with community participation and support from the Mukhya Mantri Jal Svavlambhan Yojana (MJSY), along with 2 *johads* (ponds) through MJSY. About 2000 trees were planted in this patch with the purpose of developing it as a new pasture land. Over the streams of the two villages, 1 anicut and 1 *johad* were built with support from the MJSY.

In Budha, 1 anicut was built with support from the MJSY.

In Murlipura, farm bunds over 2 hectares of land was built with support from the MJSY.

In Lyada Ka Guada and Talaab, farm bunds were built over 5 hectares of land through NREGA.

In Ghevar, 1 anicut was built through NREGA.

In Jahaj, an anicut built over the river next to a temple, was cleaned of silt and repaired, completely through community participation.

*Illustration 3: Anicut built over a stream in Budha*

Nanduwali II region:

In Rampura and Kakrali, 1 anicut each was built from support from Worldvision India (Rajgadh) and community participation.

In Kho Dariba, farm bunds were built over 1 hectares of land with support from Worldvision India and 1 hectare MJSY.

In Tilwadi, farm bunds were built over 1 hectare of land with community participation.

In Goverdhanpura, Rampura, Tilwadi and Kho Dariba, farm bunds were built over 2 hectares of land through community participation.

In Urwari, 1 *johad* was built through community participation.

In Kaleshwar, farm bunds were built over 0.5 hectares of land through community participation.

*Illustration 4: New farm bund built in Lyada Ka Guada*

Sakatwali region:

In Ramsinghpura and Tipura, villagers set up a community cattle shelter completely through their own funds, for which they got land allotted from the Government. The shelter has a pucca building, a water source and a water storage tank, all organised through the community's own funds. It hosts about 300 cattle.

In Sakat, 1 *johad* was built through community participation and NREGA.

In Devti, 1 *johad* was built through support from the Gram Panchayat and community participation.

In Kundla, 1 anicut was built through community participation.

In Vidhota, Kundla and Nathalwada, farm bunds were built over 2 hectares of land through community participation.

In Karnawar, 1 *johad* was built through NREGA.

Note:

An anicut is a pucca structure made of stone in cement mortar, and usually built over a rivulet or a large stream that helps to store rainwater and recharge groundwater downstream of the anicut. It also helps to maintain flow of the rivulet or stream over a longer period of time.

A farm bund is a small (in height and width) embankment with a trapezoidal cross-section usually designed to help harvest, store and recharge water that flows over a small portion of a farm. The purpose is to retain rainwater within the farm, increase sub-soil moisture to help in growth of crops

and trees. It also helps to recharge nearby wells, and help nearby streams flow over a longer period of time.

**Phagi and Dudu blocks, Jaipur**

*Illustration 5: Revived (deepened) pond in Savli*

Work in Phagi and Dudu is ongoing in about 10-15 villages and is focussed on conservation of land, water and pastures, for the benefit of drinking water for humans and livestock and irrigation for agriculture. This area receives about 450-500 mm of rainfall.

In Savli, trees were planted over 3 hectares of land with support from the Gram Panchayat and community contribution.

In Savli, five ponds were deepened and their bunds repaired, through community participation of about 400 labour-days.

In Savli, farm bunds were built over 5 hectares of land, through community participation.

In Rampura and Dedu, farm bunds were built over 2 and 3 hectares of land respectively through community participation.

In Jhag and Kishanpura, 1 and 2 ponds were repaired through community participation.

In Dhamana and Biharipura, 10 and 5 farm ponds were built respectively with support from the Horticulture department.

In Dhamana, farm bunds were built over 5 hectares of land through community participation.

In Hirapura, Jaabad and Raithal, farm bunds were built over 8 hectares of land, through community participation.

In Kishanpura and Gohandi, 2 ponds were deepened and their bunds repaired with support the Gram panchayat and community participation.

In Gohandi, farm bunds were built over 2 hectares of land, with support from NREGA.

In Gulabpura, 1 new pond was built with support from NREGA.

In Hirapura, Raithal, Kishanpura and Jaabad, 2 new trees were planted in every household (450 households). Trees were also planted over the bunds of 2 ponds in Hirapura and Jaabad to provide shade.

*Illustration 6: New pond built in Gulabpura*

**Dausa block, Dausa**

Work in Dausa is ongoing in about 15-20 villages, and is focussed on conservation of land, water and pastures, for the benefit of drinking water for humans and livestock and irrigation for agriculture. This area receives about 550-600 mm of rainfall.

In Dahan Ka Chordi, trees were planted over 20 hectares of land, with support from the Gram panchayat and community participation.

In Dahan Ka Chordi, farm bunds were built over 2 hectares of land through community participation.

In Basdi, 1 pond was deepened and its bund repaired through support from NREGA.

In Chandarma, 1 pond was deepened and its bund repaired with support from the Gram panchayat and community participation.

In Uddawala, farm bunds were built over 20 hectares of land, through community participation.

**Kuchaman block, Nagaur**

Work in Kuchaman is ongoing in 5-10 villages, and is focussed on conservation of land, water and pastures, for the benefit of drinking water for humans and livestock. This area receives about 400-450 mm of rainfall.

In Gudha, 1 new pond was built with support from NREGA.