# <u>Visit to Dungarpur with Asha Fellow Ashis Panda (Padmanava Sen – 17-18<sup>th</sup> January 2017 – padmanava.sen@gmail.com)</u>

#### **Visit Summary:**

- Snapshot of the visit
  - o Reached Dungarpur from Udaipur around noon on 17<sup>th</sup> January.
  - After lunch, visited Dolwar and Bharatpur Village within 15 km radius of Dungarpur
  - Visited the office of Vagad Mazdoor Kisan Sangasthan
  - On 18<sup>th</sup> February, we visited Dingiya and then a model pond near Dungarpur before I left for Ahmedabad.

### Overall impression

- The water conservation and utilization of water for farming is key to well-being of the locals here. A major migration of bread earners happens from Vagad villages once the stored rainwater dries out to Gujarat. This affects their family lives and economy of villages.
- Ashis Panda works on sustainable long-term solutions of water in these villages. Once these ponds plus wells systems are in place, the family which has the ownership benefits for generations. Long term, as the number of working ponds increases to store the rainwater (otherwise going down), more villagers will come forward.
- The model where half of the funds are given by Landowner creates a much better quality of work than the NREGA works done. Also, Ashis Panda has defined some areas where they need to work completely by themselves. This creates an ownership model that will create more steps to build a system but protects the investment as well in term of quality.
- Asha fellow's technical knowledge and expertise in these areas greatly helps the planning and implementation.
- Since the work is spread across multiple villages, coordination also happens through local groups who revisits the plans and gives recommendations.

#### **Details**

First we saw a pond in Dolwar village (around 30 minutes by two-wheeler) where the boundary wall is constructed but the levelling of the Ota (the runway) is not done yet. I learnt about the PAL (wall) and Ota (runaway) system. Also the ways the Ota can be constructed to avoid damage during heavy rains. We also saw the location of well and how the water should flow etc

Another villager showed some interest for a new construction of pond in his land. But the process to construct new ponds will involve Panchayat as well.



Dolwar Village Scenery



Discussion regarding the location of Ota (in picture)





**Recharge Well** 



The well location for the new proposed work

In the water conservation system, important factors are slope, water proofing, rain water collection and recharge wells, under-ground reserve. Once the reserve dries out, pumps can be used to get water from Recharge wells. I did not see any Government canals etc. However, Rajasthan has a good history of big ponds and water reservoirs built hundreds of years ago and maintained by local people but with increasing population, it is not enough.

Then we went to Bharatpur village and saw the fully constructed work (it was under progress during Asha Silicon Valley volunteer Amit Sharma's visit). We also saw the ineffective work done under NREGA scheme that is damaged by rains. There were some discussions about ring wall as well. But the fully cemented ring wall is very costly hence mostly rigid route with stones chosen during construction. Ashis Panda

insisted that the villager should take care of the cement work on boundary wall to the villager or get the money through their own Gram Panchyat. Only when it goes through someone else's land they will make a permanent wall like in Dolwar. Construction work is mostly done by people that create some employment too rather than involving machines. And that creates a big difference between work done by workers from villages and JCB machines.



**Bharatpur Village** 



**Boundary wall of the working Pond(created a year back)** 



The damaged NERGA wall



Vagad Landscape



Mr Ashis Panda waiting for me on his two-wheeler

Next day, we visited Dingiya village. The village is a collection of small hillocks and people living in different hillocks farming on the side of those hillocks. Most farming happens during rains. We went to a place where final measurements are being done for a pond. It was very interesting to notice that cactus plants are used almost everywhere around farmlands to avoid intrusion by animals.



**Cactus plants in Dingiya** 



**Dingiya Village Landscape** 



Mr Ashis Panda inspecting the area

Finally we saw a model pond that is made 30+ yrs back in a nearby village. Even after many months of no rains, it had some water in it. Mr Panda explained me the way it is built and what he envisions for the pond-recharge well systems he showed me. He also mentioned these efforts can be fruitful in Dungarpur since these areas get 40+ cms of rainfall which is not so bad like the Jaisalmer area(that sometimes get 10-20 cms in a year).





The model pond in nearby village

## Recommended readings:

http://www.ted.com/talks/anupam\_mishra\_the\_ancient\_ingenuity\_of\_water\_harvesting http://www.indiawaterportal.org/articles/rajasthan-ki-rajat-boondein-book-anupam-mishra\_