

PAKISTAN SPATE IRRIGATION NETWORK
IN ASSOCIATION WITH
STRENGTHENING PARTICIPATORY ORGANIZATIONS (SPO), ISLAMABAD

Drinking Water Ponds at District Mithi Tharparkar

GENERAL FEATURES

The district lies between 24 ° 13' and 26° 21' North Latitude and has an area of 13638 square miles. It is bounded on North with District Khairpur, on the east by states of Jesalmir and Marwar of India on the south by Runn of Kach and on the west by district Badin and Hyderabadⁱ.

Previously district Umer kot was also part of the district but now it is completely new district with its head quarter at Umerkot. The second part is now an independent district with the Name of Mithi. This report covers the site visit in Mithi district only. District Mithi constitutes with 5 tahsils (i) Chachro (ii) Nangarparkar (iii) Islam kot and (iv) Mithi. There are 43 union councils in the district under local government systems

The forces of nature which originally produced the desert are also still at work there and very evident. For ages which go beyond human history the whole delta of Indus, the coast line where its mighty waters encounter the sea and the Runn of Kach have been great depository of the finest sand, which as fast as the ever shifting water let it dry, is caught up by the fierce winds that blow from the sea with but little intermission through the long hot season and is swept away to north west. Forming long ridges in its course, as wind blown and always does, it has produced a landscape which has been aptly described as resembling "The Atlantic in a severe storm". But the line of their rests at right angles to the direction of wind but parallel to it. Observation of phenomenon on a small scale anywhere will show the reason for this. The origin of a ridge usually is a bush or other obstruction, which arrests the sand to windward and shelters it to leeward. Once formed, the ridge itself becomes the obstruction and grows as it begin with a gentle slope on the side facing the wind and an abrupt fall on the others. The ridges are naturally irregular and only roughly parallel to, so that they often enclose sheltered valleys, above which they rise to a height of some one hundred and fifty feet. These valleys are frequently moist enough to admit of cultivation and when not cultivated they yield luxuriant crops of rank grass. Even on the sand hills a very little rain suffices to sustain a surprising amount of vegetation, consisting of Salvadora (Khabar), stunted (Ber), Babul (acacia trees).

But the extra ordinary salt-ness of sub soil and the consequent difficulty of finding water fit to drink renders many tracts quite uninhabitable. In many of the valleys the sub soil water collects and forms large salt lakes, very picturesque sometimes which rarely if ever dry up.ⁱⁱ

The entire districts is reportedly consist on sand desert except Nangar Parkar Tahsil which is flat in nature and give rise to temporary streams after rain fall. The sweet drinking water remained a scarce through history.

Numbers of NGOs has been reportedly working on the water that mainly includes Thardeep (reported black listed now), SRSP, MDF, PVDP and Sukar. The latter is still working at Mithi district with meager funding on drinking water improvements in association with water Aid International in one of the Union Council of district Mithi with its office at Mithi.

Drinking Water

District headquarter Mithi has been provided with a sweet water supply pumping it through series of pump stations from Indus water canal. Reportedly water is supplied 2 times in a month up to district headquarter. Pump station along the way provide a tap facility to the neighborhood with a view to store the water in a separate tank and subsequent use for drinking until the next supply.

However, the saltish water pumps are installed at the district headquarter which pump water daily to Mithi (the district headquarter) which is mainly used for construction, washing and other domestic use including animals.

The entire rural union councils are devoid of sweet drinking water availability. In most of the villages, deep wells up to the depth of 100ft has been excavated and lined with bricks by the villager themselves and sometimes by NGOs and Government to sustain the water supply for the human and animals too. The practice is the same elsewhere in the district and particularly the people living in the desert villages.



Figure 1 Photo by Sukar Foundation

1. Barnilio Village DWSS

Water for domestic use: The village can be accessed along the metal road towards south at the distance of 20kms from Mithi headquarter. The village has 2 parallel well to the depth of 100 ft deep and lined with bricks by the community themselves. The population of the village is approximately 3000 souls depend on the only sources of water for human and animal.



Figure 2: Females and Kids extracting water from well-Barnilio Village Mithi (Tharparkar)

Villagers on the spot informed that the use of well starts in the early morning till night. The water is manually extracted from the wells by bucket tied with rope and most of the time pulled by 5-6 women at a time where a man stand on the edge of well and upon arriving the bucket on top he catches it and disperse it into the small ponds made exactly near the top of well. The stored water is then filled into pictures and plastic cans manually by a filling type vessel. At a time, the groups

who are pulling the water from well can fulfill their needs when they finish the other groups resume the same task and so on. It is worth notable that every group brings his own rope for pulling of bucket.

Water for animal use: The villagers informed that there are 500-600 small ruminants and other cattle that drink water from the well. Normally, the large folks keeping in the village are not common but every household has numbers of goats which are grazed by the paid shepherd on monthly basis. The grazing cost for sheep was reported Rs: 80 and large animals cows Rs: 150/month.

The water timings for animals start from 11 am onward. The owners of the animals have to provide the labor like pulling of water with buckets for animal drinking. Reportedly the animal owner normally arrive at the well before the arrival of flocks and fill the small earthen pond made at the safe distance from well which is surrounded by the brush wood to keep the animal in a feeding area. At the start of animal drinking timings, the people with domestic need confined to the other well where no animal trough are constructed and they are confined to the well until all the animals are watered and then both wells are used for domestic water use. Some people having dinkies use them in a pair to pull the bucket from well.

It was found in this village and elsewhere, such well were developed in the natural depressions which gets recharge from the seasonal water. Community informed that if the rains are disappeared, the quality and quantity of the water is replenished.

There are 2 such wells for the people of Barnilio village. Villagers informed that the brick lining and development works at the top of wells were done by themselves and none of the outer agency has ever supported them for the improvements of the wells.

Cleaning of Wells

Since, the wells are open surface but their upper ring is constructed higher from the surface level in order to escape the fall of reptiles and other animals. But some time it does happen, and villagers clean the well after every such incidence. The cleaning of the well carried once in six month by the villagers themselves proportionate to the lineage groups.



Figure 3: Animal Drinking Trough with hurdles inside it to avoid animal to enter the trough

2 Drinking water at Dedh Village

Dedh village is further at the south of Barnilio village on the same metal road. It is 45kms from Mithi the district headquarter. The population of the village reported 150 households. At the time of visit none of any male member was available at the first hamlet to conduct discussion on the matter. However, our local guide was well informed and got all the desired informed. In total 3 types of water conservation/storage examples were seen in the village. (i) Collection of roof top and compound water of the primary schools (ii) large reservoir about 50000 gallons capacity was seen. This was built with first diverting run off to moderately deep silting basin and then water was conveyed through a conduit to the reservoir hence minimizing the silt level entering the lines reservoir (iii) A unique type of structure was built by constructing artificial basin on 100 x 100ft with B class concrete and in the middle 6 numbers of buried pictures type reservoir.

Local population seems more inclined towards the third type of water collection and storage. In fact, we find that water in the picture type reservoir collected from the artificial basis was still there. The interest of the local women can be seen from the temporary plastering of the shutters to protect the theft from their well.

The local guide informed us that all the six well have been distributed one each on the extended family basis. So it seems some of the beneficiaries have finished their stock in the well and other seems moderate on use and still there was water in their well and hence, the women were plastering the shutter to know if some ne is stealing the water.



Figure 4: Reservoir with silting Basin - Dedh Village



Figure 5: Artificial Basin with well inside it



Figure 6: Plastered shutter to escape water theft



Figure 7: One well with small Basin

ⁱ District Gazetteer Vol VI Thar and Parkar District
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