

Nagarparkar drought- A Rapid situation appraisal and intervention identification



By

Pakistan Water Partnership

Mission

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Purpose

This report provides a drought situation appraisal of Nagarparkar thesil in Tharparkar district. It identifies an area of 15 villages within 25 km radius heavily impacted by drought that could be brought under GWP- WACREP project for possible inclusion. Nagarparkar has witnessed pockets of drought somewhat less severe than the other thesils. Since Diplo, Chachro and Nagarparkar continue to be negatively impacted by drought expanding area coverage to help impacted populations to cope with climate changes is a priority for the government of Sindh. Ensuring sustained livelihood for communities requires integrated water resource management especially during periods of extreme stress¹. While parts of Nagarparkar have access to saline and fresh water for agriculture the challenges of drought adaptation are similar to those in other thesils.

Background to Nagarparkar

History Nagarparkar

The history of the Nagarparkar Taluka and its relationship with power centres in Sindh, Rajisthan and Delhi are not dissimilar to that of Tharparkar. Tribal and caste relations along with ethnicity are also similar. However, there are two major differences. One, Tharparkar was dominated by the Jains who controlled trade and commerce in the region through the port of Parinagar, the ruins of which are adjacent to Virawah village. The Jain influence declined due to the shifting of the sea from Parinagar and because of the suppression of the Jains (who were sea going merchants) by the land owning Rajputs. Most of the Jain temples (which are architecturally and artistically impressive) were built in the 12th and 13th centuries, which appear to be the high point of Jain culture. The second difference is that unlike the rest of Thar, Nagarparkar's trade and cultural relations were with Kutch and Gujrat and not with Sindh and Rajisthan. Cattle, ghee, khata (woollen blankets) were sent to Gujrat and Kutch along with gugur (the gum of balsamodendron mukul) and nat (used for camel saddles). Wool and hide and skins were also exported. In exchange, Nagarparkar received cloth, oil, sugar, dyes,

¹ Also see Tharparkar Appraisal mission report entitled "Aide Memoire Fact Finding Mission and Drought Master Planning Appraisal Mission April 16– April 21, 2014" for additional background.

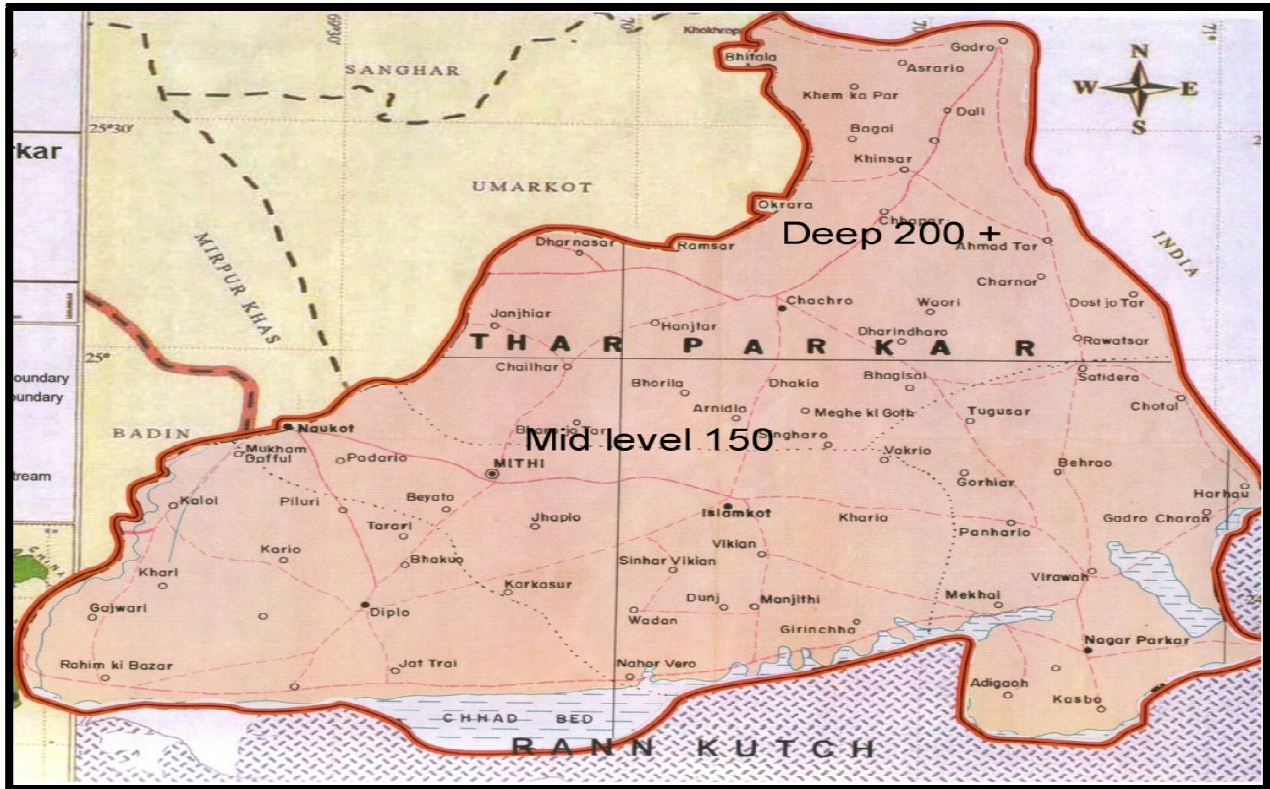
tobacco, gold and silver (for jewellery), tea and some grain from Kutch and Gujrat. Local elders relate that this trade was carried out through camel caravans and was managed by the Baniyas and Lohanas.

Two to five hundred camels per day crossed over to Kutch. Their resting place was under the trees (which have since disappeared) along the Godhra Nala in Nagarparkar town. The Gujrati language was extensively used. The majority



population (about 80 per cent) were Hindus and most of the land was owned by the Rajputs. The importance of Nagarparkar taluka can be gauged from the fact that a municipality was established in Nagarparkar town as early as 1862. In 1919, the population was 3,354 and the town contained a Mukhtarkar's office, a police station, post office, a vernacular school of boys and another for girls, a district bungalow and a dispensary. All this changed, with partition the link with Kutch and Gujrat was broken. Due to the 1965 and 1971 wars, the Hindu upper castes and landlords migrated. Their tenants and artisanal castes became the de-facto land owners of the survey numbers they cultivated. This has laid the foundation for the development of a more

equitable society. As a result, considerable social mobility has taken place, especially among the Menghwaris (artisans) and the strict Hindu caste system in practical terms has almost collapsed.



Area : The total area of Nagarpakar is 3,862 Square Kilometers.

Population = According to 1998 census It has the total population of 153,106 and in 2008 its population was 19, 1613 and in 2020 it will be 250,811.

- 59.12 per cent of the population in 1998 was Hindu and 40.63 per cent was Muslim. In 2008 the Hindu population was 57.03 per cent and in 2020 it will be 54.62 per cent.
- Population below 15 years of age in 1998 was 47.76 per cent (73,125), in 2008 it was 50.66 per cent (97,068) and in 2020 it will be 54.47 per cent (136,640).

Climate data:

Tropical desert climate but cooler than the rest of the Tharparkar. During monsoon it receives considerably higher rainfall than the other adjacent areas of Tharparkar. It mostly receives rainfall in the month of July to September. April, May and June are the hottest months

(maximum temperatures 39 centigrade and minimum 20.12 centigrade) and January and February are the coldest (maximum temperatures 26.49 centigrade and minimum 5.42 centigrade). After the rains in August Nagarparkar is extremely green and pleasant and temperatures become bearable (maximum temperature 34.51 centigrade and minimum 13 centigrade). Between March and May there is a constant and strong breeze from the sea from the direction of south-west and west-south-west. This is accompanied by a lot of dust which makes life difficult and is called chaliha (or 40 days)

Agriculture:

Livestock population: The total livestock distribution is as follows

| Taluka | No. of HHs | No. of Villages | Total No of Livestock Sheeps | | No. of Death of Livestock in 3 Month | | No. of Migrated Livestock Small/Bigs | | No. of HHs who sold Livestock |
|--------------|------------|-----------------|------------------------------|--------|--------------------------------------|-------------|--------------------------------------|-------------|-------------------------------|
| | | | Goats & Sheeps | Others | Goats & Sheeps | Big Animals | Small Animals | Big Animals | |
| Nangarparkar | 2872 | 11 | 14776 | 6854 | 1946 | 145 | 0 | 78 | 928 |

Ref: SITUATION ASSESEMENT ON DROUGHT (September 2014 Monitoring and Evaluation Section TRDP)

Mission Observations

1. Nagarparkar tehsill being about 120 km from current PWP focal area shows marked signs of drought with negative impacts of drought. While lower temperature and moisture laden winds provide some respite and the challenges faced by man, flora and fauna are quite similar. Both human and livestock populations show signs of severe to moderate drought.
2. Having close proximity with the Indian border there are several check points as a result of recent extremist attacks.

3. Terrorist attacks in Peshawar have put security agencies on alert thus movement in Nagarparkar is carefully monitored. This could create minor inconveniences for development activities.
4. There are some small scale mineral activities including China clay plants in Nagarparkar. But majority are no longer in operation. Local foliage, tree cover, grasses show moderate to severe levels of drought. Animal condition is weak to debilitating with greater diversification of species e.g. buffaloes, horses, peacocks. Fodder situation is critical with wheat straw being imported from other districts at high cost. Locally grown wheat partially fulfils fodder requirements but drought has markedly reduced grain and forage crop productivity.
5. Malnutrition and infant mortality reported to be high. While basic medical facilities exist in Nagarparkar mobile access to distant places is lagging and poor communities face great hardship in gaining access to these facilities. Hospitals have doctors but few chose to live in these isolated environments. Many essential medical specialties are absent.



Fig:1- The Livestock has effected by Drought.



Fig:2- Drought Condition in Nagarparkar.

6. Livelihood opportunities are restricted to livestock, handicraft making, tourism, religious pilgrimage sites, migratory labor opportunities during harvest, honey collection etc.
7. Local household assets are all in form of livestock, a small hamlet and household items valued at less than Rs. 75000.



Fig: 3 Small ruminants in search of shade that is scanty due to prolonged drought

8. Water quality is extremely poor and source of water is open ponds, dug wells and transported water. TDS meter readings range from 240-390. Water is brackish with odor. Water borne diseases are common. Livestock continues to suffer immensely and there are many dead carcasses observed due to water deprivation. Poor condition is partially attributed to drinking very saline to near sea water



Fig:4- PWP team member is testing Water Quality in Nagarparkar.



Fig:5 Salt Mining in Nagarparkar.

9. Road infra structure and electricity coverage is quite good. But neglect and lack of maintenance paints a dismal picture especially in the interior linked dwellings. Migrants outside Thar are also visible given the mineral mining facilities.

10. Food availability in terms of grain, vegetable, pulses in shops and village centers appears adequate but majority of the population lacks the buying power to purchase food. A few tuck shops and general stores cater to the middle class. However, overall nutrition status of rural inhabitants is worrisome. This is evident from the low body weights and poor hemoglobin counts of 4-6 while healthy blood counts are 12 and above,
11. There are numerous signs of failed water schemes, abandoned public works, rusting water pumps, ambitious but failed politically motivated investments. The general neglect of development or failed development is glaring and reflects the part time attitude of the political machinery to tackle Nagarparkar's development woes.
12. There is general peace and harmony in the area and crime rate is very low. Rapid influx of money and outside contractors will create positive and negative externalities that need to be carefully monitored.
13. Some isolated NGO interventions noted but no serious interventions to mitigate negative impacts of drought seen at grass roots level. Given the higher rate of education greater application of science based solutions can help speed up the development process in Nagarparkar.
14. Little evidence of field engagement of government departments or NGO's but much attention to display boards around Nagarparkar city.
15. Social services of education, health, tourism, civil administration exist but give a pathetic look. The " who cares" look is much evident and is clearly reflected in the state of affairs prevalent in the area. Development of a tourist hostel facility reflects the ambition of locals but without a development vision this may just be an isolated endeavor
16. There are good opportunities to engage wealthy local community leaders now residing in Karachi to help in the uplift of the neglected communities. However focus has to be on sustainable development as opposed to charity based food transfers. Creating opportunities to earn livelihood should be the prime motivation.



Fig:5- Severe Drought Condition in Nagarparkar.



Fig:6- The beauty of Tharparkar Desert.

PWP Strategy for development activities in Nagarparkar.

Based on mission observations the future strategy in Nagarparkar should be based on the lessons learned by drought adaptation work in Mithi and priority setting documentation provided by NGO's engaged earlier in relief work. The first and foremost ingredient of success would be to develop a close bond with the local communities gain their trust, identify leadership and change agents and proceed in a step wise manner "slow and steady". Only make those promises that can be fulfilled and apply an approach of community ownership and participation. Jointly identify and create opportunities with integrated water Resource Management as the underlying framework. Nagarparkar provides much greater biodiversity. The ecological sensitivities should be kept in mind as experience is further gained through IWRM interventions.

In line with above strategy the following recommendations are made to initiate work in Nagarparkar.

Recommendations

1. Identify local leadership and key contact points by enlisting the villagers.
2. Demonstration of bio-sand filters in areas of poor water quality. Following successful demonstration launching of campaign to assist households to install own filters by facilitating in materials and technical back stopping.
3. Foremost will be building rain harvesting ponds to store water. These ponds to be identified by villagers and dug on existing water depressions by the community with small grants from project. In selective villages demonstrate use of semi permeable membrane.
4. Demonstrate soap making in each village followed by female and children hygiene campaign led by female activists trained by the project. Distribute 500 posters to be displayed in schools and homes with special sermons in mosques and mandirs.
5. Distribution and highlighting precautionary measures to combat drought and heat stress including e.g. ORS, head covering, basic first aid.
6. Distribution of dry milk and nutritious food amongst infants, pregnant and lactating women

7. Provision of vegetable seed and technology to promote kitchen gardening. Provide know how and demonstration. Pay attention to salt tolerant vegetable and rangeland grasses.
8. Special needs of poultry including peacocks during drought in isolated environments
9. Livestock fodder promotion through grass species, multipurpose trees, Napier grass etc.
10. Distribution of mineral mix for pregnant livestock along with de-worming demonstration. Jointly with livestock department organize vaccination campaign.
11. Establishment of village nursery to be managed by villagers themselves. Each nursery will raise 500-1000 saplings of rangeland species and also be encouraged to collect tree seeds to be broadcasted during rainy season. A community seed bank will be created.

Implementing partners:

1. Pakistan Water partnership
2. Tharparkar Area Water Partnership
3. Al-Khadmat Foundation, Mitthi
4. Luqman Shaheed Army Public School, Nagarparkar
5. Green Media Initiatives plus Farozan