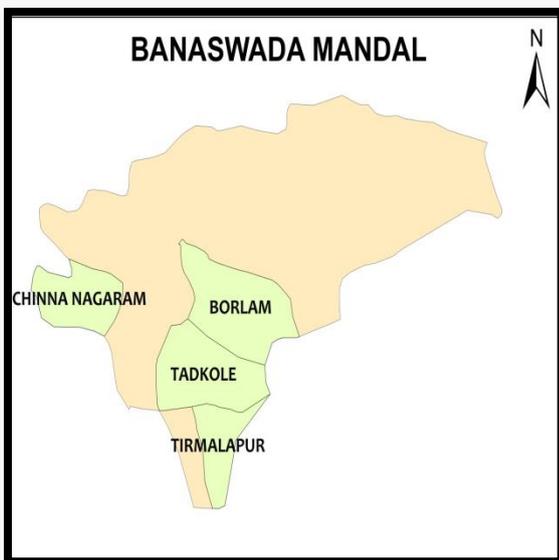


Recharging Groundwater: Experiences on Community Participation to address Fluorosis

The village of Tirmalapur, one of the Water Quality project's intervention villages, is located in the Mandal of Banswada, Nizamabad. The village is made up of 4 habitations and has a total population size of 4,108.

Upon review of the available secondary literature, the reports found on the National Rural Drinking Water Programme website gave an indication that approximately 50 per cent of the water sources that were tested by the local Banswada Water Quality testing Laboratory were contaminated and the major contaminant was Fluoride. Furthermore, the data found on the Government of Telangana's <http://tspri.cgg.gov.in/reports.do> website, indicate the water contamination has a health implication which are observable.

The project team investigated the nature of the complaints through FGDs, with the Youth, GP representatives, SHGs and SC community. The villagers report about 75-80 per cent of the water sources in the village was contaminated. In Tirmalapur habitation alone there were 10 physically disabled people caused by bone deformation.



At the main village, drinking water is supplied through 3 overhead water tanks. Water is drawn from 2 bore wells. Of the 6 hand pumps in the village, one hand pump is fit for drinking purpose while

**Nizamabad District - Banswada Mandal - Tirmalapur Panchayat-
Tirmalapur village Habitation Report**

Sl.No	Habitation Name
1	Donkmoor Thanda
2	Kothabadi
3	Mogulan Pally
4	Tirmalapur

others are considered with excess fluoride. Although the piped water is supplied for one hour twice a day, it is not equitably distributed. Some households do not receive any water at

all, while others manage to get 25 pots and few with about 5 pots. There is no operation and maintenance of the water supply infrastructures.

b) చాటి, కంటి, కీళ్ళు, జిడర సంబంధ మరియు వ్యాధులకు సంబంధించిన ఆరోగ్య సర్వే అనమూనా
Health survey format for Chest, eye, orthopedic ,intestinal and other diseases (Form-12(b))
Nizamabad District - Banswada Mandal - Tirmalapur Panchayat

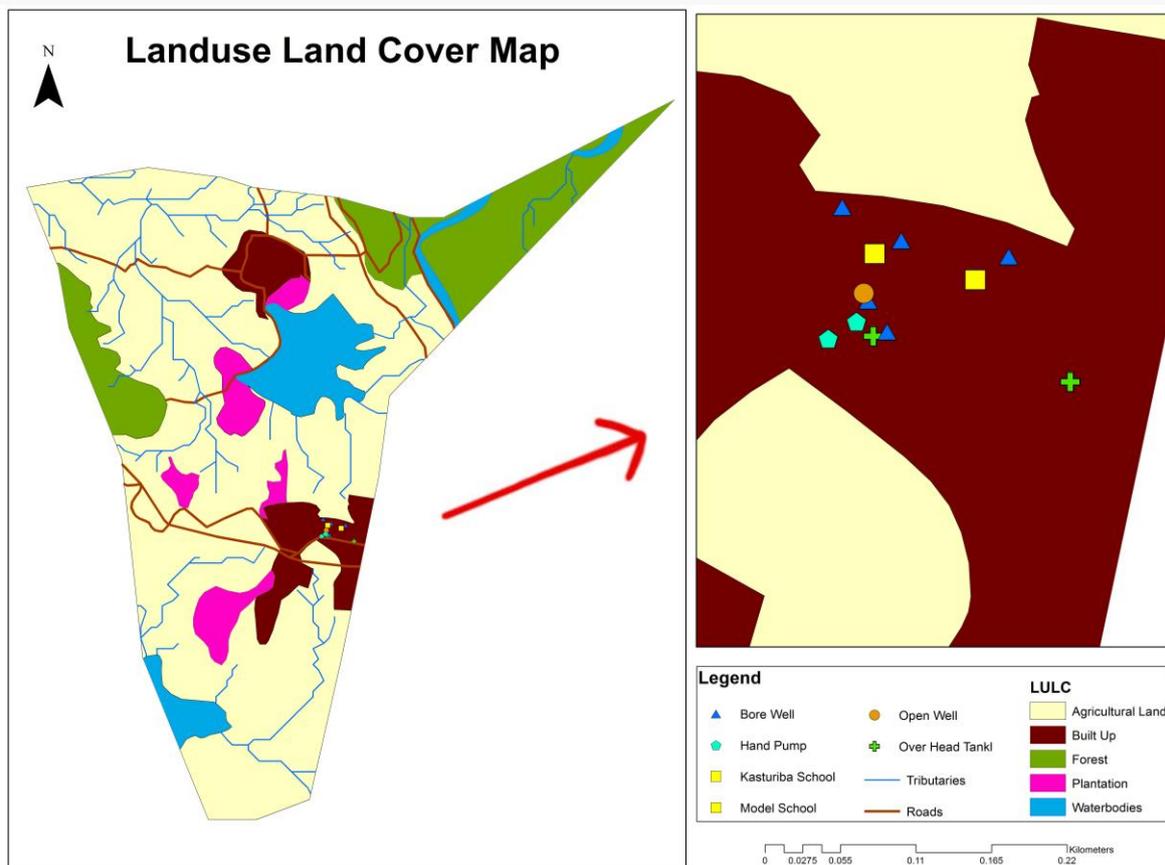
Sl.No	Name of the patient	Name of the GP village/Habitation	Gender	Age	Spouse name	Name of the Disease	Details of disease	How long he/she is suffering	Details on treatment so far undergone	Treatment measures to be obtained	Remarks
1	S Ramulu	Tirmalapur	M	68	Susheela	Asthama	Ill helth	5Years	Treatment taken Area hospital Banswada	Refer to private hospital	no
2	M Balawa	Tirmalapur	F	45	Nagaiah	JOINT PAINS	Joints pains	5Years	Treatment taken Area hospital Banswada	Refer to private hospital For good treatment	NO REMARKS
3	Jara Sarojana	Kothabadi	F	45	Narayana Reddy	Joint pains	no	4Years	Treatment taken Area hospital Banswada	Refer to private hospital	NO REMARKS
4	P Govind	Mogulan Pally	M	35	Roopsingh	Joint pains	Floride water	3Years	Treatment taken Area hospital Banswada	Refer to private hospital For good treatment	NO REMARKS
5	Badli	Mogulan Pally	F	45	CHANDU	Joint pains	Floride water	2Years	Treatment taken Area hospital Banswada	Refer to private hospital For good treatment	no

Few people purchase water bottle supplied from local water treatment plant at the rate of Rs. 5-10 per 20 litres bottle. Due to lack of demand for clean and safe drinking water, water treatment plant eventually closed. So now all households in the Gram Panchayat depend on groundwater. The worst affected by water quality issues belong to the SC community who could not afford pipeline water supply or purchase the private water bottles. These community members rely on public hand pumps that are not fit for human consumption.

Considering the grave situation about the village drinking water, the rural community proposed a solution. They suggested to construct Rain Water Harvesting Structure (RWHS) in the Village Model School located at Kothabadi habitation.

At Kothabadi, construction of the recharge and rainwater harvesting structure directly addressed the water quality issues. The team discussed with the villagers and found a defunct well that could be recharged through harvesting the rainwater. Around the dilapidated well there were 6 bore-wells providing drinking water to the local habitants. The groundwater level of the bore-wells was reducing at an alarming rate.

Incidence of fluoride is observed in all the bore-wells and is increasing in the past 20-25



years. Water-borne symptoms such as discoloration of teeth, deformed bones and skin diseases are common in the village.

Construction of a rooftop rain harvesting structure that would recharge groundwater and prevent contamination from fluorosis was the common need for the local habitants in Kothabadi. Today water recharge structure benefits more than 2000 population. The villagers and school authority contributed in-kind labour and cash (INRs 2000) to construct the RWHS. SaciWATERS with the financial support of WaterAid provided INRs 1,50,000 to construct the RWHS infrastructure.