ADDRESSING WATER SECURITY IN THE GRAM PANCHAYATS OF NALANDA - DEVELOPING LOCAL KNOWLEDGE AND CAPACITY

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ABSTRACT

In spite of ample fresh water resources, Nalanda is experiencing water scarcity issues due to a combination of natural factors. Owing to its geographic location and unique characteristics, the district is also highly vulnerable to the anticipated impact of climate change. Inability to conserve the surplus water available during monsoons is the major constraint in ensuring long-term sustainability. The concept of a water security for the district, with short, medium and long-term components for the holistic management of available water resources is aimed at ensuring its water security. The current status demands that the state adopts an approach that covers not only the technological aspects but also incorporates elements of social, economic, legal and environmental concerns. It must recognize "Water Security" as a predominant objective as an inseparable aspect of right to life. Thus in the context of Nalanda, safe drinking water and sanitation becomes not only a basic right but also the step towards securing sustainable water resources through community participation. Both availability and quality of water have posed serious concerns. The over extraction of ground water has affected both the sustainability of the water source and the quality of the water. So an integrated approach to water supply, household and sanitation has to be realized.

KEYWORDS: Nalanda, Water

Nalanda is one of the thirty-eight districts of Bihar state, India. Geomorphologically, Nalanda district is located within the Mid-Ganga Basin, in the southern margin of the Gangetic plains. For majority population agriculture is the main occupation and unequal distribution of land has created a wide gap between have and haven't in the rural area. Here majority of the marginalized people belong to the Pasi, Mushahars and Dusads. These castes are generally landless labours and working as daily wage earners. Owing to illiteracy and lack of awareness among the marginalized benefits of government schemes and programmes have not been entitled by these communities. Poor access to water and sanitation facilities affects the sense of well-being of communities, thereby increasing the morbidity and mortality rates, especially among the poor, infants and aged .The study covered 50 villages of Giriyak block of seven Panchayats and aims to see the achievements with regard to safe drinking water and sanitation campaign for improving the access of communities of the intervention area.

Provision of clean drinking water, sanitation and a clean environment are vital to improve the health of our people, improve standard of living and wellbeing of local community and to reduce the incidence of diseases. Problems arising from inappropriate services of drinking water and sanitation are more evident in poor and backward communities of developing countries like India. The problems that affect majority of the rural areas of Naland are of supply of inadequate and contaminated water, improper sanitation and untreated liquid and solid waste. These problems have direct impact on the health of the people.

In the absence of pure drinking water and proper sanitation facilities, people suffer from different water-borne diseases, leading to high incidence of morbidity and mortality thereby increasing their sufferings. This, in turn, causes loss of working days and loss of income. Improving environmental health by addressing these problems would be the most cost effective measure to enhance people's health, welfare and safeguard their livelihood.

In this regard finding reveals that there are increases in the access to improved water sources from 30 percent to 62 percent. In the intervention areas especially, access has increased to 65 percent. NGOs like BJUP and other has taken several initiatives assisted by related government departments, NGOs, and Agencies to improve water supply and ensure proper sanitation coverage, through community participation at the local level. Programmes on water and sanitation focused on providing socio-technical services to rural communities and local level organizations to enhance capacities and address water and sanitation related issues. A wide scope for improvement is still available particularly with regard to the

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knowledge and behaviour of the rural poor towards hygiene.

This study, aimed at establishing the current status of safe drinking water and sanitation in benefiting households so as to make intervention locally responsive. The survey covered households in the intervention area. Data was collected by using a questionnaire designed to capture household and individual information to carry out with the objectives to gain a better understanding of the water and sanitation related situation in five Panchayats of Giriyak and Bihar Sharif Blocks, Nalanda. And to collect information about Knowledge, Attitude and Practice of the village population regarding hygiene, defecation habits, diseases and other practices. This report is based on a descriptive community survey and highlights important water and sanitation issues. The data was generated by the use of questionnaires and observation forms.

The study shows clearly and noticeably that the issue of water is the domain and concern mainly of women. As regards the multiple problems connected to water supply: drinking water availability and management, water usage, hygiene behavior in terms of cleaning of vessels, hands and surroundings, women are much more acquainted of all these factors than men appear to be. Women are crucial in collecting and storing of drinking water and water for all other purposes. They are responsible for the health and well-being of the family and to take care of the personal hygiene of their family. There is at the same time a considerable degree of difference between men and women in the choice of water sources for various purposes. It appears that in most cases men have the option of using a number of different sources and that they freely make use of those most convenient to them. In all the Gram Panchayats of Giriyak the number of SC and OBC is higher .The number of General category is lower than the SC and OBC while the number of Muslim Household under Muslim category is nominal. Unlike Gram Panchayats of Giriyak Block Pawa Gram Panchayat of Bihar Sharif blocks is having more numbers of Households under general category. While the total of SC and OBC is always higher than the households under general categories. In all the GPs the percentage of children is higher than the male and female adults.

NALANDA DISTRICT OUTLINE

Nalanda district is one of the 38 districts of Bihar, and Bihar Sharif town is administrative headquarters of this district. Nalanda district comes under Patna Division. The subdivision of Biharsharif in the old Patna district was upgraded to an independent district on November 9, 1972 and named Nalanda, after the famous university (the world's oldest) located here. Nalanda district is one of the backward and poorest districts of Bihar. The literacy rate of the district is 53.2 % and only 38.6% with respect to the women population. However, this ratio is very low in the rural areas and especially among the socially excluded & Mahadalit groups. People are mainly dependent on agriculture for their livelihood. In this area most of the people are ignorant about health, hygiene and sanitation issues and practice unsafe and unhygienic habits in their daily life. Large number of the households has no access to safe drinking water and very few households have toilet in their houses, majority of the people still practice open defection. The awareness about maintaining personnel hygiene among young children, youth and young men are also very low. Water, Sanitation & Hygiene has not been in the priority list of the households.

Nalanda District Urban Population 2011

Out of the total Nalanda population for 2011 census, 15.93 percent lives in urban regions of district. In total 457,489 people lives in urban areas of which males are 239,111 and females are 218,378. Sex Ratio in urban region of Nalanda district is 913 as per 2011 census data. Similarly child sex ratio in Nalanda district was 917 in 2011 census. Child population (0-6) in urban region was 69,872 of which males and females were 36,451 and 33,421. This child population figure of Nalanda district is 15.24 % of total urban population. Average literacy rate in Nalanda district as per census 2011 is 75.23 % of which males and females are 83.52 % and 66.15 % literates respectively. In actual number 291,604 people are literate in urban region of which males and females are 169,263 and 122,341 respectively.

Nalanda District Rural Population 2011

As per 2011 census, 84.07 % population of Nalanda districts lives in rural areas of villages. The total Nalanda district population living in rural areas is 2,415,034 of which males and females are 1,256,466 and 1,158,568 respectively. In rural areas of Nalanda district, sex ratio is 922 females per 1000 males. If child sex ratio data of Nalanda district is considered, figure is 931 girls per

1000 boys. Child population in the age 0-6 is 431,174 in rural areas of which males were 223,252 and females were 207,922. The child population comprises 17.77 % of total rural population of Nalanda district. Literacy rate in rural areas of Nalanda district is 64.68 % as per census data 2011. Gender wise, male and female literacy stood at 75.85 and 52.54 percent respectively. In total, 1,283,214 people were literate of which males and females were 783,707 and 499,507 respectively.

Nalanda Child Population 2011

In census enumeration, data regarding child under 0-6 age were also collected for all districts including Nalanda. There were total 501,046 children under age of 0-6 against 461,240 of 2001 census. Of total 501,046 male and female were 259,703 and 241,343 respectively. Child Sex Ratio as per census 2011 was 929 compared to 942 of census 2001. In 2011, Children under 0-6 formed 17.44 percent of Nalanda District compared to 19.46 percent of 2001. There was net change of -2.02 percent in this compared to previous census of India.

In 2011, Nalanda had population of 2,872,523 of which male and female were 1,495,577 and 1,376,946 respectively. In 2001 census, Nalanda had a population of 2,370,528 of which males were 1,238,599 and remaining 1,131,929 were females. Nalanda District population constituted 2.77 percent of total Maharashtra population. In 2001 census, this figure for Nalanda District was at 2.86 percent of Maharashtra population.

PLANNING

MGNREGS entails planning by community itself. To achieve the same consultations at all the levels were held before finalization of perspective plan. The annual plan is available on website of district. The process followed for the same was bottom-up approach as compared to usually followed top-down approach. The process followed in the Nalanda District for participatory Planning is Gram Sabha which prepares and approves the action plan under MGNREGS thereby helping in strengthening of Panchayati raj governance and participatory planning. A good mix of various types of projects like irrigation, water and sanitation ,connectivity, forestation were part of annual action plan for every Gram Panchayat. This help in better participation of community in works taken up under different programmes.

Increase in GPs expenditure

As far as women participation is concerned Nalanda district has more participation % in comparison of state and country. There are 249 GPs in Nalanda district and per GPs expenditure went up to 38.67 Lacs and expenditure pattern is progressive. Panchyat have graduated over the period of time and holding the responsibility for generating jobs and creating sustainable assets in their Panchtyat. In some cases Panchyat have shown a good instance of coordination in linking the projects among other Gram Panchayat also.

Existing Places of Participation

There are two different types of spaces of participation found here. First, Gram Sabha, which can be defined as invited space1 of participation. Meetings of Gram Sabha are organized by Gram Panchayat to include people in the planning process. Gram Sabhas are being held regularly for preparation of action plan, monitoring and supervision and Social audit. For making these bodies effective IEC campaign are being taken up by involving civil society organization. Panchayat level meetings on fixed dates are being held at Village level. Meetings are chaired by Mukhiya and attended by the Ward Members to ensure full participation of Mukhiya and Ward Member in MGNREGS. Emphasis is given on creating awareness and on training of Panchayat members for conduct of Gram Sabhas.

In the district Vasudha Kendras are running under e-governance project and Nalanda is one of the e-governance district of India. 249 Vasudha Kendras are functioning in all 249 Gram Panchayats of Nalanda district. Nalanda district administration is using its facility for MNREGS also and has witnessed a good response for mitigation of complains and enhancing the pace of implementation of schemes at village level.

Irrigation Potential

Water Conservation and Water Harvesting: Water harvesting is the accumulating and storing of rainwater for reuse, before it reaches the aquifer. It has been used to provide drinking water, water for livestock, water for irrigation, as well as other typical uses given to water. Around 658 Number of water harvesting structure including Pond on public and private land, Ahar, Check dam was constructed in year 2010-11 which is about

2211378 cubic meters. A good number of the panchayats were benefited and thousands of hectare land got irrigated by these structures. Water table which was dropped drastically during the last few years due to continuous drought in Nalanda has begun to improve due to Ahars, pyanes & ponds.

Water Contamination

Indiscriminate discharge of sewage and ineffective sewerage treatment plants, wherever located, create contamination of surface water. Less than 10% of the population is connected to sewerage network. Wastewater treatment facility is only limited to urban area in Patna. Thus it would not be wrong to say 100% wastewater generated from rural areas goes into open drains and subsequently into the river. From drains, it also percolates into the groundwater and is a major source of contamination of ground water.

The broken platform in hand pumps, non-availability of cemented platforms in stand posts and leakages in distribution system coupled with inadequate pressure and intermittent supply. Water logging near the source of water is also responsible for microbial contamination, mosquitoes and related problems. Further, water logging also affects village roads and makes them muddy. Similarly, water logging and muddy conditions after receding of flood water near the sources of drinking water also causes microbial contamination.

Possibilities of Participatory Management

Participatory management of drinking water services was discussed several times in different forum of sample GPs in the district. The common finding is that people prefer to get pipe water connection as part of better drinking water services. It is found that there is not much problem in availability of drinking water, but the quality of water is questionable. People like to have quality drinking water to avoid diseases and reduce medicinal costs. It is also revealed that people want to have pipe water in their households to reduce time spent to fetch water from hand pumps. People are ready to pay monthly charges if convinced effectively.

Role of Gram Panchayat

Gram Panchayat as a village level institution is responsible for ensuring delivery of basic services to its people. GP can play a pivotal role in participatory management of rural drinking water supply services. On the one hand the GP can mobilize people for collecting user charges, and on the other, it can bridge the gap between people and implementing agency through proper measures. It is found that in delivering pipe drinking water supply GPs are rarely involved.

Challenges

Challenges before District Administration for ensuring successful implementation of the schemes in the district were many folds. Alike, it is a district with more than 85% population belonging to deprived and marginalized sections of society i.e. ST, SC, OBC, BC & Minorities community. This along with the low literacy level resulted in poor awareness levels at the level of community and Panchayat. The district has 249 GPs, but branches of schedule Commercial Banks having their presence only in 26 Panchayat. There are a significant number of Panchayat which do not have any telephone and mobile connectivity. This results in lack of flow of communication between District programme Team, Block & GP. Continuous Communal disturbance background in the district resulted in a fractured society and mistrust amongst various sections of society. The district is also affected by flash floods and which adds another dimension to management of the programme. Last three Years drought conditions created another challenges .During rainy season employment in these months is a major issue. Small Landholdings of the farmers after the abolition of the Zamindari system, lands were given to landless people and even Ahars were divided by the administration. Today, land comprising one Ahar finds ownership amongst 10-15 or even more farmers.

CONCLUSION

Assuring drinking water security at the household level calls for not only a major policy shift, but changes in practices, application of technology, change in approaches, and change in mind sets of all stakeholders. As recommended in the new guidelines on drinking water, ensuring drinking water security would need practices like conjunctive use of ground water, surface water and roof top rain water harvesting systems, to be encouraged as a means of improving sustainability and involving communities for decentralized planning by Panchayat.

In the years the issue of Water Quality Monitoring & Surveillance has been given major emphasis. The district is required to prepare Panchayat -wise Drinking Water Security Plan prepared by the people through community participation. The district level planning and coordination is extremely significant as it provides an institutionalized means of scaling up and strengthening village level planning, and linking it with district plans vertically, and horizontally across areas of quality, quantity, sanitation. There can be little doubt that water is a basic necessity for the survival. There is intermingling of various factors that direct access and use of water resources. In the light of the present scenario of scarcity and utilization of it becomes important to look for holistic and participatory approaches for water management. Creating improvements in water security will not happen without committed leadership by politicians, water sector professionals, and leaders of civil society.

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