

Water Security Planning Training Report

Date: 03-03-2017 to 05-03-2017

Venue: Mangal Bhawan, Belkharikha



Introduction:

The drinking water sector institutions have been effective in building infrastructure, and most habitations in rural India currently have access to hand pumps or piped water supply systems. However, high rates of non-use of hand pumps and piped schemes persist due to lack of ownership, poor Operation and Maintenance (O&M), lower groundwater tables and water sources going dry or becoming quality affected.

At the same time, competition for water use continues to increase rapidly and drinking water supply can no longer be addressed separately from agricultural and industrial use. Although water for domestic drinking purposes is accorded first priority in India's National Water Policy, it represents a very small proportion of water use. Around 80 per cent of the total water resources withdrawn in India are used for agriculture. A parallel need exists to develop and implement a system of safeguards to satisfy drinking water demand.

A new approach is required to achieve drinking water security and sustainability. A holistic and participatory planning approach is clearly needed, with clear guidance on institutional roles, responsibilities and financing. Gram Panchayats (GPs) and Village Water and Sanitation Committees (VWSCs) need to prepare water security plans which address source sustainability, water quality (both bacteriological and chemical), O&M issues, as well as make provision for system replacement and expansion. This can be achieved by the GP and VWSC with appropriate technical and financial support provided by the departments concerned. While Block Resource Centres (BRCs) have a key role in facilitating technical support and training, District Water and Sanitation Missions (DWSMs) need to provide overall planning coordination. This should include making decisions on expanding water resources, merging funding arrangements from different development programmes, and monitoring implementation and performance. Technical support is required from Public Health Engineering Department (PHED) engineers and local professionals to ensure the preventive maintenance of hand pumps, supply of spare parts and O&M of piped water supplies. Financing needs to be made available to address sustainability issues through immediate and longer term investment planning (physical and operational), annual budgeting and periodic review of village water security plans. Drinking water security planning is thus a comprehensive approach that involves addressing engagement, involvement and ownership at all levels, particularly at the community level.

WaterAid defines water security as, 'Reliable access to water of sufficient quantity and quality for basic human needs, small-scale livelihoods and local ecosystem services, coupled with a well-managed risk of water-related disasters'. People are dependent on water-related services provided by ecosystems, for example, the purification of water by wetlands or forest zones.

The main aim of a Drinking Water Security Plan (DWSP) is to ensure that:

1. The surface and ground water resource is conserved, protected, enhanced and managed to ensure that the quantity of drinking water is sufficient to meet the demands of the population.

2. The water supply service is managed efficiently and sustainability with clear operational, maintenance and management procedures. Procedures include a clear O&M cost recovery policy together with transparent arrangements for the renewal, replacement and expansion of the source and/or the scheme (i.e., operating and service improvement plans).

Objective:

The main objective of this training is to:

1. Communities have their own Water Security Plan
2. Capacity building of Youths on Water Security Planning
3. Capacity building of staff on Water Security Planning
4. Implementation of Water Security Planning in intensive panchayats of Raipur & Surguja district

Introduction about the village:

Belkharikha village comes under Lakhanpur block of Surguja district. It is 40 KM away from the district headquarter. It has a total population of 2404 and 425 families live here. 65% of the population are Schedule caste, 15% are Schedule tribes and rest are OBC and General. Most of the people living in this village are farmers and rest are wage labourers. The village is divided into 17 wards. There are 6 Aanganbaadi, 2 Primary, 2 Middle Schools and 1 Health center in the village. Talking about the water sources, there are 2 ponds, 32 hand pumps, 1 canal and 1 channel in the village. Adani under their CSR funding has made 15 toilets.

Process:

Before the training was initiated in Belkharika, PRIA team members made a visit to the panchayat and told the Sarpanch and Sachiv about Water Security Planning and its importance and time required to carry out the process. They were given all the information which they required and instantly agreed on carrying out 3 day training program at *Mangal Bhawan*. The training started with an introduction session. Then, a small discussion was carried out on how the village became Open defecation free. The participants told that about 80% people have stopped defecating in open and to avoid slippage, a group of people known as blue brigade and *nigraani samiti* takes a walk early every morning to motivate people who are still going for open defecation. Another fact as stated by *Sulekha Yadav* was 'Some of the people who still have a habit of going for open defecation have changed their time of defecation' which is very astonishing.



Then the participants were given brief introduction about *Swachh Bharat Mission*, its objectives and phases. Post orientation, a visioning exercise was carried out with the participants in whom the participants wish to see their village to have / be:

1. Clean and beautiful
2. Alcohol free
3. Employment for all
4. Availability of potable water and electricity at each and every household
5. Availability of roads
6. 100 % literacy

After this visioning exercise, some of the major issues of the village were identified with the help of participants. They are:

1. Availability of water at home
2. Unhygienic environment of the village
3. Lack of employment
4. Alcoholism
5. Lack of availability of electricity for 24 hours
6. Illiteracy



Then the participants were divided into groups and each group were asked to make the social and resource map of their village. Then the groups were asked to discuss and narrate 1 thing that their group will do to make their village clean. The responses that were received are:



1. The group will make soak pits around the hand pump to avoid spillage of water on road or in the locality....*Shiv Mahila Swayam Sahayta Samooh*
2. The other group said that they will motivate people to use their toilets at home and stop defecating in open....*Devika Mahila Swayam Sahayta Samooh*
3. The other group said that they will educate people to keep their colonies clean....*Prithvi Mahila Swayam Sahayta Samooh*
4. They will try to make availability of water at each home so that people start using toilet at home and stop defecating in open....*Shraddha Mahila Swayam Sahayta Sahooh*

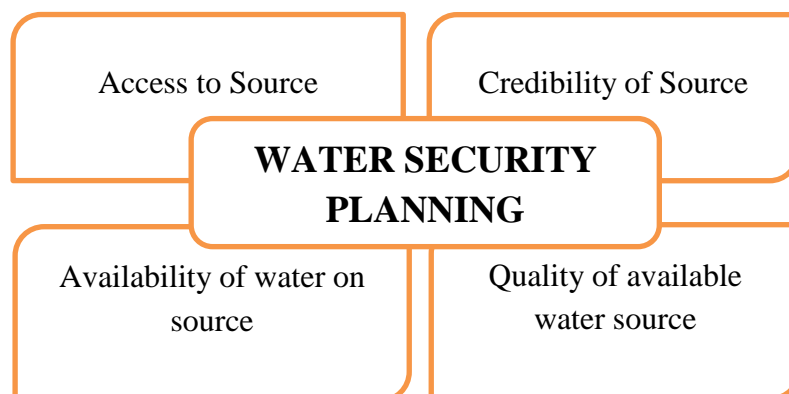
Availability of water in / near the house is a big issue in the village, the training started by asking the participants their use of water in day to day life: The points stated by them are:

1. for drinking
2. for washing clothes and utensils
3. for bathing
4. for toilet
5. for cattle and other animals

The participants were made aware about the government scheme named ‘National Drinking Water Program’ that focuses on achieving habitation level coverage towards household level drinking water coverage and moving away from over dependence on single drinking water source to multiple sources through conjunctive use of surface water, ground water and rainwater harvesting. They were also told that those villages that have become open defecation free will benefit with priority from these schemes. The participants were also accustomed that according to NRDWP guidelines 55 Litres of water is required by a person per day. Then the participants were asked to carry out a survey of their colonies and collect relative information regarding the name of the head of the family and correspondingly the number of members in the family and number of animals in the family. The trainer asked to the participants on their understanding on water quality testing. A Mitadin of that village who was a participant also told that H₂S bottles are available in P.H.E.D and what we have to do is just fill the bottle with the water and keep it in a dark place away from sunlight for 24 hours and darker the water more contaminated it is. It was told by the trainer that this test may just show the contamination but would not identify the presence of chemicals in water. So, for complete water quality testing, we have to inform the respective department for complete testing.



The second day of the training program started with the recap session. Then the participants were told that there are four factors of water security planning:



If any of the above mentioned factors is missing from the planning then it can be said that the village does not have proper Water Security Planning. Then the participants were acquainted with importance of water quality testing. It was suggested by the trainer that water quality testing of the sources should be carried out at least twice in the year i.e in the month of September and in the month of April or May and if possible to be carried out in the month of January and June for Fluoride, Arsenic and Iron testing.

Water Budgeting:

Then with the help of participants, Water budgeting was carried out. The table is as follows:

Water Budgeting of village Belkharikha			
Name of the colony	No. of houses	Total Population	Water requirement per year by colony
Bajar para	25	125	2281250
Bar para	58	300	5475000
Bhaji para	40	200	3650000
Sarna para	35	175	3193750
Kisan Para	35	175	3193750
Mahadeo para	46	330	6022500
Baghiya Para	35	175	3193750
Khas para	55	575	10493750
TOTAL	329	2055	37503750

Three Crore Seventy Five Lakhs Three Thousand Seven Hundred and Fifty Litres of is the total requirement of water for a year as it can be calculated by formula:

$$\text{Total requirement of water for a village} = \text{Total population of the village} \times 365 \text{ (Number of days in a year)} \times 50 \text{ (per capita water consumption in Litres)}$$

It was told by the trainer that there is chemical contamination which is bad for health and should be avoided. Rather surface water should be used; it may have bacterial contamination that can be removed by boiling the water. Water from well or pond doesn't have stickiness or can have high viscosity but ground water may it.

The objective of Water Security Planning is:

- Every person should have access to safe drinking water
- And water should be available whenever it is required

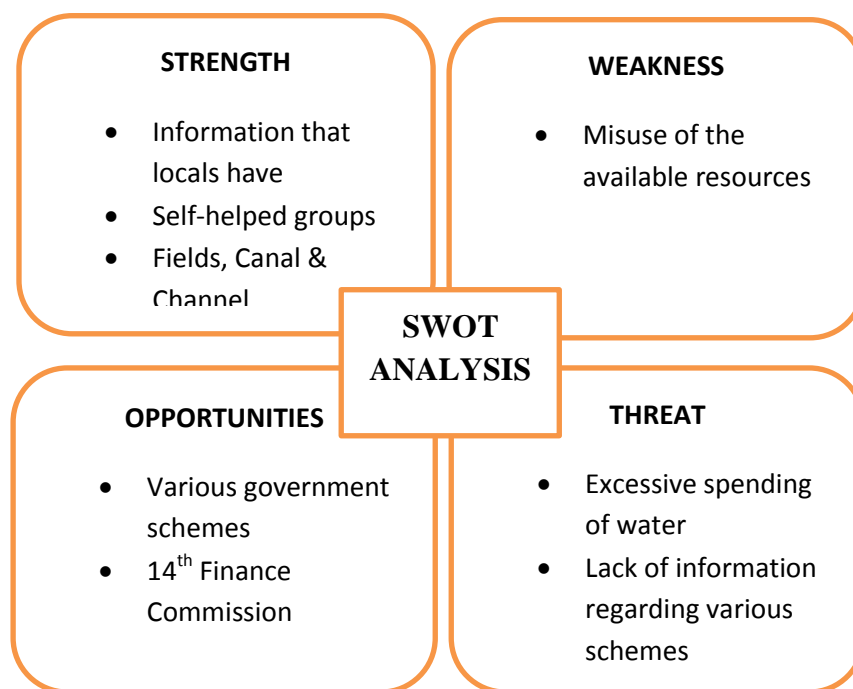
Then, the participants were trained on how to carry out a planning process. Planning is carried out in 3 phases:

- Before planning

It is a phase where information is collected from various departments about schemes from which the villagers can benefit, searching and identifying people whom will help us in planning process (cadre formation) and creating awareness among the villagers about Water Security Planning. During this training the participants were told about 'Nal Jal Yojna' as Belkharikha has become ODF and are eligible for carrying out this work.

- During planning

In this phase, data relevant to the training is collected and post data collection analysis of the data is carried out and is shared with the participants. During this phase SWOT analysis of the village was done by the community itself.



Third day's session started with the recap session. Post recap session, the participants were motivated to use surface water rather than ground water and stop drilling. They were also told that to secure water they can construct soak pits, new ponds, dig wells, fencing, plant more trees and protecting rain water.

- Post planning

In this phase, the plan will be presented in *gram sabha* before people and if the *gram sabha* passes the resolution, then the plan will be copied in the *gram sabha* register and will be send to the block for further process.

WATER SECURITY PLAN OF BELKHARIKHA:

At last, planning exercise with the villagers are carried out. It is as follows:

Infrastructure development				
Sr. No.	Activity	Unit	Total cost	Department
1	Pond	2	1500000	MGNREGA
2	Well	2	300000	MGNREGA
3	Dam at canal	1	500000	AGRICULTURE
4	Dam at channel	1	500000	AGRICULTURE
5	Tank (50000 Litre)	1	2000000	P.H.E.D
6	Pump house	1	500000	P.H.E.D
7	Pipe line (8000 meter)	-	400000	P.H.E.D
8	Chlorination	-	50000	P.H.E.D
9	Drain (8000 meter)	-	800000	P.H.E.D
Maintenance				
10	Maintenance	-	50000	PEOPLE'S CONTRIBUTION
TOTAL			6600000	

Way forward:

- The participants have given an application to *Sarpanch* for organizing *Vishesh Gram Sabha* so as to pass the resolution and send this plan to block and district for approval.
- The participants were determined to secure water for their upcoming generations and whatever lessons they have learned in this training program, they will execute it.

बेलखरिखा में पानी की समस्या को दूर करने नल-जल योजना का प्रस्ताव पारित किया गया

अखिलपुर। पानी की समस्या को दूर करने वाटर एंड सहयोग से प्रिया संस्था द्वारा बेलखरिखा के मंगल भवन में तीन दिवस प्रशिक्षण आयोजित किया गया। जल संरक्षण निर्माण के लिए आयोजित प्रशिक्षण का रविवार को समापन किया गया। गांव में पानी की समस्या को दूर करने के उद्देश्य से आयोजित प्रशिक्षण में नल जल योजना का ग्राम सभा में प्रस्ताव पारित बिकासखंड को भेजने का निर्णय लिया गया। प्रिया संस्था के प्रवीण सिंह ने बताया कि बेलखरिखा ओडीएफ घोषित हो चुका है, इसलिए



यह गांव नल-जल योजना का लाभ उठाकर अपनी समस्याओं को दूर कर सकता है। इसी के तहत ग्रामीणों ने यह निर्णय लिया कि योजना

निर्माण कर ग्राम सभा से प्रस्ताव पारित कराकर ब्लॉक मुख्यालय भेजा जाएगा, ताकि नल-जल योजना का लाभ उठाया जा सके। जल सुरक्षा योजना का निर्माण प्रिया वाटर एंड के सहयोग से पूर्ण किया गया। कार्यक्रम के दौरान गांव के लोगों ने अपने गांव का विजन बनाया, जिसमें स्वच्छ पेयजल की व्यवस्था होने की प्राथमिकता दिया गया। प्रिया संस्था से आलोक पांडेय ने भी ग्रामीणों को ट्रेनिंग दी। इस अवसर पर गजेंद्र साहू, अंकुर सिंह सहित गांव के सरपंच-सचिव व ग्रामीण उपस्थित थे।