WATER SAFETY PLANNING (WSP) IN RURAL INDIA

UNICEF Experience and linking WSP to sustained behaviour change

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Overview

1. WSP approach in rural India
2. Case Study Maharashtra
1. WSP approach in rural India and UNICEF Support in various States
State learnings (Assam, Chhattisgarh, Maharashtra, Rajastan, Orissa, MP, WB)

3. UNICEF conducted a Multi-district Assessment of Water Safety (MDAWS) in 60 districts in 2007-08 in districts in Madhya Pradesh and 11 other States. The main points that have come out of the survey are:

(i) The survey was carried out in almost 12,000 water sources. About 47% of the samples showed bacteriological contamination. This showed the huge impact of poor wellhead maintenance and open defecation on ground water quality.

(ii) Water quality testing should be linked with sample sanitary survey. With this process we can assess the risks which lead to ground water contamination.

(iii) Observing the above risks, can allow communities to better understand which are the risks that are leading to groundwater contamination.

(iv) Random sampling coupled with sanitary risk identification can show a very rapid understanding of quality issues in rural area which can enable PHED and PDS to design intervention programmes for wellhead maintenance and to initiate appropriate communication campaigns targeting risk behaviours around water sources. In the UNICEF study, response plans where implemented, showed significant improvements in water quality.

Village Water Safety Security & Environmental Sanitation
Bio Village Project in Maharashtra

Safeguarding Future Rural Drinking Water Supply in Odisha
Some of the key words emerged from these experiences

- Capacity
- Standard approach
- Process
- Gender
- Empowerment
- Redressal systems
- Follow-up
- Systems
- Partnership

- Impact
- Decentralized Governance
- Timely fund release
- Community
- Convergence
- Monitoring
- Corrective action
- Known focal points
- Trust
2. Case study from Maharashtra
BACKGROUND of The Pilot

- Project Cycle: 24 months
- Project Covered
  - 110 Village Panchayats from two districts
  - 24074 households
  - nearly 120,000 population
- Partners: District Administration, GSDA, PriMove and Local NGOs
- Linking village water security with safety and understanding the link of water (quality & quantity) with sanitation
Water and Sanitation Nexus
Why both need to be addressed jointly

Yusuf Kabir, WASH Officer, UNICEF Mumbai
19th September, 2012
Households having drinking water within premises of any type, the adoption of toilets is more than 2 times likely as compared to households with drinking water near or away the premises.
Proportionate of HH with Toilet Vs Water within premises in Maharashtra: Census 2011
What needs to be done
to achieve Village Water Safety

A community led ‘village water safety’ planning for –

- Definition of the Problem and risks mapping
- Identification of solutions
- Timely and effective implementation
Village Water Safety and Security Planning Process

- Community Participation
- Trigerring
- Technical Support
- Source Management
- Demand & Supply side
- Source Protection, Quality Monitoring, hygiene promotion at household level
- VWSS
- Open defecation elimination plan
Village level water safety and security plan components

- Water Security for Source Sustainability
- System Sustainability
- Water Safety, household hygiene and open defecation elimination plan
Water Security for Source Sustainability

- Measurement of rainfall and ground water level
- Village water account
- Planning and implementation to meet the water deficit
- Implementation of source strengthening activities on a priority basis
- Facilitation of the demand side management actions such as cropping patterns, water use efficiency, etc.
Water Safety and Environmental Sanitation

- Risk mapping from source to consumer point
- Regular water quality monitoring and surveillance, sanitary survey of sources
- Regular monitoring of residual chlorine, proper storage of bleaching powder and record keeping
- ODEP with hygiene promotion at household level
- Solid & Liquid Waste Management (SLWM)
System Sustainability

**Technical:** Actions for repair, maintenance and monitoring of the performance of water system

**Financial:** Preparation of O&M budget, tariff setting and water tax collection system

**Institutional:** Institutional arrangement, roles and responsibilities, training of water person, accountability and reporting
## Indicative Timeline

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<th>Sl. No.</th>
<th>Activities</th>
<th>Months</th>
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<tr>
<td>1</td>
<td>Identification of master trainers</td>
<td>1</td>
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<tr>
<td>2</td>
<td>Identification of village level facilitators</td>
<td>2</td>
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<tr>
<td>3</td>
<td>Training of master trainers</td>
<td>3</td>
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<tr>
<td>4</td>
<td>Orientation at block level for VWSS</td>
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<td>Block/ district level planning</td>
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<td>Convergence and coordination</td>
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<td>9</td>
<td>Documentation of case studies</td>
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PLANS DISPLAYED IN THE COMMUNITY

जैवगाव कार्यक्रम : ग्रामस्तरीय पाण्याची शास्त्रता आणि सुरक्षितता

पाण्याचे गृह आरोग्य

पाणी पुरवठा सुविधांची संचालन आणि देखभाल दुरुस्ती

पाणी गुणवत्ता आणि स्वच्छता संयंत्रण कृती आरोग्य

पाण्यामध्ये आली कुठी, धराचमध्ये आली समृद्धी!
RESULTS

Toilet coverage increased by 27% points in Chandrapur and 22% points in Latur which is higher compared to the 15% and 8% increase under Sanitation programme for the district for the same period.

Regular repairing of hand pumps, power pumps, their platforms formed critical interventions in strengthening operation and maintenance services and chlorination campaign of all water sources before monsoon.

Average water tax collection in project villages increased from 40% to 70%. In many villages it went to 100%. District level average is below 50%.

Installation of rain gauges and fixation of observation wells in most of the villages.
INVESTMENTS MADE

Figure 1: Investment pattern since inception

- Support to TSA: 40%
- Support to community mobilisation: 43%
- Support in project management: 10%
- Advocacy/ Capacity Building: 7%

Per capita investment of INR 102.00 (1.5 USD) or per household investment of INR 511.00 (8 USD)
Learnings

• Aligned with the government flagship programs and not a stand alone initiative.
• Works with the existing mandated institutional arrangement without creating any parallel structures.
• Integrated approach, looks at both safety and security and ODEP, all are interlinked.
• Seeks convergence at village level, the structure and process is designed accordingly.
• Specific interventions to enhance coordination at block and district level. In a centralize resource allocation system this is an important consideration.
• Informed advocacy with other stakeholders and at policy level.
Bottlenecks

1. Village Water Safety Plan - VWSC
2. O&M of sources (including risk Identification and action via San Survey)
3. Don’t use unsafe sources - red pump

Institutional

1. Re-dressal mechanisms
2. Capacity building / infrastructure
3. Convergence (sanitation, health, ICDS)

Community

1. Safe Water knowledge
2. Demand for testing
3. Safe handling and storage
4. Household Water Treatment systems

HH

Convergence (sanitation, health, ICDS)

1. Village Water Safety Plan - VWSC
2. O&M of sources (including risk Identification and action via San Survey)
3. Don’t use unsafe sources - red pump
National Drinking Water Advocacy and Communication Strategy Framework

Core Elements of the Strategy

- Barrier analysis
- Identification of priority behaviours to be promoted nationally at household and community level
- Participant/stakeholder segmentation
- Communication objectives
- Three phases of the strategy
- Strategy supported by an implementation framework
Key behaviours to be promoted at national level

National level pan-India behaviours
- Families ensure safe storage and handling of drinking water
- Communities demand establishment of representative and functional committees for drinking water supply from PRIs/PHED at GP level

Additional State level behaviours
- Families treat drinking water at household level
- Families and Communities-conserve water
- Communities demand for the regular review of water sources from GP committees to ensure proper operation and maintenance of water sources
Key Phases to promote the intended change

**PHASE 1**
Awareness raising

- Increase awareness on the risks of consuming unsafe water

**PHASE 2**
Advocacy

- Increase commitment and action among key influencers and decision makers for safe drinking water

**PHASE 3**
Social and Behaviour Change

- Empowering families and communities with correct information to promote demand for safe water, hygiene practices and collective action for ensuring safe drinking water for all.
Thanks for the attention

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