Learning Document on Jhaukhel WASH Improvement Project



April 2011 to March 2013





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Background

Established in 1990, ENPHO is a service-oriented, scientific, national Non-Governmental Organization that envisages contributing in sustainable community development by combining research and actions through the integrated programs in the areas of environment and public health. ENPHO develops and promotes integrated community based approaches endorsing safe water, sustainable sanitation, solid waste management, hygiene behavior and improving indoor air, and environmental and air quality monitoring to create healthy societies.

WaterAid Nepal has been supporting ENPHO to implement community based Water, Sanitation and Hygiene (WASH) project in urban and peri-urban settings in Nepal. This initiative has been designed to support implementation of water and sanitation related Millennium Development Goals (MDGs) specifically promoting proper governance, water demand management, increased attention to environmental sanitation. In this context, ENPHO implemented "Jhaukhel WASH Improvement Project", a community based WASH programme in Nepal at Jhaukhel VDC of Bhaktapur district. The project was implemented from April 2011 to March 2013.

Objectives

The overall objective of the project was to upgrade the existing water and sanitation situation of the VDC with the target to declare the entire VDC as an Open Defecation Free Zone by the end of the project period.

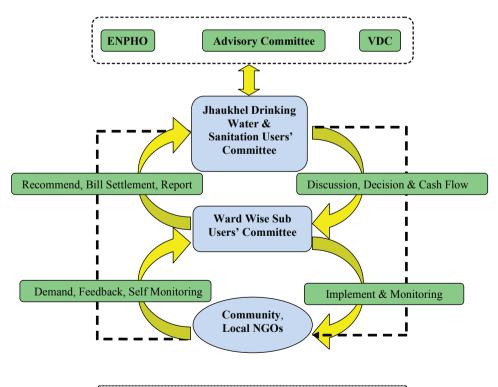
The specific objectives of the project were:

- To promote and secure poor people's rights and access to safe water, improved hygiene and sanitation.
- To support government and service providers in developing their capacity to deliver safe water and improved hygiene and sanitation.
- To advocate for the essential role of safe water, improved hygiene and sanitation in human development.

Project Implementation Modality

In order to implement the programme, ENPHO and WaterAid Nepal partnered with various partner organizations; District Development Committee, Bhaktapur; Jhaukhel Village Development Committee; Jhaukhel VWASHCC; Jhaukhel Drinking Water and Sanitation Users' Committee; Ward Wise Sub Users' Committee and the local community.

ENPHO provided technical support for the program whereas the programme activities were implemented directly through Jhaukhel Drinking Water and Sanitation Users' Committee (DWSUC). The Jhaukhel DWSUC comprises of representatives from different political parties, local communities, organizations, differently able groups, Dalits and women. There are a total of 13 members in the committee where 1 is Dalit, 1 disabled and 3 are female. Women representation was highly ensured during the formation of the users' committee for their equal participation throughout the project implementation and mainstreaming them in decision making process.



Schematic Representation of the Implementation Modality

Project Activities

Enhance inclusive access of safe drinking water

- Rehabilitation of water supply systems and upgrading with installation of treatment unit (Iron Removal Plant): Lakila WSS, Ward No. 9 and Aaganja Tole WSS, Ward No. 8.
- Rehabilitation and upgrade of water supply systems: Dahal Gaun WSS, Ward No. 1; Dhimal Gaun WSS, Ward No. 2; Mathilo Tole WSS, Ward No. 3; Geylal Gaun WSS, Ward No. 3; Thapa Gaun WSS, Ward No. 7; Kasula Tole WSS, Ward No. 8. Activities included boring of water, providing water tank and pipes, fitting in of pumping machine and installation of Iron Removal Plant.
- Renovation of traditional water sources- dug well (kuwa) at Tashi Tole Ward No. 8, spring source at Dada Ghar, Ward No. 4 and dug well near Taleju stone spout at Ward No. 6.
- Installation of new water supply system in Gairhi Gaun, Ward No. 5.
- Installation of Rooftop Rain Water Harvesting System at Institutional and Household level.
- Promotion of Bio-Sand Filter as PoU option to assure safe drinking water at HH level.

Enhance access to hygienic sanitation facilities

- Promotion of ECOSAN toilet and support for construction of household level hygienic (Sulav) latrine.
- Construction of toilets with installation of hand rails and construction of ramps as special support provisions for disabled people.

Improve sanitation and environment

- Promotion of environmental sanitation through installation of grey water management system (Juthelno) and biodegradable solid waste management system at household level.
- Improve indoor air through promotion and installation of improved cooking stove (ICS).

Support communities to understand their rights to have access to safe WASH, improved hygienic sanitation and improve the health status of the people

- Capacity building programmes to strengthen and empower the local community.
- TOT to WASH Volunteers and FCHVs.
- School level WASH education programme.
- Formation of community level child clubs.
- Mass awareness programmes.
- Clean up programmes.
- Street dramas.
- Operation and maintenance of water and sanitation facilities by the local community.
- Exposure visit.
- Monitoring and evaluation of the project.

Key Approaches

Disability in WASH piloting	Disable	friendly	latrines										
Disa in W pilc		fri	lat										
Advocacy and Influencing	Formation of	D-WASH-	CC and	V-WASH-	CC								
Training and Awareness Campaigns	 Training 	to FCHVs	and WASH	Volunteers	Street	dramas	 Community 	level child	clubs	 School level 	child clubs		
Environmental Sanitation	 Soakpits with dish 	washing platform	(Juthelno)	 Grey water 	management	 Solid waste 	management	Storm water	drainage	improvement	 Improved cooking 	stove (ICS)	
Promotion of Sustainable Sanitation and Declaration of ODF Zone	• ECOSAN	toilet	 Reuse of 	resources									
Community Based Water Resource Management	Community	participation,	ownership and	self-reliance	Decentralized	and participatory	process	Water tariff	system	Rain Water	Harvesting	System with	recharge options

Key Approaches

Community Based Water Resource Management (CWRM)

The project implemented the key approach of Community Based Water Resource Management to enhance inclusive access of safe drinking water and for institutionalizing community participation for setting up of water supply systems and sources, pollution control and water quality assurance in the area. This approach proved to be very successful in regard to community participation, empowerment and for decision making in setting up water supply system along with planning, design, implementation, monitoring and financial management of the system.



The approach also ensured the equal participation of women and differently able people along with mainstreaming disadvantaged, marginalized and poor people of the community in decision making process. There was active and equal participation of women throughout the implementation of the project including both the hardware and software components along with participation in decision making process.

This approach further accelerated the promotion of community ownership and selfreliance for operation, maintenance and sustainability of water resources through partial cost contribution in construction of infrastructure and regular tariff collection for water service deliver.

The implementation of the project by participatory processes and in decentralized manner coordinated by the users' committee has helped to enhance the inclusive access of safe drinking water for the community people.

The collective initiative of the community has helped to transform the water scarcity community into an opportunity for developing reliable and sustainable water sufficient community.



Lakila village with almost 139 households is located in Ward No. 9 in Jhaukhel VDC. Few years back, it was popular as water scarcity and unhygienic village of the VDC. Men and women kept themselves busy all day fetching water for drinking and domestic use from the traditional water sources located outskirt of the village. There were no toilets and open defecation was a common practice. But with the commitment and dedication of Lakila Drinking Water and Hygiene User Committee and with the mutual effort of all the community members, each household now has the toilet along with the water supply system.

Chandra Bahadur Sulu recalls, "I had to wake up early in the morning in dark and walk very silently so that my neighbors would not know that I was going to fetch water. One day, I stumbled over a plastic bag and fell down which resulted to serious injury in blood vessel of my hand and needed to spend more than one lakh rupees to recover from it. I am very happy now that I have the drinking water supply system at my house and I don't need to face such difficulty."

Hari Bahadur Bhutu, who used pump to lift water from shallow tube well, has noticed reduction in consumption of electricity after installation and use of Rooftop Rain Water Harvesting System. The women members have also felt that with the use of rain water to wash clothes has reduced the time consumption as well as no strains were formed in washed clothes.

Water for Livelihoods

Hari Keshari Sulu (34), an entrepreneur in Lakila, Jhaukhel VDC – 9, makes tea for her customers. "Water which I used before the installation of the iron removal plant was of poor quality. When I used to boil the water in my tea shop, it would become red-coloured. Now this problem is resolved."



Promotion of Sustainable Sanitation and Declaration of ODF Zone

The project initiated through Community Led WASH campaigns to make the community people understand their rights to access to improved hygienic sanitation facilities and define appropriate sanitation related activities relevant to local needs. It is also crucial for the promotion of ECOSAN toilet and reuse of the resources for the sustainable sanitation.



Jhaukhel VDC was declared Open Defecation Free (ODF) VDC on 30th March, 2013 grabbing the momentum supporting nationwide campaign with the slogan "Khula Disha Ma Huncha Rog Ko Chalkhel, Swachha Safa, Disha Mukta Hamro Jhaukhel."

Environmental Sanitation

Environmental Sanitation is key component for Sustainable Sanitation approach. Grey water and solid waste management at household level, storm water drainage improvement at community level and improvement in indoor air quality at household level by promoting Improved Cooking Stove (ICS) have been implemented as components of environmental sanitation improvement. Designing



and implementation of such environmental sanitation activities were important to provide hygienic environment for the community to thrive in with minimal chance for disease carrying vectors to multiply.

Trainings

Training and hygiene education activities were conducted which promoted good hygiene practices among community people that helped to prevent water and sanitation related diseases. Likewise, FCHVs and WASH volunteers were also trained and mobilized in the community which resulted in developing capacity of local human resources.

Awareness Campaigns

The celebration of global event days related to WASH helped to institutionalize the WASH activities at the local level. The health and hygiene activities were mainly targeted for the children and women as they are the key agents of change in the community. The promotion of personal hygiene and environmental sanitation among children through the implementation of school level WASH education and formation of



school level child clubs helped them to adopt hygienic behavior. Key messages on awareness campaigns helped to develop people's comprehension on their roles and responsibilities. Besides, other interactive and participatory tools, street dramas and formation of community level child clubs were effectively executed to reach out to maximum targeted people at the communities.

Street dramas organized in coordination with Paschim Paaila team proved to be very effective medium of creating awareness among the marginalized, disadvantaged and poor community members to adopt better sanitation and hygiene practices both at the personal and community level.

During the implementation of the project, it was perceived that only formation of school level child clubs is insufficient as there are many children in the community who are deprived of education especially Dalits from the disadvantaged community and who actually are in need of awareness on better sanitation and hygiene practices. In order to reach to such community, the community level child clubs were also formed. This approach helped to make the entire Dalits community aware and practice better sanitation and hygienic behaviors.

Advocacy and Influencing

ENPHO coordinated at the district level especially with the WSSDO-Bhaktapur (Water Supply and Sanitation Divisional Office) for the formation of D-WASH-CC which as per the National Sanitation and Hygiene Master Plan is the mandatory committee in any district. Immediately, after the formation of D-WASH-CC, V-WASH-CC was also formed in the VDC. ENPHO initiated to integrate advocacy through its service delivery programme at the district level.

Inclusive Approach

Disability in WASH piloting – as an Equity & Inclusion Approach

The project has demonstrated in addressing WASH needs of the disable people of the VDC. As per the project plan designed to incorporate the piloting of disability in WASH, 13 disable people were supported with the latrine designed as per their need, demand and suggestion. The toilets were designed for the physically disabled people with the installation of hand rails and construction of ramps.



Dream Come True

Ganesh Bahadur Gwacha who is physically disabled resides in Gwachatole, a small settlement located at ward number 6 in Jhaukhel VDC. "Due to lack of toilet, I and my family defecated openly often walking far away from the house which was very difficult especially for me and my wife. But after learning from the awareness activities and with the support of the project, I could build my own toilet for the family," says Ganesh. With great effort Ganesh and his family prepared raw bricks in their own field and exchanged with bricks in local brick kiln and taking loan in low interest, they constructed the toilet. Ganesh further adds, "I and my wife no more have to bear that difficulty and defecate openly with disgrace. Installation of hand rails in the toilet has made us easier to use the toilet. This has further added our dignity in the community."

Project Sustainability

The key approach of community based water resource management contributed towards community ownership of the assets along with their willingness towards the operation and maintenance. This resulted in undertaking various initiatives by the community as proactive steps towards sustainability of the project.

- In Lakilatole, the users' committee introduced progressive water tariff system to curtail excessive wastage of water, as a result of easy access and availability through water supply system.
- Soakpitswithdish washing platform (Juthelno)as household level grey water management units have become common practice in most of the households controlling stagnant of grey water and mosquito breeding and pollution.
- The communities have promoted ECOSAN toilets which consume less water. Reuse of the resource approach has been practiced through the promotion of ECOSAN toilet by applying it in vegetable farming which highly contributed in increasing the productivity.
- The community initiated the Rain Water Harvesting with recharge options as water efficient technology to resolve the problem of water scarcity and to ensure the source sustainability.

Key Challenges

The programme interventions were challenged by various constraints:

- Mobilizing community adopting fast track approach to meet the programme objectives within the limited time was quite challenging and difficult to achieve;
- The poverty mapping tool was used to identify the poor in the community. However, the outcomes of the mapping did not match with the understanding of the community and were also not accepted by the community due to which it could not be implemented. During the post monitoring phase, the project is working to simplify and disseminate the tool such that community people will understand and use the tool.
- The major challenge of the program was the lack of consistent unity within the users' committee as a result of individual interest guided by political background. This hindered the smooth implementation of the project.

Lessons Learned

Direct involvement of the community and other stakeholders from the very initial stage of the project implementation helps to identify existing problems, develop the project and mobilize local resources more effectively and efficiently. It also builds feeling of ownership among the community. However, it is important to ensure that considerable time has been allocated for the community mobilization process.

The involvement of Child Clubs in community and schools has been very effective in promoting software component of WASH programme in the community. Child Clubs have been helpful to raise awareness and promote communities as ODF zones. though, it was realized that the capacity building of local community including users' committee is time-consuming and continuous process.

In the water and sanitation interventions, the programme sought co-funding from the community catalyzing community ownership and self-reliance and mainly to make it sustainable. This process further increased their roles and responsibilities and helped in developing ownership of the programme. In such way, the community participation becomes very crucial for the sustainability of the project.



It is equally important to train and mobilize WASH volunteers and FCHV of the community to build the local capacity and for creating larger impact in the community. For this it is essential to draw their attention in water and sanitation issue and involve them in programme interventions through some incentive package.

Conclusion and Way Forward

Water for Sanitation and Health - Jhaukhel Project was accomplished with setting up community water supply systems and sources, pollution control and water quality assurance under CWRM approach along with the promotion of sustainable sanitation.

In future, the users' committee and community should continue to take the leadership role and ownership in ensuring the sustainability of the project. To ensure users' committee and community have been taking this leadership role, the post-monitoring and follow up support has been done by ENPHO. So, far, this monitoring and follow-up activities have supported community to overcome key challenges and solve the major operation and maintenance problems associated to WASH facilities. The progressive water tariff system introduced in the community and the Rooftop Rain Water Harvesting System with recharge options initiated by the community should be further continued and implemented in other communities in order to ensure the source sustainability. Furthermore, the technical and monitoring support is required for the interventions made in disability in WASH. The project provided support for the physically disabled people with the latrine designed as per their requirement. In future, it is also needed to address the requirements of diversified disabled people other than physical in coordination with other organizations working for them. The assessment of the long term impact of the project should also be done in the future.



Abbreviations

CWRM Community Based Water Resource Management

DWASHCC District WASH Coordination Committee

DWSUC Drinking Water and Sanitation Users' Committee

ECOSAN Ecological Sanitation

ENPHO Environment and Public Health Organization

FCHVs Female Community Health Volunteers

HH Household

ICS Improved Cooking Stove

MDG Millennium Development Goal

NGO Non Government Organization

ODF Open Defecation Free

PoU Point of Use

ToT Training of Trainers

VDC Village Development Committee

VWASHCC Village WASH Coordination Committee

WAN WaterAid Nepal

WASH Water, Sanitation and Hygiene

WSSDO Water Supply and Sanitation Divisional Office

WSS Water Supply System





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