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**LOCAL ACTION WITH INTERNATIONAL COOPERATION TO IMPROVE AND  
SUSTAIN WATER, SANITATION AND HYGIENE SERVICES**

**Local level skilled WASH human resource mapping:  
a case from Nepal**

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*Improved WASH services are not just for dignity of people but also human rights and Nepal constitution has also endorsed it as a fundamental human right. Despite of hard hit by earthquake 2015, WASH sector in Nepal is moving ahead to achieve the national universal coverage target by 2017 and SDGs; however, sustainability and functionality of WASH facilities are not materialized as envisaged. People want to improve their ladder from basic service to improved service level in water supply and sanitation and seek support from service providers at local level. This study was conducted in 4 districts of Nepal to explore the present status of WASH skilled human resources; resulted that only 30% trained people were working professionally and there was remarkable drop out of trained people. Key reasons behind dropping out are less demand and income, financial constraints for establishing business and lack of updated knowledge and skills.*

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## **Background**

Assess to improved Water, Sanitation and Hygiene (WASH) services are very crucial to improve the health, livelihood and economic development of people. WASH is not just for dignity of people but also considered as human rights. The constitution of Nepal has endorsed the water and sanitation as fundamental human right (Constitution of Nepal-2016, Article 32). The Sustainable Development Goal (SDG 6) has target of universal coverage of water and sanitation by 2030 globally whereas Government of Nepal has set a target of universal water supply and sanitation coverage by 2017. The attention of the WASH sector actors has increased to cope with the challenges posed due to disaster and scarce resources. Government is leading the WASH sector with a coordinated manner with all other sector actors. So, an encouraging development and changes have been observed in WASH programmes. Some examples of recent milestones are, successful inclusion of water and sanitation as fundamental human right in new constitution, establishment of the Ministry of Water Supply and Sanitation, preparation of Sector Development Plan (SDP) etc. However, the challenges remain in relation to functionality of water supply systems, public toilets, water quality, operation and maintenance, and long-term sustainability.

As per the report published by National Management Information Project (NMIP, 2014) open defecation is still practiced by 20% of total population. Similarly, the population access to basic water supply is 85%. However, there is a big gap between coverage and the functionality as only 18% water supply schemes are well functioning, 21% schemes need rehabilitation and 9% schemes needs reconstruction. Sustainability and proper use of water supply schemes, toilets and hygienic practices are not materialized as envisaged. In addition, the earthquake 2015 had destroyed many infrastructures of water and sanitation in 14 districts, which seeks additional funding, innovative approach and disaster resilience technologies (PDNA, 2016). Further, the social dynamism of society and life style has been changing. People want to improve their ladder from basic service level to improved service level in water supply and sanitation. Willingness and capacity to pay for quality services and products, has been increased than before. People are ready to buy the services but the service providers are not in the access of people as and when they need it.

There is remarkable drop out of trained people like Village Maintenance Worker (VMW), technician, masons etc. from the WASH sector. The availability of trained local people for immediate services and technical input in the community are less likely. The reasons behind are financial de-motivation, migration and lack of updated knowledge and skill, and their creative mobilization. Without addressing these challenges faced by service provider at community level, the sustainability of existing structures, improvement of service level and acceleration aspect in WASH cannot be achieved. Also, the gap analysis of demand of services and service provider at community level is important.

National and international WASH actors/organizations have trained local people at community level, but a proper database is not maintained at wider sectoral level. There is lack of information in regard to who trained? how many trained? where are they now? how they are engaged? etc.

## **Objectives**

The objective of the WASH skilled human resource mapping in community level is to understand the current status of local level skilled WASH human resources as service provider and key requisites required to strengthen the capacity of these people.

The immediate objectives of this human resources mapping are to:

1. Assess the gap and turnover rate in WASH services in the community.
2. Figure out the key issues required increasing their working efficiency toward quality services and social entrepreneurship.
3. Identify the problems, challenges and expectations of those persons who are engaged in the community.

## **Methodology**

This mapping study was conducted in two stages: WASH stakeholders visit for collecting the relevant local technical WASH human resource information, and field visit for conducting the Key Informant Interview (KIIs) with local level skilled human resource.

Different 16 selected WASH stakeholders (12 development partners, 1 private sector, 3 government institutions) including National Water Supply and Sanitation Training Centre (NWSSTC) were visited and information were collected on types of training provided, upcoming training plan and what they think of importance of training using semi-structured questionnaire.

A transect field visit was set up in Dailekh, Surkhet and Banke districts for conducting the key informant interview with skilled trained human resources. Only four groups of technicians (Local Latrine Builders-LLB, VMW, rain water harvesting technician and well drillers) were considered. Total 10 people were interviewed to understand their current state as well as motivation and challenges faced to continue their work.

In addition, discussions were done with local government as well as programme implementing partners to understand the barriers and motivators of the skilled HR. All the collected information were compiled, analysed and used for the gap analysis as well as for recommendation.

## **Key findings**

### **Findings from the consultation with WASH stakeholders**

Working areas of the organizations varied from 1-2 districts (NGOs) to national wide (Government). All of these organizations have been providing local level skilled WASH trainings and skilled trainings for masons, Village Maintenance Worker (VMW) and Rain Water Harvesting (RWH) technical training (Figure 1).



These trainings were conducted as one-time training for a project (except NWSSTC) and few organizations kept record of training recipients and did a follow up training as well. Most of the trainee did not receive any support for business entrepreneurship or tools and spare parts. There was no hard and fast compulsion for coordination with local government for conducting these trainings and does not require activities level reporting to local government as well. WASH actors had been coordinating with local government (District Water Supply and Sanitation Division Office, District Technical Office) at programme level and sometime represent in training as a training facilitator or as a participant. Also, none of the organizations had set specific participants selection criteria and selections were based on the need or randomly. Although action plan were set for the trained people, no specific follow up mechanism has been set so far.

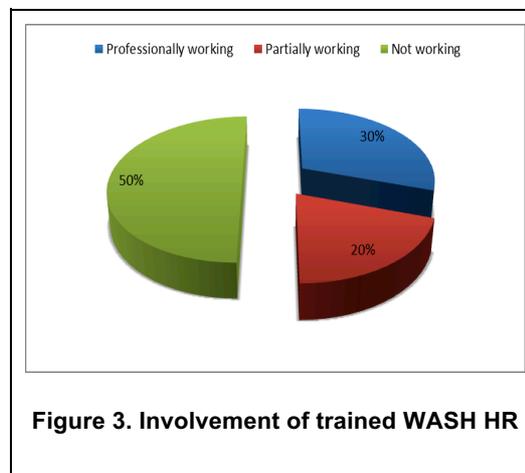
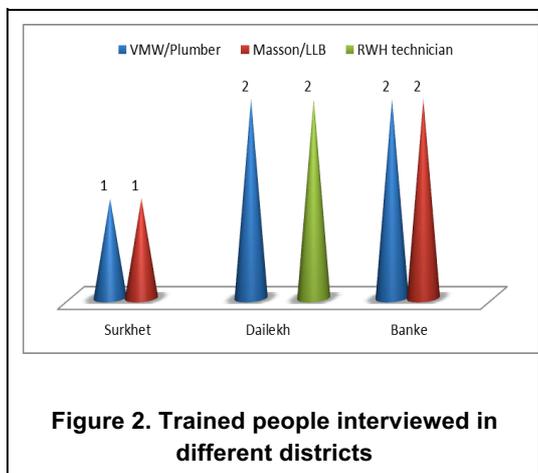
All the stakeholders are aware of dropping out of trained people: however, they do not have a specific plan to retain these technical personal. The reasons behind drop out and possible retaining plan as reflected by stakeholders are presented below (Table no 1).

<b>Table 1. Dropout and retaining possibilities of skilled WASH HR</b>	
<b>Reason for drop out</b>	<b>Possible way to retain in a work</b>
Due to lack of; <ul style="list-style-type: none"> <li>• Any further materials and tools support after the training</li> <li>• Follow up after the training</li> <li>• Consistant income</li> <li>• Participation selection criteria</li> <li>• Business plan support</li> </ul>	<ul style="list-style-type: none"> <li>• Selection of right participants for the training who can continue their work in the community</li> <li>• Continuous follow up with the trained people</li> <li>• Linking their experties in existing development works from development partners as well as coordination with local government</li> <li>• Business plan support for establishing the entrepreneurship</li> <li>• Tools and spare parts support together with technical guideline</li> <li>• Refresher training</li> </ul>

#### **Findings from the consultation with Local level WASH technical HR**

With the objective of understanding the current state of local level WASH skilled HR, a total of 10 trained people (5 VMW, 3 LLB and 2 RWH technician) from different three districts were interviewed as shown in Figure 2.

Among them, only 30% (1 RWH technician, 2 VMW/plumber) were continuing their work as a technical WASH person, 20% were providing technical services as per the demand and remaining 50% just attended the training and no further technical work had been done so far shown in Figure 3.



Although many people received the training, most of the people were not available in their villages. The reasons behind are:

- Less demand in work (lack of market)
- Insufficient income
- Lack of tools and spare parts
- No financial support for establishing business, and
- No follow up of their work from concerned agencies
- The trained WASH HR (who just received the training) do not have idea on how to find a work, whom to contact to get work and what additional skills do they need to build up to work as a professional.

During interview with skilled trained people, the barriers and possible motivation/drivers were explored. The outcome of the discussions are summarised as;

#### ***The barriers***

##### *No systematic record system at organization level:*

Most of the trainings conducted were project based and the data is used just to report to the donor. The trained persons showed their commitment in work and the training provider believed that they would be providing service after training. Among the 16 organizations visited, none of the organizations have track record of all technical trainings they provided in past. Only few organizations have track recording system in post training stage for specific types of training.

##### *Coordination with local government:*

Since many activities and programme have been running parallel, less priority was given for coordination with local government at activity level. During discussion with the technical overseer at Water Supply and Sanitation Division Offices, it was found that only few organizations invites them during the training as a participants or training facilitator and they really do not discuss on the scope of the training, selection criteria, and possible ties-up with the government programme.

##### *Project based training:*

The training was conducted assuming that the trainees are local and can contribute for the operation and maintenance of the WASH structures. Most of the trainees participate in the training without their interest and the only motivation is the allowance given during the training.

*Post training support:*

Still there is gap in provision of post training support. Majority of the skilled technician said that they got nothing after the training and they do not have tools and spare parts for construction, operation and maintenance work.

*Professionalization of work:*

There is huge difference in income level in WASH technical work. Some people shared that they made monthly income up to NPR 15000-20,000 provided they get regular work. However, getting continuous work for trained personnel in community is quite tricky. There were the group of technician who dropped out from WASH and shifted their work as a mason in other construction work.

**Possible motivators/drivers**

Random questions were asked to understand the key motivators and the summary of the findings are given below:

*Refresher training and exposure:*

The refresher training with additional skills would be helpful to do multiple works in the field. Also, the working opportunities in other sites (other projects) would help to engage continuously in the field and the exposure visit would help to learn new things, which has been done differently.

*Tools and spare parts support:*

Just giving training does not make sense unless they can have tools and spare parts. Having tools will help them to work independently as a professional technician. Also, they can make money by providing services at household level, community level as well as to their neighboring communities.

*Supply chain of the materials:*

Still it is hard to get WASH related materials in villages market and they have to spend lots of time just to get even a small part increasing the service cost. Maintaining the continuous supply chain mechanism would be another motivation.

*Business plan support:*

It will be helpful if the programmes are designed for business support to the technician by diversifying their scope of work.

## **Conclusion and recommendations**

Although some government and non government organizations have been providing WASH technical trainings most of them were donor driven and lack proper training manuals and criteria. Only 30% trainees were continuing their work as a technical WASH person, 20% were providing technical services as per the demand and the remaining 50% are completely inactive. Lack of further support materials, follow up training, business plan and consistent income has been the major constraint while lack of systematic record system, limited coordination with government, minimal post training support and inadequate professionalism were some of the barrier identified. However, refresher trainings, tools and spare parts support, establishment of supply chain of materials and business plan support could be the possible motivators to start up with. These trained personals play vital role in functionality and sustainability of WASH services, hence following recommendations are made based on the study:

1. A simple track recording system and inventory for technical WASH human resource at local level would help to retain the technical person whenever needed. This kind of system has to be set in community (water scheme), Village Development Committee (VDC) and district level so that everyone has easy access to contact in case of needs. Also, it is recommended to systematize the inventory as ICT based progressively.
2. The selection of trainees, based on demand and need would be more effective. It is advisable that the project-based training should be converted in to demand based training.
3. The development of training manuals and guidelines (Standard Operating Procedure-SOP) together with list of technical focal person will be helpful to refresh their knowledge and skills. Also, keeping the contact address of trained people and key supplier in such manual would be helpful to contact the technician for major repair.

4. Professionalization of skilled WASH human resource by making alliance/network seems helpful to institutionalize their work and provide service in wider areas. A linkage between local level contractor and skilled people would help to maintain their financial sustainability.
5. Post training follow up and engagement in sector need to be done couple of times which helps to track the progress after the training as well as explore the urgent action for strengthening their level of engagement in the sector.
6. Business plan support together with skill development may help them to engage in the sector. Just having skills does not mean they are capable enough to work as a service provider. The tools and spare parts, availability of materials and investment are the major requirements. The business plan support via diversification of their job would help them to retain and contribute in local level.
7. National-wide inventory needs to be established and record needs to be kept at local level so that this human resource can be mobilized whenever and wherever needed.
8. It is also recommended to integrate the current emerging issues (disaster risk management, climate change adaptation, etc.) in the training, which helps them to enhance knowledge and skills so that they can consider those issues while working in the field.

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