



Research Report

# Impact of WOBA on gender and social inclusion for communities in Vietnam's remote mountainous districts

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## LIST OF ABBREVIATIONS

CPC	Commune People’s Committee
CWU	Commune Women’s Union
EMW	East Meets West
GESI	Gender Equality and Social Inclusion
GSI	Gender and Social Inclusion
HH	Household
PWD	People with Disability
SANOBA	The name of the EMW/WU sanitation enterprise
UN	United Nations
WASH	Water, Sanitation and Hygiene
WOBA	Women-led Output Based Aid

# 1. Introduction

## 1.1. Background

WOBA Vietnam is a project designed and implemented by Thrive Networks/East Meets West Foundation (EMW) to address challenges and inequities in Vietnam's rural water, sanitation and hygiene (WASH) sector. It is funded by the Australian Department of Foreign Affairs and Trade (DFAT) through the Water for Women Fund over 4.5 years (June 2018 to December 2022) with a total budget of 5,893,086.43 Australian dollars. The project has two objectives: (i) To increase access to equitable WASH services for the poor and marginalized (gender and social inclusion) communities in rural Vietnam; and (2) To improve gender empowerment and inclusion of women through program implementation and decision making. This study aims to gain insights into the extent to which WOBA has impacted gender and social inclusion for its targeted households.

## 1.2. Objective of the Study

The households living in remote areas are generally considered to be more disadvantaged in terms of general economic development and access to WASH services. Therefore, this study aims to assess the impacts of WOBA on gender and social inclusion in WOBA's remote mountainous districts. To achieve this central objective, the study is guided by two research questions:

1. To what extent has WOBA enhanced gender and social inclusion at the household, community and institutional level?
2. What are the factors that facilitate or constrain positive change toward gender and social inclusion at the household, community, and institutional level?

In answering these two questions, the study provides insights into GSI and offer implications for policies and practices in GSI in WASH programs in remote mountainous areas generally and in Vietnam particularly.

# 2. Operational framework

According to the UN Environment Program (2020), "unsafe water, inadequate sanitation and insufficient hygiene kill 3.5 million people every year over the world, and water scarcity affect more than 40% of global population"<sup>1</sup>. The United Nations World Water Development Report (2019) also shows that three out of ten people do not have access to safe drinking water. Six out of ten people do not have access to safely managed sanitation services, and one out of nine practice open defecation. However, these global figures mask significant inequities between and within regions, countries, communities and even neighborhoods. Access to water, sanitation and hygiene (WASH) has been considered as a right of human that is mentioned in the SDG #6 "Ensure access to water and sanitation for all".

Inequality in access to WASH services is often emphasized in research and reports relating to WASH. Women and girls regularly experience discrimination and inequalities in the enjoyment of their human rights to WASH in many parts of the world. Similarly, the people with disability, the elderly and other

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<sup>1</sup> <https://www.un.org/en/academic-impact/world-water-day-reminds-us-value-precious-resource>

marginalized groups also lack access to WASH services. There are four main dimensions mentioned in the link between WASH and women's empowerment and social inclusion: physical, economic, political/governance and socio-cultural dimensions.

## 2.1 *Physical dimension*

**Water is a natural resource**, and its availability depends upon the amount of water physically available. The ways that water is exploited, compounded by environmental have a great impact on the quality and quantity of water resources. **Availability of water** also depends on how water is managed and allocated to target users with various purposes. It includes aspects related to the management of surface water, groundwater, as well as water recycling and reuse. Water accessibility refers to how water is physically delivered or obtained. Piped water is the least costly method to transport water in densely populated areas (RWSN, 2016). Where piped networks are unavailable, people mostly rely on wells or community water supply systems (e.g., water delivery through kiosks and vendors, or water trucks). In the latter case, they often pay prices several times higher for water of lesser quality, further exacerbating inequities between the rich and the poor and disadvantaged as stated by UNESCO World Water Assessment Program (WWAP2019) in the World Water Development Report with the theme "Leaving no one behind" for all regions in the world including the developing countries.

In many areas, the households must apply the **water treatment** for using. It includes the processes of purifying, disinfecting and protecting water against recontamination. The most common methods of water treatment depend upon energy (usually electricity) being available around the clock, which is rarely the case in most developing countries. Low-tech and nature-based solutions also exist but are usually not applied at scale and usually do not guarantee a quality of water that is safe for drinking (RWSN, 2016).

In the remote mountainous areas in Vietnam, many boarding schools do not have separate toilets for boys and girls, or for students and teachers, or there are not enough toilets for the number of students. Some schools have latrines but they are not well maintained and do not have water for cleaning (Nguyen, 2011). Water has often been taken from upper streams using simple techniques, but the water supply system is not well maintained. As a result, the water is unsafe for drinking and cooking. Water flow is often interrupted during the dry season, causing hygiene problems for boarding ethnic minority students, especially female students.

Similarly, activities relating to **sanitation and fecal sludge management** are quite complicated and difficult for households to solve by themselves without the appropriate facilities. It generally comprises on- or off-site facilities for the collection, transport, treatment and disposal of wastewater under hygienic conditions. Collection systems usually refer to a toilet system. Transportation in the context of typical grey infrastructure refers to a piped underground sewage system, although in some instances waste is transported by trucks, and treatment — when available — usually involves centralized sewage treatment plants or localized systems (RWSN, 2016).

Therefore, it is important to select the **technology and infrastructure design** in WASH to ensure all members in community including the disadvantaged groups to be able to access. Moreover, these group need to be involved in this selection process. This not only assures the development of appropriate designs and design standards, but it can also serve to facilitate local designs and the use of locally available material (Wilbur, 2015). Lack of knowledge about technical aspects of accessible designs is a barrier to inclusive WASH. For example, the availability of guidelines and accessibility standards on inclusive WASH in the local language is limited in Cambodia. Therefore, it is difficult for households to select which one is most suitable with them (WaterAid, 2014).



The choice of **local material**, for example wood versus metal, must be weighed against the costs and durability of the technology (or infrastructure). Technologies made of wood, while generally of lower cost, may be subject to premature degradation from termites. Design standards for inclusive infrastructures are needed, but during implementation, some measure of compromise may also be needed as relative costs (in material and time) for “ideal” design must be weighed against the needs of disabled persons in the community (Wilbur, 2015).

## 2.2 *Economic dimension*

On the economic dimension, the **payment and affordability** in WASH services is a prevalent and multifaceted issue. Human rights to water and sanitation place obligations on states and utilities to regulate payments for services and to ensure that all citizens can afford access to basic services. Ensuring that water and sanitation is affordable to all requires policy recommendations tailored to specific target groups such as poor and disadvantaged households. These marginalized group need physical and financial support to access WASH services and the communities are best placed to identify and assist these people. Community members may be able to support with this process, but leaving it solely to them can lead to the risks that reinforce existing power inequalities in their community (Wilbur, 2015). Poor and disadvantaged households, who are typically not connected to water piped systems, suffer disproportionately from inadequate access to safe drinking water and sanitation services and often pay more for their water supply services than their connected counterparts (WWAP, 2019). From the government and WASH suppliers’ perspectives, the costs of providing safely managed drinking water and sanitation typically includes infrequent, large capital investments such as cost of infrastructure and connections as well as recurrent spending on operation and maintenance. From the communities’ perspectives, costs include toilet construction costs and ongoing maintenance costs, water connection cost and water usage tariff. To subsidize some of these costs for households and prate sector organizations, **subsidies** (from the government and/or foreign investment/aid) is a common lever to encourage provision and purchase of WASH services.

It is likely that **subsidies** will continue to be important for achieving universal coverage. In Vietnam, experience of private rural water enterprises shared by the Institute for Sustainable Futures showed how poverty is a barrier to accessing piped water. Almost 70% of poor people without a connection said that it was as a result of the connection fee not being affordable (Wilbur, 2015). Other studies have pointed to water tariff, among other factors, as the barrier to household connection and use of piped water. Because subsidies are most often linked to capital expenditures and those are most often focused on relatively well-off communities, the non-poor have often been the beneficiaries of subsidy interventions intended to reach the poor (WWAP, 2019). Sanitation services may be more natural candidates for subsidies than water supply services, since willingness to pay for such services is often lower and the wider social benefits are higher.

Subsidies that promote greater community participation empower vulnerable groups to allocate resources toward their own priorities (RWSN, 2016). Large WASH service providers can use commercial financing and indirectly support vulnerable groups through cross-subsidization. Where this is the case, pricing mechanisms might allow for cross-subsidization between population groups, using a uniform volumetric tariff with a rebate. Ideally, the tariff level paid by the customers who do not receive the rebate should be high enough to repay the principal and interest at commercial terms. In some cases, other funding sources such as domestic tax revenues, grants and private finance may supplement the tariff receipts. Blended finance approaches will require potentially complex combinations of development finance, private finance and government subsidies to ensure that all target groups are being reached. Therefore, subsidies must therefore be appropriately designed, transparent and targeted, and tariff

structures need to be designed and implemented with the objectives of achieving equity, affordability and the appropriate level of service for each targeted group.

WASH sector also creates **a source of jobs**. For example, water is considered as crucial source of jobs, both directly, as an employer in water services, and indirectly, through the economic opportunities that depend on water (World Bank, 2019). Therefore, there are opportunities that water and sanitation service providers can adopt to reduce and eliminate the barriers that women and other disadvantaged groups (like people with disability) confront in entering and working in the WASH sector. Through tailored interventions, utilities can address the specific needs of their utility and thereby ensure that they have the best possible trained and skilled workforce, including women, to support them in their task of providing water and sanitation services to all (RWSN, 2016).

There are also opportunities for **women's economic empowerment** (World Bank in Wilbur, 2015) in WASH. In Nepal, establishing credit facilities enabled women to invest their free time in income generating activities. Research from Senegal explored the significance of productive water use in the livelihood diversification strategies of rural women. It found that access to water for productive purposes is a critical asset for expanding and diversifying rural livelihoods. In Vietnam, the World Bank's sanitation program had utilised provincial Women's Union to support the construction or renovation of large-scale household latrines or bathroom facilities. In India, female masons carried out roles in the business of the water sector.

### *2.3 Political or governance dimension*

World Bank (2004) showed that in some public services such as health, education, water, electricity, and sanitation, there is no direct accountability of the provider to the consumer. The society has decided that the service will be provided not through a market transaction but through **the government taking responsibility**. That is, through the "long route" of accountability by clients as citizens influencing policymakers, and policymakers influencing providers. In essence, this is the complicated relationship among three parties: **the policy maker – the service provider – the clients including the poor and disadvantaged**.

If **the politics are "pro-poor"**, there are more opportunities for the poor to get the benefits of these public services. In the private sector, although incentives presumably are better aligned, the private markets are not the solution to these problems in the first place. Private providers fail to reach the very poor. Even with the public water companies funded through state budgetary transfers, many service delivery arrangements neglect the role of clients, especially poor clients, in making services work better. When the poor actually participate in the service provision, they have the ability to monitor and discipline or reward the provider's service quality. As clients, they can play the role of monitors since they are present at the point of service. But they need to have an incentive to monitor. When publicly financed services are subject to be noticed and **the politics are not pro-poor**, it is the best to strengthen the client's power as much as possible. So, separating the policymaker from the provider, and making the provider accountable to the client through prices and quality of services, can strengthen client power and lead to better results. Poor people can be protected from high prices if charges rise with use (with an initial, free amount of consumption). Allowing small, independent water providers to compete with the local monopoly can also discipline provision and keep prices down (World Bank, 2014).

Having **inclusive institutional structures** in place for multistakeholder dialogue and cooperation is essential to ensure equitable access to sustainable water supply and sanitation services. Government alone cannot always take on the full responsibility for 'providing' water supply and sanitation services to all citizens, especially in low-income settings. When governments' role is geared towards policy setting and regulation, the actual provision of services is carried out by non-state actors or independent

departments. Well-functioning accountability mechanisms help institutions with sufficient capacity fulfil their mandates to monitor and enforce the obligations of service providers. Creating coherence between the various institutional levels is essential to ensure that policies deliver on their objectives (RWSN, 2016). In the current context of multi-dimensional governance, the role of non-governmental organizations in expressing the opinions of civil society and promoting the public's active participation has become increasingly influential in policy formulation. Large corporations can also have a great deal of influence over policymaking as well as policy outcomes.

The interreference of politics can make the policies not be inclusive. For example, where **legislation and policies on tariff setting exist**, without consideration of social inclusion in tariff calculation and eligibility, tariff might not address equity issues and even enhance inequality in WASH access and use. Tariff setting should be approached very carefully and with the participation of key stakeholders from outside the community. Tariffs should be set according to the service's life cycle costs, management model of the provider organizations, as well as user's ability to pay (Wilbur, 2015).

**Good governance** relates to systems that have qualities of accountability, transparency, legitimacy, public participation, justice and efficiency and therefore overlaps with the principles of the rights-based approach which advocates for the fundamental standards, principles and criteria of human rights frameworks. These include non-discrimination and participation that is active, free and meaningful, as well as representation by and for people in disadvantaged or vulnerable situations. Good water governance involves measures and mechanisms that promote effective policy implementation along with sanctions against poor performance, illegal acts and abuses of power. Holding decision-makers accountable requires ability, willingness and preparedness among rights-holders (or their representatives) to scrutinize actions and non-actions. This in turn builds on transparency, integrity and access to information (RWSN, 2016).

The network and collaboration mechanisms from the sectors and government is related to inclusive WASH in Cambodia. The local partners even blamed the limited progress on inclusive WASH on the absence of a national platform or mechanism for cross-sector collaboration, and a lack of leadership by the government to initiate a conversation between its own departments (WaterAid, 2014).

## **2.4 Socio-cultural dimension**

The social and cultural factors driving exclusion and discrimination need to be taken into account when endeavoring to fulfil the human rights to safe drinking water and sanitation, as well as to implement Sustainable Development Goal # 6. Discrimination may happen in various ways and for different reasons. Direct discrimination occurs when individuals are discriminated against in laws, policies or practices that intentionally exclude them from service provision or equal treatment. Indirect discrimination occurs when laws, regulations, policies or practices seem neutral at face value, but in practice have the effect of exclusion from the provision of basic services (RWSN, 2016). Comparatively lower levels of access to water and sanitation services can be observed among ethnic minorities and indigenous peoples. Valuing traditional knowledge through the recognition of indigenous peoples' stewardship of land and water supports inclusion and the fulfilment of human rights.

WSP (World Bank, 2010) released the findings of two studies in Cambodia in 2008, one on the demand for latrines by consumers, and the other on the supply of latrines by the private sector. The research noted that a latrine purchase decision involves both men and women, in different ways. Whilst men and women could therefore be targeted separately, it was recognized as important to encourage household discussion between men and women on the subject of investments for latrine ownership. The study showed that women in this context were more responsive to consumer messages, while men

are more interested in the technical aspects of a sanitation facility. Investing in collecting sex disaggregated information can therefore be used to help the private sector and development agencies to communicate more effectively, and influence the behavior of sanitation adoption. In the same vein the study highlighted the importance of targeting children who are obviously not decision makers for latrine purchases. Stereotypes are being dashed as women become more engaged in economic endeavors outside the home, and children increasingly shape the behavior trends of current and future generations.

### 3. Methodology

The study employs a mix of qualitative and quantitative methods in this study. The study has three phases.

Phase 1 involves a desktop review to scope the issues linking WASH and GSI dimensions (physical, economic, political, sociocultural). The aim is to identify GSI measures relevant to gender and social inclusion along the four dimensions in the operational framework generally and in remote areas of developing countries.

Phase 2 involves designing and executing a survey incorporating the gender and social inclusion dimensions identified from the desktop review. 602 respondents in the survey are the representatives for 302 households that have completed latrine and water connection through WOBA and 300<sup>2</sup> households not having hygienic latrines in the communes (non-WOBA households).

Phase 3 involves 60 in-depth interviews with selected respondents from Phase 2 and village heads. The interviews focus on poor/near poor and GESI<sup>3</sup> households to ensure that the GSI impacts are gathered from the GSI perspectives. The study also surmises that women and GESI households must have the opportunities to engage in WOBA intervention and empowered as users, managers and change agents in their communities.

#### 3.1 Survey

##### 3.1.1 Survey instrument

A questionnaire was developed to collect household information including the following main parts:

- Background information
- Current situation of water access use and sanitation facilities and the changes in access and using water and latrine for last 3-5 years (or since joining WOBA)
- Training and information on WASH that HHs received
- Responsibility for the activities in household and changes for last 3-5 years (or since joining WOBA)

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<sup>2</sup> At the time of the survey, some of HHs not having latrines according to the provided list by the CWUs have built their latrines already.

<sup>3</sup> WOBA uses the GESI categorization used by Vietnam's Ministry of Labor, Invalids and Social Affairs. While some government categorizations are quite narrow, implementing through government systems is more efficient, and provides a pathway for scale if this targeted GESI support is successful. There are six GESI categories: (i) children under 16 without parental or foster care; (ii) People aged 16-22 currently enrolled in secondary schools, vocational schools, colleges or universities (who also meet criteria (i)); (iii) HIV-positive people from poor households; (iv) poor single parents with custody of children; (v) the elderly; and (vi) people with a disability. WOBA Vietnam specifically target people with disabilities and elderly people.

- Perception of gender and social inclusion

This questionnaire was designed by the principal researcher in consultation with the research consultants and programmed on Qualtrics in both English and Vietnamese. It was tested by the consultants and enumerators and revisions were made on Qualtrics. All enumerators were trained on executing the survey prior to fielding.

The survey was conducted using face-to-face interviews to maximise responses rate and minimise drop out. During the fielding, daily data from the Qualtrics were exported to Excel formatted file daily and checked to identify and fix mistakes and inconsistencies in understanding the answers of the respondents.

### 3.1.2 Survey sample

All six mountainous districts in Nghe An and Hoa Binh were selected in the survey. Basing on the number of project communes in each district, 1-2 communes were selected. The number of samples in each commune was based on the number of HHs in the provided list of HHs which have completed the latrines under WOBA and the HHs not having latrines yet. The number of samples in each commune is from 50 to 70 for the survey. In each commune, there are 5-7 villages selected, and in each village, about 10 HHs were selected by type of HH (poor; non poor; GESI) and sex of head of household. Table 1 summarises the survey respondents.

Table 1. The samples in the study

No	District	Communes	Total HHs having latrines under WOBA			Samples having latrines under WOBA			Samples not having latrines	
			Poor/near poor	GESI	SANOBA	Poor/near poor	GESI	SANOBA	Poor/near poor	GESI
	<b>Nghe An</b>									
1	Anh Sơn	Tường Sơn	36	22	0	10	10	0	15	5
2	Quỳ Hợp	Châu Thái	214	40	18	14	12	9	32	3
3		Châu Quang	37	67	22	11	8	11	23	7
4	Tân Kỳ	Đồng Văn	194	30	0	22	13	0	24	11
5		Phú Sơn	101	35	0	19	12	0	28	2
	<b>Hòa Bình</b>									
6	Yên Thủy	Đoàn Kết	96	24	11	11	7	8	18	7
7	Lạc Sơn	Tuần Đạo	179	31	8	18	11	6	24	11
8		Quyết Thắng	260	35	0	23	12	0	28	7
9	Tân Lạc	Đông Lai	90	35	0	17	8	0	18	7
10		Ngọc Mỹ	148	56	0	20	10	0	20	10
	<b>Total</b>		<b>1355</b>	<b>375</b>	<b>59</b>	<b>165</b>	<b>103</b>	<b>34</b>	<b>230</b>	<b>70</b>
			<i>Total with latrine</i>			302				
			<i>Total without latrine</i>						300	
			<i>% of those with latrine</i>			54.6	34.1	11.3		
			<i>% of those without latrine</i>						76.7	23.3
			<i>% of poor/near poor of sample for this survey</i>			65.6				
			<i>% of GESI of sample for the survey</i>			28.7				
			<i>% of SANOBA of sample for survey</i>			5.7				
			<i>% of total WOBA population of poor/near poor in survey</i>			12.2				

% of total WOBA population of GESI in survey	27.5	
% of total WOBA population of SANOBA in survey	57.6	

### 3.2 *Semi-structured interview*

#### 3.2.1 *Interview schedule*

An interview schedule was designed for the semi-structured interviews with HHs and the heads of villages. It aims to gain further insights on the information collected from the survey thus the topics were similar to the questionnaire in the survey. The content of the interview schedule with HHs was focused on the information at HH level while the content of the interview schedule with heads of villages focused on the information at community level.

#### 3.2.2 *Interview sample*

A stratified purposeful sampling method was applied to interviews. In each commune, 6 interviews in 3 villages were conducted. In each commune, a head of village and a HH in the provided list of HHs which have completed the latrines under WOBA and the HHs not having latrines yet were selected.

### 3.3 *Data analysis*

*Analysis of the survey responses includes:* (1) Run frequency counts for all questions; (2) Run cross tab to identify group differences for questions relating to GSI in Part 3,4,5, and barriers in Part 1 and 2. Groups are based on socioeconomic characters in Part 6; (3) Run Chi square correlation tests for all GSI related questions, and some WASH barriers questions and socio economic groups; (4) Run Chi square reliability tests for questions with multiple options; (5) Run regression tests for those variables that have significant correlation and socioeconomic differences; (6) Run factor analysis for those variables in Part 5 of the survey. The quantitative data was analyzed using SPSS software.

The qualitative interview data were processed in three steps: (i) coding by themes and sub-themes; (ii) cross-check the information from different sources (including the results of the survey data); and (iii) quotes and case studies used to make coded interview data clearer.

The final stage of analysis compares themes identified from the analyses of the survey and interview to ascertain any commonalities or differences in terms of characteristics of disadvantage (poverty, gender, disability, age, education, job) and various factors contributing to GSI dimensions.

### 3.4 *Limitations*

There are some limitations in this study due to Covid 19, they are as follows:

- There are three provinces of Nghe An, Ha Tinh and Hoa Binh in WOBA which have the mountainous districts. However, the survey couldn't be conducted in Ha Tinh province due to Covid 19 situation that prohibited travel to the communes. Therefore, only Nghe An and Hoa Binh communes were included in the study. The total number of samples were unchanged.
- About 30% of randomly selected HHs in samples couldn't be interviewed because these HHs were working far away from home or were being quarantined due to Covid 19. Therefore, the

replaced HHs were chosen from the spare samples or from the remaining HHs in the list if the spare samples were not enough.

- Due to social distancing restrictions, gathering is not allowed, so some of the initial focus group discussions with the HHs as planned were not possible.

## 4. Findings and Discussions

### 4.1 Current situation of access to water and latrine of disadvantaged HHs

#### 4.1.1 Water source

Dug well is the most common source of water that the surveyed households have been using. Most of the dug wells were built 15-20 years ago, especially since the community village wells could no longer meet the people's daily domestic water needs. In addition, due to the insufficient supply of water from dug wells, the number of borehole water/drilled wells in the survey areas tends to increase in recent years. However, due to higher costs, drilled wells tend to be built by the well-off households, while the proportion of disadvantaged households using drilled well is much less. In addition, 9.3% of surveyed households are still using water from streams in the ravine for the domestic purposes. The surveyed households often install water pipes to take water from the water source to the house. This water pipe installation is usually done by a group of households, because there are not many streams in the ravine so that many pipes can be installed in the same place.

*“My family have installed water pipe from my mountain field for drinking and cooking since 2008 or 2009, ... that pipe is up to 4km long, my family installed that pipe with 24 other households. It has been well operated and usable up to now.”* (HB\_TL\_ĐL\_Du\_Ho ko NVS)

Only 6.8% of households in the survey use tap water to their house and pay water tariff monthly. Among the 10 surveyed communes, only Quyet Thang commune (Hoa Binh) has a centralised piped water supply system that is in use. In some other communes, there were also centralised water supply systems built in the past however they have been unusable for some years due to serious deterioration. The percentage of people using tap water in the mountainous districts in the survey is much lower than the percentage of rural people in Vietnam using tap water.<sup>4</sup>

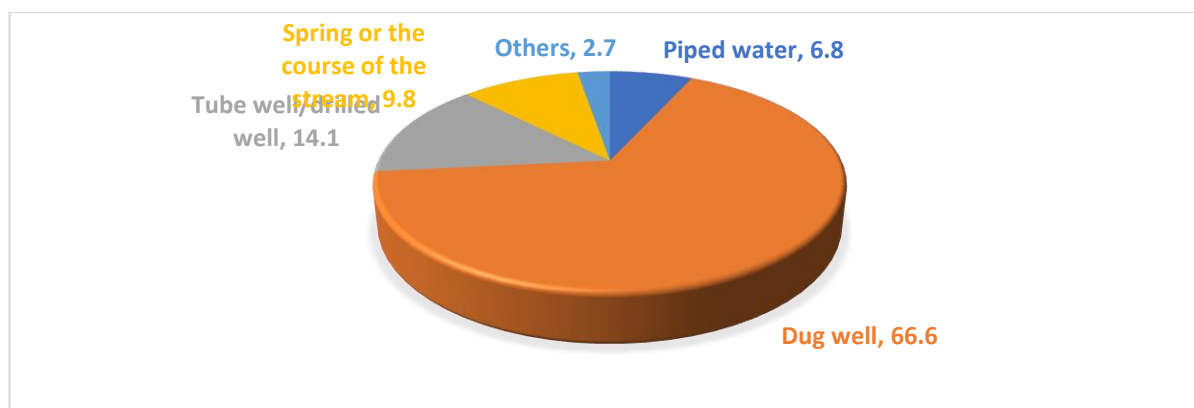


Figure 1. Water sources (%)

<sup>4</sup> According to NCERWASS (2019), the proportion of rural people using water from centralized piped water supply systems was about 43,5%. <http://ns.mard.gov.vn/Pages/chi-tiet-tin.aspx?NewsID=45631>

Very few households in the survey use water from lakes, rivers and streams for domestic purposes. The water from these sources is often used by households for agricultural production purposes such as farming and livestock.

According to the community leaders (village heads) in the interviews, in the last 3-5 years, there has not been much change in the water source of households (only a few more households have installed more drilled wells). However there has been a big change in water use that must be taken into account for a longer period of time, since the past 10-20 years. When households dig their own wells - using their own water sources or some invested piped water supply systems for rural areas, many households in mountainous - rural areas started to use tap water.

Among the households in the survey using water for agricultural production, most households (up to 84%) have been still using the same water source within the past 5 years. 14% of households have been using more water from other sources for production. Only 2% of households have used less water sources in the past 5 years for agricultural production.

#### 4.1.2 Quality and quantity of water facilities

Water shortage occurs in most of the surveyed areas; however, it does not frequently happen to all households but only some households living in higher areas where there is no underground water source which makes it impossible to dig a well. The lack of water also does not occur all year round. It usually happens in the dry season or during the flood season, when rainwater falls from the mountains, making the water source muddy and unusable.

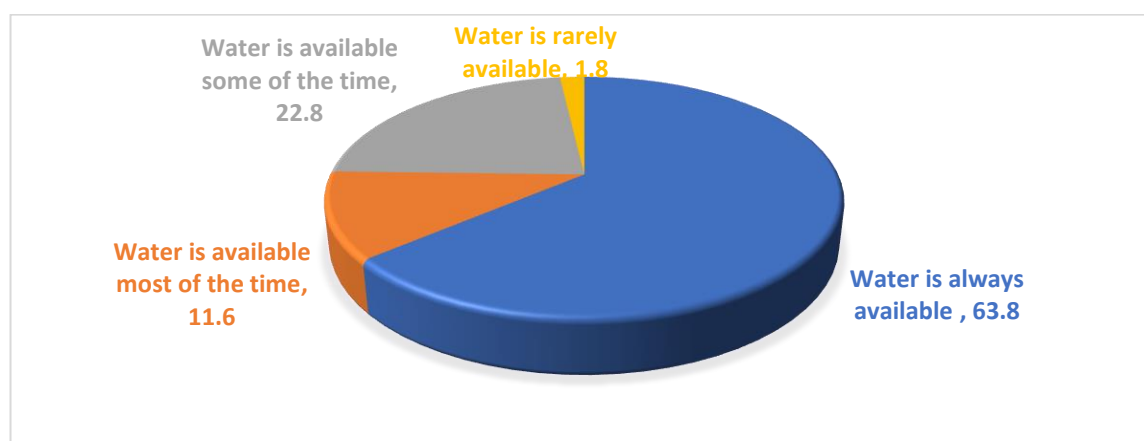


Figure 2. Water quantity (%)

Of the surveyed HHs, 63.8% say that their water is always available to use, 22.8% and 1.8% say the water is sometimes available or rarely available (Fig 2)

Regarding the quality of water for domestic purpose, 41.7% of surveyed HHs say that water quality is frequently acceptable. However, 21.2% say that their water quality is sometimes/occasionally/rarely acceptable (Fig. 3)



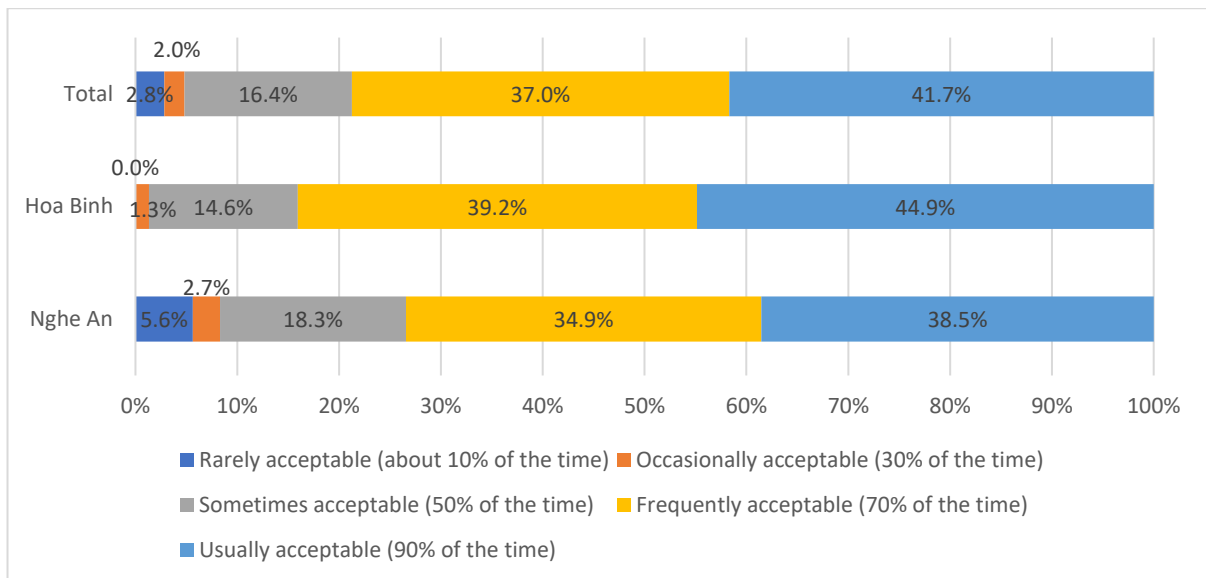


Figure 3. Water quality (%)

Some reasons for unacceptable water quality mentioned by the respondents include bad smell (12.9%), containing materials (61.8%), unacceptable color (18.1%) and unacceptable taste (33.3%).

*Q: How is the water from the dug well?*

*A: Generally, the water has the smell of iron*

*Q: Do you think if the quality of water is acceptable?*

*A: This is also normal with the households living around here, it can't be improved due to lack of money, who knows how now....*

*Q: Do you feel secure using this water?*

*A: It is so so, there is not another choice.*

(HB\_LS\_YP\_Nhụn\_Ánh)

Households' perceptions of water quality vary between Hoa Binh and Nghe An provinces. It seems that the water quality in Nghe An is worse than in Hoa Binh. 94.1% of survey HHs in Hoa Binh say that their water quality is usually and frequently acceptable while this figure in Nghe An is 83.4%. One of the reasons is that climate change in Nghe An has recently occurred quite obviously, leading to more difficulties in domestic water for people in rural areas.

*My HH used water from dug wells (now using drilled well since the beginning of 2021). But the water had a scum and lime and it was worse and worse... So, my HH tried to install a drilled well then have use this drilled well since the beginning of 2021. (NA\_TK\_ĐV\_Vĩnh Thành\_Hộ ko có NVS\_Nhạ)*

#### 4.1.3 Water treatment for drinking

The most common water treatment method for drinking is boiling the water. 91.8% of surveyed HHs boil water before drinking. Others often use bottled water or water by RO water purifier for drinking. Almost no HHs report using raw water from dug/drilled wells for drinking. One of the reasons is that the water quality is also considered to be increasingly more polluted from livestock waste, pesticides and fertilizers.

*In the past, (well water) is just pumped up the tank and used directly. When they (water testing agencies) came to test the water, we knew that the water was very polluted in this area. Sometimes the pollution of this water is more severe than the water from the stream in the*

*ravine, they (water testing agencies) came here 2-3 times, about 3 years ago. (NA\_QH\_CQ\_DH hộ dân \_Trần Văn Sách\_5.12.2021)*

This awareness of contaminated water is also the reason for the HHs increased use of water purifier. 32.2% of the surveyed HHs have been using RO water purifier. According to the village heads in the interviews, the number of HHs using water purifiers could be higher in the wider community as the surveyed HHs are under the WOBA project areas who are mostly the poor/near poor or have people with disability with the difficult economic conditions, which do not have financial resources to buy water purifiers.

*“Many HHs are also poor that there are not any valuable assets in their house... But they are interested in protecting their health. With some poor households, they don't have any valuable assets, not even a refrigerator, but they still buy a water purifier”. (NA\_AS\_TS\_Già Hóp Ò Ò\_Trường Xóm\_Thảo)*

A RO water purifier costs more than 4 million VND, which is a large amount of money not only for poor, near-poor households but also for average income and better-off households in rural areas. It could be that buying water purifiers has become popular in the survey areas due to the communication of water purifier businesses, who give actual test evidences (litmus test) for the water quality to show the contaminants and local people can see right away. Moreover, water purifier businesses also offer different forms of installment payment for households (such as buying a water purifier in installments for 6 months without interest) – which is suitable for difficult households who cannot afford single payment terms.

*Q: Do you prefer a water purifier or new hygienic latrine (as they are using unhygienic temporary latrine)?*

*A: I prefer buying a water purifier.*

*Q: Why?*

*A: I am afraid of unclean water.*

*Q: But you have just said the water from your dug well is pure and good taste and you satisfy with this water, right?*

*A: Yes, it looks pure but I am still afraid .... I will prioritize the water purifier first when I have enough money.*

*(NA\_QH\_CQ\_Đồng Lạm\_Hộ chưa có NVS HVS\_Vi Thị Hương)*

#### 4.1.4 Fetching water for basic consumption

Collecting water from wells of the neighbors/relatives or rivers is no longer common in the mountainous areas in the survey. It is very rare for households to have to collect water frequently. In some areas with high terrain or no underground water, some households have to fetch water in the dry season. According to the survey data, 12.5% of households say they have to fetch water. In average, it takes 8 minutes each time to take water (standard deviation = 10 minutes) and average frequency of fetching water per households is 2.7 times per day (standard deviation = 2 times). This equates to in average about 22 minutes/day spent on fetching water. However, it only takes about 5 minutes for most HHs who have to fetch water because their wells are located in their garden. Only 2.5% takes more than 10 minutes – often these are households who have to ask for water from other households – and this water collection usually takes place during the dry season of the year. Fetching water was common in mountainous areas in the survey about 15-20 years ago, but now it has been no longer

common as the number of households with their own water facilities has increased significantly. In addition, electric water pumps help households in reducing labor by taking water by hand from dug wells. As the story below illustrates, the differences between households in terms of time and effort in collecting water are those with and without an electric water pump.

#### **Fetching water rather than having the electric water pump stolen**

Mrs. A (38 years old, Nghe An) currently lives with her husband and two sons (one in 9th grade and one in 6th grade). Her family doesn't own much field and land, so most of the time she has to grow acacia for other HHs near her house. Her husband is often sick, and can only work occasionally. The family's expenses largely depend on her hired job. For many years, her family has always been classified as a poor household. Because of the poor household, her family was able to borrow money to build a house 2-3 years ago, but because there was not enough money, the house has not been painted or the doors have not been installed yet.

Her house was built on the land given by her parents-in-law, and she shared a well dug by her parents-in-law. Every day she has to take water from that well to her house, also dozens of times, but fetching water is not as tired as taking water from the dug well by hand. Her husband does not help take water; her two sons sometimes help their mother take water when they are off from school. When she comes home from work, in spite of being late and tired, she hastily brings two buckets of water to take water to cook.

Before, she also once tried to save up to buy an electric water pump that cost 500,000 VND to pump water up to save her labor, but after only 1 month of using the pump, it was stolen when no one was at home, so "even if I had money, I wouldn't buy a pump anymore, because there is not fence around my land. If I bought an electric water pump, the thief would take it away again."



#### 4.1.5 Types of latrines

Among the surveyed HHs, septic tank latrine is most popular with 42.2% of HHs using this kind of latrine, 31.2% are using dry latrine. 15.8% do not have latrines and they often defecate in open air (Fig 4)

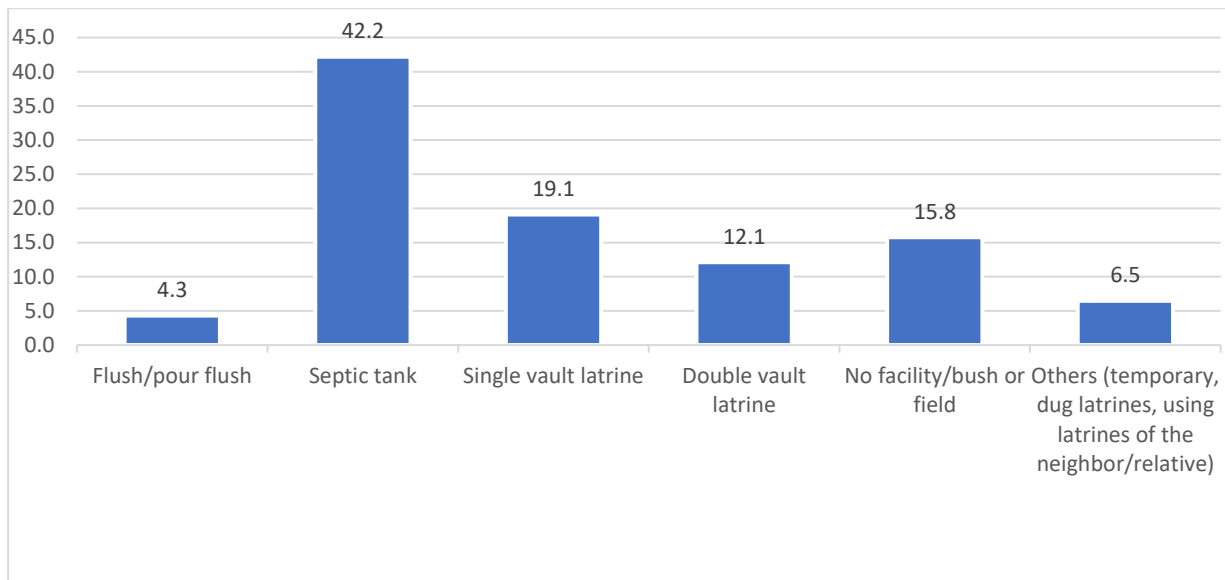


Figure 4. Types of latrines (%)

Among HHs with latrines, 30.3% of the latrines are located in dwelling/house and the remaining in the yard/plot/garden. Only septic tank latrine can be located in dwelling/house while other types of latrines are often located outside the house because of smell, flies, mosquitos, etc. In some HHs' opinion, any type of latrine must be located outside the house, because they feel it is unhygienic living next to the feces., 93.3% of respondents say that their family member can access and use the toilet at all times of the day and night. Only 6.7% cannot use toilet at night due to the long distance from their house. 15.8% are sharing their latrines with others such as relatives, neighbors, etc.

Out of the surveyed HHs, 54.3% encounter at least one problem with their own latrine. Of this 54.3%, 68.8% report the reason is access difficulty due to the latrine located outside their dwellings/houses; 54.4% of respondents say that their latrines lack of privacy, especially with HHs have to use latrines with others, or latrines without the doors, etc.

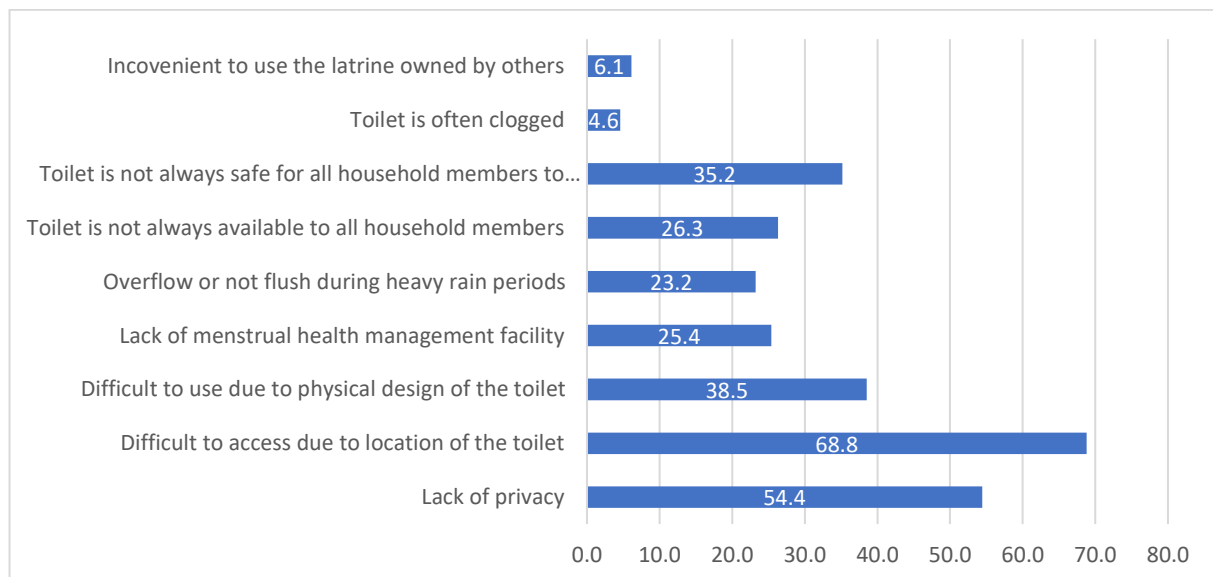


Figure 5. Problems of the latrine (%)

38.5% of HHs also say that it is difficult to use latrine due to physical design of the toilet or even toilet is not always safe for all household members to use. Especially, for households with elderly members

using the double vault latrines or whose latrines are outside their houses/dwellings. It is even dangerous for the elderly to use latrine at night or in rainy weather.

#### 4.1.6 Barriers and challenges in accessing and using WASH for disadvantaged HHs

The poor HHs and the more disadvantaged HHs often face more difficulties in accessing water source and owning the private water facilities such as water pump, water tank.

*“There are about 120-130 dug wells in the village (among 179 HHs in total). About ten HHs don’t have dug wells... most of them are poor HHs or dug wells don’t have water.”*

(NA\_AS\_TS\_Già Hóp Ò Ò\_Trưởng Xóm\_Thảo)

Among surveyed HHs, 36.4% say that they don’t need to improve their current latrine – they feel satisfied with their own latrines. The remaining 63.6% wish to improve their latrines. Of these, 47% want to build new septic tank latrines, 53% want to install or improve hygiene facilities such as roof, door, water tank, light, sink, etc. It is seen that there is a high demand on improving latrines. But the biggest barrier to do that is the financial issue – 94% of respondents say.

According to the survey, there are differences in having problems in accessing and using latrine between the HHs having people with disability (PWD) and HHs without PWD, and between the elderly HHs and non-elderly HHs. The non-elderly HHs and the HHs having no PWD having at least one problem in accessing and using latrine is less than the elderly HHs and the HHs having PWD. It is because the proportions of elderly HHs and the PWD HHs having the septic tank latrine (the type of latrine is considered as the best one for the criteria of convenience, safety and cleanliness) are higher than the non-elderly HHs and non-PWD HHs (56.7% and 52.9% versus 44.9% and 45.2%) (Table 2)

Table 2. The problems in accessing and using latrine by kind of HHs (%)

Kind of HHs	No problem encountered	Having at least 1 problem	Total	N
Elderly HHs	55.6	44.4	100.0	81
Non-elderly HHs	44.1	55.9	100.0	521
HHs having PWD(s)	54.8	45.2	100.0	104
HHs having no PWD	43.8	56.2	100.0	498
Female headed HHs	34.8	65.2	100.0	115
Male headed HHs	48.0	52.0	100.0	487
Currently Poor/near poor HHs	33.3	66.7	100.0	363
Previously poor/near poor HHs	63.2	36.8	100.0	182
Never poor/near poor HHs	66.7	33.3	100.0	57
<b>Total</b>	<b>45.7</b>	<b>54.3</b>	<b>100.0</b>	<b>602</b>

On the contrary, the proportion of female headed HHs who encounter problems in accessing and using latrine is higher than the male headed HHs (65.25 versus 52.0%). Especially, the proportion of currently poor/near poor HHs encountering problem in accessing and using latrine is nearly double the currently non-poor/non- near poor HHs (66.7% versus 35%). This is because the poor/near poor HHs and the female headed HHs often use the dry latrine located outside their house, or these HHs couldn’t access full sanitation facilities. For example, septic tank latrines need water to flush, but they don’t have water tank, so they have to take water by hand to flush latrine.

## 4.2 Access to information about WASH

68.9 % of respondents say that they once attended a training/promotional event or received information on WASH. Of the respondents who have access to WASH information, 86.9% say they heard from the Women’s Union and 56.1% heard from the head of village (Fig 6). This is because all of HHs in the survey is under the WOBA project and the Women’s Union is the mobiliser of these HHs to build latrines. In some areas, the head of village have also mobilized HHs together with the WU in the WOBA.

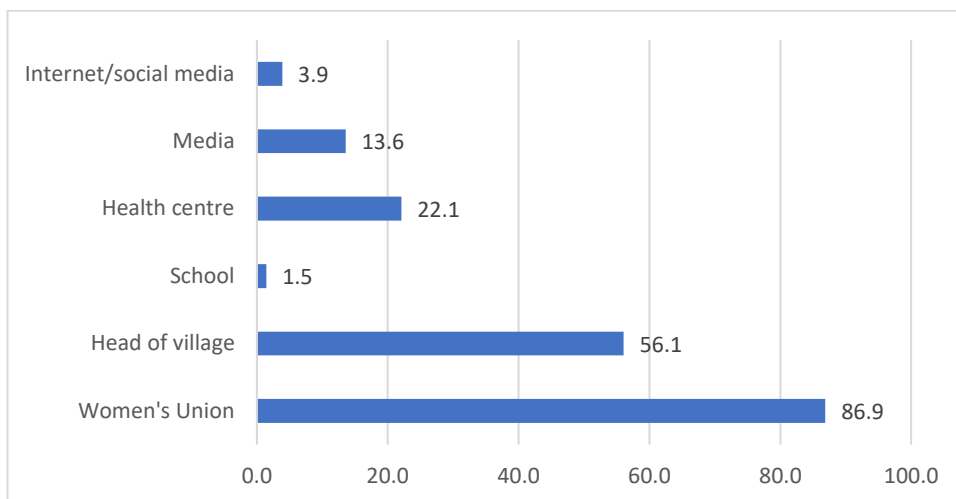


Figure 6. The source of information provided (%)

However, not all participants in the training/promotional events or not all people receiving information on WASH always understand the content. Only 26.7% say that they were always able to read and understand the content, 36.4% are always able to hear the presenter and understand what he/she said and 41.9% say that the content was useful for their understanding about WASH. More than a half of respondents say that they sometimes read and understand the content or are able to hear the presenter and understand what he/she said (Fig 7a).

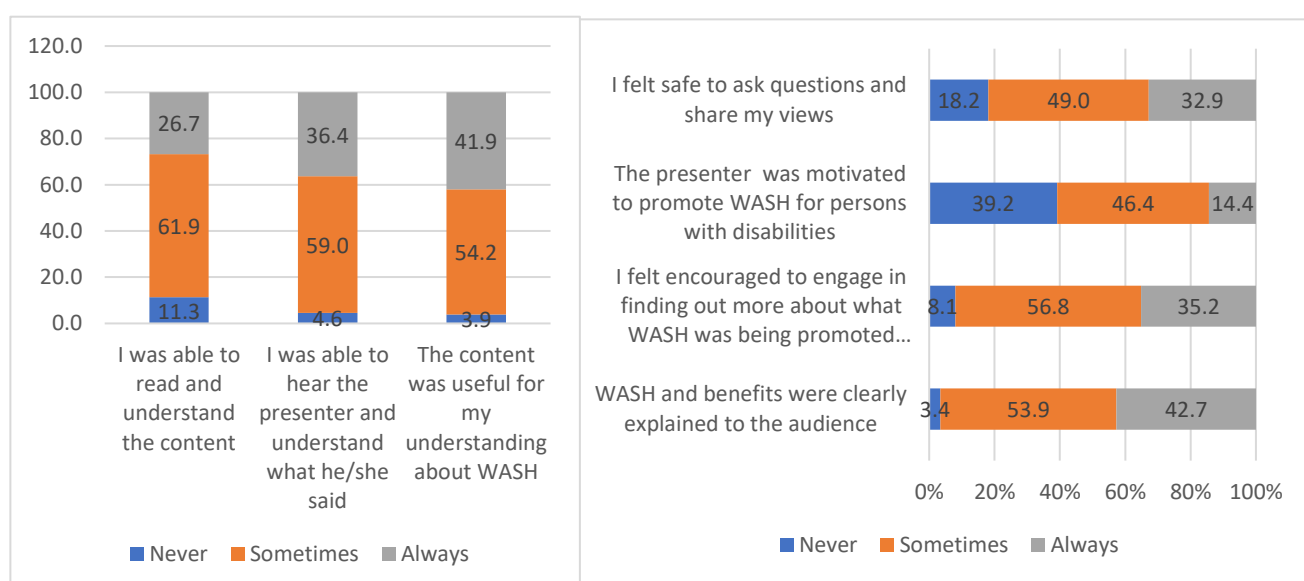


Figure 7 a, b. Experience of training/promotional events or information received (%)

As shown in Fig 7b, among respondents who once attended the training/promotional events on WASH, less than a half of respondents (42.7%) say that WASH and its benefits were always clearly explained to the audience in the training/promotional events. Only 14.4% say that the presenter was always motivated to promote WASH for PWD. Even WASH for PWD have been rarely mentioned in the community meetings when discussing WASH. Only 32.9% of respondents say that they always feel safe to ask questions and share their views.

38.2% said that there have been training/promotional events about WASH that they were invited but they didn't attend. Of this 32.8%, 81.3% said that they do could not attend because it occurred in working time, or they have to do housework. Only 7% say that they lacked means of transport to get the events, or the events were held too far.

### 4.3 Changes in gender and social inclusion through WOBA

#### 4.3.1 Attitude towards gender equality and women's empowerment

All interviewees said that they felt gender equality has improved for last 5-10 years. Most respondents also expressed their support and agreement with gender equality.

*"Why don't we agree? In the community meetings, it is also said that husband and wife have to share the work, taking care of children together, doing business and whatever. Husband and wife must be equal."* HB\_LS\_YP\_Nhụn\_Ánh

Women's empowerment is also often mentioned in the interviews in relation to women participating in making decision in the family, especially when they can earn more money than men when they work far away from home.

*"In recent years, almost women are the real core labor in the family. Women can not only discuss with their husband but also make decision. Honestly, in only few HHs, the men earn money the most. The women can earn more money when working away from. The women working from home is more than men... When the women can earn more money, they have more powers to make decision."* NA\_AS\_TS\_Già HópỒỒ\_Trường Xóm\_Thảo

Although women can discuss with their husband during making decision in the family and it seems that it is "easier" for men to accept women's opinions, whenever husband and wife disagree, men tend to make the final decision.

*A: Because the husband is the head of household, the head of family.*

*Q: Head of household? Does it mean others have to follow his words?*

*A: Yes, right, I often follow whatever he says.*

*Q: Have you ever seen your husband saying something unreasonable?*

*A: No, never.*

*Q: All his words are reasonable?*

*A: Yes, of course, whatever he says is always reasonable.*

*HB\_LS\_YP\_Nhụn\_Ánh*

*H: Among 70 HHs that you encouraged them to build latrines in WOBA, you see the wife or the husband in these HHs decides to build latrine?*

*Đ: Both wife and husband discussed about that.*

*H: Yes, they did discuss, but who was the decision maker?*

*Đ: Then, the husband had more power to make decision.*

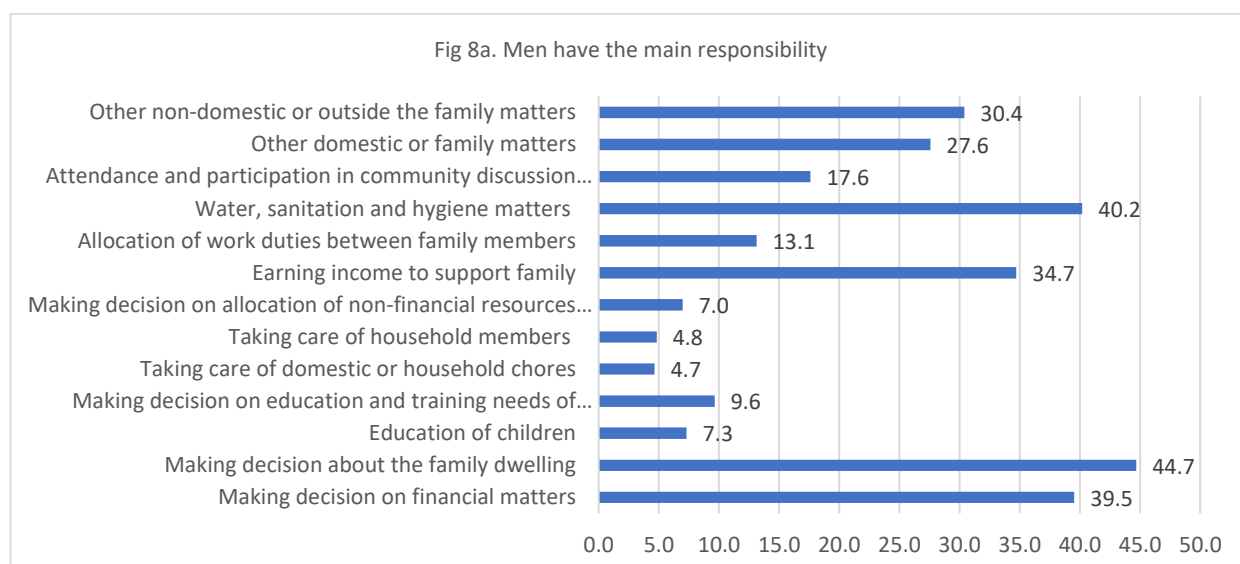
H: The husband had more power?

Đ: Yes, the men are often defensive than the women. About 30% of HHs doesn't respect the opinion of the women/the wives. Therefore, the women in these HHs don't have right to make decision.

NA\_AS\_TS\_Già HópỒỒ\_Trường Xóm\_Thảo

#### 4.3.2. Decision making in family

There are significant differences among surveyed HHs with regards to responsibility for the activities in the family. There is an obvious pattern of women in the family being responsible for taking care of domestic or household chores, taking care of household members, making decision on allocation of non-financial resources in HHs and attendance and participation in community discussion or consultation (above 50% of surveyed HHs). There is a higher proportion of respondents who say that the “man” is mainly responsible for the activities of making decision about the family dwelling, water and sanitation matters in the family or even making decision on financial matters. Nearly half of surveyed HHs (45%) say that both husband and wife are responsible for children’s education, with 7.3% say that the husband is main responsible and 37.5% say that women are mainly responsible (see Fig 8).





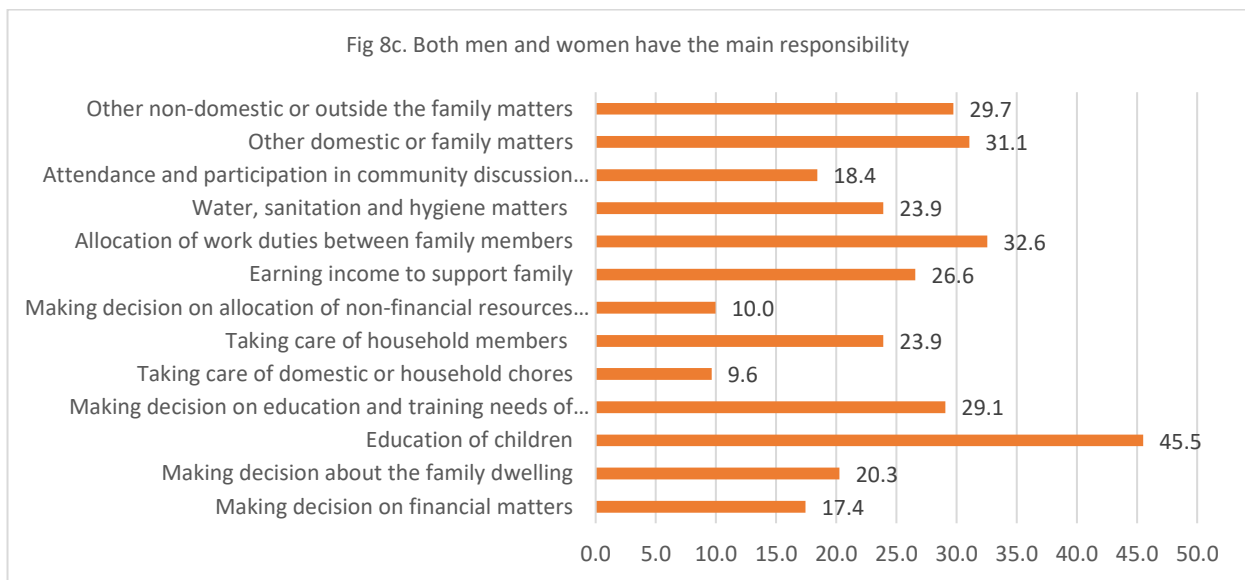
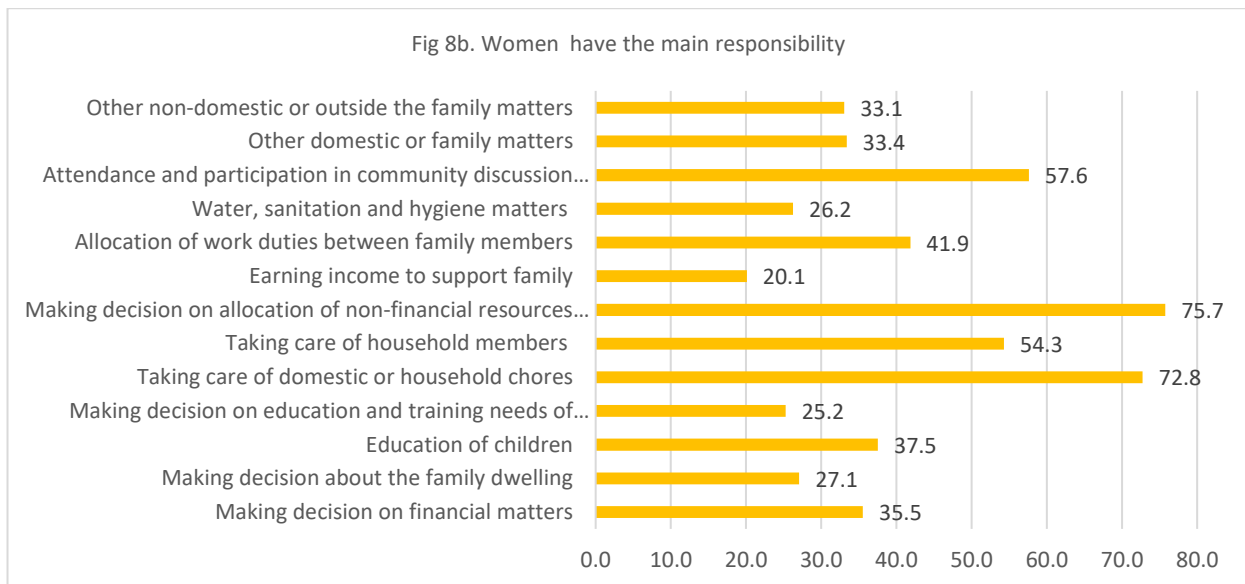


Figure 8a, b, c. Responsibility in the family (%)

#### 4.3.3. Changing roles of women and men

Interviews with both HHs and the heads of villages suggest that men have also taken on jobs that used to be done only by women. For example, men never went to harvest paddy rice before, they only took rice from the field to house. But now both men and women can do that. Men even "voluntarily" help the wife take care of the children, cook, wash dishes and clean. One of the reasons for this shift is access to information through mass media such as television in the past 10 years.

*"Today, people watch TV and know there must be equality between men and women. A few years ago, people did not have a TV, there was no electricity here. Electricity has been installed for a few years only. In the past, we didn't have nothing to see."* (NA\_AS\_TS\_Già Hóp Õ Õ\_Trưởng Xóm\_Thảo)

Most interviewees confirm that not only women but also men can do the housework and taking care of household members, and it is becoming popular that the husbands have helped their wives for the

recent years – especially since the gender equality law was issued and the communication on gender equality has been focused by authorities at all levels.

94.4% of surveyed HHs said that there has been no change in the responsibility for housework not only in last 3-5 years but also a long time ago. The women have been still mainly responsible for housework such as cooking, cleaning, washing clothes, fetching water, etc. Even the women are considered they do this task more carefully, more patiently and much better than men, therefore in the family the women should keep doing that.

Among the surveyed HHs, 72.6% report that the wife who is mainly responsible for housework while only 4.7% say that the husband does that. Similarly, 54.3% of surveyed HHs say that the wife is mainly responsible for taking care of other family members while only 4.8% of surveyed HHs say that the husband does that (Fig 9).

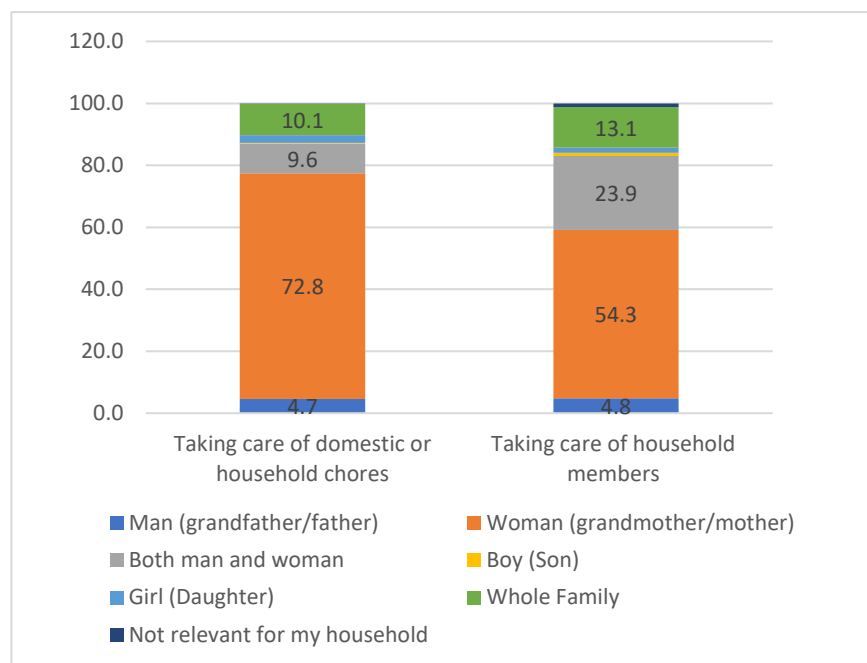


Figure 9. Responsibility for house chores and taking care of HH members

Both women and men interviewees are aware that the husband should help their wife do housework. It can help the wife to have more time to take a rest or to participate in community activities, which can help both to feel happier. However, all feel that when a man does housework, he is helping his wife rather than fulfilling his responsibility. With that awareness and attitude on equality in housework, many women say that they still do the housework because they see it as their responsibility. As expressed in the exchange below, the traditional view of women’s role in the household chores and men earning income is still embedded in these households. Some say that a woman is lucky if her husband “loves” her, and so he helps her do housework. When the husband does nothing, the wife has to do all housework.

**Women often do housework but they are not mainly responsible for that**

Q: In your village, women or men are mainly responsible for housework, such as washing, cleaning?

A: It is equality; the women often wash clothes but washing clothes is not the responsibility of the women.

Q: Do you mean that in all HHs, women often do that?

A: Yes, it is common. The men sometimes wash clothes as well. For example, when their wives are busy, the man will wash clothes when staying alone at home.

Q: Do you mean when the women don't stay at home, their husbands wash clothes, but the women are always in charge of washing clothes when staying at home?

A: Yes, that's right.

Q: In general, do you see which men or women have to spend more time to do housework?

A: The women have to spend more time (than men) to take care the children, washing clothes, cooking, ect. but the men also have to work harder jobs to earn money. So, that is the equality.

( HP\_YT\_ĐK\_Minh\_Truong xom)

#### 4.3.4. Economic empowerment

The number of households with people working far away has been increasing. In some villages in the survey, the percentage of households with people working far away is more than 80%. Households take advantage of their free time for agricultural production to work far away because the income from agricultural production is not enough for their living. Both men and women in the rural area started to engage in non-agricultural activities to earn extra income. According to the opinion of the village heads in interviews, households with people working far away from home are often better off than those without anyone working far away or HHs whose income depends entirely on agriculture or social protection. Although the other non-agricultural jobs that those working far away are often non-skilled hired jobs such as mason, housemaid, waiter, the wages from these jobs are still much higher than income from agricultural production.

As shown in Fig 10, among the surveyed HHs, 51% said that they have gained access to credit facilities for the last 3-5 years to get more economic opportunities. 40.7% have had more confidence to do things outside from home as work a non-agricultural job far away from home. 40.7% say that they have used time saved in collecting water or taking care of other HH members to participate in income generating activities. Only 17.3% and 9.0% respectively say that they have used water to expand and diversity livelihoods and have increased income due to improved rural water facilities.

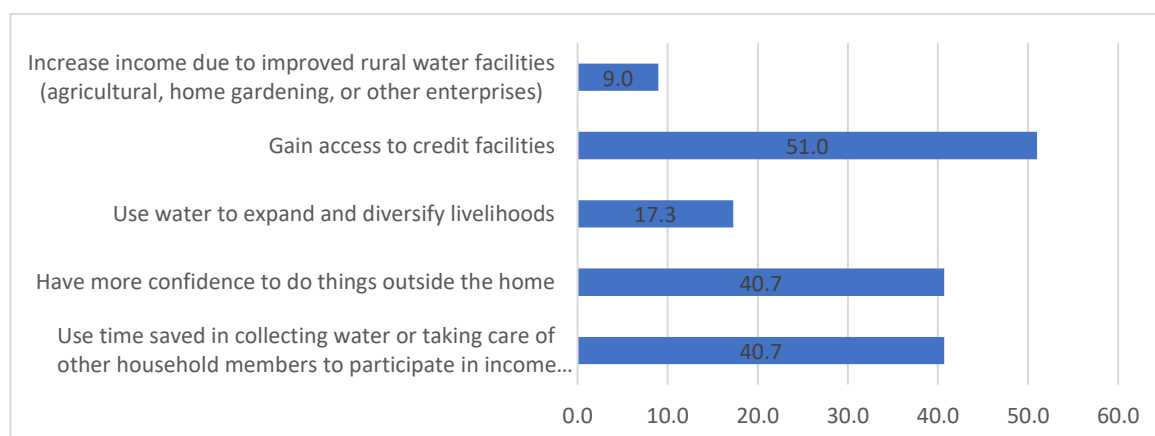


Figure 10. Changes in economic opportunities (%)

HHs that saved time spent on collecting water for the last 5 years have participated more in income generation activities and are more confident in earning money far away from home than those HHs that

report no change in time spent for fetching water. It is similar to the change in problems with the HH sanitation facility. The HHs whose problems with the sanitation facility changed for the last 3-5 years – or since they built latrines under the WOBA participated more in income generation activities and are more confident in earning money far away from home

In the surveyed areas, the WOBA intervention is in building latrines. So, it only can be said that building latrines under WOBA also contribute to increasing economic opportunities through saved time in taking care of other HH members and having more confidence to do things outside the home. However, there is no significant differences between men and women in relation to change in economic activities. It means that both men and women have increased economic activities due to the time saved in collecting water and the solved problems relating to the sanitation.

The wife is often considered as the member in family who is mainly responsible for financial management of HHs. The reason is that women often spend more sparingly than the men, and moreover, women do not spend money on wine or cigarettes. 39.5% of surveyed HHs in which the husband has the main responsibility for making decision on financial matter; 35.5% say that the wife plays this role; 17.4% both wife and husband make decision on financial matter. Most of the HHs that say the wife has the main role in financial issues are female headed HHs – who are mainly the single – mom, divorced, widow or the husbands in those family are disabled or so sick that can't join the economic activities. Similarly, the proportion of HHs with the husband responsible for earning money is higher than that with the wife having such responsibility (34.7% and 20.1% respectively). It appears that at the household level, there is still an equality gap between wife and husband in making decisions on financial issues although women still keep money for daily expenditure activities and participate in the income generation.

#### 4.3.5. Participation in community activities

One of the most common community activities is village meetings which are organized at least twice a year. In some surveyed villages, the village meetings take place every month. The proportion of HHs participating in the village meetings is quite high from 60-90% of total HHs in the village. According to the assessment from the village heads, the proportion of participants in the village meetings in Nghe An is higher than in Hoa Binh. The reason is that in Nghe An, most villages have developed their own regulations, those who do not join the village meetings will be fined about 50,000 to 100,000 VND. This money is remitted to the mutual village fund. Since these regulations are in place, households participate more fully in village meetings. In Hoa Binh, some villages also developed these regulations, however, they have not been in place, therefore, the proportion of HHs in the meeting is less.

In the surveyed HHs, 57.6% HHs say that the woman who are mainly responsible for attending and participating in the community meetings, while only 17.6% of HHs having the man doing that. This result is also consistent with the comments from the interviewees when they say most of participants in the meeting are female. It is because the men often work far away from home more than women, therefore, women have to participate in the village meeting. This is distinctly different to Western literature that often privilege women's participation in public meetings as a form of women empowerment. As seen in the exchange below, in the context of Vietnam, village meetings are often forums for the government to disseminate propaganda rather than two-way communication of citizens among each other and with the authorities.

*H: In the meetings, do the participants often give their opinions or speaking something?*

*Đ: No, very few*

*H: Which kind of HHs that the participants who often speak or give opinions in the meetings belongs to?*

*Đ: They are mainly the officials of village (such as of village Communist Party, Fatherland Front Association, village Farmer Union, ect.)*

*H: Are there more male or female participants?*

*Đ: Most are female*

*H: Why most participants are female?*

*Đ: In general, most of men in the HHs are working away from home, their wives stay at home, so their wife or their mother participate in the meetings, 80% participants are female.*

(HB\_TL\_NM\_Coi Vinh\_Hòa\_Trường thôn)

In the village meetings, most of participants tend to listen rather than actively participate in the meetings. Those who speak in the meetings are mainly the officials of the villages or HHs who are. The poor or near poor HHs rarely speak anything in the meetings,

*“They (the poor/near poor HHs) often keep silent, but they strictly abide by the regulations of the village even better than the medium or better off HHs” (HB\_YT\_ĐK\_Minh\_Truong xom)*

Women also rarely give their opinion in the meetings, even they have a concern or do not understand the content because they feel ashamed and self-deprecating if they speak up.

*Q: Have you ever given your opinion in the community meetings?*

*A: No, never, a normal resident with the limited education doesn't know to speak out, I only see some others give your opinion or consultation.*

*Q: Did you understand whatever they said?*

*A: Their speech lasted a whole afternoon so how I can remember everything. Now I can't remember anything they said. My memory has been declined due to the old age.*

*Q: When you heard something unreasonable or inconsistent, you didn't understand then did you raise a question or give your opinion?*

*A: If I don't understand anything, I will ask the village head when I meet him, but I never ask in the meeting.*

*Q: Why don't you dare to ask in the meetings?*

*A: I feel ashamed and afraid that others will comment my question.*

*Q: Ashamed?*

*A: Yes.*

(HB\_TL\_ĐL\_Dư\_Ko NVS)

The timidity and shyness of the women is one of the challenges for the meaningful participation in the community activities. HHs, especially women, have been encouraged to participate only but not to speak out, discuss and give opinions in the meetings. In some villages, the head of village even found out a way to reduce the “wrong” opinions of the participants.

*“In fact, in the past, there were often many opinions in the village meeting. One person was standing to give his/her opinion, others, especially some women, nearby also spoke up, the meeting became noisy and messy... So, I have learned from experience, those who wanted to speak did not stand in place, had to stand on here (the podium in the community house), turned down and spoke for everyone to hear, they had to say something properly but not the nonsense*

*things, so that others could hear, right? to see if they dare to speak, or trembled so said wrong issues...” (NA\_QH\_CT\_TQ\_Trường thôn\_Đạm)*

Overall, it appears that at the community level, the gender and social inclusion gap experience stems from the social and political norms of “public” meetings in Vietnam. The sense of exclusion experienced by HHs in community affairs is an intersection of entrenched culture and attitude of the village leaders and manifested shyness, shame and lack of voice in the HHs. These issues are wider than WASH issues that WOBA intervenes.

#### 4.4 Changes in gender equality and social inclusion in WASH sector

##### 4.4.1 Awareness on WASH for the vulnerable groups

All interviewees say that the vulnerable groups such as PWDs, poor HHs, elderly have basic needs, especially the need on WASH, and they should be prioritised in WASH services.

Similarly, 69.4% of respondents in the survey say that they are aware of the needs of different poor and vulnerable group. 62.1% are aware of the rights of poor and vulnerable groups to feel safe, secure and dignified; 64.8% agree the poor and vulnerable groups have a need to access to WASH services (Fig 11).

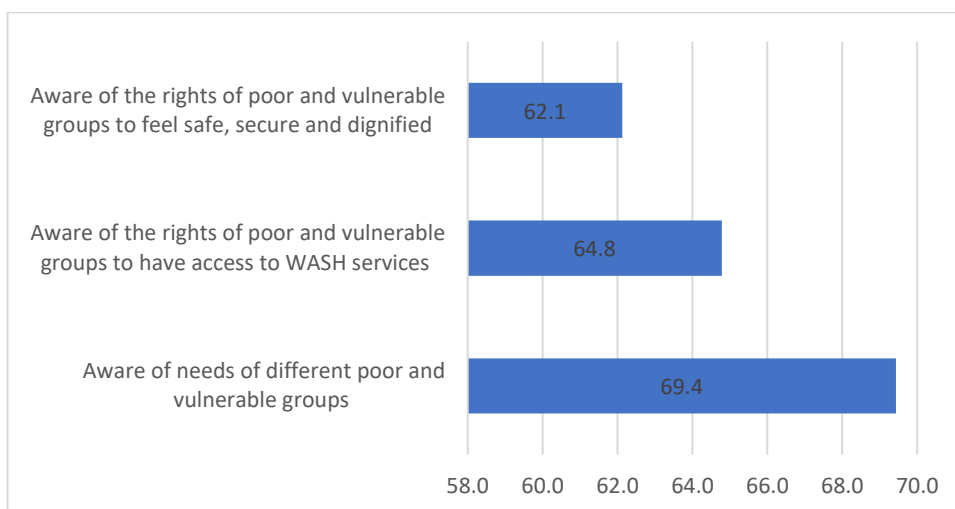


Figure 11. Changes in awareness of gender and social inclusion (%)

The poor and the vulnerable HHs are also aware of their own needs on WASH. They also want to build latrines, to have access to dug wells and to install the electricity water pump. However, in the opinion of the interviewees in the vulnerable groups, not all people can understand their needs on WASH. They claimed that in the village meetings, the village leaders often call their name as the HHs without latrines or water, which make them feel more ashamed and self-deprecating.

*Q: Why don't you speak up in the village meeting?*

*A: Feel ashamed (when they repeat many times that my HH haven't still built a latrine)*

*Q: Even when you have a concern, you don't raise a question in the meeting, either?*

*A: No, let it be.*

*Q: But if you don't speak out, how will the others can know about your needs and your rights?*

*A: They don't give the grant meaning that they don't understand. One-half of the world does not know how the other half lives. They don't understand our needs. We don't build a latrine as we don't have enough money. That's all.*

NA\_AS\_TS\_Quyết Thắng\_Hộ Ko NVS\_Liễu

#### 4.4.2 Attitudes toward people with disability

There are PWDs in most of the surveyed areas. Households with PWDs living are often considered to have more difficulties, and many localities also have annual visits to these HHs, give priority to them when delivering the gifts from the government and charity organizations.

*Q: How the people feel and interact with PWDs?*

*A: There is no stigma here. It is possible that those households do not receive the physical support. But they are encouraged to overcome the difficulties by other HHs. The other HHs can help to take care when the PWDs get sick or help plant trees, that's all.*

*Q: It means the HHs having PWD don't receive financial support from other HHs?*

*A: The other HHs don't have money to help HHs having PWD. But there is no stigma towards them.*

HP\_YT\_ĐK\_Minh\_Truong xom

Although there is a general sense of support for people with disabilities to gain access to WASH, the community's self-contribution to build a latrine for these households has not yet been implemented by any locality, either by labour or by money.

63.3% of respondents in the survey say that there are cash benefits and compensation given to the poor and vulnerable HHs to cover the expenses they incur to buying WASH products. 60% feel that there is provision of financial advice, loans and grants to poor and vulnerable groups including women to support WASH access and use. 44.9% mentioned the vulnerable groups were referred to local WASH service providers (Fig 12).

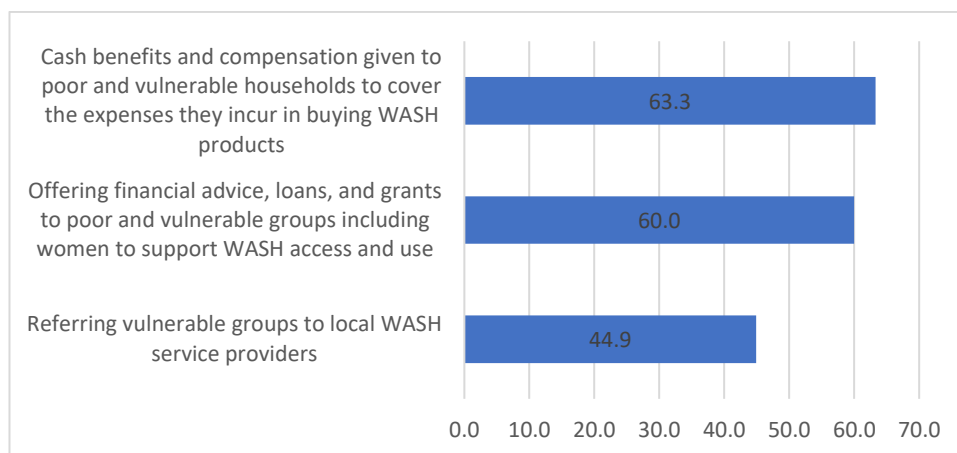


Figure 12. Practices toward gender and social inclusion in WASH

However, it should be noted that, half of the surveyed HHs in the study are the direct beneficiaries of WOBA, and they get the small grants to build their latrine. In the whole community, there may be a less people who observe these things.

40% of respondents say that they had a change in recognising that PWD could play a key role in WASH operations and policy making in the last 3-5 years. Although the proportion of HHs having PWDs who recognize that PWD could play a key role in WASH operations and policy making is higher than the proportion of HHs not having PWD (45.2% versus 39%), the difference is not statistically significant.

### 4.4.3 Practices of gender equality and social inclusion in relation to WASH

#### 4.4.3.1 Practices toward social inclusion

Although many survey respondents are aware of the idea of social inclusion in WASH, the practices of social inclusion in relation to WASH seems limited. In most of the survey area, there are no initiatives to enhance social inclusion in relation to WASH. So, although some respondents feel that the vulnerable groups need to be encouraged and supported in WASH and other aspects, they do not know how to participate in which movements or which activities.

*Q: Have you ever participated in any movements to support the PWD or the vulnerable groups?*

*A: I'm interested in but I don't know how to participate. For an example, there is a woman whose husband died of illness last, she had 4 children, so some women discussed with each other that if anyone had a lot or a little, let's donate to her so that she can bring up her children, and her children could go to school. I have never heard anything about support the PWD. Last year, the authorities called the support of 30,000 VND per capita for the disadvantaged HHs to overcome Covid 19 pandemic, and I also agreed to join.*

HB YT\_ĐK\_ĐB hộ dân\_Bùi Thị Tinh

Only 12.6% of surveyed HHs say that they bought adaptive latrine or water equipment to enable PWD to cope with accessibility issue. Only 11.5% of respondents accessed disabilities support services (such as adaptive devices, credit, and mechanized equipment) for WASH. There is no difference in these accessibility actions between the HHs with PWD and the HHs with no PWD.

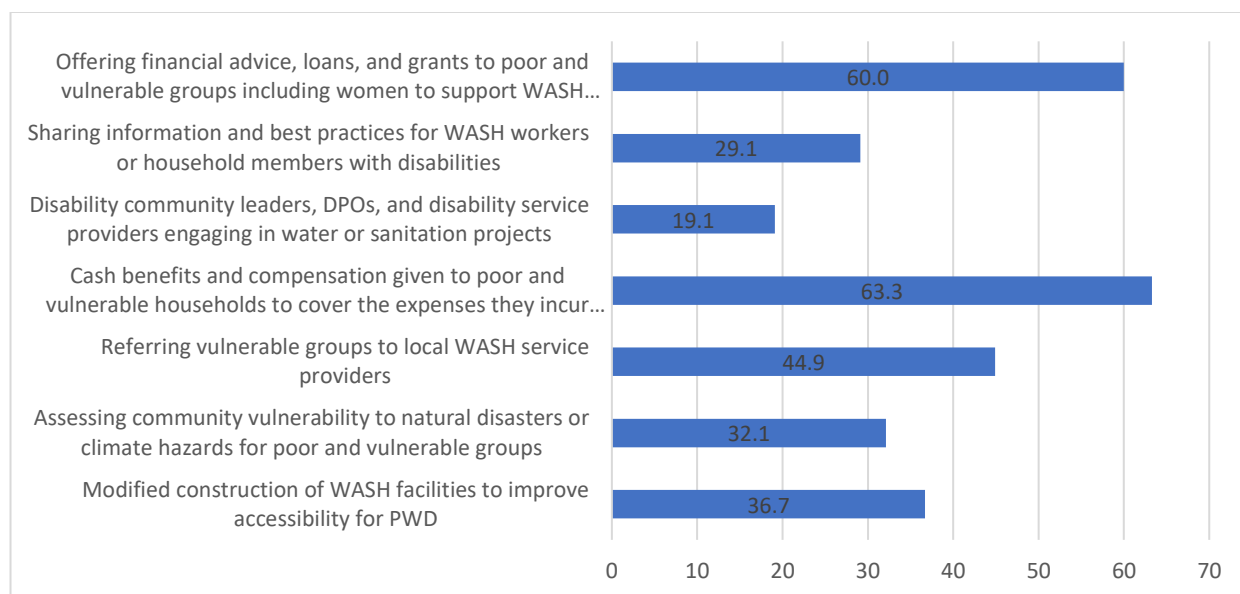


Figure 13. Practices toward social inclusion

Most village heads and HHs in the interviews agreed that the disadvantaged HHs should receive subsidy to improve their WASH situation. This is consistent with the results of the survey that 63.3% respondents were aware of or saw “cash benefits and compensation given to the poor and vulnerable HHs to cover their expenses incur in buying WASH products”. These cash and benefits were from a development project or from the state budget such as WOBA not from the community.



*“Every year, households are also encouraged to contribute money to buy gifts in the Tet holiday for poor and advantaged households, but they have never been asked to contribute money or labor to build latrines for these households”. (HB\_TL\_Bài Trang\_Văn\_Trường xóm)*

*One of the given reasons is the difficult living condition of the HHs in the village. “I see that the households really want to support the poor households who don't have a well and don't have a latrine, but they have nothing to support, their lives have been still difficult”.*

*(HB\_YT\_ĐK\_Hoàng\_Trường xóm).*

Through training of local masons on building latrines for PWDs, and some mobilization activities to encourage to build latrines for PWD, the community has started to be interested in and having some knowledge about latrines for the PWD. However, there are some challenges for the design of the latrine for PWD to be applied in practice. For example, information and best practices have been shared for WASH workers and HHs members with disability; but there are very few HHs which applied them to build their latrine. Building the new latrine is considered as the big effort for disadvantaged HHs given that they did not have hygienic latrine before. It is difficult for them to follow the design of the latrine for the PWD because the cost of a latrine for the PWD is much higher. Similarly, the design of latrine (such as bidet, bathroom floor tiles, handrails) for elderly people have not yet applied by those HHs with elderly members at the time they built their latrines.

*Honestly, it is very difficult for these HHs who have PWDs. They are using the temporary unhygienic latrines, their wish of having a new hygienic one is still considered a luxury, so it is difficult for them to build a full latrine with higher cost for one or two PWDs in family who can use it. They are still living in the seriously degraded houses due to not having money. So, they don't think it's really necessary to build a latrine (NA\_TK\_ĐV\_Nhà Tra\_Trường xóm\_Tuấn).*

#### 4.4.3.2 Practices toward gender equality

As shown in Fig 14 below, some activities towards gender equality in relation to WASH such as incentives implemented for women to take up WASH roles (28.9%) and women taking up role in water operations (32.2%) have started to be recognized and supported by HHs.

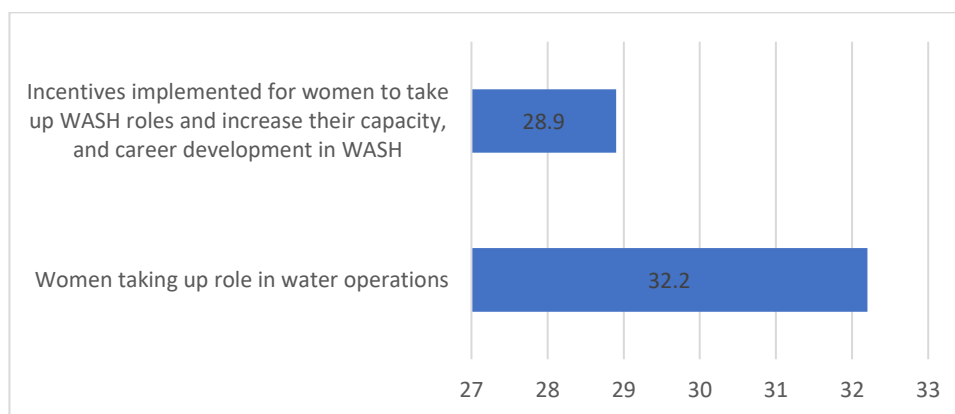


Figure 14. Practices toward gender equality

Some village heads in the interviews mentioned that it was necessary to increase the incentives for the staff or WU to encourage them to persuade the disadvantaged HHs. It means that they are aware of and recognise the contribution and roles of WU staff, and incentives could motivate these WU members to participate more to enhance effectiveness of the interventions.

*It is necessary to increase the incentives for the village WU in the activities in WOBA. It is a motivation for them to participate more actively, that helps the WU get more successes and helps the results spread wider. (NA\_TK\_ĐV\_Nhà Tra\_Trường xóm\_Tuấn)*

There is only one commune having the piped water supply system in the survey. Although the heads of village and HHs do not require members in water operation committee to be male, and that women are in charge of checking and repairing the burst water pipe, there are no women in the committee.

*Q: With two HHs (in the group of 24 HHs) in charge of checking and repairing the burst water pipe, who in these families is responsible for?*

*A: One person in a HH. It is unnecessary that is male or female, both genders can do.*

*Q: Have you ever checked and repaired the burst water pipe?*

*A: Yes, many times.*

(HB\_TL\_Bài Trang\_Hộ Ko NVS\_Dư)

#### 4.4.4 Comparison between WOBA and non-WOBA HHs

To consider the possible attribution of WOBA to GSI impacts in WASH, the survey data were split into two groups:

(1) HHs participated in WOBA (WOBA HHs), they include the HHs who have taken up latrines/water connection or once registered to participate in WOBA but not taken up anything (they were assumed to get certain information in relation to WASH through the communication activities during the registration process);

(2) the HHs absolutely didn't participate in WOBA (non-WOBA HHs).

The Chi square tests were used to consider the statistically significant differences in changes in gender equality and social inclusion between two groups.

##### 4.4.4.1 The differences in changes in awareness in relation to WASH

There are statistically significant differences<sup>5</sup> in changes in awareness and practices in relation to WASH between WOBA HHs and non-WOBA HHs. As shown in Fig 15, there are higher proportions in WOBA HHs compared to non-WOBA HHs in understanding the benefits of WASH for health (89.8% versus 76%), washing hands or doing other hygienic practices more regularly (85.4% versus 74.7%), less disease and illness due to better hygienic practice (70.1% versus 54%), feeling more safe and secure due to improved water and sanitation (59.3% versus 31.3%), gaining access to more WASH services (22.1% versus 14,8%) and feeling prouder of the WASH facility in the family (53.1% versus 19.3%).

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<sup>5</sup> Sig. < 0.05 in the Chi square tests.

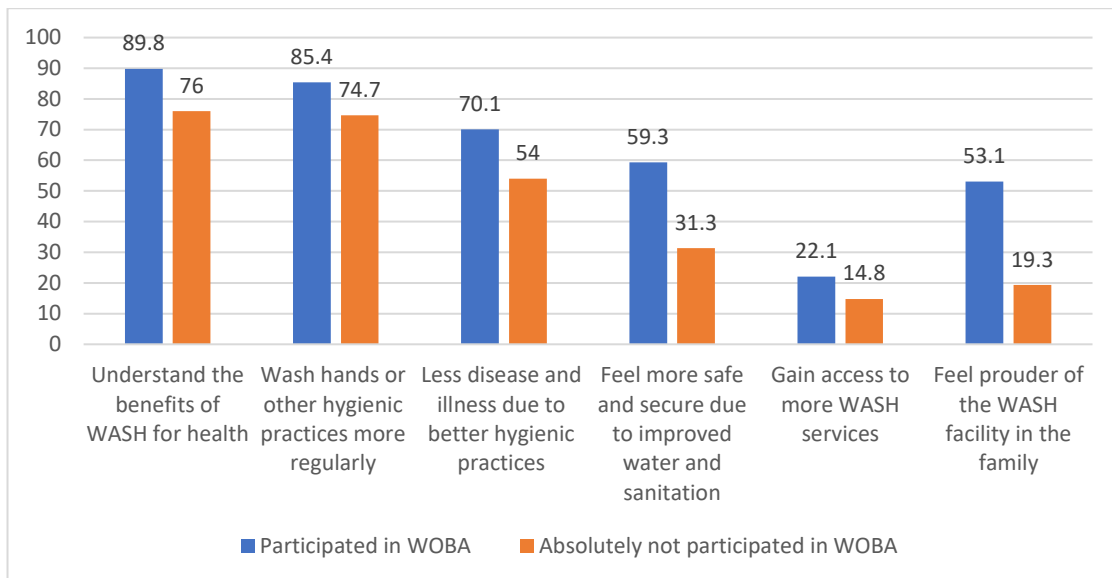


Figure 15. The differences in awareness and practices in relation to WASH between WOBA and non-WOBA HHs

However, there isn't statistically significant difference between WOBA HHs and non-WOBA HHs in changes in paying any housing modifications to access and using water, buying new adaptive latrine or water equipment to cope with accessibility for PWD, secure alternative means of transport to get to water points and accessing disabilities support services for WASH. This result is consistent with the challenges for the design of the latrine for PWD to be applied in practice and the limited number of HHs having to fetch water for daily domestic consumption as mentioned in the previous sections.

Similarly, there are higher proportions of WOBA HHs increasing knowledge and skills in water and sanitation services and participating in WASH activities as a bring benefits to the community compared to these proportions of non-WOBA HHs (68.4% and 51.1% versus 54% and 26.7%).

#### 4.4.4.2 *The differences in changes in awareness and attitude to gender and social inclusion*

There is a trend that the WOBA HHs have better awareness and attitude to gender and social inclusion than the non-WOBA HHs (Fig 16). For example, 73% of WOBA HHs are aware of needs of different poor and vulnerable groups while this figure of non-WOBA HHs is only 58.7%. Or 62.6% of WOBA HHs recognize that women could play a key role in WASH operations and policy making, but there are only 51.3% of non-WOBA HHs recognise that.

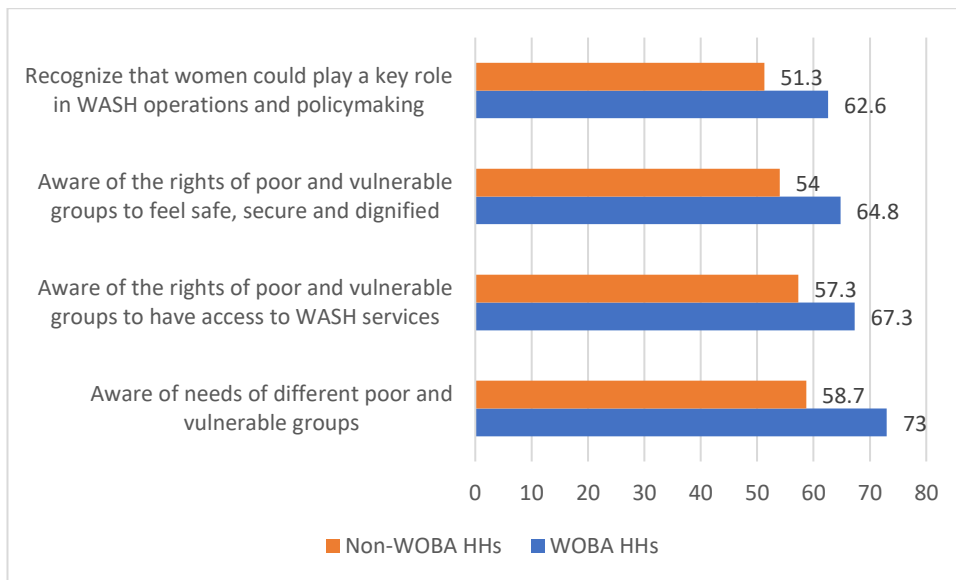


Figure 16. The differences in in changes in awareness and attitude to gender and social inclusion between WOBA and non-WOBA HHs

However, there is no difference in recognising of the role of PWD in WASH operation and policy making. It is similar to the above claim that the activities in relation to PWD in community are very limited.

#### 4.4.4.3 The differences in economic opportunities

There is no statistical difference in using water to expand and diversity livelihoods or increasing income due to improved rural water facilities between WOBA HHs an non-WOBA HHs. The reason is that there is no project intervention in relation to water supply in the surveyed communes.

There is no statistical difference in gaining access to credit facilities as the economic conditions between WOBA HHs and non WOBA HHs. But it seems that participating in WOBA makes HHs use time saved in taking care of other HH members to join income generating activities and have more confidence to do things outside the home. 44.0% and 44.7% of WOBA HHs agreed with these statements while those figures of non-WOBA HHs are only 30.7% and 28.7% respectively.

#### 4.4.4.4 The differences in practices in relation to WASH at community and institutional levels

Although there are many differences in the awareness and attitudes on gender and social inclusion in relation to WASH, the difference in practices between WOBA HHs and non-WOBA HHs is very limited. There is only difference in seeing the practice of conducting accessibility and safety audits at WASH facilities between these two groups (78.1% of WOBA HHs compared to 48.7% of non-WOBA HHs). It means that the WOBA HHs have a certain knowledge about the verification process of latrine under the WOBA.

There is no difference between two groups in other practices toward to gender and social inclusion at household and community levels such as modifying construction of WASH facilities to improve accessibility for PWD, referring vulnerable groups to local WASH service providers, sharing information and best practices for WASH workers or HH members with disabilities, assessing community

vulnerability to natural disasters or climate hazards for poor and vulnerable groups, disability community leaders and disability service providers engaging in water or sanitation projects.

In terms of perceived need for policies to promote GSI, there are only two statistically significant differences in development of disability inclusive national WASH policies and development and/or adoption of standards for PWD in WASH facilities. However, these gaps between WOBA HHs and non-WOBA HHs are not big (85.5% and 84.1% compared to 74.7% and 72.7% respectively).

Overall, it seems that there is a difference between WOBA and non-WOBA HHs in awareness and attitude toward gender equality and social inclusion in relation to WASH. But this difference is not obvious in both practices at household, community level and institutional level.

#### *4.5 Factors impact the positive change toward gender and social inclusion*

##### *4.5.1 Factors facilitating positive change at household and community level*

Before running the regression models with the variables indicating positive change toward gender and social equality, the Chi square correlation tests, reliability analysis and exploratory factor analysis are conducted.

- The Chi square correlation tests aim to determine if a difference between observed data and expected data is due to chance, or if it is due to a underlying relationship between the variables. If there is a statistically significant relationship between independent and dependent variables in the Chi square correlation tests, the independent variables will be considered to put in the regression model.
- The reliability analysis aims to study the properties of measurement scales and the items that compose the scales.
- The exploratory factor analysis is used to identify the structure of the relationship between the variables to reduce data to a smaller set of summary variables and to explore the underlying theoretical structure of the phenomena.

The results of reliability analysis and exploratory factor analysis is also a basis to determine which independent variables (divided into personal characteristics, family characteristics, and WASH interventions) will be put in the regression models with the dependent variables in relation to the positive gender and social inclusion impact at HH and community levels (Table 3).

Table 3. Survey items (variables) indicating positive change toward gender and social equality

Variables for changes at HH level	Variables for changes at community level
<p><b>Changes in relation to WASH access and use</b></p> <ul style="list-style-type: none"> <li>- Less disease and illness due to better hygienic practices</li> <li>- Feel more safe and secure due to improved water and sanitation</li> <li>- Gain access to more WASH services</li> <li>- Pay any needed housing modifications to access and use water</li> <li>- Buy new adaptive latrine or water equipment to cope with climate risk</li> <li>- Buy new adaptive latrine or water equipment to cope with accessibility for PWD</li> <li>- Secure alternative means of transport to get to water points</li> <li>- Access disabilities support services (such as adaptive devices, credit, and mechanized equipment) for WASH</li> <li>- Feel prouder of the WASH facility in the family</li> </ul>	<p><b>Changes in relation to providing WASH services</b></p> <ul style="list-style-type: none"> <li>- Increase knowledge and skills in water and sanitation services</li> <li>- Participate in WASH activities to bring benefits to the communities</li> <li>- Recognised for my contribution in WASH activities</li> </ul>
<p><b>Changes in relation to the awareness of needs and rights of women, the poor and vulnerable groups</b></p> <ul style="list-style-type: none"> <li>- Aware of needs of different poor and vulnerable groups</li> <li>- Aware of the rights of poor and vulnerable groups to have access to WASH services</li> <li>- Aware of the rights of poor and vulnerable groups to feel safe, secure and dignified</li> <li>- Recognise that women could play a key role in WASH operations and policymaking</li> <li>- Recognise that PWD could play a key role in WASH operations and policy making</li> </ul>	<p><b>Changes in practices</b></p> <ul style="list-style-type: none"> <li>- Conducting accessibility and safety audits at WASH facilities</li> <li>- Modified construction of WASH facilities to improve accessibility for PWD</li> <li>- Assessing community vulnerability to natural disasters or climate hazards for poor and vulnerable groups</li> <li>- Referring vulnerable groups to local WASH service providers</li> <li>- Offering financial advice, loans, and grants to poor and vulnerable groups including women to support WASH access and use</li> <li>- Disability community leaders, DPOs, and disability service providers engaging in water or sanitation projects</li> <li>- Women taking up role in water operations</li> <li>- Sharing information and best practices for WASH workers or household members with disabilities</li> <li>- Cash benefits and compensation given to poor and vulnerable households to cover the expenses they incur in buying WASH products</li> <li>- Incentives implemented for women to take up WASH roles and increase their capacity, and career development in WASH</li> <li>- Training or information on gender for water utilities, NGOs, contractors and other stakeholders (e.g., elected officials, government staff, community leaders)</li> </ul>
<p><b>Changes in relation to economic opportunities</b></p> <ul style="list-style-type: none"> <li>- Use time saved in collecting water or taking care of other household members to participate in income generating activities</li> <li>- Have more confidence to do things outside the home</li> <li>- Use water to expand and diversify livelihoods</li> <li>- Gain access to credit facilities</li> </ul>	

Based on the results of Chi square correlation tests, reliability analysis and exploratory factor analysis, the independent variables were divided into three following groups and put in the regression models:

1. Variables group on personal demographic characters: Sex, age, ethnicity, education
2. Variables group on family characters: Type of HHs (poor, near poor, non-poor), HH having elderly, HH having PWD, female headed HH, type of income (agricultural/non-agricultural income source, income)
3. Variables group on intervention activities includes the following subgroups:
  - Uptake of latrine from WOBA: Having septic tank latrine; Saved time spent on collecting water.

- Attend the communication activities and training on WASH: Attend public planning or communication on WASH; Attend training or receive information on designing and implementing WASH for PWD; Attend training or receive information about livelihood in rural communities; Attend training or receive information about political processes or policies in WASH
- Experience of the training/communication activities on WASH: WASH and benefits were clearly explained to the audience; I felt encouraged to engage in finding out more about what WASH was being promoted after attending the event; The presenter was motivated to promote WASH for persons with disabilities; I felt safe to ask questions and share my views; I was able to read and understand the content of the materials provided in the training/promotional events or information received; I was able to hear the presenter and understand what he/she said in the training/promotional events; The content of the materials provided in the training/promotional events or information received was useful for my understanding about WASH; attended any training/promotional event or received information about water, sanitation and hygiene.

#### 4.5.2 Regression results: factors facilitate the positive change at household level

##### 4.5.2.1 Changes in relation to WASH

The variables group on personal demographic characters doesn't have much impact on the changes in relation to WASH at HH level except for:

- Minority ethnicities gain access to more WASH services than the Kinh – the majority ethnicities in Vietnam in the last 3-5 years. The ethnic minority HHs have also bought new adaptive latrine or water equipment to cope with climate risk and accessibility for PWD and access disabilities support services for WASH. It is because, the Kinh HHs had accessed to WASH serviced already, even long time before the ethnic minority HHs did that.
- Age is also a factor impact the access disabilities support service for WASH. The higher age group has tended to access more disabilities support service for WASH for several years. It can be explained the older have more needs to use disabilities support service for WASH when their mobility becomes to reduce.

Among the variables in the variables group on family characters,

- Type of HHs (poor/near poor) also impact buying new adaptive latrine or water equipment to cope with climate risk and accessibility for PWD.
- Non- poor/near poor HHs are more ready to pay for new adaptive latrine or water equipment than the poor/near poor HHs.
- HHs not having PWD have also gained access to more WASH service than the HHs having PWD.

There are some variables in the WASH intervention activities:

- The most significant changes as result of taking up latrine under the WOBA are: reduction of disease and illness due to better hygienic practices, feel more safe and secure due to improved water and sanitation, gain access to more WASH services, helps the HHs pay any needed housing modifications to access and use water such as installing water pipeline, building water

tank, etc. and buy new adaptive latrine or water equipment to cope with climate risk and accessibility for PWD.

- The experience of the training/promotional events or public planning or consultation on WASH have impact on the changes in relation to GSI in terms of: WASH and benefits were clearly explained to the audience, feeling encouraged to engage in finding out more about what WASH was being promoted after attending, feeling safe to ask questions and share views. This shows the importance of meaningful participation in the events/trainings/meetings in changes in relation to WASH.
- Accessing more water sources and saving time on collecting water also have positive changes, wherein they help HHs to feel more safe and secure due to improved water and sanitation as well as be more ready to pay any needed housing modifications to access and use water. This indicates the two-way relationship of WASH access and HHs' desire for WASH.
- One of the biggest changes from WASH activities is the prouder feeling on WASH facility in the family. The independent variables can explain nearly 50% of the variation of the dependent variable ( $R^2=0.487$ ), in which, the HHs taking up latrine from WOBA have the biggest impact on the change in the prouder feeling of the WASH facility in the family (see Table 4).

This change in the prouder feeling on the WASH facility in the family when the HHs can take up the latrine can result in other changes such as more confidence to do things outside the home as mentioned above. This means that mobilisation activities could be more effective by focusing on improving self-esteem of the HHs without latrine and involving poor HHs with latrines. In this way, households with latrines can inspire and share their own positivity and experiences with those without latrines and motivate the latter to build latrine.

#### *4.5.2.2 Changes in relation to gender and social inclusion*

Among the variables in the group on personal demographic characters, sex impacts on awareness of needs of different poor and vulnerable groups and awareness of the rights of poor and vulnerable groups to have access to WASH services. Regression results suggest that women have more awareness of the needs and the rights of the poor and the vulnerable groups to access WASH services than the men. It is explained that the women have participated in the community activities more than the men when the men work far away from home more than the women. Therefore, this helps the women raise more awareness on these matters.

In the variables group on family characters, ethnic minority HHs seems to have less awareness than the Kinh HHs on the rights of the poor and vulnerable groups to feel safe, secure and dignified and recognising that the women and the PWD could play a key role in WASH operations and policy making. In this regard, the intervention activities on raising awareness of gender and social inclusion in WASH should focus more on the ethnic minority HHs.

Once again, meaningful participation (such as well-understood, encouraged to find out, shared the views, etc.) in community meetings, consultations, trainings or promotion events have positive impacts on the changes in relation to GSI. Non-meaningful participation as "attendance in silence" does not promote changes in awareness and attitude in relation to gender and social inclusion.



There is significant evidence that the positive changes in access to water or sanitation facility also contribute to raising awareness on gender and social inclusion in WASH.

#### *4.5.2.3 Changes in relation to economic opportunities*

- Results from regression tests suggest that women gain more economic opportunities such as using time saved in collecting water or taking care of other household members to participate in income generating and having more confidence to do things outside home than men. Taking up latrine under WOBA and saved time from collecting water are also important factors impacting economic opportunities.
- In term of ethnicity of surveyed HHs, the Kinh HHs take advantage to have more economic opportunities such as more confidence to do things outside home, using water to expand and diversity livelihoods or gaining access to credit facilities than the minority HHs.
- The variables of the poor/near poor/non-poor HHs and income also influence on economic opportunities. The poor and lower income have less economic opportunities than the non-poor and the higher income HHs. It is because the resources such as capital, knowledge, capacity and even labor are more limited compared with better off HHs. Time saved from collecting water impacts on all variables in relation to economic opportunities. The HHs who saved more time from collecting water have more economic opportunities.
- The factors of meaningful participation in trainings/promotion events and community meeting are also positively impact on economic opportunities.

#### *4.5.3 Regression results: factors facilitate the positive change at community level*

##### *4.5.3.1 Changes in relation to providing WASH services to community*

The variables group on personal demographic characters does not have much impact on the changes in relation to providing WASH service to the community.

- Women have more change in providing WASH service to the community than men. The women also are recognised for their contribution on WASH activities. It is because the WU at all levels have involved in WOBA under the direction of the local authorities. It cannot be denied that women have played a huge role in mobilising and helping disadvantaged households to build toilets in recent years. These women's efforts have also been recognised not only by the women themselves, but also by the authorities and households.
- The non-poor HHs recognised for their contribution in WASH activities more than the poor/near poor HHs. As mentioned above, this could be because poor/near poor HHs have more limited access to WASH and thus can participate in less WASH activities compared with non-poor.

Meaningful participation continues to impact on the change in relation to providing WASH services such as increasing knowledge and skills in water and sanitation services, participating in WASH activities as bringing benefits to the communities.

##### *4.5.3.2 Changes in the practices of GSI in the community*

There are not many personal demographic variables which impact the practices of gender and social inclusion in the community.

- Sex only impacts the practice of women taking up role in water operation. Female respondents are aware of this practice more than the male respondents. It may be because the women

participate more in the community meetings than they can pay attention more the activities in relation to WASH under the WOBA of WU at commune and village levels.

- HHs with PWD are more aware of practices relating to PWD compared with HHs without PWD. These practices relating to PWD include referring vulnerable groups to local WASH service providers and sharing information and best practices for WASH workers or household members with disabilities. It can be explained that the HHs having PWD are more interested in issues relating to disability and pay attention or participate in these practices than those without PWD.

Among the intervention variables group,

- Attending the activities relating to PWD such as working with DPO, attending training or receiving information on the designing and implementing WASH for PWD also impact on the awareness of the inclusive practices relating to disability in the community. It means that, someone many are not interested in PWD because they haven't had any chances to participate in the communication activities relating to the PWD.
- The positive changes in household WASH facilities impact the better awareness of practices in relation to GSI in the community. Participation in the meeting/training/events still have a great impact on the awareness of practices in relation to GSI in the community. The more meaningful participation helps the attendants understand the needs of GSI and pay more attention to the practices in the community.

#### 4.5.4 Barriers constrain the positive change at HH and community level

Although the economic condition is not the direct factor influencing positive changes in WASH, poor and disadvantaged HHs lack financial resources to build their latrines. Most of HHs without latrines in the survey are also included in the list of beneficiaries under WOBA. However, only HHs with better economic condition could build a latrine with the subsidies from WOBA because it is a very small amount compared to the total cost of the latrine. The septic tank latrine is considered as the hygienic one and the best one. Most of HHs without latrine also want to build septic tank latrine. The lack of different levels of subsidies for different types of latrines is also a reason why some households who do not have latrines have not yet taken up the project's subsidy to build latrines.

Another reason that some HHs haven't taken up latrines because building latrine should be considered as a part of the house. Building latrine in advance can make building/improving house or dwelling in the future more difficult especially when the HHs want a septic tank located in their house. However, building/improving house takes a lot of money, so some HHs needs more time (even years) to accumulate money to be able to build latrine and house at the same time. It is a cultural barrier to improving better WASH facilities at the household level.

Consequentially, limited access to WASH facilities will constrain these positive changes for GSI at HH level. Therefore, if the target of intervention activities in relation to WASH aims to the gender equality and social inclusion or economic opportunities, it is necessary to provide the interventions to enhance the access to WASH for the community including the most disadvantaged groups.

In the previous section, communication activities such as trainings, promotional events, community consultation and public planning on WASH play an important role in the changes in WASH, gender and social inclusion and economic opportunities. However, the weak participation of attendants in these

activities in a meaningful way only constrain the positive changes in WASH and social inclusion at HH level. Integrating the content relating to WASH into the community meetings in which there are a lot of other contents presented and discussed is not enough because general community meetings tend to have about 100 attendants, which do not provide an enabling environment for all participants, especially the poor or the vulnerable groups, to understand the content, raise their questions, share their opinions and discuss the planning in relation to WASH.

At the community level, intervention activities impact changes in awareness of the practices in relation to WASH and gender and social inclusion at community level. However, the limited communication activities and even less practices of WASH services for PWD and elderly people constrain extent of positive change in GSI.

#### 4.5.5 Institutional/policy changes on WASH for gender and social inclusion

In the variables group on personal demographic characters, it is interesting that men support the government policy level to improve gender and social inclusion more than women, especially the policies on development of disability – inclusive national WASH policies, development the standards for PWD in WASH facilities and mainstreaming disability inclusion in WASH project at all levels. Although women participate in the community activities more than men, it seems that it is not enough to change the women's attitude and behavior on WASH policies for PWD.

The male headed HHs and the HHs without PWD also support all policies to enhance the gender and social inclusion more than the female headed HHs and the HHs having PWD. The lowest income HHs support the policies on development of disability – inclusive national WASH policies and resource allocation for disability – inclusive water and sanitation operations more than the HHs belonging to two higher income groups.

Kinh HHs support the policies on representation of women in leadership positions in government structures including making roles, partnership between the WASH, disability and ageing sectors in planning, implementing and policy making in WASH and policy on revenue and tariff arrangements including free or subsidized facilities for poor and vulnerable HHs more than the ethnic minority HHs.

Meaningful participation in the community meetings, trainings, promotion events, public planning and community consultation on WASH is still an important factor that impacts on the respondents' support at the government policy level for improving gender and social inclusion in relation to WASH.

The somewhat vague perceptions on gender and social inclusion in relation to WASH are due to lack of the detailed laws and regulations. It seems that supporting disadvantaged groups is considered the responsibility of the state, rather than responsibility of each family and individual in society. The central government has been showing a renewed strong commitment toward an equal and inclusive society through two official letters: Letter #28/NQ-CP dated on 3 March 2021 on issuing the national strategy on gender equality in period from 2021-2030 and Letter #1719/QĐ-TTg dated on 14/10/2021 on deciding to approve the national target program of social economic development for ethnic minority and mountainous area in period from 2021-2030, phase 1 from 2021-2025. However, it seems that they are not specific enough for the targets of interventions in relation to gender equality and social inclusion in relation to WASH sector. The WOBA project seems to align with the policy setting in its consideration of poor and GESI HHs as target beneficiaries of WASH subsidies rather than the actors for positive changes in WASH.

## 5. Conclusions and implications for policy and practices of GSI in WASH

### 5.1 Conclusions

This section summarises the findings to answer the two research questions.

#### 1. To what extent has WOBA enhanced gender and social inclusion at the household, community and institutional level?

##### *Household level*

At the household level, there are obvious evidence of positive changes among surveyed HHs in awareness on WASH such as understanding of benefits of WASH for health, washing hands or other hygienic practices more regularly, less disease and illness due to better hygienic practices, increasing knowledge and skills in water and sanitation services. These changes have a relation with participating in WOBA due to the higher proportion of WOBA HHs compared to non-WOBA HHs.

There is a significant difference between WOBA and non-WOBA HHs in changes in awareness on needs and rights to have access to WASH services of the poor and vulnerable groups and the rights of these groups to feel safe, secure and dignified as well. However, there have been no changes in practice in relation to WASH toward social inclusion evidenced by the lack of buying new adaptive latrine or water equipment to cope with accessibility for PWD to modifying construction of WASH facilities to improve accessibility for PWD.

Other changes at HH level include using saved time in taking care the HH member to participate in income generating activities, that can help to enhance gender equality in HH. However, there is no evidence for the changes in responsibility of housework or decision making in family under WOBA. It seems that the changes in awareness and attitude on responsibility of housework or decision making in family are not from WOBA but other communication activities and interventions of other projects/programs having been conducted for more than last ten years.

##### *Community level*

At the community level, there are differences between WOBA-HHs and non-WOBA HHs in increasing awareness and attitude that women could play a key role in WASH operations and policy making. However, there is no evidence to see that the different changes between WOBA and non-WOBA HH in practices that women taking up role in water operations or incentives implemented for women. Although the participation of women in the community meetings have been increasing in recent years, and this change occurs in the context that many men work far away, so women at home have to take on more responsibility to participate in community activities, their participation is not enough meaningful to make the different changes at community level.

Currently, the local government also has charity movements and activities to support marginalized HHs such as PWD, the poor, etc. However, separate movements and activities for each disadvantaged group to access to WASH services is completely absent. In the WOBA project itself, the communication activities on building a toilet for disadvantaged groups such as the PWD and the elderly are only discussed among internal WU but have not yet spread to households in the project community. However, prioritizing to build latrines for this target group in the WOBA project is also the basis for helping HHs understand that disadvantaged groups also have needs and rights to access appropriate WASH services.

### *Institutional level*

At the institutional level, it is undeniable that participating in the WOBA project helps to further affirm WU's position in local government structure where the WU keeps a position among six key positions under the direction of communist party including Head of village, fatherland front, Farmer association, Youth Union, Women union, Veterans association. However, this is an inherent structure with roles and responsibilities pre-assigned, as WASH issues are mostly delegated to WU, so it's difficult to change this structure. Moreover, there is no difference between WOBA and non-WOBA HHs in awareness on the necessary legal policy to improve the gender equality in general and in WASH in particular.

Although the proportion of surveyed HHs supporting for the policy of supporting the disadvantaged group in accessing WASH service is high, there is no clear evidence to consider whether this policy support is due to WOBA or not. The WOBA considers disadvantaged groups as beneficiaries, but there is no activity to mobilize disadvantaged groups in the community to participate in project activities such as consulting on latrine models for PWD or elderly, participate in propaganda and advocacy activities for households. In the surveyed communes, there have not been any people with disabilities and the poor have been able to participate in community leadership positions.

## **2. What are the factors that facilitate or constrain positive change toward gender and social inclusion at the household, community, and institutional level?**

At both household and community levels, factors such as personal characteristics (e.g., sex, age, education) or family characteristics (e.g., economic status, ethnic minority status) have an unclear impact on gender and social equality. Intervention factors such as taking up latrines, meaningful participation (e.g., well-understood, encouraging to find out, shared the views) in community meetings, consultation, trainings or promotion events have positive impacts on the changes in relation to gender and social inclusion.

Constraining factors include non-meaningful participation as “attendance in silence” does not promote changes in awareness and attitude in relation to gender and social inclusion; limited communication activities relevant to WASH content and GSI; poor and disadvantaged HHs’ lack of resources to build their latrines. Lack of financial resources also has an iterative effect in its barrier to WASH access which further perpetuate gender and social exclusion.

### *5.2. Implications for policy and practices*

One of the factors impact the positive changes in gender equality and social inclusion in WASH is the taking up the latrine, while the biggest barrier for the surveyed HHs who are mostly the poor and vulnerable HHs to take up the latrine is the financial issue. This finding is similar to other studies in WASH, that point to affordability and its link to unequal access to water and sanitation services (RWSN, 2016, World Bank, 2004). The implications offered here include:

- The subsidy model should aim to provide financial support in a way that is effective to promote WASH uptake. It is necessary that such intervention model include the most disadvantaged groups and subsidies are designed to enable choice and uptake of different type of latrines relevant to the economic conditions and needs of the HHs.
- The results of this study suggest that intervention activities particularly in mountainous regions should focus more on ethnic minority HHs to ensure that they can improve their awareness and participate in the intervention equally with the Kinh HHs.

- It is necessary to design the communication activities such as trainings, promotional events, community consultation and public planning on WASH, so that they allow for meaningful participation for all participants. There should be activities that engage participants to discuss, debate, give opinions and ensure they understand the content clearly. Small group activities are better suited to this goal.
- Beside the intervention activities in the development project, the movements and IEC campaign on gender equality and social inclusion should be conducted and led by the authorities, the mass organisations and other local organisations to raise awareness, attitude and practices on enhancing the gender equality and social inclusion in WASH.
- Increasing roles and responsibilities for women to participate as positive change agents with access to WASH is an important factor that should be recognised by the community and the local authorities and national government.

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