

## **COMMUNITY PARTICIPATION IN RURAL WATER SUPPLY: A CASE STUDY IN MY HOA – TRA VINH**

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### **ABSTRACT**

This study examines the level of community participation in rural water supply in Vietnam from two approaches: (1) the legal documents at the top level as well as implementing guidances and (2) the case study of community practice and awareness about their role in local water supply. Rural water supply policy and regulations are assessed to point out how they allow and support community participation. A survey conducted in My Hoa commune, Tra Vinh province, with the total of 152 households, reveals the levels and types of the community participation, from which some lessons learned can be drawn. The engagement of the community in monitoring and maintenance of the water supply infrastructure is seen as a key for the sustainability of the clean water supply service. Recommendations are given to improve community participation, and therefore to have better clean water supply service in rural areas.

*Keywords:* community participation, rural water supply, sustainability.

### **1. INTRODUCTION**

Community participation has been used to address the underprovision of public goods and services and to reduce social, political, and economic inequality [1]. After the first International Drinking Water Supply and Sanitation Decade set up by the United Nations (1981-1990), which aimed to provide access to clean drinking water to populations across the world, there was a shift from a supply-driven paradigm to a more demand-driven one. The new approach requires water users' participation throughout planning and implementation, and involves them in key decision making processes [2]. Donor agencies, such as The World Bank, anticipate that community participation is fundamental to the success of water supply in rural areas [3]. A quantitative and qualitative analysis by Narayan [4] of 121 rural water supply projects in developing countries shows that beneficiary participation is "more significant than any other factor in achieving functional water systems". The same study suggests that "obtaining local participation in decision making about development is sound business practice". In Vietnam, water supply for

people living in rural areas finds itself among the social and public services projects that top the political agenda. The Government of Vietnam started its National Target Program (NTP) on Water Supply for Rural Areas in 2000. Thus far, there were three phases: 2001-2005, 2006-2010 and 2011-2015. The third NTP sets a target of providing access to clean water to 86 % of the rural population. This target is reported as “generally met” [5].

This study intends to examine the level of community participation in realizing the NTP targets from two perspectives, top-down and bottom-up. It investigates relevant government policies, like the Law on Water Resources, the Prime Minister’s Decisions to approve each of the NTP phases, and ministerial level circulars and directives. From the perspective of bottom-up, a survey conducted in My Hoa commune, Tra Vinh, province reveals the perceptions of the grassroots on their participating role in improving sustainability of the local water supply system.

## **2. METHODOLOGY AND SCOPE OF STUDY**

The research methodology is basically qualitative. It evaluates findings arising from primary data collected from a survey of 152 samples, and from secondary data. A questionnaire was developed to obtain primary data. Besides, village heads provided information through discussions. A desk study was carried out to analyze the secondary data. This study focused on the community participation aspects of relevant legal documents compiled. Information on socio-economic indices were obtained from government information portals. The study area confined itself to the My Hoa commune in Tra Vinh province, and focused mainly on the existing, centralized, piped, rural, water supply system.

## **3. POLICIES ASSESSMENT**

As per the Law on Water Resources and Decision 366 of the Prime Minister related to the approval of the third NTP phase (2011-2015), community participation is to be taken into account during planning, implementation, and operation and maintenance of water supply systems.

The 2012 Law on Water Resources stipulates the consultation of local communities affected by the exploitation and use of water resources (article 6), and the participation of communities in planning (article 16). The Law also encourages monitoring by communities (article 24). Directly related to rural water supply schemes, Article 2 of Decree 201 (2013), which expands on and details the Law on Water Resources, makes it mandatory to consult affected communities when the extraction of groundwater exceeds 12,000 m<sup>3</sup>/day. Decision 366 (2012) requires to “ensure the participation of communities”, and “maximize the resource mobilization from the community, and encourage the eligible beneficiary community to build rural water supply and sanitation (RWSS) infrastructure based on appropriate technologies.” During the planning process, it is mandatory to “report the communities opinions of communities. At the selection of contractors, it is said to “encourage the eligible beneficiary community to build RWSS infrastructure based on appropriate technology,” Furthermore, the Decision mentions community participation as one of the six key principles of the NTP implementation: “Stimulate the participation of communities to create opportunities for all to benefit from and actively participate in the Program; The Program has to be implemented in line with the regulations on grassroots democracy, and encourage holding consultation meetings at community level to discuss local priorities and make decisions on relevant RWSS issues”.

However, in lower level legal documents, such as circulars and directives, community participation plays a relatively small role, if at all, in the construction, management, and maintenance of water supply systems and infrastructure. Between 2011-2015, the Ministries of Agriculture and Rural Development, Finance, and Planning and Investment, as well as other related government institutions have issued a number of regulations and guidelines in support of the NTP. Notably, Joint Circular 54/2013 focusing on management and operation of rural water supply facilities does not mention community participation at all, instead it addresses the roles of central and local government. In some other documents, community participation is briefly mentioned. Direction 1118 of MARD mentions the use of community resources and advises communities on the protection of water resources and the proper use of water supply infrastructure. Joint Circular 37/2014 addresses the utilization of the community resources, as well as of third parties. The Table 1 summarizes the main points on community participation, made in central government documents:

Table 1. Community participation in legal documents on NTP.

No.	Legal document	Reference to community participation
1	Joint Circular No. 75/2012/TTLT-BTC-BXD-BNNPTNT, dated May 15, 2012: Principles, assessment methodologies, and authority to decide on the tariff for clean water supply in urban and rural areas, and in industrial zones;	Labor cost in case of participation
2	Joint Circular No. 04/2013/TTLT-BNNPTNT-BTC-BKHDT, dated 16 January 2013: Guidance on the management and use of state funds under the National Target Program for Water & Sanitation, Phase 2012-2015.	Raising community awareness; Community contribution sharing in the investment cost
3	Joint Circular No. 54/2013/TT-BTC, dated 04 May 2013: Regulation on the management and operation of rural water supply infrastructure.	None
4	Joint Circular No. 27/2013/TTLT-BNNPTNT-BYT-BGDĐT, dated 31 May 2013: Guidance on assignment of tasks and responsibilities among, and coordination between ministries of Agriculture and Rural Development, Health, and Education with respect to the implementation of the National Target Program on Water & Sanitation, Phase 2012-2015.	None
5	Decision No. 18/2014/QĐ-TTg, dated 3 March 2014, of the Prime Minister on the Amendment and Supplement of Article 3 of Decision No 62/2004/QĐ-TTg, dated 16 April 2004, of the Prime Minister on Financing by the National Target Program on Water & Sanitation.	None
6	Directive No. 1118/CT-BNN-TCTL, dated 03 April 2014, of the Minister of Agriculture and Rural Development on the strengthening of the management and operation of water supply projects in rural areas with the aim to increase the effectiveness and sustainability of those projects.	Making use of community resources; Guiding communities on the proper use and protection of water supply infrastructure and water resources

7	Joint Circular 37/2014/TTLT-BNNPTNT-BTC-BKHĐT, dated 31 October 2014: Guidance on the implementation of Decision No 131/2009/QĐ-TTg, dated 02 November 2009, of the Prime Minister on policies to encourage the investment in, and management and operation of rural water supply schemes.	Utilizing resources from community (as well as from other sectors of the economy)
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#### 4. CASE STUDY OUTCOMES

My Hoa commune (Cau Ngang district, Tra Vinh province) as shown in Figure 1 is one of the poorest communes in Tra Vinh Province.



Figure 1. Map of My Hoa commune.

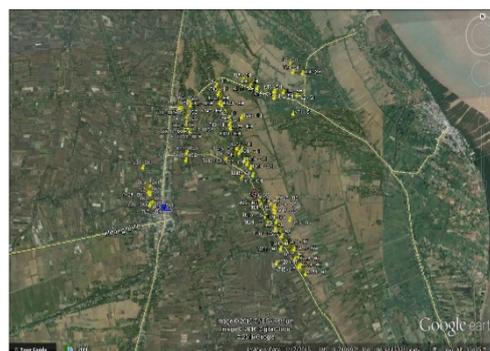


Figure 2. Map of interviewees' locations.

The study has been executed by interview of 152 households of mixed ethnicity, level of education, and income level. The interviewees (Figure 2) were mostly family heads. Among them, 16 % were poor, or near to poor, which is higher than the level of Tra Vinh province in 2014, of 10.66 % [6]. Sixty-one percent (61 %) of the households had four or more people. Regarding the level of education, 19% of the interviewees had finished secondary school, 57 % elementary school, and 14 % were illiteracy. Most of the people interviewed were not member of a social organizations. Table 2 shows the respondents' characteristics in detail.

Table 2. Respondents' characteristics (n = 152).  
Source: Community interview, March 2016.

Number of people per household, M (SD)	3.9 (1.4)
Living in the community for over 20 years	93 %
Completed at least primary school education	86 %
Poor or near-to-poor households	16 %
Ethnic Khmer	51 %
Households receiving at least one kind of financial support	10 %
Households taking at least one concessional loan from the local government	21 %

*Note: M = mean; SD = standard deviation*

The clearest evidence of communities contributing to the maintenance of water supply schemes is the fact that, in addition to the regular monthly charges for consumption of water, 86 % of the households pay an extra amount of 5,000 VND (about 0.22 USD). A reserve account is established to cover the cost of simple repairs, like common failures of pumps and broken valves. When it comes to more complicated issues, like broken distribution mains, dysfunctional wells, etc., it is not uncommon that the whole system breaks down. Figure 3 shows the cost sharing in repair and maintenance of some basic water supply facilities.

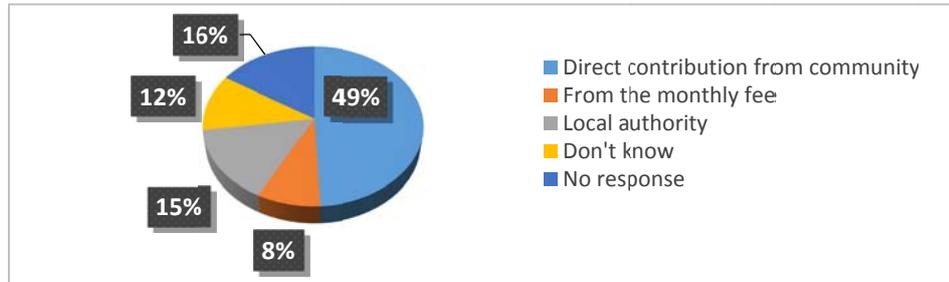


Figure 3. Cost sharing in repair and maintenance of water supply infrastructure.  
 Source: Community interview, March 2016.

Except for supervision of the installation of the connections from the distribution main to their house (68 %), households have limited involvement in the construction of a public piped water supply system. Moreover, households are vaguely aware of public water supply services in general. Fifty-six percent (56 %) of the interviewees said they do not know which organization is responsible for the supply of clean water to the people. Forty-nine percent (49 %) stated they did not see a benefit or advantage for women to participate in the management of water supply service provision to the commune.

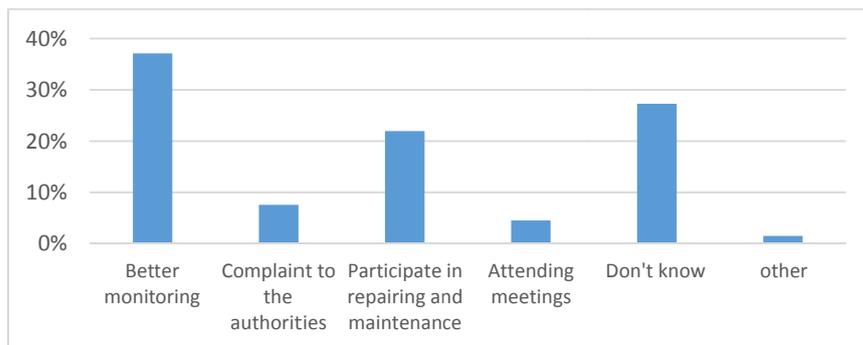


Figure 4. Perception of community's involvement to improve water supply service.  
 Source: Community interview, March 2016

When the government is the sole initiator, planner and provider of water services, it is easy to understand why people think of the projects as a given good. Hence, they lack ownership. Nearly 30 % of the interviewees (Figure 4) say they have no idea about their role in the provision of water supply services. It was revealed during the discussions and interviews that people hesitate to make formal complaints about the services. Moreover, it was not known to more than half of the people asked that to whom they can question the problems of service provision as shown in Figure 5.

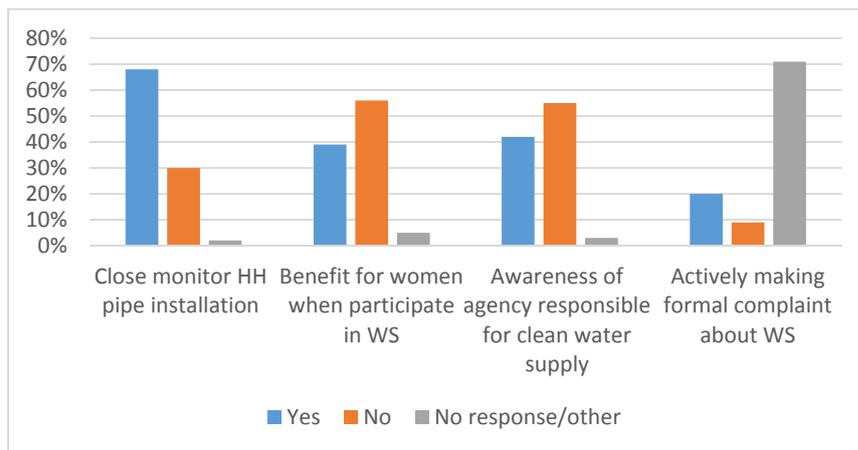


Figure 5. Community's practice and awareness about participating on rural water supply.  
Source: Community interview, March 2016

## 5. DISCUSSION

This study has been limited by its reliance on secondary data to make an analysis of government policies on community participation in the provision of public piped water supply services. The limited primary data relied upon in the study implies that outcomes are only indicative. The prime motive here is to highlight the need to raise awareness of people about their roles and rights in order to achieve real community participation throughout the phases of water supply services and infrastructure planning, implementation and operation.

Furthermore, although conventional wisdom shared by governments and donors is that community participation generally contributes positively to the sustainability of water supply infrastructures in rural areas, it does not mean that participation in itself guarantees better outcomes. In an investigation of 45 rural water projects in India [7], the author points out that cost sharing and household involvement in decision making are correlated with better water supply services, but only attendance at planning meetings before and after construction is not. Marks et al. [2] emphasize the depth, rather than the breadth, of community participation is critical in order to sustain the water supply services. They found a strong correlation between community participation and the sustainability of water supply infrastructure in a study based on data collected from 200 rural communities in Ghana. Their main conclusions were: (1) The community's water point sustainability is associated with the depth, but not the breadth, of households' involvement in planning process; (2) Project outcomes are more favorable in communities where a greater share of households reported participating in management-related decisions, and less favorable in communities where more households participated in technical decisions; (3) The community's access to post-construction support services is strongly associated with hand pump sustainability outcomes.

## 6. CONCLUSION

The research yields some insights related to water supply schemes in rural areas of Vietnam. Insights are gained with respect to top-down and bottom-up aspects of the realization and operation of the schemes. First, the analysis of government documents, such as the Law on Water Resources, Prime Minister's Decisions, Ministerial Joint Circulars and Directives, shows

that although community participation is mentioned in these high level documents, but is not adequately clarified in the related guidance documents at the local level for the implementation. Second, the case study in My Hoa reveals that the community has little understanding and awareness of its roles in the planning, construction, and operation and maintenance of public piped water supply infrastructures and services. As the result, the community's participation in the water supply schemes at all steps is relatively limited.

It is suggested that community support mechanisms are developed, specifically in terms of institutional, legal, and procedural aspects. The aim should not simply be to fulfill procedural requirements, but to create meaningful community participation in order to enhance the provision of public piped water supply services, and to guarantee the sustainability of the water supply infrastructure.

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## REFERENCES

1. Mansuri G. and Rao V. - Localizing Development: Does Participation Work?, Washington, DC: World Bank, 2013.
2. Marks S. J., Komives K., and Davis J. - Community Participation and Water Supply Sustainability: Evidence from Handpump Projects in Rural Ghana. *Journal of Planning Education and Research* **34** (3) (2014) 276-286.
3. Schouten T. and Moriarty P. - Community Water, Community Management, London, UK, 2003.
4. Narayan, D. - The Contribution of People's Participation: Evidence from 121 Rural Water Supply Projects, Environmentally Sustainable Development Occasional Paper Series, No. 1. Washington, DC: World Bank, 1995.
5. Government Report No. 507/BC-CP - Evaluating the results of Implementation of the National Target Program 2011-2015 and Building Orientation National Target Program Phase 2016-2020. Báo cáo Chính phủ số 507/BC-CP, Đánh giá kết quả thực hiện các Chương trình mục tiêu quốc gia giai đoạn 2011-2015 và định hướng xây dựng các chương trình mục tiêu quốc gia giai đoạn 2016-2020, Hà Nội, 2015, tr. 6. (in Vietnamese).
6. Ministry of Labour – Invalids and Social Affairs, Decision 1294/QĐ-LĐTBXH - Approval of the Result of Investigation, review the poor and near-to-poor households of 2014, dated Sep 10, 2015. Bộ Lao động – Thương binh và Xã hội, Quyết định 1294/QĐ-LĐTBXH Phê duyệt kết quả điều tra, rà soát hộ nghèo, hộ cận nghèo năm 2014, 10/09/2015 (in Vietnamese).
7. Prokopy L.S. - The Relationship between Participation and Project Outcomes: Evidence from Rural Water Supply Projects in India, *World Development* **33** (11) (2005) 1801–19.