

People's Participation in Rural Water Supply and Sanitation Project: A case study in Jorong Kampung Baru, Solok, West Sumatra, Indonesia

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Abstract

This study analyzed Rural Water Supply and Sanitation (RWSS) quality improvement under Water and Sanitation for Low Income Communities (WSLIC II) project in Jorong Kampung Baru, Solok district, West Sumatra. The paper explores people participation in the project with emphasized on equal participation between men and women in decision-making process, implementation, operation and maintenance, monitoring and evaluation. In decision-making process, men more actively participate and they attended the meeting more frequently than women. Women also participate in the project construction as well as men as unpaid labors. However, women did not get any knowledge about the schemes during the project construction or trainings. Women use the facilities more often than men but lack of general knowledge on the schemes make the women unable to do maintenance tasks. Men and women participation in monitoring and evaluation was very low because most of them were not involved in evaluation activities, besides they did not have initiative to report and discuss the solutions concerning damage or destruction of facilities. The sustainability of the project in the next five or ten years is threatened because women were not effectively involved in the project. Therefore, involving both men and women effectively in the project phases need to be emphasized and implemented in the achievement of project sustainability.

Keywords: people's participation, WSLIC II, rural water supply project.

Introduction

Access of rural communities to sanitation in Indonesia is reported 52%, however the real number might be lower since the data do not specify whether the existing sanitation facilities meet the minimum standard for sanitation, whether the facilities in good condition and being used by the communities or not (Robinson, A., 2005). Many efforts related to provision of clean drinking water and sanitation has been implemented by the Indonesian government which is supported by national and international agencies, NGOs and other institutions.

However, the performance of water supply and sanitation sector in Indonesia is lower compared to other countries in South East Asia (WHO – UNICEF, 2004 cited in proposal of National Program for Community Water Supply and Sanitation Services). A study by Sara and Katz (1997) on rural water supply sustainability in relation to project rules in some projects in some countries, reported that Indonesia has the lowest score in physical condition, operation and maintenance, consumer satisfaction, financial management and willingness to sustain the system. Some of the problems are low quality of construction that cause the decrease on water flow and lack of people knowledge to cope with destruction. Women as the

main beneficiaries prefer to use old water sources because they are not satisfied with the new water facilities. As the consequence, community particularly women do not have sense of ownership to the system which cause unwillingness to sustain the system.

The objective of this paper is to explore people's participation in rural water supply project by analyzing both men and women participation as the main water users. In this context, people participation means that involving women as well as men. This paper would address the question, whether women are involved as well as men, if yes whether women exclusion or inclusion influence the sustainability of the project. This study employs five techniques in data collection namely participant observation, in depth interview, focus group discussion, recording of oral history, survey and review of secondary data.

Water and Sanitation for Low Income Communities (WSLIC) project in Jorong Kampung Baru, Nagari Gantung Ciri

WSLIC Project

WSLIC is a single sector water and sanitation project. The project is funded by World Bank and AusAid. The funds are channeled through four lines agencies. WSLIC is a government project where the Ministry of Health is primarily responsible for the project. WSLIC project is mainly concerned to the low-income communities in the rural area through community empowerment approach in decision-making process, implementation, operation and maintenance and for its sustainability.

Study Area

Jorong Kampung Baru is located in Solok District, West Sumatra. Based on the secondary data collected in 2002, there are 185 households living in this area. Educational background of the people is very poor; most of them are graduated from elementary school (84%). The majority of the people are farmers. More than half of the community (52%) is categorized as poor based on welfare classification conducted by Village Implementation Team of the project in 2002. Jorong Kampung Baru was chosen based on the proposals to the WSLIC II committee in 2002. The consideration is related to the diarrhea disease, social and economic condition of the community. In fact, water sources are available, but it is difficult to access and there was not any effort to improve water accessibility.

Water and sanitation in Jorong Kampung Baru

Water sources in Jorong Kampung Baru are available in a great amount. The water sources are spring, river, stream, unprotected well. However, the location of springs is quite far from the settlements. They are about 2 km from the settlement. People have to walk through rocky path for collecting water. Nevertheless, the water depends on the season. The quality of water during dry season is better than in rainy season. However, the amount of water during dry season is not enough to fulfill the needs, water shortage mostly happened during this period. Moreover, most of people do not have well in their house because it is hard to find water sources although they have already dug the well. People usually fetch water from the house that has well for about 500 m to 1 km from their house. They use the water only for drinking. Other household needs such as for bathing, washing the dishes and washing clothes are done on streams that flow near their houses.

Most of the people in *Jorong* Kampung Baru do not have appropriate sanitation in their house. They usually defecate in stream or pond near their house and also from the dry agricultural lands (*ladang*). People are not used to defecate by using latrine. They think that it is dirty and it is not proper. The general condition of sanitation in Kampung Baru described as follows (Table 1).

Table 1. The condition of sanitation in Jorong Kampung Baru.

Sanitation Facilities	Number (household)
House holds/private	
Sewage system	0
Sanitary latrine	0
Unsanitary latrine	2
Without any facilities	159
Having trash can facilities	0
Institution	
School latrine	0
Medical centre latrine	

Source: Village Implementation Team of Jorong Kampung Baru, 2002.

Both, bad latrine and lack of clean water supply in this area has caused diseases such as diarrhea and skin disease especially during dry season. Due to lack of facilities, most of the people have experience this bad and unhealthy habits for many years.

Referring to the MPA-PHAST (2002) conducted by the Community Facilitator Team (CFT), there were two options for water source used in this project namely river and spring. Spring is chosen as the source of water considering some factors such as physical water quality, source of contaminant, capacity of water, distance from settlement, flowing system. Physical water quality is based on four indicators: smell, taste, turbidity and color. Debit of the spring is 2 lit/sec during dry season. The seasonal fluctuation is relatively constant in dry season and tends to increase in rainy season. Technical options of the project are completed with water catchments, reservoir and pressure releasing chamber.

People participation in rural water supply and sanitation project

Community participation is one of the important factors in the achievement of goals of any development activities. People participation is known as the most effective way in promoting and achieving sustainability of rural development projects, particularly in developing countries (Livingstone and McPherson, 1993).

People participation in project initiation and decision making process

WSLIC II is a development project, which applies participatory approach. All phases of the project are intended to encourage community participation. One of the facts showing the involvement of people in the project is the process of proposal formulation. Each *Jorong* was excited in preparing the proposal for the WSLIC project.

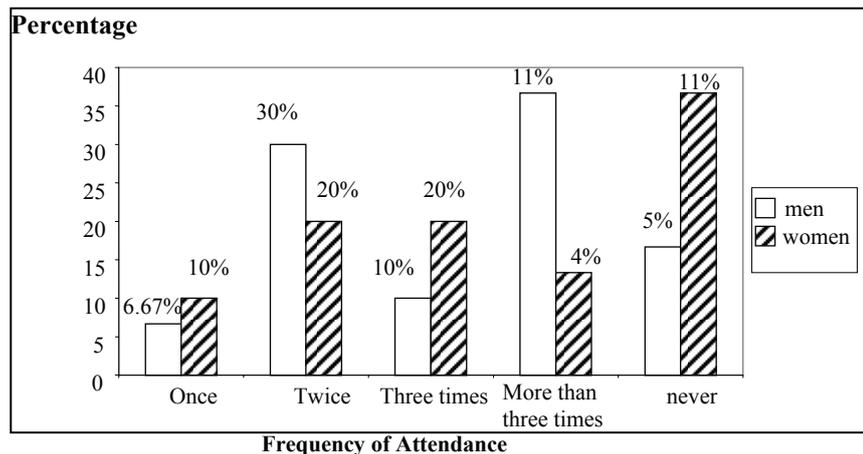


Figure 1. Frequency of People Attendance in Meeting

Socio cultural plays important roles in decision-making process. Related to its socio cultural system, the people in Kampung Baru usually discuss any problems for the improvement of their *kampung*. This activity is known as *musyawarah*. However, it is usually done by men. Women are rarely take part in *musyawarah* because the people think that women responsible only to take care children and household's activities, such as cooking, washing, cleaning the house and sometimes help their husband in *ladang* (Figure 1). The absence of women in a meeting is not merely caused by the objection of men to their involvement or hesitation and fear (Prokopy, L.S 2004). In this study, women mainly claimed that their absence from the meeting is due to their roles as wife and mother. Moreover, the meeting is usually held in the evening that makes women reluctant to attend the meeting.

People participation in project construction

In areas with a different gender culture, men do the works such as digging while women and children do transporting, catering or organizing other support activities (Abeywardena, 1977; Jaeger and Mattson, 1989; Mc eachem et al., 1983; NCU, 1991., cited in Wijk, 1998). A different situation is found in Kampung Baru, whose people are all Minangese. The women were not only transporting materials or other supporting activities but also digging, lifting the pipe and other jobs usually done by men (Figure 2). This is caused by *Minang's* culture where the people used to work together, known as *Gotong royong*. Moreover, women are used to do agricultural works, which help them much easier to do physical works during project construction. The flexibility of women social mobility in the context of culture have reduced, which create opportunity and chance for poor women to work out side their home to support family life. The same situation is also found by Joshi, D and B. Fawcett (2001) in donor funded and managed urban slum projects.

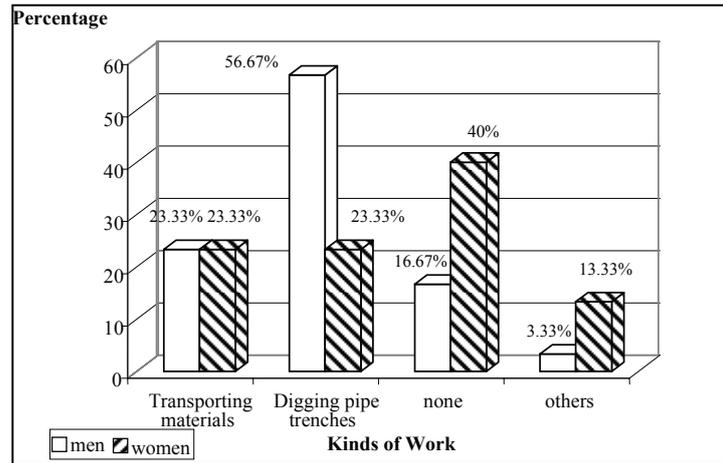


Figure 2. Project Construction Works

In the study area, men and women do not paid for their unskilled-labor, except for skilled labor that usually only one or two people from the village. During the construction works, women are used to do the unskilled works, such as lifting or transporting materials. Women do not get any new skills or knowledge related to technical aspect. If the problems occur after the project completion, the only thing women can do is asking men's help or waiting for the Village Water Committee (VWC) to fix the problem. Women should be involved in the training on technical aspects, so that they can get new skills and able to solve technical problems.

People participation in operation and maintenance

Based on the WSLIC II approach, people were fully involved in the operation and maintenance of the facilities. When the construction is completed, the operation and maintenance of the facilities were delegated to the community. For this purpose, water committee was formed at the village level. In Kampung Baru, almost all of the people including men, women and children use RWSS facilities. However, the frequency in using water facilities is quiet different; men usually use the facilities for drinking but rarely use the facilities for washing their agricultural products.

Table 2. People Involvement in the Operation and Maintenance

Responses	Men (N=30)		Women (N=30)	
	f	%	f	%
a. always	4	13.33	12	40
b. often	3	10	9	30
c. sometimes	14	46.67	4	13.33
d. rarely	9	30	5	16.67

N= Number of respondents, f = frequency

Table 2 shows the frequency of people involvement in the operation and maintenance of facilities. Women use the facilities more often than men do. The reason why people rarely use water facilities is because they have water source near their house. They feel more comfortable to use water from river than other water sources. Water facilities are only used as drinking water. The frequency in using water facilities influences the task of maintenance.

Women have more chance to do maintenance task, which is mainly to keep the area around the tap clean. The maintenance task particularly related to the damage of facilities considered as the responsibility of VWC. People report any damage or destruction to the VWC (Table 3).

Table 3. People Reaction on the Damage of Water Facilities

Responses	Men (N=30)		Women (N=30)	
	f	%	f	%
a. Try to fix it	1	3.33	0	0
b. Report to VWC	25	83.33	27	90
c. Let it and wait for the VWC	2	6.67	2	6.67
d. nothing	2	6.67	1	3.33

N= Number of respondents, f = frequency

Observing women activity in fetching water, it was found that they spend more time to fetch water because they cannot bath in the taps. Some of them are reluctant to wash their clothes at the tap stands because the location of tap stands along the roadside. Consequently, they have to collect more water to their home. People collect water from springs or well two or three times a day before water facilities were built. When the facilities have been built, the water needs increased, but the frequency of fetching water is not significantly different from before. This is because children can bath and collect water for their own needs.

People participation in monitoring and evaluation

Monitoring and evaluation activities are done to assess the functionality and sustainability of the scheme. However, community participation in the evaluation and monitoring phase is still low. This might be caused by low level of community educational background and lack of knowledge on water scheme, especially on technical aspect. The people are not able to detect facilities destruction. They cannot give any suggestion for a better condition of the RWSS facilities. Monitoring and evaluation conducted by donors are focused on the community satisfaction on water supply and sanitation facilities. However, the results show that most of the people never asked about any problems during the operation of water facilities (Table 4).

Table 4. Involvement in Monitoring and Evaluation Activities

Problem	Responses	Men (N=30)		Women (N=30)	
		f	%	f	%
Have you ever been asked by the VWC or project team concerning the constraints or problem in the operation of RWS facilities	a. yes	5	16.67	9	30
	b. no	18	60	14	46.67
	c. don't know	7	23.33	7	23.33

N= Number of respondents, f = frequency

People participation in monitoring and evaluation is influenced by the participation in three previous project's cycles: initiation and decision-making, implementation, operation and maintenance phases. The knowledge about the system can be derived from their participation in previous phases. The people will be benefited by the system and will feel that the system belongs to them if they were involved in every project phase.

People participation and project sustainability

Monitoring and evaluation of the project was held by the independent agency two years after the project accomplished. Although it is not a proper way to represent the sustainability of the project, which collected the information only at single point in time, at least it can describe the condition of water supply and sanitation facilities in the study area. Focus group discussion was applied during the monitoring process. Field visit to villager houses was also conducted to get the information related to consumer satisfaction on the scheme.

The physical condition assessment in terms of materials used during the construction shows that the facilities construction such as water catchments is in good condition. It is also protected hence water contamination can be avoided. On the other hand, the tap facilities are often damaged or broken. People were not aware to repair the broken tap. The leakage of the pipe and joint seems to be a problem that should be considered although it is not yet influence the quantity of water supply to the taps.

The sustainability of water supply and sanitation project in the study area is threatened by the lack of people's awareness and general knowledge on the schemes. This is due to community participation in project phases; women were not effectively involved as well as men. Lack of ownership and responsibility on the facilities lead to the damage of the facilities. Some of the taps are no longer used by the community because they are located near the houses that have access to water source. Women have to fetch water not only for drinking but also for bathing. Women cannot bath freely in the taps because the taps are located along the roadside. Most of the people do not use public latrine facilities anymore. They feel more comfortable to defecate in the streams or in the river. It is estimated that 3% of the poor, 14% of the middle and 9% of the rich family who has built sanitation facilities.

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