



Implementation of Community-based Environment Sanitation Program (Case Study in Benteng Sub-district, Kepulauan Selayar Regency, South Sulawesi Province)

Gunawan M. Salihun ^{a*}

^a *Dinas Pekerjaan Umum Kabupaten Kepulauan Selayar, Provinsi Sulawesi Selatan, Indonesia*

INFORMASI ARTIKEL

Article history:

Dikirim tanggal: 26 Agustus 2016

Revisi pertama tanggal: 29 September 2016

Diterima tanggal: 30 November 2016

Tersedia online tanggal: 19 Desember 2016

Keywords: *implementation, community-based, sanitation*

ABSTRACT

Lack of clean water and sanitation infrastructure systems is a major problem in most developing countries. One of the policies implemented by the Central Government through the Ministry of Public Works is the Special Allocation Budget on Community-Based Environment Sanitation Program for domestic wastewater infrastructure, and drainage for the poor in rural areas or slums. The purpose of this study is to analyze implementation, supporting and inhibiting factors of community-based environment sanitation program in Kepulauan Selayar regency using a case study conducted in benteng sub-district. This study found that implementation of community-based environment sanitation program in benteng sub-district, Kepulauan Selayar Regency has been successfully implemented, but still found the inhibiting in the implementation. The successful implementation can be seen from the actors of this policy implementation completely carried out their duties and responsibilities, the funding and programs from regional government and central government, support the mechanism of the implementation run smoothly in accordance with the provision.

2016 FIA UB. All rights reserved.

1. Introduction

Sanitation facts from WHO/ Unicef Joint Monitoring Program (2015) revealed that of 67% of world's population had access to improved sanitation, while 20% still lack of sanitation facilities, and 13% still practice open defecation practice. Due to this, world citizens have a huge homework to fill out provision of 2.4 billion people of improved sanitation and encourage 940 million people to stop open defecation practice. One of the solutions for provision sanitation services and facilities is community-based sanitation program through hardware approach, where community became the subject on the establishment of sanitation facilities.

More than 32% of Indonesian people who live in urban areas are infected by various diseases, poor sanitation, and poor hygienic (Cameron & Shah, 2008).

The open defecation behavior can cause water pollution and even endangering human health. The open defecation behavior is a very serious issue and this is not only bad for the people who do not have toilets, but also those who have it, because the disease can be transmitted from human feces are exposed through the water (waterborne diseases), such as diarrhea, skin diseases, and so forth.

As a consequence of poor sanitation and hygiene, Indonesia suffered a loss for approximately 56 trillion rupiah (3.6 billion USD) in 2006, an amount equivalent to 2.3% of Gross Domestic Product (WSP, 2008). Asian Development Bank report revealed that water pollution in Indonesia could lead to a potential loss of 45 trillion rupiah, or 2.2 percent of Gross Domestic Product (GDP). Then, based on data from the United Nations

* Corresponding author. Tel.: +62-813-4261-2355; e-mail: gmsalihun@gmail.com

(UN) showed that Indonesia is a country with 51 percent of the population without access to proper sanitation.

Based on the results of Basic Health Research 2010, National Development Planning Agency (Bappenas), said that the losses due to poor sanitation economically reach up to 1.3 million IDR per family per year. While nationally, losses caused by poor sanitation could reach 67 trillion IDR per year. Awareness together is needed to reduce poor sanitary conditions in this country. The role of society is urgently needed in changing their bad habits in defecating at the open area like along the river bank.

Funding for access development to improved sanitation in Indonesia is quite burdened, but still in accordance with the plan although it takes a lot of budgetary. According to National Statistics Agency (BPS) achievements of sanitation in Indonesia by 2013 reached 59.71%. This number is still under the average achievement of access to sanitation in the Southeast Asian countries. While the MDG's (Millennium Development Goals) which states that until 2015 the target of providing adequate sanitation can reach 62.41% and based on the directives of National Medium Term Development Plan (RPJMN) III (2015-2019) from Ministry of Public Works set a target "100 -0-100 ", that is 100% access to safe drinking water, 0% slums area and 100% access to improved sanitation. Moreover, in 2010 United Nations has declared that sanitation into Human Rights.

Government plays an important role in overseeing public health-related waste arising from human activities. Through implementation of Law No.23 of 2014 related to the local government, construction of sanitary authority of central government is not only their obligation, but also the responsibility of local governments. Furthermore, local government is responsible for developing access to improved sanitation for people residing primarily in slums area and do not have access to proper sanitation.

In accordance with Law No. 32 of 2009 on Environmental Regulation: Article 1, paragraph 2 and 3 states that protection and management of environment is a systematic and integrated effort to preserve function of environment and prevent pollution and/or damage to environment consists of planning, utilization, control, maintenance, monitoring, and enforcement. Sustainable development is a conscious and deliberate effort that combined environmental, social, and economic aspects into development strategies to ensure the environmental integrity and safety, capability, well-being, and quality of life for the present generation and future generations.

Then in chapter 70, paragraph 2 and 3 states the role of the community can be: social control, provision of advice, opinions, suggestions, complaints, and/or delivery of information and/or reports. Role of the

community is done for, raise awareness in the protection and management of the environment, increase self-reliance, community empowerment, and partnerships, develop community capacity and initiative, foster community responsiveness to social supervision, and develop and maintain the culture and local wisdom in order to conserve the environment function life.

One of the policies implemented by central government through ministry of Public Works is the Special Allocation Budget (SAB) on Community-Based Environmental Sanitation (CBES) Program for domestic wastewater infrastructure, and drainage for the poor in rural areas or slums. These are doing through an initiative to promote development of domestic wastewater infrastructure, and drainage in a responsive community-based on need. Kepulauan Selayar regency has set as a priority in the development of sanitation. Special allocation of budget was allocating for sanitation through the selection of certain specific criteria, general criteria, and technical criteria. Target location based on the density, poverty indices, and the sanitary conditions are poor.

Providing sanitation services is not only governmental obligation, but also need support from the local community where the sanitation facilities planned to be established. By improving sanitation would be improved significant on health both in households and communities. Community based sanitation program emerged as an interesting discussion because this activity involves high amount of development cost and projected to have high impact to the community itself by sustainability in the utilization of the facility.

Table 1 Community Based Environment Sanitation Program in Kepulauan Selayar Regency (2014)

No	Program/ project	Sub-district
1.	Development of communal septicktank	Bontoharu
2.	Development of communal septicktank	Bontosikuyu
3.	Development of communal septicktank	Pasimarannu
4.	Development of communal septicktank	Bontosikuyu
5.	Development of communal septicktank	Bontoharu
6.	Development of communal septicktank	Pasimasunggu
7.	Development of communal septicktank	Pasimasunggu
8.	Development of communal septicktank	Bontomanai
9.	Development of communal septicktank	Buki
10.	Development of communal septicktank	Buki
11.	Development of communal septicktank	Bontosikuyu

No	Program/ project	Sub-district
12.	Development of communal septicktank	Bontosikuyu
13.	Development of communal septicktank	Bontosikuyu
14.	Development of communal septicktank	Bontomanai
14.	Development of communal septicktank	Bontoharu
16.	Development of communal septicktank	Bontomatene

Source: Public Works Department of Kepulauan Selayar Regency (2014)

In order to be sustainable, a sanitation system should be economically viable, socially acceptable, technically and institutionally appropriate, and protect environment and natural resources. However, among many of sanitation projects in developing countries, there is a significant number of projects fail to deliver benefits to society over the long term, the impacts limited and not sustainable (Carter et al., 1999). This condition also explained by Okurut and Charles (2014) that is low demand for sanitation improvement in low income settlement and the government should be tailored the program for specific community to meet the local demand.

On the other hand, successful sanitation projects expressed that educational campaigns succeed in creating local demand of improved sanitation and under condition of weak demand, the government may act more aggressive to fill service provision (Winters et al., 2014). Marketing strategies in the preference and choices stages is promising ways to increase household sanitation demand and coverage (Jenkins and Scott, 2007; McGranahan, 2015). Furthermore, community based sanitation has been successfully implemented in slums in India, Lao PDR, and Vietnam (UN Habitat, 2006).

Community based approaches have been tested in urban slums and have shown to have the potential to improve the sustainability of sanitations interventions (Luthi et al., 2010), in other words Roma and Jeffrey (2011) explain as longevity of community sanitation system. In community based sanitation project, it is very important to assure the sustainability utilization of sanitation facility after installment. Sustainable use of sanitation facility would increase significantly environment condition of the establishment area.

The purpose of this study is to analyze implementation, supporting and inhibiting factors of community-based environment sanitation program in Kepulauan Selayar regency using a case study conducted in benteng sub-district.

To answers these problems, this study used qualitative approach, particularly descriptive analysis.

Primary data was collected from interviews, and field observations. The primary data is gathered through field survey conducted in 7-18 May 2016 in 6 areas of Selayar island, South Sulawesi Province, Indonesia. Total respondent including in the field survey is 150, and respondent included in the data analysis is 149 due to incomplete data in 1 respondent. Secondary data was collected from documents to complement primary data related to the focus.

There are several limitations within this study related with the sample that only small community in the rural area. A major limitation of this research was the sample size achieved for the household level questionnaire was limited on resources and time.

2. Theory

One of the important stages in the cycle of public policy is policy implementation. Implementation is often considered just an implementation of what has been decided by the legislative or decision-makers, as if this stage is less influential. But in reality, the implementation stage is so important because a policy will not mean anything if it cannot be implemented properly. In other words, implementation is the stage in which a policy can be implemented optimally and achieve the objectives of the policy itself.

There are some concepts regarding the implementation of policies proposed by some experts. Etymologically, the implementation according to Webster's dictionary that quoted by Solichin Abdul Wahab is as follows: the concept is derived from the English language implementation is to implement. In a large dictionary Webster, to implement (implements) means to provide the means for carrying out (providing the means to implement something); and to give practical effect to (for impacts/ consequences of something (Webster in Wahab, 2006).

Definition according to Webster's implementation in addition to the above described also by Van Meter and Van Horn that implementation is "actions performed by individuals/ officials or groups or private government aimed at achieving the objectives outlined in policy decisions"(Van Meter and Van Horn in Wahab, 2006). Another definition is also expressed by Daniel Mazmanian and Paul Sabatier that explains the meaning of implementation by saying that: the main essence of policy implementation is to understand what is supposed to happen after a program is considered valid or formulated. Understanding includes efforts to manage and real impact on society or events (Mazmanian and Sabatier in Widodo, 2010:87).

Based on some of the definitions given above experts, concluded that the implementation of an activity or work done by implementing policies in the hope of obtaining a result that is consistent with the

objectives or goals of the policy itself. So that the implementation process can be seen through:

- a) The passing of legislation and policies followed by the output in the form of policy implementation by the implementing agencies;
- b) Compliance with the policy target groups;
- c) Influences both the desired real or not the output of the policy;
- d) The effects of the policy as perceived by policy maker's agent; and
- e) The reforms are essential to the legislation or policy.

Then, Lineberry (1978) stated that at least the process of policy implementation has the following elements:

- a) Creation and staffing of new agents in order to implement new policies or assign responsibility for the implementation of the personnel or agents are available;
- b) Translating the legislative intent and objectives into operational rules are good, it is necessary the development of guidelines for implementers;
- c) Coordination of resources and financing agent on the target groups, the development of responsibility inside the agency and between agencies with relevant agencies; and
- d) Allocation of resources to the perfection of the impact of the policy.

According Bridgman and Davis (2004) showed a prerequisite for the successful implementation of policies, among others, as follows:

- a) The policy is supported by a conceptual framework that is simple, clear and scientifically tested, then the implementation of the policies most likely to succeed;
- b) States steps are not too many and complex;
- c) Have a clear accountability procedure. A competent person should be entrusted with clear responsibility to control and ensure the successful implementation of a program;
- d) Parties are responsible for providing services should be involved in the formulation of policy design;
- e) Involve regular monitoring and evaluation in order to run an effective policy implementation; and
- f) Policy makers must give earnest attention to implementation as well as the formulation of policies.

There are three models of policy implementation that have been proposed by Birkland as cited by Islamy (2008):

- a) Top-down model, put their main emphasis on the ability of the decision makers to produce unequivocal policy objectives and on controlling the implementation stage;
- b) Bottom-up model, critiques on the local bureaucrats as the main actors in policy delivery and conceive of

the implementation as negotiation process within network implementers; and

- c) Hybrid model, try to overcome the dividing between these two previous approaches by incorporating elements of top-down, bottom-up, and other theoretical models.

Furthermore, Lane (2000) stated that there is no single model of policy execution that will guarantee policy achievement but a process of implementation. There are those who believe in control, planning and hierarchy on the one hand, and those who believe in spontaneity, learning and adaptation as problem solving techniques on the other hand. Implementation theory inquiries into how accountability may be combined with trust in the implementation process.

Moreover, Nugroho (2009:627) stated that the most classic implementation model was Van Meter and Van Horn Model. This model assumes that the implementation of policies run as linear from public policy, implementer, and the performance of public policy. Several variables are included that affect the public policy are as followed:

- a) Implementation activities;
- b) Characteristics of the implementing agency/ implementer;
- c) Economic, social, and political conditions; and
- d) The tendency (disposition) of executor/ implementer.

George C. Edwards III (Nugroho, 2009:512) confirms that the main problem of public administration is the lack of attention to implementation, so that without the effective implementation of decisions of policy makers will not succeed. Edward advised to pay attention to four key issues in order to be an effective policy implementation:

- a) Communication with regard to how the policy is communicated to the organization or the public, the availability of resources to implement the policy, attitude and responsiveness of the parties involved, and how the organizational structure of implementing the policy;
- b) Resources related to the availability of resources, especially human resources. It is concerned with implementing public policy skills to produce effective policy. The resources here are related to all sources that can be used to support the successful implementation of the policy. These resources include human resources, budget, facilities, information and authority; and
- c) Delegation or attitude with regard to the willingness of the personnel who implement to bring the public policy. Skill alone is not sufficient, without the willingness and commitment to implement the policy.

The structure of the bureaucracy associated with the suitability of bureaucratic organizations that host the

implementation of public policy. The challenge is how to avoid fragmentation of the bureaucracy, because this structure makes the process of implementation is far from effective.

3. Research Method

In this research, the author used a community-based environment sanitation project in Selayar island as study area. The project located in Benteng sub district of Kepulauan Selayar Regency, South Sulawesi Province, Indonesia. Population of Kepulauan Selayar Regency was 128,744 people, while Benteng sub district was 23,811 people (Statistic Agency of Selayar, 2015).

The first community based environment sanitation program was established in 2011. This program developed a sanitation facility where the government provided funding and in kind from the community to provide location for development and also in cash as initial cost for operational of the construction process. The scope of the government in this project is basically providing fund for construction of sanitation facility and later on giving assistance during the development, while from the location selection, construction process, and operation and maintenance of the sanitation facility is conducted by the community.

In this research used both primary and secondary data. Based on the formulation of the problem that has been set then compiled a useful research focus limits the subjects studied. With the establishment of a clear and steady focus, a researcher can make right decisions about which data will be collected and which ones do not need to be touched, or which will be discarded. However, implementation in the field, focus of the research can be developed in accordance with flexible nature of qualitative approach, following inductive empirical pattern with assumption that results of data collection in the fields are able to reflect actual conditions.

Referring to the formulation of problem, focus of this study as follows:

- a) Implementation of community-based environment sanitation program and role of the community in benteng sub-district of Kepulauan Selayar regency, includes development process, participation and role of the community; and
- b) Factors supporting and inhibiting in the implementation of community-based environment sanitation program in benteng sub-district of Kepulauan Selayar regency.

4. Results and Discussion

4.1 Implementation of Community-Based Environment Sanitation Program in Benteng Sub-District of Kepulauan Selayar Regency

Construction technical assessment for the foreman, worker, and the people who involves in the community-based environment sanitation;

- a) Management and financial training of the community support group member;
- b) Public health campaign to the whole potential user of the facility; and
- c) Operationalization technical training and maintenance to the operator of the facility.

The whole location of the Community-based environment sanitation program sanitation facility development in benteng sub-district of Kepulauan Selayar regency was slum area where most of the communities were immigrant from other regency which has occupation as the traditional sand miner and pedicab driver. While most of their houses built of semi-permanent building materials like wood and not established in their own land.

Community-based environment sanitation implementation in benteng sub-district of Kepulauan Selayar regency, city council of Kepulauan Selayar regency generally play small role in the implementation of community-based environment sanitation. The role of city council is in approving to allocate fund from local government budget. It can be described that city council of Kepulauan Selayar regency is still limited. Its limited roles is caused by the policy of community-based environment sanitation program which is designed by central government and local actors including city council of Kepulauan Selayar regency only execute community-based environment sanitation implementation as well as designed by central government.

Local Public Works department of Kepulauan Selayar regency can be included into the appointed official. As Howlett and Ramesh stated, that the appointed officials dealing with public policy and administration are referred to as the bureaucracy. As mentioned above, as project executing agency, the local public works department services is consistent with the central government's role such as, coordinating, monitoring, and providing technical assistance resources and specialists in urban planning, community development, and project management. Its role is implement substantial tasks.

It can be described based on the implementation of community-based environment sanitation in benteng sub-district of Kepulauan Selayar regency which is implemented by local community as well as designed by manual book. After socialization of community-based

environment sanitation, local community knew and ready to implemented community-based environment sanitation in their location. Local community also knows what the general objective of community-based environment sanitation and start to discuss and share each other to achieve common goals in overcome sanitation environment problems. Local community also has willingness to identify and mapping their own needs in order to upgrade sanitation environment by doing site self-survey. After that they identified sanitation problem and infrastructure, the local community also formulates the community-based environment sanitation and implements it.

The roles of mass media are crucial to link between government and society. The implementation of community-based environment sanitation in Kepulauan Selayar regency was influenced by articles in local mass media. It was agreed by Howlett and Ramesh that news reporters and editors are news maker, in the sense that they define what is worthy of reporting and the aspects of the case that need highlighting. Interest group and research organization generally play very limited role in the implementation of community-based environment sanitation in benteng sub-district of Kepulauan Selayar regency. It should be regretted, because as Howlett and Ramesh stated that one of the most important resources of interest group is knowledge.

4.2 *The Supporting and Inhibiting Factors in Implementing Community-Based Environment Sanitation Program in benteng sub-district of Kepulauan Selayar Regency*

4.2.1 *Supporting Factors*

- a) Commitment of the local government of Kepulauan Selayar regency and central government in realizing community-based environment sanitation program;
- b) Willingness from the people of Kepulauan Selayar in receiving and implementing the community-based environment sanitation program; and
- c) Support of funding provided by the Kepulauan Selayar regency and central government through the special allocation budget.

4.2.2 *Inhibiting factors*

- a) Lack of quantity and quality of human resources (facilitators) who have sufficient technical qualifications to carry out the community-based environment sanitation Program in Kepulauan Selayar regency;
- b) There are still groups of people who do not realize the importance of adequate sanitation facilities to support and improve the quality of life, especially in the rural area; and
- c) The existence of the unexpected factors.

5. Conclusion

The implementation of community-based environment sanitation program in benteng sub-district, Kepulauan Selayar regency has been successful implemented, but still found the inhibiting in the implementation. The successful implementation can be seen from the role of the community before, during, and after the implementation of the program, they completely carried out their duties and responsibilities, the funding and programs from regional government and central government that support the mechanism of the implementation run smoothly accordance with the provision.

Supporting factors in the implementation of community-based environment sanitation program in benteng sub-district of Kepulauan Selayar Regency are:

- a) Commitment from the local government of Kepulauan Selayar regency and central government in realizing community-based environment sanitation;
- b) Willingness from the people of Kepulauan Selayar in receiving and implementing community-based environment sanitation program; and
- c) Support of funding provided by the local government of Kepulauan Selayar regency and central government through the special allocation budget.

Inhibiting factors in the implementation of community-based environment sanitation program in benteng sub-district of Kepulauan Selayar Regency are:

- a) The lack of quantity and quality of human resources (facilitators) who have sufficient technical qualifications to carry out community-based environment sanitation program in Kepulauan Selayar regency;
- b) There are still groups of people who do not realize the importance of adequate sanitation facilities to support and improve the quality of life, especially in the rural area; and
- c) The existence of the unexpected factors.

References

- Bridgman and Davis (2004). *The Australian Policy Handbook*, 3rd Edition. Ullen & Unwin, Australia.
- Cameron, Lisa., & Shah, Manisha. (2008). Water and Sanitation Program. *Working Paper: Scaling Up Rural Sanitation*. World Bank.
- Carter et al. (1999). The Impact And Sustainability of Community Water Supply and Sanitation Programmes in Developing Countries. *Water and Environment Journal*, Volume 13, Issue 4, pp:292-296.
- Islamy, M. I. (2008). *Public Policy Analysis*. Malang: UB Press.

- Jenkins & Scott (2007). Behavioral indicators of household decision-making and demand for sanitation and potential gains from social marketing in Ghana. *Journal of Social Science and Medicine*, 64 (12): 2427-2442.
- Lane, J. E. (2000). *New Public Management*. London: Routledge.
- Lineberry et al. (1978). *Urban Politics and Public Policy*. New York: Harper & Row.
- Lüthi et al. (2010). Community-based approaches for addressing the urban sanitation challenges. *Journal of Urban Sustainable Development*, 1(1-2): 49-63.
- McGranahan. (2015). Realizing the right to sanitation in deprived urban communities: meeting the challenges of collective action, coproduction, affordability, and housing tenure. *Journal of World Development*, 68: 242-253.
- Nugroho, R. (2009). *Public Policy: Teori Kebijakan - Analisis Kebijakan - Proses Kebijakan, Perumusan, Implementasi, Evaluasi - Revisi Risk Management dalam Kebijakan Publik - Kebijakan sebagai The Fifth Estate - Metode Penelitian Kebijakan*. Jakarta: PT. Elex Media Komputindo.
- Okurut & Charles (2014). Household demand for sanitation improvements in low income settlements: A case of East African cities. *Habitat International*, 44:pp.332-338.
- Public Works Department of Kepulauan Selayar Regency. (2014). *Community-Based Environment Sanitation Program of Kepulauan Selayar Regency 2014*. Kepulauan Selayar.
- Roma & Jeffrey (2011). Using a Diagnostic Tool To Evaluate The Longevity of Urban Community Sanitation Systems: A Case Study From Indonesia. *Journal of Environment, Development, and Sustainability*, 13(4), pp.807-820.
- Statistic Agency of Selayar (2015). Kepulauan Selayar in figure 2015. Kepulauan Selayar.
- UN Habitat (2006). *Meeting Development Goals in Small Urban Centres – Water and Sanitation in The World Cities*. Earthscan, UK.
- Wahab, S. A. (2006). *Analisis Kebijakan (Dari Formulasi ke Penyusunan Model-Model Implementasi Kebijakan Publik)*. Jakarta: Bumi Aksara.
- WHO & Unicef. (2015). *Progress on Sanitation and Drinking Water (Update and MDG Assessment)*. WHO, Swiss.
- Widodo, J. (2010). *Analisis kebijakan publik, konsep dan aplikasi analisis*. Jakarta: Bumi Aksara.
- Winters et al. (2014). Public Service Provision under Conditions of Insufficient Citizen Demand: Insights from the Urban Sanitation Sector in Indonesia. *Journal of World Development*, 60:31-42.