Situation, Input and Output for Community - Based Total Sanitation, First Pillar of ODF (Open Defecation Free) in the Working Area of Health Centers in Banyuwangi Regency

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Abstract- One of the areas in East Java in Indonesia that still encounters sanitation problem was Banyuwangi Regency. Access to sanitation in Banyuwangi in 2016 was 84.5% and the numbers of ODF villages were 67 villages out of a total of 217 villages. Efforts were made to overcome the problem by implementing Community – based Total Sanitation, which is the First Pillar of ODF, implemented by the Local Health Office through Health Centers in its working area. The purpose of this study was to describe the implementation of the Community – based Total Sanitation first pillar of Open Defecation Free Program. This study applied an evaluation study and observational study approach. The study was conducted in Banyuwangi by selecting 4 Health Centers. Data collection was conducted by interviewing 20 respondents consisting of environmental health officers, Head of Health Centers, Head of Districts, Head of Villages and Health Cadres. Data analysis was done indescriptive and presented in table. The results of the study indicated that situation variable was sufficient. The input variable was also sufficient. Some of the variables that fell into sufficient category were education, materials, facilities and time. Output variable was good, but the value that fell in the category of insufficient was innovation. The variables that fell into sufficient category were triggers, mentoring and cross-sector cooperation. While evaluation all variables in Situation, Input, and Output were in good category.

Keywords : evaluation; community-based total sanitation first pillar of ODF; situation, input and output variable

1. INTRODUCTION

East Java is one of the provinces with the percentage of population using healthy latrine below the national average (55.5%)^[1]. One of many area in East Java that face the problem isBanyuwangi Regency.

Banyuwangi is the largest regency in terms of area in East Java Province, at about 5,782.50 km². With such a vast geography area, Banyuwangihas many streams ^[2]. The existence of theses streams provide probability for local community to open defecation (OD) with consequences of getting diseases.

Diarrhea goes into the top 10 diseases in Banyuwangi, starting from 2012 until 2015. The high incidence of diarrhea making the need for serious handling, in which one of them with the implementation of Community - based Total Sanitation, first pillar of ODF program.

Community - based Total Sanitation, the first pillar of ODF is a program created to overcome open defecation by ensuring that each family owns and accesses healthy latrines for the purpose of defecation. This program, starts from one village that has been previously declared free of ODF and subsequently ODF-free districts and regencies. With this program, it is expected that open defecation could be decreased or even fully eliminated. In the implementation of the program, categories divided into Free of ODF – Declared Village and Free of ODF - Undeclared Village.

The coverage of Free of ODF – declared Villages in Banyuwangi was only 27 villages out of 217 ODF villages in 2013-2014 ^[3]. And in 2016 there was an increase to 67 Villages from total 217 Villages in Banyuwangi ^[4]. Further analysis for these achievements, which was not maximized in the past, isnecessary. One of them is by evaluating the situation, input and output variables.

2. METHODS

This study applied an evaluation study with observational study approach. The study was conducted in Banyuwangi Regency by selecting 4 Health Centers namely Tampo, Mojopanggung, Tegaldlimo and Klatak. Data collection was conducted by interviewing 20 respondents consisting of environmental health officers, Head of Health Centers,

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Head of Districts and Villages as well as Health Cadres. Data analysis was done in descriptive and presented in table.

3. RESULTS

Banyuwangi is the largest regency in East Java with an area of about $5,782.50 \text{ km}^2$ which is divided into high altitude - mountainous areas and coastal areas, stretching from north to south. In addition, Banyuwangi Regency has a coastline of 178.8 km and 10 islands. The population of Banyuwangi in 2015 was 1,594,08. Average population growth indicates the rate of increase of population per year within a certain time period. The highest population density was in Banyuwangi district with 3,594 people/km² in 2015. There were 45 health centers spread across 24 districts in Banyuwangi ^[5].

There were four Health Centers targeted for study:

- 1. Tampo Health Center which covers working area of 4 villages
- 2. MojopanggungTampo Health Center which covers 6 villages
- 3. TegaldlimoTampo Health Center which covers 4 Villages
- 4. Klatak Health Center which covers 5 villages

3.1. Situation Variable

In the implementation of Community - based Total Sanitation, first pillar of ODF program has a situation component, in form of the involvement of stakeholders. Stakeholders referred here are from the level of regency, district and village.

Table 1. Health Center Involvement in Co	ommunity -	
based Total Sanitation, first pillar of ODF pa	rogram	

Health Center	Situation Variable, in		
	form of Stakeholder		
	Engagement		
Tampo	Good		
Mojopanggung	Insufficient		
Tegaldlimo	Sufficient		
Klatak	Sufficient		
Total	Sufficient		

Source : The primary data

Based on Table 1, the evaluation of situations in form of stakeholder involvement at level of Health Center, Tampowas categorized as good, Tegaldlimo and Klatak Health as sufficient, while Mojopanggungas insufficient. The overall evaluation of situational variables inCommunity - based Total Sanitation, first pillar of ODF program in Banyuwangi Regency in 2016 was categorized as sufficient.

Based on the results of the interviews, the involvement of stakeholders at district and village level was lacking, as only one region that has performed its role in accordance with the Decree of the Minister of Health of the Republic of Indonesia Number 852 of 2008 on National Strategy on Community - based Total Sanitation, first pillar of ODF program, which contains reference in planning, implementation, monitoring and evaluation.

3.2. Input Variable

Input variable consists of staff, materials, equipment and time. Staff consists of education and knowledge. Material, referred as existence of septic tank facility owned by the Health Center. Equipment referred as promotional tools used by the Health Center. While Time referred as time in achieving target by the Health Center.

Table 2	2. Evaluation	of Input	Variables	in Community	,
- based	Total Sanita	tion, first	pillar of O	DF program	

Innut Health Center					Total
mput	1*	2*	3*	4*	Total
Education	Insuffi cient	Good	Suffici ent	Suffi cient	Good
Knowledge	Suffici ent	Good	Suffici ent	Suffi cient	Sufficient
Material	Suffici ent	Suffici ent	Suffici ent	Suffi cient	Sufficient
Facility	Good	Insuffi cient	Suffici ent	Insuf ficie nt	Sufficient
Time	Good	Insuffi cient	Insuffi cient	Suffi cient	Sufficient
Total	Good	Suffici ent	Suffici ent	Suffi cient	Sufficient

Source : The primary data

*Health Center 1 = Tampo, Health Center 2 = Mojopanggung, Health Center 3 = Tegaldlimo, Health Center 4 = Klatak

Based on the evaluation results in Table 2, it turns out that only knowledge of the program that fell in good category. Components of education, facilities, materials and target times fell into sufficient categories. Overall evaluation result of input variables of Community - based Total Sanitation, first pillar of ODF program in Banyuwangi in 2016 was categorized as sufficient.

3.3. Output Variable

Output Variables includes training, the implementation of programs according to standards, the development of programs through innovation and cooperation across sectors that have been done. Implementation of these output variables will affect the outcome of Community - based Total Sanitation, first pillar of ODF program.

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Tabel	3.	E	valuatio	on of	f Output	Varia	ables	in
Commu	inity	-	based	Total	Sanitation,	first	pillar	of
ODF pr	ogra	m						

Output		Total			
	1*	2*	3*	4*	
Training	Good	Good	Good	Good	Very
					Good
Triggering	Suffici	Insuffi	Suffici	Insuffi	Suffici
	ent	cient	ent	cient	ent
Mentoring	Suffici	Suffici	Suffici	Suffici	Suffici
	ent	ent	ent	ent	ent
Reporting	Good	Good	Suffici	Good	Very
			ent		Good
Innovation	Good	Insuffi	Insuffi	Insuffi	Insuffi
		cient	cient	cient	cient
Cross-	Good	Insuffi	Suffici	Suffici	Suffici
sector		cient	ent	ent	ent
cooperation					
Total	Very	Suffici	Suffici	Suffici	Good
	Good	ent	ent	ent	

Source : The primary data

*Health Center 1 = Tampo, Health Center 2 = Mojopanggung, Health Center 3 = Tegaldlimo, Health Center 4 = Klatak

Based on the evaluation results in Table 3, it turns out that component training and reporting fell into very good category. The component of triggering, mentoring and cross-sector cooperation fell into sufficient category. As for the innovations made by the Health Center, it fell into insufficient category less. The results of the overall evaluation of output variables in the Community - based Total Sanitation, first pillar of ODF program in Banyuwangi Regency in 2016 werein good category.

Tabel 4. Evaluation of situation, input and output variables at each Health Center

No	Health Center	Evaluation of Situation, Input and Output Variables
1	Tampo	Very Good
2	Mojopanggung	Sufficient
3	Tegaldlimo	Sufficient
4	Klatak	Sufficient
	Total	Good

Source : The primary data

The results of the evaluation in Table 4 showed that Health Center that fell in the "very good" category was Tampo, while "sufficient" category included the rest; Tegaldlimo, Mojopanggung and Klatak Health Center.

4. DISCUSSION

Evaluation of the program is the first step in the supervision, done with collecting the right data to be

continued with the provision of appropriate mentoring [6].

Program evaluation functions include ^[7]:

- 1. Provide input for program planning
- 2. Present input for decision makers related to follow-up, extension or dismissal of the program
- 3. Provide input for decision makers to modify or improve the program
- 4. Provide inputs related to supporting factors as well as inhibiting factors of the program
- 5. Providing input for motivation and mentoring activities (supervision and monitoring) for organizers, managers and program implementers

Evaluation on situational variables fell into sufficient category. The condition of stakeholders has a great influence in the success of the program. Managing the stakeholders is important to program managers, in this case, managers should be able to consider stakeholder needs and expectations^[8]. The impacts of stakeholders are very influential in generating an output, whereby if the greater the strength of the stakeholders, the greater the impact on the success of the program^[9]. Referring to some previous study, it is known that good cooperation from stakeholders including Local Health Office, Health Center, districts and villages are needed so that the purpose ofCommunity - based Total Sanitation, first pillar of ODF program can be realized.

According to the result of evaluation on input variables, knowledge fell in good category, while education, materials, facilities, and time target fell in the sufficient category.

Significant relationship between education level and performance is one of the factors that can increase productivity in work. Education not only provides knowledge directly with the execution of tasks, but also a foundation in self-development and the ability to use existing facilities for tasks. Therefore, when referring to the above statement regarding the number, type and quality of health workers, as well as some studies related to education, a Sanitarian should be led by an individual with an environmental health education background.

Based on the Ministry of Health's Strategic Plan for 2015-2019, the budget for preventive health in the health sector is smaller compared to curative and rehabilitative. Funding problems can be solved by cooperating with the private sector or Corporate Social Responsibility (CSR) to obtain additional funds for the implementation of program activities with the maximum. In the interview results there are several Health Centers that carrying out Corporate Social Responsibility (CSR) to meet the needs in implementation of Community - based Total Sanitation, first pillar of ODF program

Facility is one of the elements of health services needed in the provision of health services ^[10]. The

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better the tools used in the implementation of a program, the better the results achieved in the implementation of Community - based Total Sanitation, first pillar of ODF program.

The results of the evaluation of output, training and reporting variables fell into very good categories. The triggers, mentoring and cross-sector cooperation fell in sufficient category, while innovations made by the Health Center fell into the insufficient category.

Based Minister of Health Regulation Number 3 Year 2014 on Community-based Total Sanitation, triggering activities that have been done including planning, monitoring and evaluation in which community involved. Based on the regulation, there is an assistance that Health Center should do to the community. Thus the implementation of triggers and assistance needs to be improved again.

Banyuwangi Health Office provided Health Center opportunity to create innovation. One of the activities undertaken is to organize workshops that feature innovations from the Health Center, in whichCommunity - based Total Sanitation, first pillar of ODF program included. Although the Health Office has previously held workshop activities, but the implementation of innovation in the Health Centerwere still lacking. Yet innovation is also one of the triggers of the success of the program. One example of the existing innovation was called "Pujasera", which collaborated across sectors and also the community as ODF taskforce. In addition, cooperation with the building stores associated with the supply of toilet-making materials was also done. Therefore innovation can be successful when supported by cooperation across sectors and also the communities.

5. CONCLUSION

- 1. Situation variable of Community based Total Sanitation, first pillar of ODF program in the working area of Banyuwangi Health Office in 2016 was sufficient in general. This variable is related to stakeholder engagement.
- 2. Input variable of Community based Total Sanitation, first pillar of ODF program in the working area of Banyuwangi Health Office in 2016 wassufficient in general. Some variables fellin sufficient category were education, materials, facilities and result of target achievements.
- 3. Output variable of Community based Total Sanitation, first pillar of ODF program in the working area of Banyuwangi Health Office in 2016 was good in overall, but the value obtained was still in the category of insufficient innovation done by the Health Centers. The variables that fell into sufficient categories are triggers, mentoring and cross-sectors cooperation.

4. All variables; Situation, Input, and Output were in good category but there must be improvement done on all variables. The variables that need improvements were those that fell into insufficient categories and variables that require revisionwere those that fell in insufficient category.

6. SUGGESTION

Suggestions that could be provided according to the study include:

- 1. Health Center should be more active in embracing each stakeholders in their working area to participate and participate in the Community - based Total Sanitation, first pillar of ODF program by conducting a coordination and evaluation meeting once a month in purpose of that stakeholders can be directly involved in the program.
- 2. Health Center and stakeholders should work together to provide an opinion or idea on how to implement the Community based Total Sanitation, first pillar of ODF program in each region tailored to the environmental and cultural conditions existing in the region. The result of these opinion or idea can be a workable innovation to support successful achievement of the objectives of the program.
- 3. Cross-sector cooperation, in addition to the districts and villages should be done. This includes cooperation in the irrigation, education and private sector to assist Health Centers in directing the community to change their behavior and using toilet when defecate.
- 4. The implementation of triggering practices in each Health Center must also be equipped with audio – visual promotional equipmentas well as visual aids so that awareness could be made in the community as well as to motivate the community to make immediateand possible behavioral changes.

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REFERENCE

- Badan Perencanaan Pembangunan Daerah (BAPPEDA) Kabupaten Banyuwangi. 2012.
 Studi Penilaian Resiko Kesehatan Lingkungan (Environment Health Risk Assessment) Kabupaten Banyuwangi Tahun 2012
- [2] Badan Pusat Statistik Kabupaten Banyuwangi.
 2014. Banyuwangi Dalam Angka Tahun 2014. Banyuwangi
- [3] Azizah, R.; Adriyani, R. (2016). Pemetaan Desa dengan Pendekatan GIS Dalam Upaya Percepatan

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Available online at www.ijrat.org

Desa ODF (*Open Defecation Free*) di Kabupaten Banyuwangi. Penelitian Unggulan Perguruan Tinggi (PUPT) Dikti. *Universitas Airlangga*

- [4] STBM Smart. (2017): STBM Smart Aplication
- [5] Badan Pusat Statistik Kabupaten Banyuwangi.2016. Banyuwangi Dalam Angka Tahun 2016. Banyuwangi
- [6] Arikunto, S. (2008). Dasar-dasar Evaluasi Pendidikan. Jakarta: Bumi Aksara
- [7] Sudjana, N. (2006): Penilaian Hasil Proses Belajar Mengajar. Bandung: PT Remaja Rosdakarya
- [8] Aaltonen, K..; Jaako, K..; Tuomas, O. (2008): Stakeholder Salience in Global Projects. International Journal Project Management
- [9] Nguyen, N.H.; Skitmore, M.; Wong, J.K.W. (2009): Stakeholder Impact Analysis of Infrastructure Project Management in Developing Countries: A Study of Perception of Project Managers in State-Owned Engineering Firm in Vietnam. Construction Management and Economics
- [10] Green, L.W. (2000): Health Promotion Planning an Education and Environment. Aproach Secend Edition. May Field Publising Company Montain View. Toronto.