Reduce, Reuse and Recycle Program Evaluation in Waste Processing in South Jakarta

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Abstract—**Research to evaluate the Reduce, Reuse, Recycle program in Waste Management in South Jakarta and to, find out the supporting and inhibiting factors in the Reduce, Reuse, Recycle in Waste Management Program. This study uses 6 indicators from William N Dunn's theory and uses descriptive research methods with a qualitative approach. Data collection is done by means of interviews, observation, and documentation and Focus Group Discussion (FGD). Data analysis using the Analysis Model from Miles and Huberman. The results of this study indicate that based on the six indicators described above, the 3R program has not been able to run optimally and effectively, because there is still a lack of socialization provided by tribes of the environmental service, causing many people who still do not know the 3R program or focus on the 3R program. itself, like a garbage bank, related to socialization is still very poorly done, for programs that are formed with the aim of managing waste and reducing the volume of waste in South Jakarta, the 3R program still needs to be developed again.**

Keywords—evaluation, program, 3r (reduce, reuse, recycle)

I. PRELIMINARY

The increasingly modern consumption pattern contributes to the increasingly diverse types of waste, one of which is packaging waste which is dangerous and difficult to decompose by natural processes. This will result in the increasing volume of waste produced by agglomeration communities providing benefits in the form of economic growth, employment, rising income, and increasing exports. However, the agglomeration has a negative impact, namely the concentration of waste in industries, households and transportation activities in urban areas that have a serious influence and create a danger to the health and life of urban residents in Indonesia (World Development Bank, 2004).

The enactment of Law Number 18 the Year 2008 concerning Waste Management and Government Regulation Number 81 of 2012 concerning Management of Household Waste and Similar Waste for Household Waste, there is a mandate for the formulation of new national policies and strategies in waste management that are determined not only by ministerial regulations but with presidential regulations. The national policy and strategy at a minimum include the direction of policies and programs for reducing and handling waste, which include the target of reducing solid waste generation and prioritizing the type of waste in stages and the target of handling waste for a certain period of time. (Final Report of the Ministry of Economic Affairs, 2015).

Waste management is only partially understood from a broader, integral and holistic spectrum. Waste management is not based on aspects of offense and its close relationship with other aspects, such as health, spatial planning, education, politics and civil society, poverty, business opportunities, investment, production, technology, employment, and the environment. One of the weaknesses in waste management by the government is that the sanitation agencies who are supposed to be regulators also become operators. The overlapping of these functions makes waste management ineffective because regulators should measure the performance of successful waste management and will apply sanctions if the operator cannot be done. Because the operator is none other than himself. Thus monitoring of operator performance is difficult to measure and services tend to decline.

The issue of waste in Jakarta is so complex, after 5 (Five) Years have passed from when the Law Number 18 of 2008 was enacted, in order to implement a waste management program, the DKI Jakarta government issued the Regional Regulation of the Special Capital Region of Jakarta Number 3 of 2013 concerning Management Rubbish.

The South Jakarta Sub-dept. The environment claims to be able to handle waste in its area. As is known, waste production in South Jakarta reaches 1,502.63 tons per day.

Syarifudin, Head of the South Jakarta Environment Agency, said that from this amount, the amount of garbage transported to the Integrated Waste Disposal Site (TPS) in *Bantar gebang* reached 1,306.68 tons.

Better environmental management can be done by implementing a 3R system (Reduce, Reuse, Recycle) which is one of the solutions in maintaining a cheap and easy environment to do in addition to processing waste into compost or using waste to become a source of electricity (Waste Power Plant). In addition, the application of this 3R can also be done by everyone in household activities.

Understanding evaluation needs to know the definition of evaluation, many definitions of evaluation and each of them is influenced by the models and approaches carried out by experts. Educational background, expertise, and experience influence the notion of evaluation, this raises a diversity of opinions but still enriches the theory contained in it. Evaluation comes from the word evaluation (English). The word is absorbed into the vocabulary of the Indonesian language with the aim of maintaining the original word with a slight adjustment of Indonesian pronunciation to "evaluation". The term "judgment" is a noun of "value". The definition of "measurement" refers to the activity of comparing something

with a certain unit of measure so that its nature becomes quantitative (Arikunto, 2009). Understanding Evaluation According to UNDP (2009: 10) that:

The core of the evaluation activity is an assessment of activity by comparing the initial stages of activities (which have been planned) with the final stages (results of activities). Evaluation requires a study/research design, evaluation sometimes requires a control group or comparison group, evaluation involves measurements over time, and evaluations involve specific studies/studies.

Mustopadidjaja (2003: 45) says that "evaluation is an activity of giving a value to a phenomenon, in which there is a consideration of value (value judgment)." The phenomenon assessed is a variety of phenomena concerning policies, such as policy goals and objectives, target groups who want to be influenced, policy instruments used, responses from the policy environment, the performance achieved, impacts that occur and so on. While policy performance evaluation is part of policy evaluation that specifically focuses on various performance indicators related to established policies and plans.

According to William, N. Dunn (1999) in Nugroho (2014), the term evaluation can be equated with appraisal, rating, and assessment. Evaluation is concerned with producing valid information and the benefits of policy outcomes. Evaluation can provide valid and reliable information about the performance of policies, namely how valid and reliable the policy performance is, namely how valid the needs, values, and opportunities have been achieved through actions from public policy; contribute to clarification and criticism of the values underlying the selection of target objectives; contribute to the application of other policy analysis methods, including the formulation of problems and recommendations. Even though it is related to the whole policy process, evaluation is more concerned with the performance of the policy, especially in policy implementation (Nugroho, 2014).

William N Dunn describes the criteria for evaluating public policy as follows: Type of criteria Question

A. *Effectiveness Are the desired results achieved.*

B. *Efficiency How much effort is needed to achieve the desired results.*

C. *Adequacy How far does the desired result solve the problem.*

D. *Equities Are costs and benefits distributed equally to different groups.*

E. *Responsiveness Whether the results of the policy satisfy the needs, preferences or values of a particular group.*

F. *Accuracy Is the desired result really useful or valuable.*

These evaluation criteria for public policy were used as a framework in the study of the Evaluation of Reduce, Reuse and Recycle Programs in Waste Management in South Jakarta.

II. METHODOLOGY

A. *Research Approach*

This study uses a descriptive qualitative research design (description research). To get a clear picture of how to evaluate the reduce, reuse and recycle program.

B. *Data Collection Techniques*

Data collection in this study uses Observation, Interviews, Documentation and Focus Group Discussion. And the selection of informants using a purposive sampling technique. Namely: 1 Head of the 3R Division of the South Jakarta Environment Office, 1 3R Officer in the South Jakarta Environment Office, 2 Waste Bank Officers and 5 (South Jakarta area communities).

C. *Data Collection Techniques*

Data analysis techniques in this study that refer to research problems are as follows: Data Reduction, Display Data, Verification or Conclusion.

III. DISCUSSION

Data obtained from the results of research in the field were analyzed using the theory concept from William N Dunn namely Effectiveness, Efficiency, Adequacy, Similarity, Responsiveness, Accuracy. The following is an analysis of research on the evaluation of the Reduce, Reuse, Recycle program in Waste Management in South Jakarta.

A. *Effectiveness*

Based on the results of interviews, observation, documentation and FGD, the results of the effectiveness variable in the Reduce, Reuse, Recycle in Waste Management program in South Jakarta were obtained, which still needed alternatives in waste management, especially in point points from 3R itself, where many people still do not understand what can be done in waste management with this 3R system. With the existence of a garbage bank, there are still many people who still do not know, and especially people need good information and communication with the government in handling waste, can be seen from the results of interviews that there are still many people who do not know what programs the government has done in handling garbage.

B. *Efficiency*

Based on the results of interviews, observation, documentation, and FGD the results of the 3R program have developed the scope of their programs, by establishing a waste bank program, but with the garbage bank program, it is still not efficient because the 3R has not yet been reached in the waste bank. maximizing this 3R program and there are still many people who do not know about the programs that have been formed and run by the government of South Jakarta. However, the officers continued to develop the program so that more people would be aware of the programs being run by the government, and that the programs implemented would be more efficient in meeting the community's needs in managing waste.

C. *Adequacy*

Based on the results of interviews, observations, documentation, and FGDs, the results of the 3R program were still less effective in reducing the volume of waste produced by households. Because of the lack of alternatives in the

derivatives of the 3R program itself and there is still a lack of public awareness in reducing and managing their household waste. Even though the biggest number of waste producers comes from household waste. If there is no increase in public awareness in terms of tackling waste, any program run by the department of the environment will be useless, and not run optimally.

D. *Similarity*

Based on the results of the analysis of interviews, observation, documentation and FGD, it can be said that in terms of this similarity indicator the level of socialization is still not maximal, because there are still many people who do not know what the 3R program or Waste Bank is, the official said that they did socialization, but it is still not maximal sometimes the agency is refused when it will hold a socialization, because the community does not care about waste management around the community.

E. *Responsiveness*

Based on the results of the analysis of interviews, observation, documentation, and FGD, it can be said that the community response to the 3R program is still very lacking. Some factors are understandable as a result of the lack of response given by the community to the 3R program, namely: a program that was just initiated by the tribal department of the environment, a long-established habit that garbage can only be disposed of without management first, and feels that garbage is only finished when discarded without the need to do anything else.

F. *Accuracy*

Based on the results of the Interview, Observation, Documentation, and FGD, the analysis can be produced as follows, the accuracy in the 3R program is still very lacking because it has not had a significant effect on waste management and the reduction of the volume of waste itself. recycle waste, especially plastic waste, so that it can greatly affect the management and reduction of the volume of waste itself..

IV. CONCLUSION

Based on the results of the research discussion, it can be concluded that the Evaluation of the Reduce, Reuse, Recycle Program in Waste Management in South Jakarta which consists of 6 Indicators, namely: effectiveness, efficiency, adequacy, similarity, responsiveness, accuracy. That based on the six indicators described above, the 3R program has not been able to run optimally and effectively, because there is still a lack of socialization provided by tribes of the environmental service, causing many people who still do not know the 3R program or the focus of the 3R program such as garbage banks Even though socialization is still lacking, for programs that are formed with the aim of managing waste and reducing the volume of waste in South Jakarta, the 3R program still needs to be re-developed. Because basically handling waste is not only handled in the community but must be from the manufacturer of the product. A firm policy is needed for producers to be able to package their products with materials that are more environmentally friendly.

V. SUGGESTION

A. Broad and periodic socialization to the community and made as attractive as possible such as involving Housewives in processing waste to be used as handicrafts and can increase the income of housewives, so that the community will be accustomed to conducting 3R programs in their environment.

B. The more programs in the context of 3R are not only focused on the waste bank, in order to get the maximum and effective things.

C. More encouraging the 3R program itself, because there are still many people who do not know what the 3R program is.

D. Community participation is needed to be self-aware in handling the waste.

E. It is best if a company in Jakarta can also cooperate in handling its waste.

BIBLIOGRAPHY

[1] Agustino, Leo. 2016. "Fundamentals of Public Policy". Alfabeta: Bandung.

[2] Dunn, William N. (2013). "Public Policy Analysis: Yogyakarta: Gadjah Mada University Press.

[3] Moleong, Lexy. 2014. "Revised Qualitative Research Method". Bandung: PT Remaja Rosdakarya

[4] Sustiyono, Aris, and Kurdiyono, Study of Yogyakarta City Public Awareness Level on Environmental Sustainability, http://www.jogjakarta.go.id/app/modules/banner/images/1222102800. volume2.pdf Accessed on May 24, 2014

[5] Winarno, Budi. 2013. "Theory and Process of Public Policy". Yogyakarta: Media Pressindo.

[6] Zulkifli, Arif. 2014. "Basics of Environmental Sciences". South Jakarta: Salemba Teknika.

[7] Purba, H.D., Meidiana, C., dan Adrianto, D.W., 2014. Waste Management Scenario through Community Based Waste Bank: A Case Study of Kepanjen District, Malang Regency, Indonesia. International Journal of Environmental Science and Development, 5(2):212-216

[8] Bacchi, C. (2015). Problematizations in Alcohol Policy: WHO's "Alcohol Problems", Contemporary Drug Problems, 42 (2), pp. 130-147, DOI: 10.1177/0091450915576116

[9] Pariatamby, A. and Fauziah, S.H., 2014, Sustainable 3R Practice in the Asia and Pacific Regions: The Challenges and Issues, in Pariatamby, A. and Tanaka, M. (eds), Municipal Solid Waste Management in Asia and the Pacific Islands: Challenges and Strategic Solutions, Springer, Singapore, pp. 15-40

[10] Fadila ,. Akhmad, 2015, "Implementation of the City Regulation of Samarinda City Number 02 of 2011 concerning Waste Management (Case Study at the Samarinda City Sanitation and Landscaping Office)" eJournal of Governmental Science, 3 (2),

[11] JISE 5 (2) (2016) Journal of Innovative Science Education http://journal.unnes.ac.id/sju/index.php/jise PERCEPTION AND COMMUNITY BEHAVIOR PATTERNS ASSIST DAMAR RIVER IN WASTE WASTE IN RIVER By Sri Endhes Isthofiyani, Andreas Priyono Budi Prasetyo, Retno Sri Iswari.

[12] Suryani, U.S., (2014), The Role of Waste Banks in Waste Management, Journal of the DPR RI, Vol. 5 (1): 71-84

[13] Jumar, Fitriyah, N., and Kalalinggie, R., 2014. Strategies for Household Waste Management in Lok Bahu Village Sungai Kunjang District, Samarinda City. Journal Administrative Reform, 2 (1): 771-782

[14] Mulasari, S.A., Husodo, A.H., and Muhadjir, N., 2014. Government policy in Domestic Waste Management. National Public Health Journal, 8 (8): 404-410.

[15] Yousuf, T.B. (2014). 3R (Reduce, Reuse and Recycle) in Bangladesh, in Pariatamby, A. and Tanaka, M. (eds), Municipal Solid Waste

Management in Asia and the Pacific Islands: Challenges and Strategic
Solutions, Springer, Singapore, pp. 61-75