

The Implementation of Waste Management in Bandung Green and Clean Program Based on Multistakeholder

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Abstrak. Program BGC merupakan program pemberdayaan masyarakat untuk mengelola lingkungan khususnya pengelolaan sampah secara swakelola di tingkat Kota Bandung (Kota Bandung). Kota Program ini dibangun atas kerjasama Yayasan Unilever Indonesia, Badan Pengelolaan Lingkungan Hidup Bandung, Harian Pikiran Rakyat, Radio Rase FM, dan Lembaga Penerapan Teknologi Tepat Guna dan Pengembangan Kesejahteraan Keluarga Bandung. Penelitian ini bertujuan untuk mengetahui bagaimana pencapaian pelaksanaan program BGC (khususnya program pengelolaan sampah) ditinjau dari aspek relevansi, efektivitas, efisiensi, dampak, dan keberlanjutan termasuk faktor-faktor yang mempengaruhi pencapaian keberhasilan/kegagalan pelaksanaan program BGC. yang terkait dengan pengelolaan sampah ditinjau dari aspek karakteristik masalah, karakteristik program dan variabel lingkungan. Metode yang digunakan dalam penelitian ini adalah kualitatif dominan dan kuantitatif kurang dominan dikombinasikan dengan metode analisis deskriptif. Hasil penelitian ini menunjukkan bahwa pelaksanaan program Bandung Green Clean terkait pengelolaan sampah di Kota Bandung sudah relevan dengan kebutuhan dan kondisi masyarakat Bandung. Namun pelaksanaan program terkait pengelolaan sampah Bandung Green and Clean belum berhasil mencapai tujuan yaitu mengubah perilaku masyarakat dalam pengelolaan sampah. Sebagian besar kegiatan seperti pemilahan sampah, pengomposan dan daur ulang sampah anorganik harus dilakukan di tingkat masyarakat. Dengan demikian jumlah volume sampah RT-RW peserta Bandung Green and Clean mengalami penurunan hanya mencapai 10% dari target pencapaian program pengelolaan sampah sebesar 95% Kegagalan program ini, disebabkan oleh faktor karakteristik permasalahan yang dihadapi di Program-program BGC terkait pengelolaan sampah dengan cakupan program kelompok sasaran yang terlalu besar dan terlalu heterogen serta cakupan perubahan perilaku, sehingga berdampak pada mudah tidaknya program pengelolaan sampah yang dilaksanakan di lapangan, yang pada gilirannya juga berpengaruh terhadap tujuan pencapaian program Bandung Green and Clean terkait dengan kebijakan pengelolaan sampah.

Kata Kunci: Bandung Green Clean Program (BGC); Pengelolaan Sampah; Evaluasi

Abstract. *The Program of BGC is a community empowerment program to manage the environment in particular self-governing waste treatment management in the level of Bandung City (Kota Bandung). This Program city is built by the partnership of Unilever Indonesia Foundation, Bandung Environmental management Agency, Pikiran Rakyat Daily Newspaper, Rase FM Radio, and Institute for Appropriate Technology Implementation and Bandung Family Welfare Development. This study has objective to determine how the achievement of BGC program implementation (in particular waste management program) considered of aspects of relevance, effectiveness, efficiency, impact, and sustainability included the factors that influence the achievement of success/failure of the BGC programs implementation which is related to waste management considered of the aspects of the problem characteristic, program characteristics and environmental variables. The method used in this study are dominant qualitative and less dominant quantitative combined with descriptive analysis method. Results of this study has shown that the implementation of Bandung Green Clean programs related to waste management in Bandung has been relevant to the needs and conditions of Bandung people. However, the implementation of programs related to waste management Bandung Green and Clean has not succeeded in achieving the goal namely change people's behavior in waste management. Most of activities such as waste sorting, composting and recycling inorganic waste have to be done at the community level. Therefore the amount of waste volume of neighborhood Association-citizens Association Bandung Green and Clean participant has decreased only reached 10% of the target achievement of the waste management program by 95% The failure of this program, caused by characteristic factors of the problems encountered in BGC programs related to waste management with the target group coverage program that is too large and too heterogeneous as well as the scope of behavior change, therefore it has an effect on easy or not the waste management programs implemented in the field, which in turn also affect to the objectives of the Bandung Green and Clean program achievement related to waste management policy.*

Keywords: Bandung Green Clean Program (BGC); Waste Management; Evaluation.

Introduction

Population growth, changes in patterns and increased consumption of people in urban areas, led to an increasingly diverse volume and type of waste. The increase in volume and types of waste has become a major environmental problem occurring in the Big Cities. Urban waste problem is also experienced by the Government of Bandung. 2016 Bandung City was dubbed "Bandung is Sea Of Trash" and got the predicate of the dirtiest city following the landslide of garbage waste in Leuwigajah Disposal Area. Various programs continue to be pursued by

the government of Bandung City to overcome the problems of waste and the environment, among which in 2018 was born Bandung Green Clean (BGC) program that focuses on issues of green and hygiene, especially community-based waste management. The BGC program is built on partnerships from the Bandung City Government - the Environmental Management Agency (BPLH), the Unilever Foundation, The Media Mind of the People, the Radio Rase FM Media, and the Appropriate Technology Implementation Institute (LPTT) (Agustina et al., 2020). In enhancing community motivation to manage the environment, the BGC program is implemented through environmental management contest at the Citizens Association level. Criteria for the assessment of this environmental competition include community participation, waste processing and segregation and reforestation program. Waste management assessment includes waste reduction, and waste management system. Community self-assessment includes facilitators, environmental cadres, community activities, and Family Welfare Development. Parameters to accounted management of waste are covering administration, health and habit or community customs. The contestant who is entitled to be the winner of the environmental competition is the participant with the highest score with that condition he / she can be crowned as champion (BGC champion). 1556 Citizens Association level spread across 151 urban villages and 30 sub districts in Bandung, BGC program in 2018 was followed by 100 Citizens Association level, 2019 followed by 200 Citizens Association level, 2020 followed by 373 Citizens Association level, and 2021 followed by 619 Citizens Association level

The BGC program has been implemented since four years ago and is still running until now. To be able to find out whether the implementation of BGC program (especially in the case of waste management) is successful in achieving its objectives, it is necessary to do an evaluation effort. Evaluation of previous BGC program implementation has been conducted based on the successful evaluation of BGC project implementation activities from the project side, namely: 1) community empowerment; 2) hygiene through waste management; 3) green project; 4) water enrichment with groundwater recharge method, absorption well etc; 5) energy saving, and 6) replication to other regions. Although, according to the evaluation results, the implementation of the BGC program which has been done from the side of the project is considered to have been successful, but whether it can have an impact that the sustainability of the program is guaranteed or not can be known. Evaluation starts from planning, execution, and also to monitoring and evaluation will make to accuracy information about success rate/failure and factors influencing it. The results of the evaluation of BGC program activities are expected to be used as inputs to improve and improve program performance in the future. This study was conducted with the aim to finding out: to examine how the achievement of the successful implementation of BGC program in Bandung related to waste management in terms of relevance, efficiency, effectiveness, impact and sustainability of the program. To examine what factors influence the achievement or failure of the implementation of the related BGC project waste management (Mulianingsih, 2019).

Methods

This research is descriptive, conducted by using qualitative-quantitative approach (mix method) dominant qualitative and less (less) quantitative dominant as its supporter. Sampling method is done by random (random sampling) that is how to take the elements from the population such that each element gets the same opportunity to be selected as member of sample. Qualitative data collected from interviews, observations, and literature studies will then be analyzed. Data processed in line with data collection by doing data reduction is the process of selecting focusing, simplification, abstraction and transformation raw data. Then displayed (display) into the results of quantitative data analysis is displayed in the form of tables, graphs/histograms in the form of percentage values that describe the measurement of community participation in the achievement of BGC program objectives related to waste management (Wulandini & Sembiring, 2019).

Results

Achievement of Waste Management

Program Implementation The implementation of the Bandung Green and Clean program has been underway for 4 (four) years and is still ongoing until now. To find out the successful implementation of Bandung Green and Clean program related to waste management that has been going on for 4 (four years) is evaluated by using several approaches such as relevance, effectiveness, impact, efficiency, and sustainability.

Relevance

The evaluation of the relevance aspect is aimed at assessing the extent to which the conformity of the activities is in line with the existing objectives and policies. Evaluation with relevance approach is done to all stages of Bandung Green and Clean program activities related to waste management from planning, implementation to monitoring and evaluation. Based on interviews with informants, the design of Bandung Green and Clean program implementation related to waste management is a planning document made based on agreement from six Bandung Green and Clean partners (Unilever Foundation, 35/5000 Agency for Environmental Management Bandung, Mind

Media, Radio Rase FM Media, and Team Drivers Family Welfare Development Bandung) that adapted to the conditions of the region and the needs of people in the field (Widyarsana & Daniel, 2020).

Based on the results of research conducted that the design of Bandung Green and Clean program implementation related to waste management made relevant to the needs of the community in the field. Based on survey data, it is known that community participation in planning of Bandung Green and Clean program related to waste management is quite high, that is equal to (59%) participate in socialization activity, hence there is conformity of plan / plan compiled with community requirement in field so it can facilitate in carrying out activity of Bandung Green and Clean program related to waste management as planned. Where in making this design the community is also involved in providing information about the condition of the area and environmental problems that are faced, especially the problem of waste, so it can more easily reach the target set program target. Implementation phase evaluated is the extent of the stages of Bandung Green Clean program activities related to waste management carried out in accordance with the planning program that has been made. Based on research conducted that every stage of Bandung Green Clean program activities related to waste management has been implemented in accordance with the program plans that have been made, the objectives of the program and the right target. When do the implementation all stages of this program can run well. This is due to the commitment of each Bandung Green Clean partner as well as the participation/involvement of the community (Ida et al., 2021). Based on the survey data, it is known that the involvement of the community in the implementation of Bandung Green Clean program related to waste management through training of organic waste management, inorganic waste and also training of garbage Bank given is very high that is (36%) facilitator follow the composting training activity, (6,0%) (8.4%) of facilitators participate in inorganic waste recycling training and (41%) facilitators follow all training activities.

Evaluation of the relevance aspect in this case is to know whether the monitoring and evaluation activities on the implementation of program activities in accordance with the plans that have been made. Implementation of monitoring of Bandung Green Clean program activities related to waste management is done by field coordinator assisted by companion volunteers at the time of program activity in progress and done at least once a month to field. This monitoring aims to measure how far the design of programs that have been made can be implemented in the field. As for the evaluation activities on the whole Bandung Green Clean program conducted every one period ended once every one year after all activities completed and done at the end of the year in December. Evaluation activities were conducted by Bandung Green Clean program managers and managers as well as representatives from all Bandung Green Clean partners (Bandung Environmental management Agency, Unilever Foundation, Mind Daily Media, Radio Rase FM, and Bandung Family Welfare Development) The purpose of this evaluation is to know the advantages, disadvantages of running the program in as well as a tool to measure the extent to which program objectives and targets are achieved Based on research conducted that the implementation of monitoring and evaluation of Bandung Green Clean programs related to waste management has been in accordance with the program plan that has been made but still not optimal (Ayu et al., 2020)

Ideally the frequency of monitoring implementation is done two to three times in one month. However, in the implementation with the large number of participants neighborhood Association Bandung Green Clean period of 2018 while the number of companion volunteers is very limited, monitoring can only be done once a month. In the implementation of monitoring evaluation activities not only to meet the administrative activities and monthly reports and annual reports that must be submitted to all Bandung Green Clean partners, but monitoring and evaluation activities should also provide a report that contains solutions and problem-solving strategies that occur in the field so that the implementation of the next activity to be better and the success of the program can be realized. Because in the implementation of field activities will be faced with the complexity of the problem and the uncertainty of the situation, thus the problem is not considered a failure but rather a learning process that provides better confidence and understanding for future field implementation who can base their decisions (Fitriansyah et al., 2020).

Effectiveness

Evaluation of effectiveness in this case is seen from the achievement of BGC program activity objectives related to waste management. The purpose of BGC program related to waste management is to change people's behavior in waste management. Increased participation / participation of the community to sort waste from home, is a manifestation of the change of behavior / behavior of the community so that citizens can reduce the amount of waste volume transported to garbage dump , help the community to be trained and responsible for their lifestyle, their living environment is healthy, and citizens are able to reduce methane pollution / reduce global warming (Hafidzah, 2020). Based on research conducted that the achievement of objectives of the implementation of BGC program activities related to waste management is to change the behavior of the community in waste management so that there is a decrease in the volume of waste disposed to the garbage dump through waste segregation activities, composting activities and the presence of new Trash Banks realized and implemented in community level, so that the total volume of waste disposed to the garbage dump from citizens Association of BGC participants is only about 10% (from 100

households there are 10 people doing waste management activities) with the target of achieving BGC program objectives related to household waste management of 65% for organic waste and 30% for inorganic waste with an estimated ten years program.

Impact

Based on research conducted that the changes/impacts that occur with the activities of waste management programs in terms of social is the establishment of communication/social interaction in the community about environmental care, such as collaboration activities where this activity for most people of Bandung is no longer done (Achmad, 2014) Other changes that occur with the BGC program activities related to waste management are the economic improvements obtained from composting activities, inorganic waste recycling activities and from the Bank Trash. Besides, there has also been a change in environmental quality in citizens Association BGC participants that the environment becomes more comfortable, cleaner, more beautiful and greener.

Efficiency

Efficiency in this case is what the means to achieve cost-effective results and objectives in terms of the cost of all BGC programs related to waste management activities. The source of funds for the implementation of all BGC program activities is entirely from the Unilever Foundation. Funds that have been issued by Unilever Foundation since the beginning of BGC program year 2018 to 2021 is Rp.1.600.000.000, -. (in 2018 amounting to Rp.450 million, 2019 amounting to Rp.450 million, 2020 amounting to Rp.450 million and 2021 around Rp. 250 million) with the allocation of BGC program funds used to finance socialization and training activities both citizen association and district levels as well as for mentoring activities to the community. Based on the results of interviews with informants when calculated with the budget funds, 2018 is still around 2019 budget amounting to Rp.450 million with the allocation of funds for the cost of socialization and training and assistance to 373 citizen association participants BGC while in 2021 Rp.250 million is included for training and facilitation costs to 619 citizen association BGC participants. Based on Budget comparison of 2018 with 2021 indicates that in 2021 financing is more efficient. Efficient is not seen from why get a small budget but see from its use. With less budget, but all BGC program activities, especially waste management starting from waste management and garbage bank training activities both at citizen association and sub-district level up to 619 citizen association of BGC which only amounted to 373 citizen association and can run and work well. According to (Kurniadi, Y U., 2020) that efficiency is closely related to the concept of effectiveness, is the ratio that the output produced to the input used.

Sustainability

Sustainability is the maintenance or influence of any additional positive changes generated by the program or project after the project ends. Through sustainability actions it is expected that the program/project can proceed even after the intervention has ended, either by the same organization or by different organizations. Based on the results of the research, the indication of sustainability of waste management activities in the community can be seen from the processing of organic and inorganic waste, garbage bank and also campaign of garbage companion which continue to be done. The role of Chairman of citizen association as a stakeholder in the environment is very supportive for the sustainability of BGC programs related to waste management in the community. Due to the fact that every change of the neighborhood Association- citizens Association management, will affect the policy in the community that causes the waste management activities that have been running eventually ended. In addition to support from citizens Association, other support needed for the sustainability of BGC programs related to waste management in the community is the support of the village and local sub-district (Khairunisa & Safitri, 2020). Based on the survey results, it is known that the sustainability of waste management programs in the community after the BGC program for 1 (one) year has been completed shows that 60.2% is still carrying out the BGC program activities related to waste management and (39.8%) have not run the waste management program by reason of change of management of citizens Association which caused the policy in his citizens Association also changed also due to lack of participation from the citizens due to busy work, etc. Based on the survey results also known that source of funds for waste management activities in the community (88%) comes entirely from the donation of citizens (self-help community) (Chaerul & Dewi, 2020). BGC parties do not provide financial assistance to the community, but as an intermediary of the community to get funding from other parties such as from Cleanliness Corporate, Agriculture Agency, Bandung Environmental management Agency.

Conclusion

Based on the results of the study, it can be concluded that the achievement of the implementation of the BGC program related to waste management in Bandung City is based on the aspects of relevance, effectiveness, impact, efficiency, and sustainability: Based on the relevance that the BGC program design is relevant to the needs and

conditions of the community in the field, the implementation and monitoring of BGC program evaluation activities related to waste management is relevant to the program plan that has been made. Based on the effectiveness of the implementation of waste management in the BGC program, it has not succeeded in achieving the goal of changing the behavior of the people of Bandung City in managing waste, the reduction in the volume of waste from BGC participants only reached 10% of the target achievement of the waste management program objectives of 95%.

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