

# Qualitative study of obstacle to community empowerment in waste management: Community perspective in DKI Jakarta

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**Abstract.** Even though waste has become a big problem in Jakarta, the efforts to overcome it are still running poorly in reality. Many obstacles make community empowerment in managing waste difficult. Population numbers and increased economic capacity and community production, for example. Besides the problem of urbanization in general, the community's role in learning and taking the initiative in empowering themselves to avoid the problem of waste is still low. This study uses a qualitative method with theoretical and recent studies review, policy review, and critical analysis of the theory. Barriers to the community's internal problems and the lack of seriousness of attitude from the government can be seen as a phenomenon that shows obstacles also exist in socializing the values of waste management properly.

## 1 Introduction

The higher the production and consumption of the community, the greater the waste heap produced. With a population of around 10 million in 2018 (based on projections from the 2015 Intercensal Population Survey (SUPAS)), the amount of garbage created per day is certainly not insignificant. This condition is exacerbated by the ability to transport waste that cannot take all the waste that exists every day. Based on the data that has been recorded, in 2010, when waste production reached around 9,200 tons per day, only around 7,800 tons of waste were transported every day, leaving more than 1,300 tons of residual waste. From 2010 to 2014, this figure was the most massive [1]. Until 2017, the most significant waste source is none other than residential areas that reach around 60%. Meanwhile, garbage from urban areas is around 22%, and the rest comes from industry and lodging. Waste production is still high every day because of more and more residents in the Capital City [2].

In fact, with Jakarta's high population growth and that much waste production, up to 2018, waste is still the leading cause of flooding due to the large amount of waste accumulated in several flood gates [3]. In addition to the waste problem, with the reduction in water catchment areas due to urbanization and population growth that continues to increase, the

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downstream part of the city of Jakarta is experiencing an increase in the frequency of floods every year. Urbanization upstream then worsens the situation. The catchment area's response is changing, and the risk of flooding is increasing [4]. Even if the Directorate of Water Resources and the Provincial Government of DKI Jakarta works hard to clean up waste to reduce unwanted potential due to waste, if participation and public awareness are not adequately involved, it might not be able to handle the existing problems. In fact, in quantity with this much waste will undoubtedly cause a variety of potential health hazards such as diarrhea, fungal diseases, toxins, and an impact on social and economic conditions.

What is meant by empowerment in this context is increasing awareness and feelings of self-efficacy among members of the association by identifying conditions [5]. Self-efficacy is the faith of a person in their ability to make decisions and/or behavior appropriate for specific interests. By mastering bad situations and turning them into new things to avoid these situations while producing something beneficial, community empowerment should become widespread. Self-efficacy is generally formed through phenomenological experiences and psychological pressures that influence one another, both among factors and among community members. For example, suppose that a high-ranking executive intends to improve his department or get out of a problem the department is facing. Instead of making policy, he can authorize employees to research problems and try to make the necessary changes. In this example, the employee can be said to be empowered. In the viewpoint of these employees, they are members of associations that empower themselves [6]. Citizens should get used to holding their shopping bags while shopping to reduce waste plastic development while solving this garbage issue. Unfortunately, data from the Central Statistics Agency (Badan Pusat Statistik/BPS) in 2017 showed that only around 10% of the public get used to bringing their shopping bags regularly. More than 70% of the people claimed that they never brought their shopping bags. The rest are "sometimes" answers. The role of government and related institutions to raise awareness and build insights is undoubtedly needed so that a good start can be realized

## **2 Method**

The fact within Jakarta's society is at odds with the idea given in the previous theoretical discussion. The Jakarta people, based on the data from the National Socio-Economic Survey (Susenas) in 2017, revealed that more than 75% of DKI residents in Jakarta did not vote for wet dry waste. This research was conducted qualitatively by first, a review of previous studies. Previous research published in scientific articles both at home and abroad and can be accessed by the public. Second, a review of policies in waste management in urban areas, especially in Jakarta. This policy review is useful to see how the policy process is generated and the field's implementation process.

## **3 Results and discussion**

The rest, not all of them actively sort out, with specifics of occasionally sorting 13.19%, 2.62% sorting regularly, and the remaining 6.35% mostly sorting wet and dry waste. A lack of knowledge influences those that do not separate wet and dry waste. This is a waste of time, as there are no separate sorting facilities or places to put the two forms of garbage separately. Some of them also have various ways of managing waste, even in the absence of waste management information. Those who own land sometimes bury or burn it. Of course, Burning is not a good cause, because it would affect global warming and local air pollution. Only a limited amount of waste is used as a compost. However, they want to deposit it to the waste bank to recycle for a limited portion, which has economic value. Initiatives by people

to turn waste into fertilizer/compost usually need their perspectives. Through this respect, the government should be able to provide advice and information as often as possible. Of course, just about 9% of the total is the number of very "creative" (instead of littering, not handling garbage, and leaving trash scattered).

Based on PP No. 81 Tahun 2012 Pengelolaan Sampah Rumah Tangga dan Sampah Sejenis Rumah Tangga (Management of household waste and waste types of waste household), each person should minimize and manage the waste. Though relatively few, a small portion of the residents who littered was also identified, based on previous studies. They dump wetlands into the rivers, the ditches, too. Possible behavior is rational, given that their settlement is near the river. The government seems to have failed in its efforts as the front guard to understand the value of protecting the environment. With some examples of empirical cases that already exist, it should not be difficult for the government to provide education so that the public can understand what the government expects, for the common good, of course. If we look at the behavior, public awareness to maintain environmental cleanliness is still minimal so that destructive behavior is not difficult to find.

Awareness, skills, and participation of community members on empowerment in protecting the environment should be honed through good education. Suppose all members of the community (apart from differences in age, gender, gender identity, and other constructive identities) can take the initiative to protect the environment and work together to manage waste properly. In that case, it is at this point that the government succeeds in educating and "communicating" with the community. However, new problems will arise if we talk about education. This is closely related to some people's economic conditions in Jakarta who are unequal in terms of ownership of resources. This positively affects the existing income. For a small proportion of people with capacity, their incomes soar. The rest, inequality can be massive.

Data from the Central Statistics Agency mentions poverty in DKI Jakarta Province from 2013 to 2017 has increased to nearly 4% as of September 2017 ago. With such a large percentage, the number of poor people is estimated at nearly 400 thousand people. One of the effects of these conditions is certainly in terms of education. The linkage of poverty with education may have been an endless discourse. Roles, skills, insights and environmental concerns, and mastery of knowledge (related to the outline of the problem in this paper, of course) are things that should be easily obtained and understood if they have attended education "as appropriate". Current tuition assistance may have been easy to obtain and has become a long-term investment for the country. However, the legacy of limited access to education of the previous generation certainly cannot make us too much expect a change in ideal attitudes related to an issue such as garbage, the environment, and awareness of the importance of children's education, of course. Maybe the government needs strategies that are more precisely designed to meet children's educational needs from low-income families. But this can be complicated, costly, and of course there are policy differences that adjust the target [7].

According to Macionis, socialization is a social process of human self-development which also includes the process of learning culture which includes values [8]. In this case, the DKI Jakarta government has always been positioned as a socialization agent who wants to make the people of DKI Jakarta internalize good waste management values. However, as explained by the phenomena above, the government can be considered unsuccessful in its socialization to make the people of DKI Jakarta internalize good waste management values.

One of the causes that can be found is the lack of diversification of socialization agents in socialization by the Jakarta administration. One of the socialization agents used by the DKI Jakarta government in this process is an educational institution. Macionis consider school as one of the educational institutions as one of the instruments of socialization in collaboration with families to socialize values, especially to children [8]. However,

educational institutions that are supposed to be agents of socialization that assist the government actually face their own obstacles. The problem is the limited access to education for low-income families [7]. This limitation ultimately led to the disruption of the socialization process regarding good waste management for children from low-income families.

Actually, the government can use various kinds of socialization agents that exist in society other than educational institutions. Mass media use as a way to socialize ways to manage waste properly or care about the environment can be an effective tool. This is because the mass media is an instrument that can spread information in a large scale [8]. When compared to educational institutions, the mass media is far superior in its ability to achieve large-scale socialization targets. Then, at a more micro level, the DKI Jakarta government can carry out programs that target the socialization of waste management and environmental awareness specifically at the family level in Jakarta. According to Maconis, family is the primary socialization agent who plays an important and most effective role compared to all other agents in a society [8]. The family has an important role because it can socialize values to children who can then carry these values to the next generation. So, in addition to using education and trying to use mass media as a way to get targets for the socialization of good waste management values and environmental awareness on a large scale, the DKI government is also not spared in trying to carry out socialization at the micro level which in this case is the family remembering how effective and important it is in the process of socializing values in a society.

In addition to obstacles to internal problems from the community and the government's attitude, which seemed to be less serious in handling this problem, several other conflicts also took place, which later became an obstacle to this waste processing. The condition of the Bantargarang landfill in Bekasi is poor, for example. The final landfill still piles open waste (open dumping) [9]. Some news reports say that this was caused by several interested parties' conflict, which became a prolonged conflict. Conflict related to such waste management is not the first time. For example, in some other areas such as in the area of South Tangerang City, Tangerang City, and Tangerang Regency. The news from the community stated that there had been several conflicts involving residents, scavengers, and non-governmental organizations. Due to the many riots, one of the final landfills was closed-down many times. Among others, problems that were found were due to location problems to the management process that were not by applicable waste processing technology standards [9]. Alfiandi (2012) in [9] states that the surrounding environment is also disturbed due to treatment methods in landfills that are not environmentally friendly.

## 4 Conclusion

Waste management conflict in DKI Jakarta is triggered mainly by gaps in attitudes between the society, stakeholders, and the view on the environment from the unequal population. In this matter, confusion in the communication process that causes the key message not to be properly received between the parties is likely. This mistake is quite likely if one party cannot understand the meaning of the message communicated by the interlocutor which then makes some of their attitudes differ. Indeed, the gaps in experience in waste management make it impossible to change the situation. In general, if we point to the root of the issue, we can conclude that the government has failed to internalize the ideals of collective caring for the environment while the population lacks the desire to "know.". Beyond "technical" issues such as eradicating poverty and efforts to equalize education, the government needs to instill an ideal attitude and perspective on the community so that they are aware and skilled in protecting the environment. This effort can also be interpreted as one of the methods of public

education. Of course, the teaching and learning process is not only focused on the community as "learners" but puts the community and government as partners in dealing with a common problem, which is mutually learned from both parties. There needs to be participation and participation of every community member and stakeholders who should be able to walk side by side in order to be able to identify, analyze and map existing problems so that the best solution can be achieved. Such integrated waste management has been proved to be an effective measure [10, 11]. Regulation on waste also needs to be reiterated among stakeholders such as NGOs, the business community, and the community. That way, community meetings and community service work on a large scale can be realized so that the main problems can be more easily solved.

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