

## **Social Entrepreneurship in Waste Management: *Surabaya's Experience***

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### **ABSTRACT**

*This paper will discuss the practice of social entrepreneurship in the waste bank or “bank sampah” activity in Surabaya city and reveal its potential for social and economic empowerment for urban community. As the second largest city in Indonesia, Surabaya has faced serious problem deal with waste. Interestingly, the problem has prompted the emergence of a community initiative to engage resolve the problem by setting up waste bank in their neighborhood. This study uses primary and secondary data that collected by interview and observation. Data analysis use interactive model data analysis. Location of study in Jambangan and Kebraon village, Surabaya. This study found that social entrepreneurs activity on waste bank in surabaya can provide additional family income, encouraged the emergence of innovative and creative community, and increasing social capital for the community. This paper also review the important factors that determine the appearance of social entrepreneurship in urban communities.*

**Keyword:** *waste bank, social entrepreneurship, social capital, Surabaya*

### **INTRODUCTION**

The last few decades, the issue of environmental management has attracted attention people in the world. Environmental management

is considered as productive efforts towards sustainable development of the world. One of the critical issues of environmental management is waste. Especially in big cities, waste has become one of the serious environmental problems. Density of population in the cities have consequences on the amount of waste generated. In Indonesia, the problem of waste in metropolitan cities can be seen from the table below:

**Table 1.**

*The volume of waste per day in The Metropolitan Cities in Indonesia 2007*

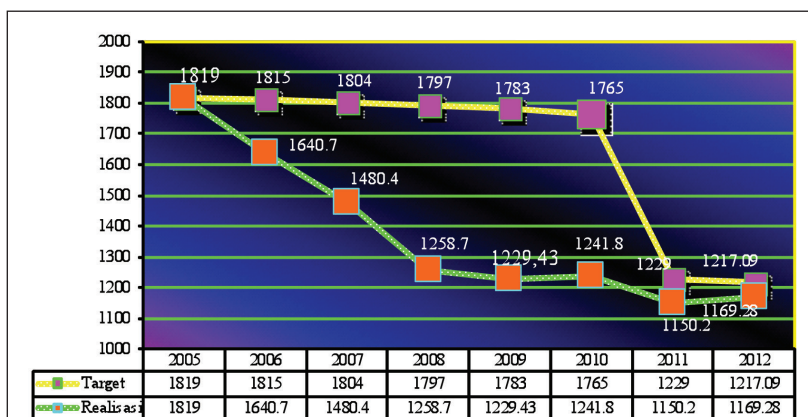
No	City	Waste Production (m <sup>3</sup> /day)		
		2005	2006	2007
1	Medan	Na	4,382.00	4,985.00
2	West Jakarta	5,500.00	5,500.00	5,500.00
3	Centre Jakarta	4,651.00	Na	5,280.00
4	East Jakarta	5,442.00	5,272.80	6,592,70
5	North Jakarta	4,180.00	Na	5,161.00
6	South Jakarta	5,223.00	Na	5,663.00
7	Palembang	4,698.00	Na	5,100.00
8	Makasar	3,580.00	Na	3,661,81
9	Depok	Na	Na	3,764.00
10	Bandung	6,473,70	Na	7,500.00
11	Tangerang	4,225.00	5.000.00	3,367.00
12	Bekasi	Na	Na	2,790.00
13	Surabaya	6,700.00	6,234.00	9,560.00
14	Semarang	4,274.00	3,805.00	4,500.00

Na: data is not available

**Source:** Sonah, S.M. & Ma'ruf, M.F. (2013).

The picture above shows how the fourteen major cities of Indonesia generate waste per day. These data also reveal that the urban area is the major contributor to the volume of waste in Indonesia. Even the Ministry of Environment (KLH) states that the average volume of waste that generated in Indonesia in 2010 reached 200 thousand tons per day. Its mean that if the waste problem is not immediately treated, it is predicted by 2020 the volume of waste in Indonesia will increase five-fold, which means it will be produced one million tons of piles waste a day.

In the city of Surabaya, waste is not a new problem. Surabaya had hit by “floods waste” in 2001. This is due to the amount of garbage produced by society can no longer be accommodated by the landfill (TPA). It resulting landslides of waste that spilled into the street and housing around landfill site. This incident has invited the attention of townspeople and emerging initiative of several groups in the communities to get involved in waste management efforts. Since then, people began to be more concerned about environment issues and encourage to develop a waste reduction programs around their neighborhood. Residents began to involve in a community-based waste reduction programs in their environment that aims to reduce the volume of waste disposed to landfill. As result, those participation in waste management have a significant impact on reducing the amount of waste in the city.



Source: Sonah, S.M. & Ma’ruf, M.F. (2013)

**Figure 1.** The Amount of Waste per Year in Benowo Landfill (TPA)

As shown in the table above, since 2005, every year the waste volume in Surabaya city has decreased. In 2005, the Surabaya city produced 1,819 tons of waste. Whereas in 2012, the production of waste in Surabaya only 1,169.28 tons. This means that by 2012, the amount of waste produced Surabaya resident is 649.72 tons less than in 2005. Decreasing amount of waste volume shows that community involvement in waste management is proven helping government to overcome the waste problem significantly.

In some neighborhood in the Surabaya city has emerged groups of people who become catalysts for community involvement in the process of waste management. They call it the *environmental cadres*, many of whom are women. They open a wide range of skills to process waste into compost, handicraft and other products economically valuable. These groups have been able to develop entrepreneurship practices in their environment.

During its development, waste management programs are developed in the form of waste banks or "*bank sampah*". Waste bank program is a system of communal waste management by recycling principles. This system has succeeded in creating economic value of inorganic waste (Utami, 2013; KLH, 2012). Other advantages, the people who act as the bank's customers will also benefit to having saving that could be taken as needed. This communal activity of waste bank has given a new socio-economic impact for the community.

The emergence of groups in community who are actively participated in waste management in their environments are crucial for review. Although participation of citizens in the public life is something that is expected, the studies showed that participation can not appear by itself. In fact, participation in public life is something that needs to be cultivated. Especially for the people in the city that normally live individualist.

For that purpose, this paper will also review the important factors that determine the appearance of social entrepreneurship in urban communities. This paper will discuss the practice of social entrepreneurship in the waste bank and reveal its potential for social and economic empowerment for urban community. This paper will also review the important factors that determine the appearance of social entrepreneurship in urban communities.

## **SOCIAL ENTREPRENEURSHIP**

There are many definitions of entrepreneurship. Peter F. Drucker (2006) stated that entrepreneurship is the ability to create something new and different. This understanding have the intent that one entrepreneur is a person who has the ability to create something new and different from the others. This also mean is being able to create something different from what already exists.

Zimmerer (1995) defines entrepreneurship as the process of applying creativity and innovation to solve problems and find opportunities to improve the lives of (business). Likewise Hisrich, Peters, and Shepherd (2009), they stated entrepreneurship is the process of creating something new or giving a new value using the time and effort required, bear the financial risk, physical, and social risks that accompany, receive a monetary reward produced, as well as satisfaction and personal freedom. Entrepreneurship also includes the method of stimulating individuals within the organization who thought that he could do something in a different way and with better results.

In public sector, limitation of public organization to fullfill public value reveal a number of gaps (Diefenbach, 2010). These gaps requaire social entrepreneur to find out better solution to social and economic problem. Brouard and Larivet (2010) stated the social entrepreneur is the individual or group of individuals who act as social change agent using his (their) entrepreneur skills for social value creation. The simple notion of a Social Entrepreneur is someone who understands social problems and use entrepreneurial ability to make social change, particularly covering areas of welfare, education and healthcare (Santosa, 2007). The understanding of the social entrepreneur actually an agent of change are able to:

- a) Implement future goals to change and improve social values.
- b) find, and identify opportunities for improvement.
- c) Always involved in the process of innovation, adaptation, continuous learning.
- d) Act with regardless of the obstacles or limitations that it faces.
- e) Have accountability for the results achieved in the community (Santosa, 2007).

Further, Brouard and Larivet (2010) define social entrepreneurship as a concept which represents a variety of activities and processes to create and sustain social value by using more entrepreneurial and innovative approaches and constrained by external environment. In addition, they explained that social entrepreneurship has characteristics:

- a) Social entrepreneurship represents a variety of activities and processes.
- b) Social entrepreneurship wants to create and sustain social value.
- c) Social entrepreneurship encourages more entrepreneurial approaches for social use.
- d) Social entrepreneurship displays varying degrees of innovation and change.
- e) Social entrepreneurship is constrained by the external environment.

In the case of waste management in Surabaya, social entrepreneurship is manifested in waste bank institution and the social entrepreneur is represented in form of environment cadre who engaged in waste bank activities in their neighborhood. Through the establishment of waste banks, environment cadre succeed increasing their role in social and economic development.

## **METHOD**

The method used in this research is descriptive qualitative method (Sugiyono, 2011). Locus of research is Jambangan and Kebraon Village in Surabaya. Subjects of the study were head of village both Jambangan and Kebraon, Coordinator of waste bank, women organization (PKK), environment cadres and informal leader. Source of data in this study are primary and secondary data. Primary data obtained from interviews to informants and direct observation. Secondary data were obtained from records, books, documents, and other sources. Data analysis uses interactive model data analysis.

## **STAKEHOLDER OF WASTE MANAGEMENT IN THE SURABAYA CITY**

In normative, stakeholders who are responsible for waste management is a community, government and private sector. In essence, each person has a right and obligation to manage waste by keeping the environment clean and healthy. In Surabaya, after “waste floods” tragedy in 2001, city government issued a community-based waste management program. This program adopted the method of 3R (Reduce, Reuse, Recycle) that intent to reduce, reuse and recycle waste by putting community as the spearhead of the program. This program involves the community, city government, and the private sector. The program focuses on educating the public in dealing with their own Waste through waste sorting, composting and recycling to reduce the amount of waste that is sent in landfills.

The policy is received a positive response from a variety of existing institutional elements in community, such as NGOs, women’s groups (PKK), and the private sector. In fact, in cooperation with the private sector, the community formed environment cadre in some places. Environment cadre is informal actors selected from the community that were given specific education and training on practical knowledge about the environment and the leadership. They encouraged being able to educate, inspire and encourage his colleagues to be concerned about the environment. Most of the environmental cadres are women, members of PKK organization.

In 2006 this community-based waste management program be included in Regulation 1 of 2006 on the Medium Term Development Plan (RPJMD) Surabaya City from 2006 to 2010. The policy has placed community as a strategic factor in waste management program. Previously, government programs for environmental management based on top-down approach. This approach often does not work and provide little benefit to the people because people are less involved so less responsible for the the program and its success (Nitisusastro, 2010). In fact, the waste is a common problem that is the responsibility of not only the government but also community.

However, to evokes community participation is not an easy thing. Participation is not a condition that is available in the community. Especially in urban communities who are accustomed to living individual, joint activities in public spaces become less and

less. They tend to be indifferent to the environmental issues that do not directly impact on them. This situation requires the emergence of reformer agents (Sulistiyani, 2004) in community who understands waste problem and have the entrepreneurial ability to make changes people's behavior towards Waste. In this study, the elements that plays an important role in waste management in the city of Surabaya is environment cadres.

### **SOCIAL ENTREPRENURSHIP IN THE WASTE BANK PROGRAM IN SURABAYA CITY**

In order to strengthen and develop a Community-Based Environmental Programs, the surabaya city government held a annual competition for villages namely Surabaya Green and Clean (SGC). SGC aims to make the villagers maintain a healthy environment together. SGC has three activities that focus on the environment issues that is making home composting, greening, and community-based waste management through waste bank.

Waste Bank is required for every villages to be able participate in the SGC competition. Despite having a different theme each year, one of the main framework remains in the implementation of SGC is the availability of waste bank. Waste bank retained to revive community participation. Like a regular commercial bank, in waste bank people open up an account with their local waste bank and make deposits with their inorganic waste. The waste would be weighed and given a monetary value based on rates set by waste collectors. This value is saved in an account and can be withdrawn in the certain time.

Among the villages that have waste bank are Jambangan and Kebraon. One of the waste bank in the Village Jambangan is Bank Sampah Pitoe. This bank established in 2012 with 12 administrators that all of whom are women and members of the PKK. Every week they are able to collect 300-600 kg of waste unorganic already disaggregated and economic value to be sold to collectors. The Bank accepts garbage deposits services every Sunday. They serve for residents in their vicinity. The process of recording, sorting, and weighing is done by the administrators. Accountability administrators is manifested in the form of financial statements and activities of the PKK Meeting. They also utilize the PKK meeting to get more customers.



They admit that at first establishment of the waste bank is in order won in the SGC competition. But along the way they actually got a lot of socio-economic advantage of the existence of the waste bank. The residents became excited when they know that their dispose waste can provide economic value in the form of saving money. The presence of waste banks also become a medium for socializing among residents. Much more than that, the presence of the waste bank in turn encourage people to develop the productive activities such as open courses recycling services, composting, and making of handicrafts. They also said they were proud when he received an appreciation and a reference resident elsewhere.

Another village which develop waste bank is Kebraon. Kebraon is one of the villages which launched a program free of garbage. These programs include the community in the planning and implementation process of composting and recycling activities. Active participation can be seen from organic waste management process by using a composter in each household. Composting results are then sold to the market. Inorganic waste deposited into the bank.

The idea of the establishment of village banks waste in Kebraon came from the chairman of the PKK. Establishment of waste bank increase the spirit and caring citizens to waste sorting activities. Sorting activities of organic and Inorganic waste in order to manage waste because organic waste can be composted, while inorganic waste to be deposited into the bank and weighed and sold according to the price and type of waste on the market.

Waste management in the waste bank involve several community groups such as the collectors whose task to collect and accommodate waste from residents, the washing group that has task to wash inorganic waste like plastic or cans, and tailor group whose task to sew the plastic waste that will be recycled into bags and tablecloths. The results of inorganic waste products are then sold in recycling galleries.

The process of recycling inorganic waste is dominated by housewife, members of the PKK. They have received training specifically on recycling inorganic waste. After they have the skills, then they provide training for the local community. The training is not solely aimed for housewife, but for all people who are interested. But in fact, people who are more interested to engage in recycling activities are mostly PKK members.

## **WASTE BANK'S CONTRIBUTION TO THE DEVELOPMENT OF COMMUNITY SOCIO-ECONOMIC LIFE**

The study conducted by Ministry of Environment (KLH) (2012) showed that the presence of the waste bank has made a positive contribution to the socio-economic life of society. Similar to the findings, this study on the existence of waste banks in Jambangan and Kebraon villages, shown that the waste bank activities have contributed to:

**a) Provide Additional Income Families**

Residents perceived economic benefits of waste banks in both these places are able to provide additional income for residents of the household waste they produce daily. They are quite happy because the money from the waste savings can be used to pay dues villages such as hygiene, social gathering PKK groups and so on. In addition, waste banks are able to create productive activities for residents to be involved as a board member in the management of waste banks.

**b) Encourage the Emergence of Innovative and Creative Community**

Bank waste has encouraged people to make waste management training such as waste sorting, composting, and making of handicrafts from recycled materials. With these skills give residents the opportunity to develop it in utilizing waste owned. Even their skills can be developed into commercial activities such as providing skills courses composting and recycling waste. In the Village of Jambangan, waste bank has extended its activities by providing savings and credit services to its members.

**c) Increasing Social Capital**

Bank waste can improve the spirit of togetherness residents in maintaining their environment. Residents are also increasingly concerned about the problems that exist in the environment. Waste bank program is able to develop a shared value, trust and a culture of cooperation.

In accordance with previous studies (Chrisvida, 2013; Shonah, 2013), that successful implementation of waste banks in both places could not be separated from citizen participation, especially of women groups (PKK), in waste management program.

### **FACTORS THAT DETERMINE THE EMERGENCE OF SOCIAL ENTREPRENEURSHIP IN WASTE MANAGEMENT IN THE SURABAYA CITY**

Community groups who took the role as a social entrepreneur in the waste bank in the city of Surabaya proven help government reduce the volume of waste. The existence of those social entrepreneurs is able to reduce the development problems that previously could not be solved by government alone. However, refers to Suharto (2010) and Sulistiyani (2004) the emergence of an individual or group of individuals who act as reformer agents is not happening by itself. There are some contexts be a precondition of the emergence of a social entrepreneur in the case of waste banks in the city of Surabaya, namely:

- a) The existence of a situation which allows potential and expanding citizens' initiatives. Waste problem has become a public concern Surabaya since 2001. Government's response to the problem of issued a waste with community-based waste reduction program has encouraged citizens to be actively involved in the program. Moreover, the character of the waste issue has properties that go beyond the barriers of culture and social structure of society. Garbage becomes a problem of all people.
- b) The protection of the initiatives that have been made community. Waste bank initiative that developed by citizens actually potentially conflict with the business players in waste collecting that have been executed by some people. However, the SGC policy has provided a guarantee of protection for the existence of the waste bank. This is also supported by the ability of waste bank to foster synergies and mutual relation with business players in waste management.

- c) The support and strengthening of the initiatives that have been made community. Community initiatives to establish waste banks shall be followed by the government's efforts to provide reinforcement. Strengthening is done by providing management training for management and dissemination to citizens who would be customers. There needs to be support from both government and private sectors to strengthen the knowledge and capabilities of the social entrepreneur in solving his problems. Empowerment should be able to grow and develop all the skills and confidence of society that support their independence.
- d) Maintenance. Stakeholders towards his form in the public social entrepreneur need to maintain conditions conducive to the practice of waste management social entrepreneur can evolve.

## **CONCLUSION**

Waste management program would be effective if it involves the community as a producer of waste itself. Therefore, waste management approach must consider the socio-cultural aspects of society as policy target group. The way of life, as well as the behavior of a particular community will determine the forms of utilization and allocation of resources to solve the waste problem. It needs be required emergence a reformer agent as social entrepreneur in the community which understand social problems and use entrepreneurial ability to make social change (social change) in the environment. This study shows that women who are members of the environmental cadres and members of PKK has been able to take on the role as a social entrepreneur who became the driving force in environmental waste management. They are able to change the perception of the public to waste. They are actively socializing and habituation to the 3R activities. They position as a housewife can make them directly to practice sorting, selecting, and value activities to garbage in their homes so that was followed by other households.

The practice of waste management through waste bank in Surabaya has been able to provide socio-economic benefits in the form of giving Family Income Supplement, Encouraging Innovation and Creative emergence communities to develop themselves; and

Increasing Social Capital. Nevertheless, the emergence of a social entrepreneur in the waste management is not necessarily a form by itself. There are several factors that affect to emergence of a social entrepreneur in the case of waste banks in the city of Surabaya. Those are the existence of a situation which allows citizens' initiatives, the protection of the initiatives that have been made community, the support and strengthening of the community initiatives and the effort by stakeholders to maintain conditions conducive to the practice of waste management social entrepreneur.

## REFERENCES

- Brouard, F. & Larivet, S. (2010). Essay of Clarifications and Definition of The Related Concepts of Social Enterprise, Social Entrepreneur and Social Entrepreneurship. In Alain Fayolle and Harry Matlay (Eds.), *Handbook of Research on Social Entrepreneurship*. Cheltenham, UK: Edward Elgar.
- Chrisvida, W. & Tauran. (2013). Partisipasi Masyarakat dalam Pengelolaan Sampah Rumah Tangga di Kelurahan Kebraon Kecamatan Karangpilang Kota Surabaya. *Jurnal Publika*. Universitas Negeri Surabaya
- Diefenbach, F.B. (2011). *Entrepreneurship in The Public Sector: While Middle Managers Create Public Value*. Wiesbaden: Springer Fachmedien, Gabler Verlag.
- Drucker, P.F. (2006). *Innovation and Entrepreneurship*. HarperCollins Publishers.
- Kementerian Lingkungan Hidup (KLH). (2012). Profil Bank Sampah di Indonesia. Jakarta: Deputi Pengelolaan B3, Limbah B3 dan Sampah.
- Nitisusastro, Mulyadi. (2010). *Kewirausahaan dan Manajemen Usaha Kecil*. Jakarta: Alfabeta.
- Pemerintah Kota Surabaya. (2013). Dokumen Rencana Pembangunan Jangka Menengah Daerah Kota Surabaya.
- Hisrich, R.D., Peters, M.P., & Shepherd, D.A. (2009). *Entrepreneurship*. McGraw-Hill.
- Santosa, S.P. (2007). Peran Social Entrepreneurship dalam Pembangunan. Makalah Seminar Membangun Sinergisitas Bangsa Menuju Indonesia Yang Inovatif, Inventif dan

- Kompetitif. Himpunan IESP. FE-Universitas Brawijaya, Malang.
- Sonah, S.M. & Ma'ruf, M.F. (2013). Pemberdayaan Masyarakat melalui Pengelolaan Sampah Mandiri berbasis Komunitas. *Jurnal Publika*. Universitas Negeri Surabaya.
- Sugiyono. (2011). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.
- Suharto, E. (2010). *Membangun Masyarakat Memberdayakan Rakyat Kajian Strategis Pembangunan kesejahteraan Sosial dan Pekerjaan Sosial*. Bandung: PT Refika Aditama.
- Sulistiyani, Ambar Teguh. (2004). *Kemitraan dan Model-model Pemberdayaan*. Yogyakarta: Gava Media.
- Utami, E. (2013). *Buku Panduan Bank Sampah dan 10 Kisah Sukses*. Jakarta: Yayasan Unilever Indonesia.
- Zimmerer, T.W. & Scarborough, N.M. (1995). *Entrepreneurship and The New Venture Formation*. New Jersey: Prentice Hall Inc.