

Small and Medium Enterprises, Eco Green and Green Society: An Indonesian Perspective

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Abstract: Global warming issue has become the focus of attention of the world's society because it has caused negative impacts. One thing that can be done to reduce the negative impacts of global warming is by doing reduce, recycle and reuse. In relation to recycle and reuse, focus of this study is on Small and Medium Enterprise's (SME) environmental friendly products. This study discusses two aspects, namely, SME's Eco-green based products and the roles of government, private sector and university in creating eco green entrepreneurs. This study utilizes qualitative method by providing data, information and three cases as derived from secondary sources such as documents, books and articles relating to SME's eco green products. Results reveal that Indonesian's SMEs are very creative and innovative in creating reduce, recycle and reuse products.

Key words: SME, eco green product, eco green entrepreneurs, innovative, Indonesia

INTRODUCTION

Ecological problems such as water pollution emission and CO₂ emission as part of global warming may come from the mismatch between two approaches in managing environmental issues namely: regulation instrument and economic instrument taken by the government (Djajadiningrat *et al.*, 2014). Basically, the first approach tries to handle the environment issue by issuing some regulation to protect and prevent environmental degradation while the second approach includes the economic incentives for economic actors (i.e., corporations, organization, individual, society) whose actions are favorable toward prevention of environmental depletion and environmental protection.

These two approaches are hard to perfectly fit each other as they have own logics that sometimes conflicting between these two. Therefore, there is a third approach that tries to integrate between regulation and economic instrument by internalizing environmental awareness and responsibility into people's decision making either mandatory or voluntarily (Djajadiningrat *et al.*, 2014) for instance, corporation practicing Corporate Social Responsibility (CSR) in pulp and paper industry in Indonesia (Mursitama *et al.*, 2014).

However, the ecological problems are complex and serious issues that cannot be solved by the government actions only. The initiatives from companies, institutions

other than government agencies, individual and society are needed. This study focuses on initiatives from individual and Small Medium Enterprises (SME) in dealing with one aspect of environmental problems such as creating environmental friendly products in Indonesia.

MATERIALS AND METHODS

We use qualitative approach in collecting data and information through books, related documents and articles on environmental friendly products. In analyzing the data, we provide three cases studies as examples namely: first, recycle plastic; second, recycle papers and third, recycle food. This approach has advantages as we can explain each case and compare among the cases in the relative comprehensive manner. The similar approach in this topic has been used widely by Indonesian researchers such as study on Corporate Social Responsibility (CSR) by Mursitama *et al.* (2014).

RESULTS AND DISCUSSION

Eco green based product (an Indonesian case): An example of the creation of environmental friendly products in Indonesia, among others was first commenced by Beni Chandra in 2009. Beni Chandra, a physicist who graduated from Bandung Institute of Technology (ITB) in 2006, processed plastic bags into plastic pellets as the recycled

materials which were badly needed by the plastic factories. He did not have any difficulty in selling his products because there are many distributors and plastic factories in Cicaheum industrial area which need a lot of supplies of recycled plastic materials.

Eco green based products of Indonesia have been attempted gradually by the Ministry of Co-operative and Small and Medium Enterprises (SME), since 2010. This institution has realized that eco green based products are increasingly demanded by developed countries. Eco green based products are easily breaking into export market. According to Deputy of Marketing and Network of the Ministry of Co-operative and SME, Republic of Indonesia, Neddy Rafinaldi Halim, the ministry has provided some facilitation and guidance to a number of SMEs to be able to adopt eco green concept in producing their goods. One of the efforts that has been done is by giving capital support to the SME that make environmental friendly products.

In order to apply the eco green concept, the Ministry of Co-operative and SME has worked together with South Korea which has been recognized as the producers of environmental friendly products. Moreover, Syarifudin Hasan, Minister of Co-operative and SME thinks that South Korea is one of the countries which is very concerned about the management of eco green based products. Indonesian government has also entered into agreement with South Korea to make a "joint operation" in eco green partnership which will be developed in Indonesia. Minister Syarifudin Hasan also adds that South Korea has agreed to help Indonesia in the application of eco green concept, especially for SME players in Indonesia. For that matter, a joint representative and marketing office will soon be opened in Indonesia.

Beside support from the government, private sector support such as from Yayasan Inovasi Teknologi Indonesia (INOTEK) on the SME's technology-based products was also helpful. This support was realized in the form of the organizing of 'Innovator Forum 2013' event on 10-11 October, 2013. INOTEK co-operated with The Lemelson Foundation launched a business competition for technology based SME that focused on green technology and renewable energy. The purpose of this competition was to encourage the technopreneurs' spirit to keep creating technology-based products which are environmental friendly, beneficial for the society and also have high commercial value. The three winners of this competition were entitled to a USD 10,000 award while the finalists would get guidance for planning and developing their business.

According to Diyanto Imam, Executive Director of INOTEK, the rate of economic improvement cannot

be maintained with a business-as-usual approach. Technology-based SMEs which are environmental friendly and have positive social impact have a chance to become an economic running machine, innovation as well as a gate to future market. Several things were discussed in "Innovator Forum 2013" event such as: how to develop the ecosystem which sustains the growth of the technology based SMEs in Indonesia; the improvement of capacity and capital access for the technology based SMEs; the support for the technology based young inventors and finally technology innovation and Corporate Social Responsibility (CSR) and inclusive business. Through this event, it is expected that there will be an integrated partnership between all stakeholders that can speed up the development of environmental friendly technology innovation that can enhance the well-being of Indonesian people.

SME and environmental friendly products: As we all know that global warming also brings a potential of great disaster for our planet, i.e., the melting down of methane hydrates: frozen methane that is sustained in ice. It has an amazing amount: 3000 times of the present amount of methane in the atmosphere (Kvenvolden, 1999). Dr. James Hansen, a prominent NASA scientist underlines this potential danger by saying that human being has not passed a point of no return, human being can still roll things back in time but it is going to require a quick turn in direction.

Therefore, there is necessities to cope with global warming problems particularly from reduce, reuse and recycle efforts. Some materials that can be reduced, reused and recycled are paper, plastic, iron, electronic devices, food, etc. This study argues that SME can contribute to those efforts. SME can directly participate especially in producing environmental friendly products or recycled products. In Indonesia, there are three emerging recycle businesses namely: first, recycle plastic; second, recycle paper and third, recycle food.

Recycle plastic: Recycled products have been commenced by Beni Chandra by recycling plastic bag's garbage into plastic pellets. His efforts began from his willingness to be self-supported and his concern of the massive amount of garbage in his city Bandung. The government, through Lembaga Pengelola Dana Bergulir (KUMKM rolling fund) gave him a rolling fund through PT Sarana Jabar Ventura. The borrowed fund as much as IDR175 million was utilized to expand his business, starting from buying plastic smelting machine, cleaning machine, rinsing machine, drying machine and finally

increasing the electrical capacity. Now, the net profit of his business achieves IDR12 million per month. Recently, he has created plastic rattan which was made of plastic bag. His creation has been tested at Yayasan Kayu Api handicrafts, Gede Bage, Bandung.

Figure 1 shows a bulk of plastic bag garbage while Fig. 2 shows plastic pellets as recycled product from plastic bag.

Beside plastic bag and used newspapers, plastic can is also raw materials for creative industry. One of the purposes of creative industry in this regard is to express the sense of art. In Indonesia, there are a lot of garbage, poor people and scavengers. These scavengers can be employed to collect plastic garbage in the form of plastic containers of liquid soap, softener, etc. That garbage then can be transformed into handicrafts. Because the materials are abundant and cheaply available many people have entered into this kind of handicraft business. Thus, the competition is on. To be able to survive, the plastic container craftsmen should pay attention to the design of their products.

The designers should be able to make people interested into their products. All of products must be unique ones. In order to be able to compete in market, designers should create innovative product and change it regularly to respond to the market's demand. Moreover,



Fig. 1: Plastic bag garbage (<http://panohan.wordpress.com/2009/11/01/bahaya-sampah-plastik/>)



Fig. 2: Plastics pellets (<http://plastikbiji.wordpress.com/2012/05/23/biji-plastik-murni/>)

new materials can be introduced and the craftsmen can do creative marketing management. They have to be able to target the market accurately. For instance, they should not only focus on one market but also target foreign market. In short, their marketing should be more effective.

Figure 3-5 show examples of recycled products made of plastic. Figure 3 shows bags made from recycled softener plastics. Figure 4 shows broom made from recycled plastic bottle. Meanwhile, Fig. 5 and 6 depict dresses made from recycle plastic.



Fig. 3: Dishwashing liquid soap packaging handycraft (<http://www.shind.or.id/shop/index.php?p=productsList&iCategory=24>)



Fig. 4: Used bottle handycraft (<http://baledaurulang.blogspot.com/2013/06/daur-ulang-botol-plastik-bekas-menjadi.html>)



Fig. 5: Dress for girl from recycle plastic (<http://heavy-stuff.com/baju/baju-daur-ulang-koran.html>)



Fig. 6: Beautiful dress from recycle plastic (<http://beritaup2date.blogdetik.com/2010/11/20/12-benda-hasil-daur-ulang-plastik-yang-cantik/>)



Fig. 7: Used paper handicrafts (<http://www.larizo.com/tas-cantik-dari-koran-bekas/>)

Recycle papers: In addition to Beni Chandra, other craftsmen from Yogyakarta were nevertheless creative. They saw that used newspapers could be used as the materials for handicrafts. Nowadays with huge information of global warming, creative people have been competing to find new innovations in utilizing used materials to make new and useful things. One of these innovations is the handicraft from used newspaper.

Due to their creativity and diligence, the recycle products are sandals made from used newspapers which surely are durable, strong and long lasting. Beside sandals, there are also bags of various sizes and models. These study handicrafts cannot be taken for granted because they have been exported to the United States. Figure 7 shows an example of paper bag handicraft made from recycle papers.



Fig. 8: Fishbone noodle (<http://kartuas.telkomsel.com/modalasik/detail/802/mie-tulang-ikan-berkalsium-tinggi>)

Recycle food: This is a unique example of food product that made from recycle food. Tiurlena, a businessman engaged in the shredded fish business, saw an opportunity to utilize the remaining tuna fish bones are usually discarded after the making shredded fish into fishbone noodles. The idea is quite simple by taking advantage of something that seems useless become a healthy and delicious noodles. Fishbone noodles won a culinary contest in Kepulauan Riau Province in 2011 (Fig. 8).

From those three examples of recycle products, creativity and innovation play very important roles in creating a business especially in the environmentally friendly products. In addition, capital and entrepreneurship is also indispensable factors. Therefore, support from government and society in order to create sustainable recycle products is needed. There are at least two ways of supports: first by being a customer of the products and secondly by encouraging people to buy domestic product and love those products.

The role of university in green society: University can play an important role in creating the society who concern about the environment or green society by giving public lecture or seminars on the negative impact of global warming. With the knowledge of global warming, lecturers and students can work together with the industries and the society to create environmental friendly products. This can be done by doing community service program to the SMEs and the community. They can be trained to conserve the environment and to create environmental friendly products.

In addition, universities can also create young entrepreneurs that can produce environmental friendly products by giving green entrepreneur lesson as an obligatory subject in each department. By doing so, the students can be prepared as the future young entrepreneurs that can create environmental friendly products.

With regard to those three examples of environmental friendly products, university can specifically give technical advices to craftsmen such as in designing, management and competing to export market. University can also try to build partnership and connect between potential buyers, capital provider (venture capital) and producers. In particular, university also can encourage corporations to give seeds capital or capital and management and technical cooperation to SME as part of their Corporate Social Responsibility (Mursitama *et al.*, 2014).

Even though those three examples of environmental friendly products have shown promising development of eco green movement toward green society in Indonesia, these developments are still in early stage. Therefore, as an alternative of doing business for SME, these efforts should be encouraged in the future as part of bigger picture of ecological problems in Indonesia. As Basri *et al.* (2012) argue that support from government in creating industrial policy is as a strategic choice to lead Indonesian economic growth to become sustainable not only from added value but also ecologically. This idea is applicable for SME development as well.

The importance of SME development is also underlined in the broader context such as in ASEAN. In addition to creating industrial and macroeconomic policies, government in ASEAN countries should also pay attention on providing microfinance to SME as most of the Indonesia' SMEs do not have access to credit provided by bank or non-formal formal institution (Tambunan, 2014).

CONCLUSION

The SME businessmen and the government in Indonesia have realized that environmental friendly products are easier to break into export market. Therefore, the government, particularly the Ministry of Co-operative and SME also support the SMEs that produce environmental friendly products. Funds are given to expand SMEs that have the potential to grow. The government's concern was triggered by the producer of plastic ores which was commenced in 2005. The government expects that self-supported SMEs will also improve the economy of the country.

Eco green art products cannot be separated from creativity, innovation and diligence. Without those three things, the products cannot compete in the market. Besides, recycled products are easy to copy because the raw materials are cheap and easily obtained. Therefore, creativity and innovation should always be improved. The private sector has seen the importance of these things by

organizing innovator forum event to encourage the technopreneurs to keep on creating technology based products which are environmental friendly, beneficial for the community and also have high commercial value.

The awareness of environment concept is not only limited to the SME, government and entrepreneurs. University also has an important role in creating green society. Green society can be initiated in the university surrounding. By providing knowledge of eco green products, there will be an awareness of the importance of preserving the environment and becoming entrepreneurs who produce environmental friendly products.

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REFERENCES

- Basri, F.B., A. Prasetyantoko and G.A. Putra, 2012. Indonesia's economy: Economy grows in the middle of crisis in developed countries. Fridrich Ebert Stiftung (FES) Economy of Tomorrow, Jakarta.
- Djajadiningrat, S.T., Y. Hendriani and M. Famiola, 2014. Green Economy. Revised Edn., Rekayasa Sains, Bandung, Indonesia.
- Kvenvolden, K.A., 1999. Potential effects of gas hydrate on human welfare. Proceedings of the National Academy of Sciences Colloquium, March 1999, USA., pp: 3420-3426.
- Mursitama, T.N., I.Y. Fakhruddin and M.F. Hasan, 2014. Evolving practices of corporate social responsibility in Indonesia's pulp and paper industry. Asian J. Scient. Res., 7: 1-17.
- Tambunan, T., 2014. The importance of microfinance for development of MSMEs in ASEAN: Evidence from Indonesia. J. ASEAN Stud., 2: 80-102.