

Exploring Women Ecopreneurship: A Preliminary Study from Lombok - Indonesia

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ABSTRACT

Entrepreneurship is offering alternative employment and economic development for a country. From the sustainability perspective, woman ecopreneurs propose an avenue for climate change mitigation and progress toward gender equality. However, there are limited studies about ecopreneurs in Indonesia, especially in the rural areas. This study explores women ecopreneurs in Lombok, West Nusa Tenggara province, focusing on the recycling business. The province is ranked as the lowest gender empowerment amongst other provinces in Indonesia. A study of 18 women ecopreneurs found that the recycling industry offers an entry point for women to be entrepreneurs. It requires very minimum capital and opens for women with a minimum level of education. It can help the women ecopreneurs in feeding the family and sending the children to school. However, society is not welcoming the recycling industry as it is considered dirty. Furthermore, some women ecopreneurs faced sexual harassment. We recommend the partnership between innovative eco-preneurs and traditional recycling women eco-preneurs to sustain the business and promote ecopreneurs in Indonesia.

Keywords: Lombok, recycling, women ecopreneur, rural.

1. INTRODUCTION

Women entrepreneurship has been of research interest in the last decade (Cardella et al., 2020). Studies explore either the internal or external factors of starting the business, the challenges, similarities, and differences (Abou-Moghli & Al-Abdallah, 2019; Longoria, 2018; T. T. H. Tambunan, 2017). Studies also review the demands to support microfinancing women entrepreneurs (Japhta et al., 2016). There is a significant difference between women's entrepreneurship in developed and developing countries (Cardella et al., 2020; Longoria, 2018). In general, socio-cultural background shapes women's entrepreneurship situation and progress (Cardella et al., 2020). A country-specific study or a multi-cultural study may add to the contribution of the literature in this field.

Indonesia is one of the most diverse and multicultural countries globally (Hugo, 2015), with more than 200 ethnic groups living in more than 8000 inhabitant islands; exploring the socio-culture and woman entrepreneurship in Indonesia may enrich our understanding of women entrepreneurship in a developing country.

In 2017, the government of Indonesia (GoI) committed to supporting the global movement for sustainable development goals by issuing presidential regulation number 59 about implementing sustainable development goals initiatives (INFID, 2017; UNDP, 2017). Indonesia aims to promote decent works and economic growth

(goal number 8), ending gender discrimination (goal number 5), reducing inequality (goal number 10), and improving the environment to deal with climate change (goal number 13). In 2021, the World Economic Forum reports that Indonesia is ranked 101 out of 156 countries globally for its gender gap (World Economic Forum, 2021a). The gap between man and woman for political empowerment, educational attainment, health survival, and economic participation and opportunity is still vast. The World Economic Forum forecasts that with the Covid-19 situation, the country needs 268 years to close the gender gap because there is a "Lack of progress in closing economic participation and opportunity gap" (World Economic Forum, 2021b).

Previous studies on women entrepreneurship adopt the online survey and/or respondents who live in the cities (Bouzekraoui & Ferhane, 2017; T. T. H. Tambunan, 2017). Their respondents are mostly educated women entrepreneurs. However, there are limited studies on uneducated women entrepreneurs in rural areas. Women entrepreneurs in a rural setting may offer an avenue to get out of poverty and close gender and inequality gaps (International Labour Organization, 2010; T. Tambunan, 2009; UNIDO, 2003; World Economic Forum, 2021a). This study aims to extend the contribution of previous research by conducting exploratory research of women entrepreneurs at the bottom of the pyramid, who are mostly uneducated and living in a rural area with a lack

of access to telecommunication networks. Indonesia is also ranked 151 out of 169 countries for its sustainability index (Mulhern, 2020). This study explores the Indonesia rural women ecopreneurship, with the research objective to provide inputs for the government of Indonesia in accelerating the Sustainable Development Goals Commitments.

2. LITERATURE REVIEW

Ecopreneurship is an entrepreneurial activity that concerns the environment and economic sustainability (Sasongko & Anggadwita, 2016), reflected along the value chain, such as using eco-friendly material, processes, technology, and packaging. Implementing ecopreneurship requires environmental consideration, both at managerial and technical levels. Studies stress that environmental motives drive ecopreneurs (e.g. Ifeoma et al., 2020; Latukismo et al., 2021). Others argue that ecopreneurs are a process, not a result. It is dynamic, as they need to respond to the changing environment or market (Santini, 2017). For example, the government may issue environmental protection regulations that push businesses to comply, or the customers' awareness of environmental issues drives the company to change its operations/products /services.

Based on the process, ecopreneurs have three typologies: eco-innovation, eco-commitment, and eco-opportunities, which may dominate the ecopreneurs' journey at a particular stage and sustain the enterprise (Ifeoma et al., 2020; Kainrath, 2009). Eco-innovation refers to the creative development of products or services with a positive impact on the environment. The sustainability of eco-enterprise and continuous operations is driven by the entrepreneur's spirit of eco-enterprise, its eco-commitment. Eco-opportunities demonstrate the potentials of economic benefit of eco-enterprise. The ecopreneurs situation may depend on its internal motivation and external structural influences. These two dimensions result in four typologies of ecopreneurs: innovative opportunists, visionary champions, ethical mavericks, and ad-hoc enviropreneurs (Taylor & Waley, 2005).

However, ecopreneurship is relatively new, introduced in 1990 (Ifeoma et al., 2020; Santini, 2017). More studies are needed to understand ecopreneurship from a developing country, especially involving women in rural areas. Such a study can provide a meaningful contribution, as Indonesia has about 2,29 million micro and small enterprises in Indonesia in 2019, with 48% are women-owned (Badan Pusat Statistik, 2019). Micro enterprise (employed 1-4 people) and small enterprise (employed 5-19 people) in Indonesia are mostly operated in the food and beverage (36%), furniture and craft (15%) and garment and fashion (14%), 62% are in Java island. Although the statistical bureau records the

enterprises by gender and location, the enterprises' environmental practice, ecopreneurship, is not recorded. These enterprises are mainly in the urban area (see (Ariffin et al., 2017; Hani et al., 2012; Sasongko & Anggadwita, 2016; T. T. H. Tambunan, 2017)), leaving the gaps to understand how to reduce the gaps in gender, economics, social and environmental challenges.

Studies on women ecopreneurship found the role of ecopreneurship on poverty alleviation, economic development, and environmental protection, such as found in the Philippines (Abichuela, 2019), Mozambique, Uganda, and South America (UNIDO, 2003).

Women entrepreneurs in general face more challenging situations in starting and managing the business than men, which include access to finance, social and cultural pressure as they need to juggle between the family responsibilities for caring and developing the business. Within this situation, a supportive environment is needed. The commitment of Indonesia government to support gender equality is reflected in the Regulation number 2/2016 about women empowerment and child protection (Pedoman Umum Pembangunan Industri Rumahan Utk Kesejahteraan Keluarga Melalui Pemberdayaan Perempuan, 2016)man Umum Pembangunan Industri Rumahan Utk Kesejahteraan Keluarga Melalui Pemberdayaan Perempuan, 2016). It stresses women's inclusion in the economic, social, and environmental development activities and sets up a pilot village with women entrepreneurs in each province at the village level.

3. METHODOLOGY

This study is exploratory research, as it aims to answer why rural women established eco-enterprises and how they survive. Yin (2003) suggests that research with why and how questions are better answered using a qualitative approach. A qualitative approach can offer insights (Kaushal & Srivastava, 2021) and justify a particular behavior when the study is context-specific and limited information is available (Werner et al., 2016). Within the qualitative approach, case studies are adopted to understand the phenomenon, as suggested by Yin (2003).

This study selects West Nusa Tenggara province as the location of the study. West Nusa Tenggara is a province with more than 20% of the working-age population being illiterate, with the lowest education attainment in Indonesia (the average length of study is eight years or only complete primary school). The women in this province are the least digital (15% of women use a computer), with 58% mobile phone subscribers. In comparison, the women as the main earner for the household in Indonesia is ranked highest (22%) (Kementerian Pemberdayaan Perempuan dan Perlindungan Anak Republik Indonesia, 2019).

Traditional culture is heavily adopted, in which West Nusa Tenggara is a province with the lowest score of gender empowerment index in Indonesia (51.91) (Kementerian Pemberdayaan Perempuan dan Perlindungan Anak Republik Indonesia, 2020). In addition, within West Nusa Tenggara province, Lombok island is chosen as the study. It is one of the tourism destinations for promoting Indonesia's natural beauty while improving economic and socio-cultural development (Indonesia Ministry of Tourism and Creative, 2015).

This study focuses on the waste recycling industry, following (Rashid et al., 2019), who maintain that by concentrating on a particular sector, research can understand the nature of the objects. We adopt multiple case studies, as they allow us to obtain a comprehensive view from various resources within a study context (Yin, 2003). It reduces the industry variant, which may exist, and can be used for triangulation.

Cases were selected using three criteria to ensure that they meet the study's objective: women entrepreneurs, operating in the waste recycling industry, and have been in the business with the main operation in Lombok for a minimum of 2 years. The data were collected using an in-depth interview, which lasted about 45 minutes to an hour, with a semi-structured interview protocol and consent form. Two local students who can speak the local language (Sasak) were recruited, one from a business management background and one from environmental management background. They were also trained before the interview to ensure a consistent methodology is adopted.

4. FINDINGS, ANALYSIS AND DISCUSSION

This study used 18 cases, see Table 1.

Table 1. Respondents' Demographic

Education background	
No schooling	5 (28%)
Primary school	6 (33%)
Junior high school	4 (22%)
Senior High school	2 (11%)
University graduate	1 (6%)

Marriage Status	
Married	12 (67%)
Widow	4 (22%)
Single	2 (11%)

The length of business operation	
2-5 years	3 (17%)
6-10 years	4 (22%)

11-15 years	3 (17%)
16 - 25 years	6 (33%)
>25 years	2 (11%)

How do you operate the business (buying, recycling, selling)	
Mobile (road collection, sorting and selling on the move)	10 (56%)
Working from home	3 (17%)
Else (change from one mode to another)	5 (28%)

This study found that the driving factors of starting waste recycling differ based on education. The uneducated women entrepreneurs began their businesses due to a lack of skills to work in other jobs. The job options are recycling waste, working as a maid, or selling products at the market. Selling products at the market requires capital that they don't have while working as a maid does not allow them to take care of the child(ren). Therefore, the recycling business offers the best option with limited skills, finance, and flexibility to share housework with family. The women entrepreneurs with high school education started the recycling business because they live in a neighborhood where women work as waste recyclers and are willing to empower more women to work in a better environment and income. The women entrepreneur with university education started the recycling business due to environmental and social concerns, lack of care for the environment in the society, and lack of education. Consistent to (Latukismo et al., 2021) who studied two successful ecopreneurs with a university background, we found that the eco-mindset drives the educated women ecopreneurs.

Most of the respondents' businesses are collecting and sorting waste to be sold to various buyers. They are micro-entrepreneurs and informal. Only two respondents create innovative products from waste by their women-owned legitimate enterprise. They are senior high school and university graduates, singles, with the length of operation nine and two years, respectively. They believe that eco-recycling business needs to keep innovating and maintain the commitment to reap the economic benefits of the business.

We asked respondents, "how is women entrepreneurship compare to men entrepreneurship?" 44% say the same challenging situation, and 50% say more demanding than the men, only 6% say easier than the man, who may because she is not the primary income generator of the family.

The main impact of the recycling business is the ability to send children to schools and cover family living costs. However, the Covid-19 pandemic has created a challenging situation because three reasons. First, the

mobility between islands (to Java) becomes limited and expensive. The economic value dropped, and the demand from the factory has reduced. Second, several places are closed for public and waste collection, and they need to find a new way of waste collection. These women ecopreneurs face both demand and supply challenges. Third, in the normal situation, the recycling business is not well accepted by the family and society as it is dirty. In the pandemic situation, it is also considered to trigger health problems. In the non-pandemic case, they face sexual harassment. Therefore, respondents look forward to having government assistant to create a better image and value of the ecopreneurship and obtain skills to sustain the business.

Using Kainrath's framework of promoting ecopreneurs (Kainrath, 2009), we found that in Lombok, there are two groups of ecopreneurs (see Figure 1).

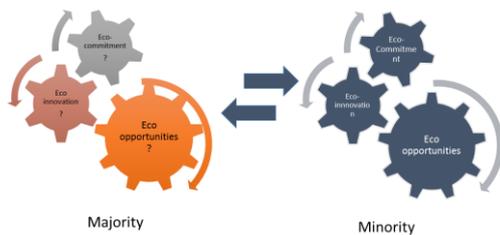


Figure 1. Two typology of eco-preneurs in Lombok

The majority of ecopreneurs in Lombok are uneducated women entrepreneurs who start the business because lack of skills and limited opportunities. This group has no eco-innovation, and with social pressure that they received (no appreciation to their ecopreneurship), the commitments to continue the business are inconsistent; they focus on the eco-opportunities as they have limited skills and rely on the eco-recycling as the primary income for the family. Lack of eco-innovation and commitment leading to the uncertain eco-opportunity of the majority women eco-preneurs. On the other hand, the minority ecopreneurs are youth, dynamic, innovative, and committed to maintaining the balance of social, economic, and environment. Society perceives the second group positively as they are educated and convert the waste into valuable products. Interestingly, the minority group is considering a partnership with the majority group to sustain the business. The eco-innovative entrepreneurs focus on their innovation, quality control, and market access, with the minority ecopreneurs' partners as their production partners. Such a model offers benefits for both parties. With limited attention to ecopreneurs, we suggest that the government promote this type of partnership to combat the economic, social, and environmental challenges.

5. CONCLUSION

Women ecopreneurship offers alternative employment for women in rural areas who are poor and have limited access to capital and skills. The social and environmental forces matters as they frequently receive sexual and social harassment. While the ecopreneur offers a solution to the environment and reduces gaps in the social economy, unfortunately, this community gets limited attention due to their remoteness and lack of access to telecommunication facilities. The growth of educated women ecopreneurs through their sociopreneurs offers a solution to bridge the gap and introduce knowledge, innovation, access to markets. The government may promote the partnership between educated ecopreneurs and non-educated ecopreneurs to fill the gap of resources and access to the market. By doing so, sustainable ecopreneurs can provide a meaningful role to social-economic and environmental development.

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