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The Challenges of Microfinance Institutions in Empowering Micro and Small Entrepreneur to Implementing Green Activity

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ABSTRACT

This study aims to examine the challenges of microfinance institutions (MFIs) in empowering micro and small entrepreneur to concern and care not only for the business growth but also the environmental sustainability in their surroundings. Indonesia as developing countries also faces the environmental degradation that contributes by micro and small entrepreneurs. Moreover MFIs have substantial relationships in term to preserve the environment because of the objectives are not only achieve the profit but also balancing with the social (people) and environment (planet) achievement and MFIs clients also micro and small entrepreneur who as the majority contributor of environment degradation in developing countries. The discussion of the paper is determined by three research questions (i) What's the role of MFIs in preserving the environment? (ii) How the role of corporate governance in MFIs? (iii) How the implementation of corporate governance in MFIs in empowering micro to implementing green activity (Indonesia evidence)? In addition, to ensure the commitment of MFIs should exist corporate governance, which supervise the compliance with Act No.1 2013 related to the sustainability concern from MFIs because until now the impact of the act has not given the significant impact yet because of the importance is not only the existence of regulation but also the consciousness all stakeholders related to comply and implementing of green activity.

Keywords: Green Microfinance, Corporate Governance, Sustainability

JEL Classifications: G2, G34, Q56

1. INTRODUCTION

The third world and developing countries in general attempt to induce economic growth, which aim to increase the prosperity of their citizen by decreasing of the poverty level. In any case the improvement of the individual welfare during the process of economic development presents a lot of controversial issues in terms of environmental impact. In this respect Grossman and Krueger (1994) questioned if the economic development in developing countries has led to environmental hazards or actually just increasing incomes and wealth have an impact on the ecological problems. The economic development increases the industrial activities and generates ecological problems such as the extinction of species, land degradation and global warming. These ecological problems have a negative impact on the individual's quality of life and on the development of a sustainable society (Mc Donald et al., 1997; Cook et al., 1999). Many environmental damages are caused by human activities driven only by an

economic motivation without taking into consideration the importance of the environment for human life (Jegasothy, 1999; Abbas, 2012). Nevertheless, the economic development and economic growth should continue, because these processes allow the achievement of a better condition for the people and without ignoring the next generation life quality.

In any case economic development should be useful not only for the current communities, but also for the future generations, in other word sustainability is economic development that meets present need without compromising the ability of future generations to meet their own needs (United Nations, 1987). Thus, we need to balance economic growth, ecological impact and social impact (as a triple bottom line) with those three elements that should be integrated into every development activity (Pereau et al., 2012). Furthermore, in developing countries, there are constraints to the implementation of sustainable development processes, especially associated with environmental issues. These

constraints are the following: (i) The approach to development is very pragmatic, focused only on economic development (profit oriented); (ii) the use of natural resources is driven by the need of products, which is actually the satisfaction of all the market needs. This condition leads to an uncontrollable exploitation of the natural resources; (iii) in the developmental process the areas of finance, trade, investment, and technology is not integrated with the environmental planning. In developing countries, the economic development may result in two diverging kinds of impact: A positive impact represented by the increase of the national per capita income but also a negative impact resulting in the environmental damage.

The majority of the people in developing countries is a low income or the poor, which need access to financial services from microfinance institutions (MFIs) to sustain their economic activity and also to fulfill their household needs. MFIs play an important role in the economic development of developing countries in provide financial services to low income people (Karlan and Goldberg, 2011; Hudon, 2011) and at the same time MFIs balancing financial and social performance (Morduch, 1999; Copestake et al., 2005, Armendariz and Labie, 2011). MFIs in developing countries also relate to the preservation of the environment (Allet, 2012). In developing countries the small-scale activities conducted by the micro entrepreneurs entail environmental risks representing direct threats to population's health and livelihoods. MFIs clients are poor people who have low income. Usually poor people, lack of education and knowledge, thus they are not concerned by environmental issues and sometimes they're also directly contributing to the destruction of the environment. Associated with this condition, recently, some donors and experts claim that MFIs could play a role in fostering pro-environmental behaviors among their micro and entrepreneur clients (Allet, 2012).

MFIs are part of the financial market system which works well if there is a harmonious relationship with the other components of the system. According to Ledgerwood and Gibson (2012) the players in the financial market system are the private sector, the public sector but also the civil society and the consumers. For MFIs the fulfillment of the triple bottom line (especially for environmental part) will take occur only if all the players (stakeholders) of the financial market system will play a proper and consistent role in achieving a sustainable development. This rule of the game includes formal (regulations and standards) and informal rules (social conventions and cultural norms) are very important to enforce all the players of the financial market system to implement the triple bottom line.

2. RESEARCH OBJECTIVE

This research is driven by the emerging environmental challenges in developing countries such as country in Asia and Africa continent which contribute from micro and small entrepreneurs who also has a low education level related to the environmental issues. Furthermore, MFIs as a financial service for the micro and small entrepreneur should have role to influence their clients to become conscious in term of the importance of environment in their life and business. The consequence of these issues

stakeholders should make a special regulation regarding the environmental protection linked to the regulation of microfinance services. The article focus on literature review according the role of corporate governance in green microfinance.

The scope of this article is the study of the literature review, which link between the corporate governance and green microfinance, this research is limited by the following research questions:

- What's the role of MFIs in preserving the environment?
- How the role of corporate governance in MFIs?
- How the implementation of corporate governance in MFIs in empowering micro to implementing green activity (Indonesia evidence)?

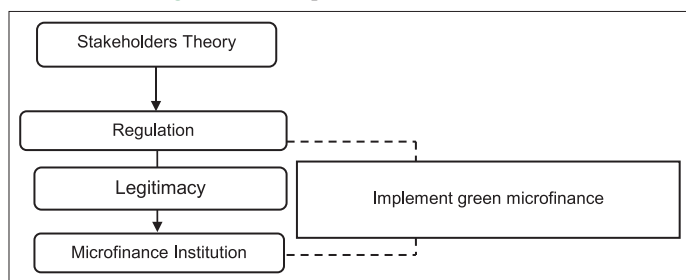
The research provides additional references concerning the role of corporate governance in green microfinance activities with particular reference to developing country context. The results of this study are expected to provide a useful and practical contribution to the management of MFIs and their stakeholders.

3. METHODOLOGY

The conceptual framework in this study is based on "Stakeholder Theory," Ansoff (1965) was the first to use the term "stakeholder theory" in defining the objectives of the company in which the main goal of the company is to achieve the ability to balance the conflicting demands of the various stakeholders in the company. Furthermore, Freeman (1983) defines stakeholders as "any group or individual who can affect or be affected by the achievement of corporate objectives," where elements of the stakeholders of the company, including shareholders, creditors, employees, customers, suppliers, public interest groups, and government agencies. Regarding to Vallerand and Bissonnette (1992) stakeholder can encouragement for someone to achieve certain goals. This theory deals with the strategy or policy that is used to create specific consequences. Corporate governance is as a variable in the organization to achieve its goals by providing rewards or sanctions for certain conditions that have been determined. Because behavior change does not happen with spontaneity, but there must be a request or through a provision that has been formalized externally. Consequences of the request and the provision is in the form of rewards and sanctions.

Legitimacy is owned by the Central Bank (CB) and Financial Service Authority as the regulator should clearly or explicitly regulate MFIs to perform activities concerned with the environment because of regulation are one of the main factor to enforce implementation of green microfinance. Parallel in this condition, MFIs also has an important role to prevent further environmental damage, and repair the environmental damage that has occurred, through MFI clients. Clients of MFIs are the actor of the environmental destruction, so that with the green microfinance implementation, the client's behavior becomes more concerned about the preservation of the surrounding environment and repair the damage that has occurred.

Based on the theory, the conceptual schema framework in this study is as follows in Figure 1.

Figure 1: Conceptual framework scheme

Based on the conceptual framework schema of the Figure 1, the article's purpose in this study was to determine the role corporate governance related laws or regulations that have been issued addressing to green microfinance and its impact on micro-finance institutions. In previous research, according to Allet and Hudon (2013) larger MFIs in term of profitable, mature and regulated, they perform better in environmental policy, ecological footprint, and environmental risk assessment because they are covered by environmental liability regulations, MFIs registered as a bank may be likely to perform better in environmental management. Furthermore, regulations play an important role in green product innovation and green process innovation, regulation is one of the most important factors in driving firms to engage in behaviors of benefit to the environment, firms tend to develop defensive environmental strategies (Lin et al., 2014).

4. THE ROLE OF MFIS IN PRESERVING THE ENVIRONMENT

The originality of microfinance services objective, it's to achieve the double bottom line. That is mean microfinance institutions are mindful not only about financial performance, but also by social indicators. Econometric analysis is used to assess financial performance, and guidance is provided for extending the analysis of social performance indicators or MFIs have a double aspect: Financial and not-for-profit. Therefore, appropriate to assess their performance not only of financial ratios, but also by social indicators (Frank, 2008; Armendariz and Labie, 2011; Hudon, 2011; Stuart, 2011; Balkenhol and Hudon, 2011; Cinca et al., 2011). In other word the MFIs was designed to serve unbanked poor and, it's seen by some as a magic wand against poverty that is supposed to solve it all (Armendariz and Labie, 2011), but microfinance neither a panacea nor a magic bullet, and it can't be expected to work everywhere or for everyone (Armendáriz and Morduch, 2010).

Global warming is caused climate change has a negative effect that is remarkable for human life on earth, natural disasters that could be due to the effects of climate change turns occur various countries in the world. Greatest impact when it's covered by the natural system: Extreme weather such as heavy rain, storms with stronger force, and heat waves. Polar ice melt triggering sea level rise that threatens citizen community, ecosystem, and in the coastal city, also have broad impact of ocean acidification for marine species, including coral reefs. Nevertheless the most dangerous, according to scientists fear is the impact on human life,

such as health, home, and food that is caused by the increased of temperature (Abbot and Wilson, 2014).

Then the question comes up, is there a link between poverty and environmental concerns? The link between poverty and environment is often mentioned in sustainable development (Reardon and Vosti, 1995; Simpson and Weiner, 2009), its mean the development should be given the impact not only for recent generation but also for the next generation. Link between poverty and environment its shown in recent year, there is an effort from the development practices to the empowerment of MFIs with starting to consider their environmental bottom line in addition to their financial and social objectives (Allet and Hudon, 2013).

But why should microfinance should concern in environmental bottom line? Allet (2013) mention the clients of MFIs should be responsible for climate change because they have an impact on the environment. The clients of MFIs have contributed in major environmental risk like chemical pollution, solid and liquid wastes, pollution emissions, inefficient production processes (energy-consuming, waste-producing), and degradation of natural resources. Regarding this risky, there are environmental issues in the community, such as health and sanitary issues, economic consequences, risk of conflicts, increased vulnerability and food security. Associated in this condition the donors in MFIs and the experts in this field, believed MFIs has capacity to involve in environmental concern in their activities to be third bottom line or additional from the original MFIs objective double bottom line, the triple bottom line element that consist of financial performance, social performance and environmental performance (Copestake, 2007; Green Microfinance, 2007; Van Elteren, 2007; FMO, 2008; Schuite and Pater, 2008; Rippey, 2009; Agier and Szafarz, 2013). We believe green microfinance activities will be significant contribute to anticipate the impact of climate change for livelihood, because of the small scale activities in developing countries has the threat of environmental destruction (Allet, 2013), and MFIs as the institution directly contact with the grassroots community. Addressing in this condition, the services of MFIs could be as intermediaries, and have the opportunity for the dissemination of environmental awareness-raising information (Hall et al., 2008; SEEP Network, 2008). In line with this issue, Kaushal et al. (2005) also mention that microfinance has a positive impact on the environment, because of there is a positive link between access to micro credit and forest regeneration in 27 Indian villages.

5. THE ROLE OF CORPORATE GOVERNANCE IN MFIS

According Labie and Mersland (2011), governance is the whole set of mechanisms that controls the managers are indeed running the organization as established by their missions in other word, governance is all about to achieve the goal corporate (Mersland and Strom, 2009). Furthermore, what kind of tools can be controlled the managers of MFIs? First of all we need rules, rules is a direction for doing some particular activity, its included formal (regulations and standards), and informal rules (social conventions and cultural norms) that influence the behavior of financial market

players, and also consumer (Ledgerwood and Gibson, 2012). Based on microLINKS Wiki (2010) related formal rules and informal rules as follows; formal rules consist of the written laws, government policies, formal regulations, and industry standards that are formally documented and (sometimes) enforced. They are shaped and influenced by the informal rules of the society or business community. Formal rules affect clients by setting legal frameworks and industry standards that influence market access, the range of products, and the competitive landscape, which, in turn, affect providers and their ability to serve their markets appropriately. Informal rules are unwritten, tacit rules that define acceptable roles and activities for different individuals based on a combination of social norms, culture, and historical factors. Informal rules related to a specific community tend to adopt such rules, codes of conduct, and regulations based on a combination of norms associated with different social institutions. Informal rules can contribute to the effectiveness of formal rules when the norm is compliance or when formal rules codify informal norms already widely accepted, beside that informal rule may also emerge in response to formal rules that do not work well for a particular group. Informal rules also influence the supply side of the market or product they may be manifested in, for example, industry norms in relation to innovation and risk, which, in turn, drive attitudes and practices to develop new products.

Ledgerwood (2012) mentions the key players in relation to formal rules are government organizations and industry associations. The increasing complexity of financial systems and new innovations within them such as the green finance activity become new challenges for rule makers in terms of not only what the rules should be, but who should make and implement them. Furthermore, protecting the environment and reducing poverty has emerged as key policy goals in the developing world, because of in developing country's majority the people are poor or near poor. Poverty has circulation in deterioration of environmental (Falconer and Michael, 1989; Falconer, 1990; Dasgupta and Karl-Göran, 1994). Poor or near poor community as part of MFIs clients because of MFIs was designed for served unbanked people, based on this, MFIs could be used as intermediary by the government to communicate, socialize, and campaign to the grassroots for conserving the environment. Nevertheless In developing countries legal and legislative frameworks are inadequate and environmental enforcement authorities are weak. The weak government regulation in developing countries because of poverty is more prevalent, citizens are forced to discount environmental amenities is-à-is immediate priorities of sustenance and income growth. "Citizens in developing countries are also relatively uneducated about environmental safety, including remedial techniques, alternative clean technologies, and cost-effective occupational safety standards" (Wenner et al., 2004).

Green microfinance is financial services to the poor in one region or country, which is one of the activities is to provide soft loans to individuals or groups of individuals who work directly to support the development of green and sustainable social development, create green jobs and environmental solutions progressive for the things that destroy and pollute the earth (Rouf, 2012). The same thing also expressed by Allet (2012), the financial activities

of the green on MFIs include: Loan screening in accordance with environmental criteria, offering micro credit to support clean technology, or training their clients about the practices of pro-environment. There is a close relationship between MFIs in protecting the environment, because clients of microfinance are also actors on environmental destruction, and they are not aware of it because of the low level of education. Discourse latest green microfinance, and became the topic of a workshop-hosted by the University Meets Microfinance organizations which held on 3-4 July 2014 at the Frankfurt School of Finance and Management, making Green microfinance activity is a part of the operations of MFIs in the world. In this event also declared activity green finance is as balancing on operational MFIs. With green microfinance activity put it on the agenda of the MFIs, the workers and clients on MFIs have an understanding, that survive life at this time with no harm to the environment, and doing a business activity today without compromising the next generation wellbeing.

To enforce the implementation of the green microfinance, needed a regulation (law or act) from the government as a key player that conduct and govern these activities and supervise (make sure that the law is respected and how to apply the regulation) the implementation of it. As rule makers, government has function to promote financial inclusion, consumer protection, rule making, design business models, and as authority to give permit a new actor into the financial service sector (Ehrbeck et al., 2012). Furthermore Staschen and Nelson (2012) mention the main participant in developing formal rules related MFIs operation are: Legislature (parliament), government department (relevant ministry and bureaucracy), and the regulator (the CB or regulatory authority). Nevertheless, regarding to Keasey et al. (1997) the key mechanism of corporate governance framework is proprietary (including institutional ownership and management), the board of directors (including the structure of the board), the CEO and the remuneration of directors, audit, information disclosure, and the market for corporate control. Key players in the financial system have an important role in the protection degradation of the environment. They can use their authority to conduct the MFIs to obey the regulation they have made. Key players in the financial system is government, because of they are as policy makers, and legislator, to industry as it warms to responsible finance self-regulation and the need for coordination (Staschen and Nelson, 2012). In line with that the implementation of green microfinance needed of CB regulation to govern the MFIs to execute this thing as part of their operation.

5.1. CB

All financial institutions included MFI policy influenced by CB or national superintendency as regulated and supervised body in the financial system (Rosengard, 2011). According Oesterloo and De Haan (2004), the CB is to maintain monetary stability and financial stability. Monetary stability associated with the macro-economy; price or as an inflation or deflation (Duisenberg, 2001). While financial stability refers to the element or the main activities that make up the financial system (Oesterloo and De Haan, 2004). Based on those things, CB function also anticipates of four macro economic failures related to the financial institution (Rosengard, 2011): Furthermore CB also has a role in maintaining financial

stability, the task of the CB to ensure the smooth functioning of the national payment system and the banking (Schinasi, 2003).

5.2. Legitimacy

Legitimacy is the recognition of the right to govern (Coicaud, 2004), therefore, to implement the green microfinance program, needed a strong motivation and desire of the authorities to govern (government, investors, donors, creditors, etc.) Of implementation in green microfinance. A strong desire or motivation the government can be reflected through regulation or legislation related to green microfinance that have been issued by the authorities (CBs, MRA, ministry of social welfare, etc.). Moore (2000) also builds a legitimate framework for understanding the concerns of managers of non-profit and public sector organizations that encompasses their concerns with mission, operations, and the environment. He argues that the mission of organizations is to create "public value" - value that benefits customers directly, and benefits other stakeholders indirectly. He mentioned that effective managers deploy resources efficiently and effectively to ensure the delivery of public value, while managing their "authorizing" environment to ensure that they receive the legitimacy and support necessary to do their work. Parallel with these definition Backstrand (2006) also mention legitimacy can be characterized as the normative belief held by actors that a particular rule, institution or order ought to be obeyed. According to Raitio and Harkki (2014). Nevertheless the regulation is legitimate if and only if (Stillman, 1974):

- It is based on the beliefs of; (all or some) other nations, states, or persons; the people unanimous; a majority of the people; a majority of any portion of the people; the king, dictator, etc.; Tradition, ancestors, prescription, etc.; God; other; noun or irrelevant.
- It has possession of a certain quality (or qualities); pursuit of a certain value (or set of values); none or irrelevant.

6. THE IMPLEMENTATION OF CORPORATE GOVERNANCE IN MFIS IN EMPOWERING MICRO TO IMPLEMENTING GREEN ACTIVITY (INDONESIA EVIDENCE)

The definition of micro, small and medium enterprises (MSMEs) in Indonesia based on Law No. 20 of 2008 are as follows:

- Micro is a productive enterprise belonging to individuals and/or entities had assets of individual businesses a maximum of 50 million rupiah and a maximum turnover of 300 million rupiah.
- Small business is a productive enterprise belonging to individuals and/or entities had assets of individual businesses more than 50 million rupiah to 500 million rupiah and a turnover of more than 300 million rupiah to 2.5 billion rupiah.
- Medium businesses is a productive enterprise belonging to individuals and/or entities had assets of individual businesses more than 500 million rupiah to 10 billion rupiah and a turnover of over 2.5 billion rupiah to 50 billion rupiah.

Furthermore, according to Saleh and Ndubisi (2006) the majority of the micro and small business sector is based on agriculture and

trade/industry. When linked with the issue that the perpetrators of environmental destruction is the micro and small entrepreneurs, and based on the study of the CB of Indonesia (2012) and in accordance with the opinion of Saleh and Ndubisi (2006) there is a study of MSMEs in the agricultural sector and trade/industry who care about the environment as follows in Table 1.

Table 1 shows the total 65 respondents SMEs in the agricultural sector, which consists of 38 respondents micro entrepreneurs, 20 respondents of small entrepreneurs and 7 respondents medium entrepreneurs, it's reflect by 26% of micro-entrepreneurs in the agricultural sector running their business is not in accordance with the activity environmentally friendly, while only 15% of small entrepreneurs who run their business are not in accordance with environmentally friendly activities and medium entrepreneurs all over the respondent has been running its business activities in accordance with environmentally friendly activities.

Furthermore, based on Table 2 shows MSMEs sector trade/industry-consisting of 136 respondents were split 15 micro entrepreneurs, small entrepreneurs 58 and 63 medium entrepreneurs. Based on the survey results it obtained 27% of micro-entrepreneurs industrial sector running a business is not based on an environmentally friendly, 36% of small entrepreneurs industrial sector is not running the business does not comply with environmental criteria and medium entrepreneurs in the industrial sector, there are 27% run the business does not comply with environmental criteria, based on Tables 1 and 2, shows that micro and small entrepreneurs segment are entrepreneurs who contributed a great deal of environmental degradation in Indonesia.

Micro and small enterprises (SME) have a crucial role in the economy in Indonesia. In 2012, SME have a proportion of 98.79% of the total SME in Indonesia or as many as 55.85 million units. In addition, SME has the ability to absorb labor, SME has absorbed 90.12% of the total labor force works in Indonesia (Ministry of Cooperatives and MSMEs of Republic of Indonesia). Therefore the contribution of MFIs in Indonesia to micro and small entrepreneurs in Indonesia is very important to support the activities, especially in financial transactions of the mess. It also showed in the amount of MFIs in Indonesia, current number of MFIs in Indonesia has reached 637.838 units.

With a large number of MFIs in Indonesia, the government made a regulation to protect and promote micro and small entrepreneurs. Implementation is the presence of the Act (UU) of the Republic of Indonesia Number 20 of 2008, MSMEs. The act explained in Article 2 of the principles and objectives, activities of MSMEs are based on the following principles: Familial, economic, democracy, solidarity, equitable efficiency, sustainability, environmental friendliness, independence, balances economic progress and national unity. Chapter 3 explained the objectives MSMEs are: To grow and expand its business in order to build a national economy based on fair economic democracy, in addition to make the regulation more comprehensive, there is newest Act, the Act No. 1, in 2013 which regulates the operations of MFIs. In Article 2 of the Act states that the MFI must have principles: Justice, solidarity, self-reliance, simplicity, transparency, justice, sustainability, flexibility, and support. In Article 3 also explains that

Table 1: Agricultural sector business activities in accordance with criteria environmentally friendly

No	Activities	Total respondents (65)	Micro entrepreneurs (38)	Small entrepreneurs (20)	Medium entrepreneurs (7)
1	Noting hygiene/health of the soil (%)		50	70	57
2	Using renewable energy in farming activities (%)		26	30	29
3	Applying the principle of protection of the environment (%)		21	35	29
4	Using seed crop/livestock certified environmentally friendly (%)		24	25	43
5	Applying the principle of consumer protection (%)		18	35	43
6	Applying the principle of honesty in farming (%)		24	30	14
7	Implement a process recycle in the production process (%)		21	30	29
8	Efficiency of water use (%)		16	20	29
9	Crop rotation in order to conduct ecological balance (%)		11	30	14
10	Using biopesticides (environmentally friendly) (%)		11	10	0
11	Carrying out the process of reuse in the production process (%)		8	0	29
12	Efficiency of energy use (%)		3	10	14
13	Using the growing medium or plant hormone that is certified environmentally friendly (%)		5	5	0
14	Implement processes reduce the activity of farming (%)		5	5	0
15	Certifying health of the land (%)		3	0	0
16	Not to do any of the above activities (%)		26	15	0

Source: Report of Bank Indonesia related Preparedness Study Micro Entrepreneur, Small and Medium-Friendly Environment in Get Access Financing (2012)

Table 2: Industrial sector business activities in accordance with criteria environmentally friendly

No	Activities	Total respondents (136)	Micro entrepreneurs (15)	Small entrepreneurs (58)	Medium entrepreneurs (63)
1	Using raw materials that are certified environmentally friendly (%)		33	36	49
2	Efficiency in the use of raw materials (%)		47	19	32
3	Using renewable raw materials (%)		27	24	21
4	Efficiency of energy use (%)		27	17	25
5	Implement a process recycle in the production process (%)		13	17	16
6	Using renewable energy (%)		7	21	13
7	Carrying out the process of reuse in the production process (%)		7	7	17
8	Efficiency of water use (%)		33	3	10
9	Implement processes reduce in the production process (%)		7	2	6
10	Using raw materials that have environmentally friendly materials (%)		0	2	6%
11	Not to do any of the above activities (%)		27	36	27

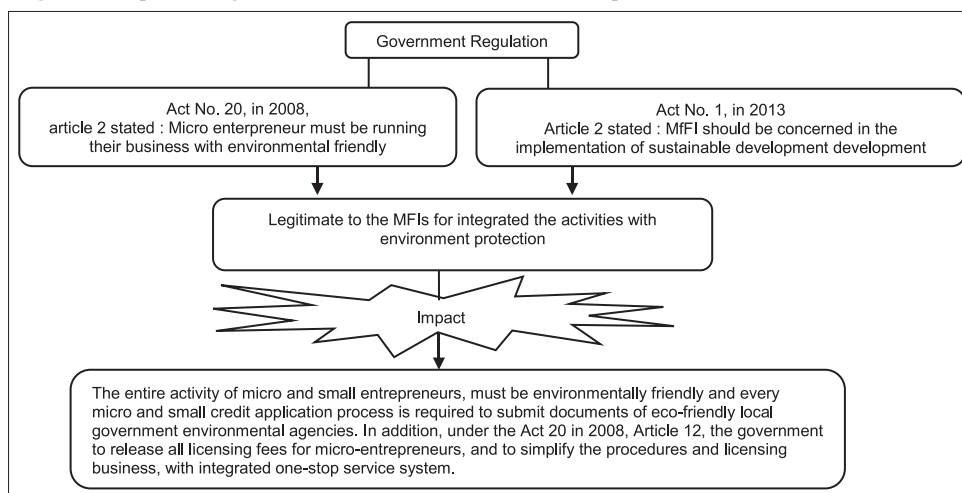
Source: Report of Bank Indonesia related Preparedness Study Micro Entrepreneur, Small and Medium-Friendly Environment in Get Access Financing (2012)

the purpose of the MFI: Improving access to micro-scale funding for the community; help improve economic empowerment, and productivity of the public; and help improve the incomes and welfare of the people, especially the poor and/or low-income.

The Act impact to the micro entrepreneurs, MFIs, and all stakeholders to implement the contents of the Act. Related with green microfinance issue, MFIs have to require a document from the applicant that state their business was not harm to the environment, this document is issued by the environmental authority in local government. This document is free, because of to avoid of collusion and the high administration cost of applicants.

In addition, rural account officer also should have ability to asses the business of the micro credit applicant is environment friendly. As an example, when the rural credit doing assesses on to the credit applicant business, they also required the trash is available in the applicant shop. Furthermore, to illustrate, the impact of the regulation green microfinance on MFIs in Indonesia are as follows (Figure 2).

However, the success of this implementation, there must organization be able to supervise MFIs regarding their concern in green activities. Under the current regulations in Indonesia, the Act 1 in 2013, the MFIs are supervised by the Financial Services Authority, and based on this law, all existing MFIs should be

Figure 2: Impact of legislation in Indonesia to the micro entrepreneur and microfinance institutions

transformed into a cooperative or a shareholder firm. While that oversee the operations of micro-entrepreneurs are the Ministry of Cooperatives and MSMEs. Related to the many numbers of MFIs that should be monitored, the consequences they also need a lot of personnel to doing this function. More over the challenges is to fulfill the personnel also need time and more government budget.

7. CONCLUSION

The rule or legislation issued by the government or the CB to require participating MFIs sustain environmental sustainability is very important, because the presence of Act-related articles in environmental sustainability, providing motivation to MFIs to implement the Act. The motivation arises due to sanctions or closing business activities by the relevant authorities. Evidence on Indonesia regulation, there is environmental regulation from the parliament that legitimate the financial authorities service to supervise the green microfinance. The impact the credit application, assess has integrated with environmental issues. The legitimacy of the government in the form of material sanctions or closing of business activities of MFIs, if it does not implement the contents of the Act, cause MFIs to improve itself provide training to staff to care for the environment, especially to integrate eco-friendly factors in the analysis of credit to prospective investors and to monitor business customers so as not to damage the environment.

REFERENCES

- Abbas, M.Y. (2012), Children, youth and environments (CYE): Lessons for developing countries? *Procedia Social and Behavioral Sciences*, 38, 15-22.
- Abbot, D., Wilson, G. (2014), Climate change: Lived experience, policy and public action. *International Journal of Climate Change Strategies and Management*, 6(1), 5-18.
- Agier, I., Szafarz, A. (2013), Microfinance and gender: Is there a glass ceiling on loan size? *World Development*, 42, 165-181.
- Allet, M. (2012), Mitigating environmental risks in small-scale activities: What role for microfinance? A case study from El Salvador. CERMI Working Paper No. 12-021, ULB--Universite Libre de Bruxelles.
- Allet, M. (2013), Why do microfinance institutions go green? An exploratory study. *Journal of Business Ethics*, 122(3), 405-424.
- Allet, M., Hudon, M. (2013), Green microfinance: Characteristics of microfinance institutions involved in environmental management. *Journal of Business Ethics*, 84(1), 17-28.
- Ansoff, I. (1965), *Corporate Strategy*. New York: McGraw-Hill.
- Armendariz, B., Labie, M. (2011), Introduction and overview: An inquiry into the mismatch in microfinance. In: Armendariz, B., Labie, M., editors. *The Handbook of Microfinance*. London, Singapore: Scientific Work. p3-13.
- Armendariz, B., Morduch, J. (2010), *The Economics of Microfinance*. 2nd ed. Cambridge, MA: The MIT Press.
- Backstrand, K. (2006), Multi-stakeholder partnership for sustainable development: Rethinking legitimacy, accountability and effectiveness. *European Environment*, 16(5), 290-306.
- Balkenhol, B., Hudon, M. (2011), Efficiency. In: Armendariz, B., Labie, M., editors. *The Handbook of Microfinance*. London, Singapore: Scientific Work. p123-138.
- Cinca, C.S., Nieto, G.B., Molinero, C.M. (2011), Social and financial efficiency 11 of microfinance institutions. In: Armendariz, B., Labie, M., editors. *The Handbook of Microfinance*. London, Singapore: Scientific Work. p397-418.
- Coicaud, J.M. (2004), Legitimacy and politics a contribute to the study right and political responsibilities. Cambridge: Cambridge University, Cambridge University Press.
- Cook, R.B., Suter, G.W., Riley, S.E. (1999), Ecological risk assessment in a large river-reservoir. *Environmental Toxicology and Chemistry*, 18(4), 581-588.
- Copestake, J. (2007), Mainstreaming microfinance: Social performance management or mission drift? *World Development*, 35(10), 1721-1738.
- Copestake, J., Dawson, P., Fanning, J.P., McKay, A., Wright-Revollo, K. (2005), Monitoring the diversity of the poverty outreach and impact of microfinance: A comparison of methods using data from Peru. *Development Policy Review*, 23(6), 703-723.
- Dasgupta, P., Karl-Göran, M. (1994), *Poverty, Institutions, and the Environmental-Resource Base*. Washington, DC: World Bank.
- Duisenberg, W.F. (2001), The contribution of the euro to financial stability. In: *Globalization of Financial Markets and Financial Stability — Challenges for Europe*. Baden-Baden: Nomos Verlagsgesellschaft. p37-51.
- Ehrbeck, T., Pickens, M., Tarazi, M. (2012), *Financially Inclusive Ecosystems: The Roles of Government Today*. Focus Note 76. Washington, DC: CGAP.
- Falconer, J. (1990), *The Major Significance of Minor Forest Products*. Rome, Italy: FAO.
- Falconer, J., Michael, A.J.E. (1989), *Household Food Security and Forestry: An Analysis of Socio-Economic Issues*. Rome, Italy: FAO.

- FMO. (2008), Environmental and Social Risk Management Tools for MFIs. Available from: <http://www.fmo.nl/esg-tools>.
- Frank, C. (2008), Stemming the tide of mission drift: Microfinance transformation and the double bottom line. Women's World Banking Focus Note.
- Freeman, R. (1983), Strategic management a stakeholder approach. *Advances in Strategic Management*, 1, 31-60.
- Green Microfinance. (2007), Microfinance and the Environment: Setting the Research and Policy Agenda. Roundtable May 5-6, 2006. Philadelphia: GreenMicrofinance-LLC.
- Grossman, G.M., Krueger, A.B. (1994), Economic Growth and the Environment. National Bureau of Economic Research Working Paper, No. 4634, Cambridge.
- Hall, J., Collins, L., Israel, E., Wenner, M. (2008), The Missing Bottom Line: Microfinance and the Environment. Philadelphia: GreenMicrofinance-LLC.
- Hudon, M. (2011), Ethics in microfinance. In: Armendariz, B., Labie, M., editors. *The Handbook of Microfinance*. London, Singapore: Scientific Work. p123-138.
- Jegasothy, K. (1999), Population and rural-urban environmental interactions in developing countries. *International Journal of Social Economics*, 26(7-9), 1027-1055.
- Karlan, D., Goldberg, N. (2011), Microfinance evaluation strategies: Notes on methodology and findings. In: Armendariz, B., Labie, M., editors. *The Handbook of Microfinance*. London, Singapore: Scientific Work. p17-58.
- Kaushal, K.K., Melkani, V.K., Kala, J.C. (2005), Sustainable poverty alleviation through a forestry project in Tamilnadu state of India. *The International Journal of Sustainable Development and World Ecology*, 12(3), 347-352.
- Keasey, K., Thompson, S., Wright, M. (1997), The corporate governance problem – competing diagnosis and solution. In: Keasey, K., Thompson, S., Wright, M., editors. *Corporate Governance: Economic, Management and Financial Issues*. New York: Oxford University Press.
- Labie, M., Mersland, R. (2011), Corporate governance challenges in microfinance. In: Armendariz, B., Labie, M., editors. *The Handbook of Microfinance*. London, Singapore: Scientific Work. p283-296.
- Ledgerwood, J. (2012), Institutional provider. In: Ledgerwood, J., Earne, J., Nelson, C., editors. *The New Microfinance Handbook a Financial Market System Perspective*. Washington, DC: The World Bank. p171-196.
- Ledgerwood, J., Gibson, A. (2012), The evolving financial landscape. In: Ledgerwood, J., Earne, J., Nelson, C., editors. *The New Microfinance Handbook a Financial Market System Perspective*. Washington, DC: The World Bank. p15-49.
- Lin, H., Zeng, S.X., Ma, H.Y., Qi, G.Y., Tam, V.M. (2014), Can political capital drive corporate green innovation? Lessons from China. *Journal of Cleaner Production*, 64, 63-72.
- Mc Donald, T.A., Becker, R.A., Ting, D.T.W. (1997), A review of the consistency, harmonization, and scientific basis of risk assessment activities within the California environmental protection agency. In: Kamrin, M.A., editor. *Environmental Risk Harmonization*. Toronto: John Wiley & Sons Ltd. p125-138.
- Mersland, R., Strom, R.O. (2009), Performance and governance in microfinance institutions. *Journal of Banking and Finance*, 33(4), 662-669.
- MicroLINKS wiki. (2010), Informal Regulations under BEE. Value Chain Framework wiki page. Available from: http://www.apps.develebridge.net/amap/index.php/Informal_Regulations_under_BEE.
- Moore, M.H. (2000), Managing for value: Organizational strategy in for-profit, nonprofit, and governmental organizations. *Nonprofit and Voluntary Sector Quarterly*, 9(1), 183-204.
- Morduch, J. (1999), The microfinance promise. *Journal of Economic Literature*, 37, 1569-1614.
- Oesterlo, S., De Haan, J. (2004), Central banks and financial stability: A survey. *Journal of Financial Stability*, 1, 257-273.
- Pereau, J.C., Doyen, L., Little, L.R., Thébaud, O. (2012), The triple bottom line: Meeting ecological, economic and social goals with individual transferable quotas. *Journal of Environmental Economics and Management*, 63, 419-434.
- Raitio, K., Harkki, S. (2014), The disappearing chain of responsibility: Legitimacy challenges in the political governance of finnish forest and park service. *Land Use Policy*, 39, 281-291.
- Reardon, T., Vosti, S.A. (1995), Links between rural poverty and the environment in developing countries: Asset categories and investment poverty. *World Development*, 23(9), 1495-1506.
- Rippey, P. (2009), Microfinance and Climate Change: Threats and Opportunities, CGAP Focus Note 53. Washington, DC: CGAP.
- Rosengard, J.K. (2011), Oversight is a many-splendored thing: Choice and proportionality in regulating and supervising microfinance institutions. In: Armendariz, B., Labie, M., editors. *The Handbook of Microfinance*. London, Singapore: Scientific Work. p159-170.
- Rouf, A.K. (2012), Green microfinance promoting green enterprise development. *Humanomics*, 28(2), 148-161.
- Saleh, A.S., Ndubisi, N.O. (2006), An evaluation of SME development in Malaysia. *International Review of Business Research Papers*, 2(1), 1-14.
- Schinasi, G.J. (2003), Responsibility of Central Banks for Stability in Financial Markets. IMF Working Paper, No. 03/121. Washington, DC.
- Schuite, G.J., Pater, A. (2008), The Triple Bottom Line for Microfinance. Bunnik: Triodos Facet.
- SEEP Network. (2008), Microfinance and the Environment. SEEP Network.
- Simpson, J., Weiner, E. (2009), *Oxford English Dictionary*. New York: Oxford University Press.
- Staschen, S., Nelson, C. (2012), The role of government and industry in financial inclusion. In: Ledgerwood, J., Earne, J., Nelson, C. *The New Microfinance Handbook a Financial Market System Perspective*. Washington, DC: The World Bank. p15-49.
- Stillman, P.G. (1974), The concept of legitimacy. *Polity*, 7(1), 32-56.
- Stuart, G. (2011), Microfinance-A strategic management framework. In: Armendariz, B., Labie, M., editors. *The Handbook of Microfinance*. London, Singapore: Scientific Work. p251-266.
- United Nations. (1987), Report of the World Commission on Environment and Development General Assembly Resolution 42/187.
- Vallerand, R.J., Blssonnette, R. (1992), Intrinsic, extrinsic, and a motivational styles as predictors of behavior: A prospective study. *Journal of Personality*, 60(3), 599-620.
- Van Elteren, A. (2007), Environmental and Social Risk Management and Added Value at MFIs and MFI Funds: The FMO Approach. The Hague: Netherlands Development Finance Company (FMO).
- Wenner, M.D., Wright, N., Lal, A. (2004), Environmental protection and microenterprise development in the developing world: A model based on the Latin American experience. *Journal of Microfinance/ESR*, 6(1), 95-122.