Agricultural sector financing to realize green banking in Indonesia

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Abstract. Indonesia is known as an agricultural country for its abundant natural wealth. It has a very strategic geographical position, located in the tropics and having high rainfall. The banking sector has a vital role in economic development. Even though bank business activities do not have a direct impact on the environment, banks can protect the environment through credit financing management. The problem observed in this study is the role of agricultural credit financing in realizing green banking in Indonesia. This research uses a normative juridical method supported by a literature review. The results show that the agricultural sector is directly in contact with society and has the potential to damage the environment. The protection from the banking sector is greatly needed to conserve the environment. Any form of potential environmental damage can be prevented through a special clause in the credit agreement. In conclusion, banks have a significant contribution to realizing the environmental sustainability of agricultural activities in Indonesia. At present, green banking in credit agreements has not included a clause regarding environmental management. This research suggests the banks to include a clause on environmental protection in credit agreements in accordance with the concept of green banking.

1. Introduction
The Indonesian agricultural sector produces various kinds of agricultural commodities such as rice, corn, soybeans, vegetables, coffee, tea, and oil palm which contribute to public welfare and national economic development. In the agricultural sector, land management is often handled by the public which often causes natural conservations to be destroyed, forest fires that create smog, the extinction of ecosystems, floods, and landslides. This situation has and will continue to negatively impact public and environmental health.

Sustainable development emphasizes on profit generation without neglecting public and environmental health. In addition to meeting the ever-increasing needs of profits, the banking sector can provide lending to finance the agricultural sector without compromising public and environmental health in order to realize sustainable development. Through lending, green banking in Indonesia can be realized.

The banking sector plays an important and strategic role in economic development through lending. [1] In essence, the business activities of banks do not have a direct impact on the environment. However, it can encourage environmental management to go green through the lending system. Banks can provide protection through credit agreements by setting special clauses to prevent environmental damage for loans in the agricultural sector.[2]
Law no. 40 of 2007 concerning Limited Liability Companies (LLC Law) and Government Regulation (GR) No. 47 of 2012 concerning Social and Environmental Responsibility of Limited Liability Companies (GR-SER) regulate the obligations of companies engaged in natural resources to carry out Corporate Social Responsibility (CSR) programs. However, companies that are not engaged in and/or related to natural resources are not prevented from doing so, for CSR is a company code of ethics.

Law No. 32 of 2009 concerning Environmental Protection and Management (EPM Law) emphasizes that all economic activities must encourage environmental sustainability by providing criminal and/or civil sanctions for perpetrators up to the revocation of environmental permits. If this is not taken into account by the banking sector, it will potentially increase credit, legal, and reputation risks of the bank itself. This study analyzes the role of banks in credit financing in the agricultural sector to realize green banking in Indonesia.

2. Methods
This is normative juridical research that analyzes primary legal materials namely: RI Law No. 7 of 1992 jo. RI Law No. 10 of 1998 concerning Banking (Banking Law), RI Law No. 32 of 2009 concerning Environmental Protection and Management (EPM Law), RI Law No. 40 of 2007 concerning Limited Liability Companies (LLC Law), and Government Regulations (GR) RI No. 47 of 2012 Concerning Social and Environmental Responsibility of Limited Liability Companies (GR-SER). The role of banks in providing credit to the agricultural sector to realize green banking in the context of sustainable development will be analyzed through these materials.

3. Results and discussion

3.1. The banking and environmental business sector
Industrialization, such as the conversion of green areas into agricultural land, has immensely degraded environmental conditions. Land clearing and burning, and also intense chemical usage have damaged the nutrients present in the soil. The impact can be felt by many parts of society, including agricultural land, the environment, and humans themselves.

Forest and land fires in Indonesia are 99% caused by human actions and 1% by nature.[3] During January to May 2019, forest fires in Indonesia have consumed 42,740 hectares of land.[4] This is deliberately caused by the business wishing to land clearing for plantations.[5] Consequently, this causes flash floods, damaged lands, and decreased farmer income.[6]

Forest fires damages both the flora and fauna ecosystem. Air pollution and smog can cause respiratory illnesses such as Upper Respiratory Tract Infection (URI), asthma, and lung disease. Smog can also disrupt visibility of land and air transportation. Excess emission of smoke, carbon dioxide, and other gases contributes to global warming and climate change. Forests become barren and cannot reserve water during the rainy season, causing landslides and flash floods. Clean water sources are reduced and drought takes place due to the lack of trees to reserve water.[7]

These aforementioned environmental damages violate the concept of sustainable development which emphasizes the importance of reaching a balance between economic, environmental, and social development in conducting business activities.[8] In the corporate world, sustainable development emphasizes profit generation without neglecting society and the environment.[9]

Sustainable development has given birth to the concept of CSR.[10] In Indonesia, it is compulsory for companies engaged in business activities involving natural resources to implement CSR.[11] Although the banking sector is not engaged in natural resources, it can also implement CSR in providing loans that will be used for agricultural land management. In LLC Law, CSR is the commitment of a company to participate in sustainable economic development through social and environmental responsibilities in order to improve public and environmental welfare of the company itself, the surrounding locals, and society in general.[12]
The provisions of Article 1 number 3 of PME Law defines sustainable development as a conscious and planned effort that integrates environmental, social, and economic aspects into a development strategy that ensures environmental integrity and the safety, capability, welfare, and quality of life of the present and future generations. The concept of sustainable development provides an opportunity for banks to be able to protect and preserve nature through loans for environmentally friendly agricultural land management by utilizing green banking programs.

The banking sector encompasses everything concerning banks, including institutions, business activities, as well as methods and processes in carrying out its business activities.[13] Credit or provision of money or its equivalence, based on an agreement or loan agreement between the bank and other parties requires the debtor to pay off the debt with interest after a certain period of time.[14]

Credit risk is the risk arising from the inability of the customer to repay the loan along with interest in a predetermined or scheduled period.[15] This can be caused by factors that violate the laws and regulations. Damage to the environment caused by the business activities of customers will also negatively impact the business activities of the bank itself.

Banks operate on the principle of trust. Without the trust of the public and customers, banks will cease to function as financial intermediaries and face legal and reputation risks.[16] Banks that provide loans to customers that utilize them for environmentally damaging agricultural purposes will face credit, legal, and reputation risks.

Credit risks start from the use of credit for the management of forests, agricultural land, and chemicals that are in conflict with environmental legislation and threaten human health and safety. This will cause surrounding locals to file complaints, which in turn decreases public trust and eventually cause legal and reputation risks.

3.2. Green banking program towards sustainable agriculture

Green banking is a program that encompasses environmental damage and credit, legal, and reputation risks. With this program, the banking sector can encourage sustainable development through increased funding. [17] The priority of this program is to develop sustainable banking business practices.[18]

As the world turns its attention on environmental and social issues, banks are pressured to adjust their business activities. The concept of the green economy requires every economic activity to minimize its impact on the environment through the concept of green banking, an effort to prioritize sustainability in loans or operational activities.[19]

The banking business activities, though indirectly, highly contribute to environmental pollution. The use of energy, water, toxic chemicals, and others in banking activities are unlike those of other business sectors, such as mining and processing industries which cause hazardous and toxic materials that damage the environment and threaten human health. Even so, banking activities cannot be separated from the ever-increasing environmental damage, since banks can be regarded as the trigger for the environmentally harmful activities of debtors through loans.[20] The green banking program can screen the business activities of debtors through protection in credit agreements.

The existence of a strategic banking sector not only supports the national economy but also acts as an agent of development.[21] Bank function as financial intermediaries between overfunded customers and those requiring funds. One of the functions of banks is to provide loans for the business activities of its customers.[22]

Banks can help prevent environmental and public health damage caused by agricultural lands by increasing the efforts of Environmental Impact Analysis (EIA). Based on the Elucidation of Article 8 paragraph (1) and the 5th Paragraph of the General Explanation of Banking Law, increases in EIA can be used as protection through bank lending.

EPM Law requires all economic activities to promote environmental sustainability by providing criminal and/or civil sanctions for perpetrators, up to the revocation of environmental permits. Article 67 of EPM Law obligates the preservation of environmental functions and the control of environmental pollution and/or damage.
Nationally, banks have implemented green banking in the agricultural sector, although not all of them are comprehensive. PT Bank Mandiri Tbk has channeled 41.3 million dollars at eight regions that produce cassava starch for the construction of biogas power generation systems. Through the wastewater treatment plant, these regions can produce 23.6 MW of electricity and reduce carbon dioxide emissions by 543 thousand tons per year.[23]

PT Bank Negara Indonesia Tbk (BNI) has implemented the concept of green banking in agricultural sector loans through FESC, People's Business Credit (PBC), Vegetable Energy Development Credit-Plantation Revitalization (VEDC-PR), Industrial Efficiency and Pollution Control (IEPC-1 and IEPC-2) or Eco-friendly Productive Business Credit, Transmigratory Citizen Smallholder Credit (TCSC), and others.[24]

PT Bank Rakyat Indonesia Tbk (BRI) has implemented green banking in agricultural sector loans. BRI develops green products and financing, such as green bonds and green financing [25] BRI implements and is committed to the concept of sustainable finance (SF). It was chosen as one of the First Mover Sustainable Banking by Financial Services Authority (FSA) for its commitment to implement green banking.[26]

BNI has implemented a policy in which it consistently provides loans to business sectors that are environmentally friendly and certified by the Environmental Impact Analysis Management. BNI will not provide loans to businesses that are environmentally damaging; debtors must manage their agricultural businesses in an efficient and friendly manner, and cannot damage the environment. BNI also participates in fostering, educating, and empowering communities to create a clean environment through the right planting, preservation, and environmental conservation methods.[27]

The FSA states there are eight banks committed to becoming First Movers in green banking financing. This is outlined in the signing of the green banking pilot project by the banks, namely Bank Mandiri, BNI, BRI, BCA, Bank Muamalat, Bank Syariah, Bank Jawa Barat Banten (BJB), and Bank Artha Graha Internasional. Through this, they have shown their support for the 2014-2019 Indonesian Sustainable Finance Roadmap. This roadmap is expected to be a means for all banks to create innovations that are in line with sustainable development.[28]

The obligation of implementing green banking in Indonesia does not yet have its own regulations that are compelling for banks; there is no strong legal basis to provide guidelines to implement green banking. Based on existing laws and regulations, namely LLC Law, EPM Law, Banking Law, and GR-SER, green banking is implicitly defined as awareness or commitment, not an obligation.

4. Conclusions

The role of banks in financing the sustainable agriculture sector through green banking to realize sustainable development has begun to be implemented. However, it is only defined as awareness or commitment, not an obligation stipulated in the legislation. A number of related laws such as LLC Law, Banking Law, and EPM Law do not oblige banks to implement green banking. Therefore, green banking has not been implemented in every bank in Indonesia. There are many credit funds used for processing agricultural lands in an environmentally damaging manner. The application of CSR/SER in LLC Law is only obliged for companies engaged in natural resources. For those that do not, CSR/SER is only defined as awareness or commitment rather than an obligation.

The Indonesian banking sector should realize the importance of sustainable agricultural financing and be committed to implementing green banking even though the business activities are not directly engaged in natural resources. Bank loans have a strong, although indirect link with natural resource management, especially in the agricultural sector. Banking Law as the lex specialist of LLC Law should be able to obligate green banking so that all banks are involved in realizing sustainable development.

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