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Green Governance Analysis Through Development Food Security Towards Sustainable Green Economy

Made Satyaguna
Faculty of Economic and Business, Universitas 17 Agustus 1945 Surabaya, Indonesia
satyaguna1272200003@surel.untag-sby.ac.id

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Abstract

The current food problem cannot be separated from environmental issues developing in Indonesia, ranging from pollution to ecosystem instability, which seriously impacts the economy. Natural disasters to the recent Covid 19 virus pandemic have given a warning signal that ecosystem instability must be a priority not only for the government but also for industry players and the public in building food security. The food estate approach proposed to create food security is believed to meet linear population growth and become a sustainable green economy model, but the failure rate of food estate transformation is relatively high because it has not been able to drive the market economy effectively. Strict regulations and comprehensive guidelines are not the keys to achieving a green economy through a balance of food security and environmental sustainability. A holistic understanding of green governance is needed before pushing food estates to achieve a sustainable green economy.

Keywords: *Green Governance, Food Security, Green Economy, Sustainability*

INTRODUCTION

Green Economy is a concept of developing an economic system based on environmental sustainability in realizing the fulfillment of the basic economic needs of the population that are needed at this time. Environmental degradation and climate change have seriously impacted food security in the last two decades. Instability in food availability shows a relatively high level of concern, especially since the recent Covid-19 pandemic has forced global economic activity to stop. Food reserves that are used cannot continuously meet long-term needs because supplying countries experience the same conditions.

Building a green economy based on ecosystem balance through the development of food estates requires an agreement mechanism between interested actors such as the government, business actors, society, economic dynamics, and market instruments. International agreements and discussions conclude that a suitable mechanism for balancing economic growth due to the depletion of natural

resources is to implement sensible policies capable of fulfilling microeconomic aspects based on food supply balanced with environmental preservation.

In the process of achieving a green economy, there are indeed many obstacles, such as 1) priority scale in fulfilling and increasing related resources, 2) consistency and commitment of policies that have gaps in conflicts of interest, 3) cost savings arising in terms of time and open innovation that can support green growth with the needed ecology. This study assesses that the process of empowering green governance in building a food estate is running in place; hence the implications for economic development based on food security become negative.

LITERATURE REVIEW

The success of developing a food estate to achieve a green economy cannot be separated from the role of rules and guidelines that need attention. These rules and guidelines are the initial mechanisms for green governance that fulfill all aspects, such as environmental sustainability, use of resources, and utilization of the economy to achieve people's welfare. The Covid-19 pandemic has consciously become a driving factor (Béné et al., 2021). This provides a valuable lesson that food security is currently classified as vulnerable, a condition that has long been known where food import activities are still relatively high. The implementation of Community Activity Restrictions (PPKM) is a preventive action taken by the government (García-Díez et al., 2021); however, it dramatically impacts the economy due to the difficulty in accessing staple food.

South Korea has been a pioneer and leading the development of green growth by elevating the green economy to the national level through an inclusive institutional system (Sonnenschein & Mundaca, 2016). In 2008, South Korea reduced greenhouse emissions by 30% and built long-term, low-carbon, and energy-efficient green developments. The South Korean government has provided an economic recovery package worth USD 45 billion, nearly 3% of the domestic GDP, as public support.

The Kyoto Protocol took place in 1992 and is one of the most ambitious agreements dealing with climate change issues (Maamoun, 2019). The protocol resulted in an agreement on climate change conventions that could affect sustainable development through private partnerships not being reached. Participation is divided into two attitudes, ensuring economic growth as a first step and environmental preservation that can encourage a sustainable economy.

The Chinese nation, in the course of its rapid economic growth in the 1990s, was faced with failures in environmental policymaking, as reported by Chinese and international academics, due to the lack of solutions within China's economic, technical, and labor reach that could stop and reverse environmental degradative trends (Jian & Yu, 2019).

Turkey struggled for a long time against climate change and disasters, resulting in a further decline in agricultural output from 1991 to 2019. Climate change threatens food security, and the country's progress toward sustainable development goals is hampered, particularly in reducing poverty and hunger rates. Based on this experience, Turkey started advocating for the development and

widespread application of climate-smart technologies to protect food supplies at individual, regional, and national levels from the impacts of climate change. Climate uncertainty encourages policymakers to set aside special funds for R&D in the agricultural industry (Ahmed et al., 2023).

Research on food security that focuses on developing a green economy has not been widely carried out because of the implementation process and the possible impacts of interdisciplinary efforts have been neglected, such as recycling, replanting, etc. No matter how rich a country is, no government can guarantee its food security (Prosekov & Ivanova, 2018). The contribution of interdisciplinary research by forming a reciprocal system (bottom-up and top-down approaches) can be significant for coordinating conflicts between food security and global environmental preservation as practical actions that carry the concept of a green economy.

METHOD

This study uses literature analysis that focuses on three main aspects: literature on green governance, food estate development based on environmental preservation, and the circular economy as an initial step in encouraging a sustainable green economy. The definition of a green economy needs to be simpler so that it is easy to understand, namely economic growth without setting aside environmental problems and limiting excessive exploitation of natural resources, and being able to encourage the industrial sector of the economy to have the opportunity to realize social welfare. The starting point of the green governance approach, in general, is to determine the extent to which human and natural boundaries form rules and guidelines that can be obeyed and follow field practice through a reciprocal system (bottom-up and top-down approaches) to create harmonious relationships between people and natural resources in supporting environmental and economic sustainability.

The emergence of green governance as a newly developed governance model presents new challenges to traditional development ideologies that focus on the scope of needs of human development. Even though the government structure and mechanisms are entirely appropriate, many obstacles still occur, especially in the subjective behavior of self-interest. This prompts many questions, such as how actors play the roles and structures developed in green governance, the clarity of responsibilities based on accounting principles, and the impacts of the implemented green governance mechanisms (Xiao & Sun, 2022). These issues and questions do not have a systematic theoretical analysis framework, so they can cause many limitations from academic aspects and field practice in carrying out green governance mechanisms.

RESULTS AND DISCUSSION

I. Definition

Regardless of the currently available definition or model approach, it is known that there is no clear evidence that many countries have consistently implemented and practiced a green economy in their policies and strategies.

Bonnedahl et al (2022) Stated that one of the main components of a sustainable economy is recognized as a pillar of the social economy does not explain a green economy. So this can be a firm consideration in meeting food needs by taking into account long-term environmental preservation aspects. From a different point of view, the OECD also states that sustainability must be a central concept of a green economy strategy and further identifies a definition of a green economy not to replace sustainable economic development. The basic concept of a green economy with green growth remains the same but has a different development perspective. Thoughts on developing a green economy have gone beyond green growth so that the green economy is considered a relevant approach to participate in sustainable economic growth and has enough opportunities to discover new potentials that can drive economies to develop rapidly.

Not much literature discusses the relationship between food security and green growth and environmental issues such as climate change; therefore, it becomes unbalanced in providing theoretical support for the transformation toward a sustainable green economy. Maybe for some countries, this will only be a reasonable and pragmatic discourse because they do not have confidence in the success of the green economy transformation process as an essential component in building the independence of a country's economic stability. Koide & Akenji (2017) argue that clear policies and plans, as well as government commitment and consistency, are the foundation for broad structural change. A solid legal and regulatory framework must be enhanced to achieve policy success embodied in a green economy.

II. Food Security and Green Economy

The green economy concept emerged recently as a basic framework for sustainable development in developing countries. The results of empirical research show that green economy indicators have a controversial (negative) effect on food security (food availability). The influence of economic policies on food security can be seen from different dimensions or perspectives, such as:

1. Green economy policies can affect food availability and stability by stimulating productivity and encouraging better ecosystem land management but are affected by production processes such as energy use for agricultural management.

2. Green economic policies can encourage increased investment in several sectors in agriculture, construction, transportation, and the agricultural and plantation industries so that they can become sources of green job creation (Cooper et al., 2020). Developing these sectors also has other added values, from recycling, environmental management, and health to reducing vulnerability to crime issues.

III. Green Governance and Food Security

Due to the lack of broad green governance structures for food security, food availability based on agricultural and plantation products is managed by actors promoting trade liberalization discourses (Xie et al., 2021). The weaknesses are

more, especially for small-scale farmers, so it is often known that food availability is an arena of interest beyond the ability to manage natural resources. Many small-scale farmers and civil society actors offer a different approach through an intrinsic focus on social justice and environmental sustainability.

Developing natural resources linked to food shortages will drive rapidly changing socio-environmental dynamics. Integrating issues such as land provision, technology, environmental preservation, and food production requires appropriate, flexible, and adaptive management mechanisms (Li et al., 2018). Without these three things, the potential for resource management can be trapped in rigidity (a rigid but maladaptive system), thus limiting the ability to provide food according to desired needs. The environmental management paradigm related to food security is currently unable to serve the high complexity due to rapid population growth (Zhang & Lu, 2023). Insights about environmental and socio-economic dynamics in an ecosystem are not well received because they do not have complete information about their management. Adaptive green governance can work in an integrated and well-connected manner between institutions, informal groups, and interested actors.

IV. Green Governance and Green Economy

Even though some countries have successfully transformed various activities, including a green economy, this is not easy to implement. From some of the literature, we note that there are frequent failures in achieving a green economy which is more associated with green governance mechanisms (Xiao & Sun, 2022), such as

1. Conflict in decision making
   The primary role in moving towards a green economy is the process and structure that supports the context of particular interests that have the potential to hinder the decision-making process that leads to the degradation of transformation.

2. Lack of commitment and awareness of the process of achieving a green economy
   The biggest problem in field practice at achieving the transformation status level is related to the quality of human character formation through education and field practice of all interested actors.

CONCLUSION

Green governance is proposed to harmonize the relationship between humans and nature while promoting environmental awareness in building a community with a shared future. Although research on Green Governance is starting to attract much attention, there is still a lack of theoretical frameworks and logical scientific expressions that limit the study and application of green governance theory (Li et al., 2018). If based on the perspective of openness to innovation, this scientific study only focuses on the importance of green governance mechanisms with food security as an innovative subject. In this context, the independence of a country can be demonstrated through independence in fulfilling food needs by optimally managing

natural resources without being separated from sustainable economic and ecological values.

Not all countries have the same level of governance stages, so a first step is needed to create a green governance framework acceptable to the actors concerned (Montt et al., 2018). The implications of policy, field practice, and research for both regulators and guideline makers will be made clear and promote a thorough exchange of information. This study reveals the critical role of green governance in encouraging economic development, integrating innovation, providing opportunities for ecological improvement, and encouraging trust through large long-term investment values.

Although it is recognized that there is still debate in the literature from broader and different perspectives, such as environmental protection and poverty alleviation, the green economy has not been able to provide sufficient evidence to support food security in the near term. Hopefully, this scientific study can provide new insights about a green economy based on an ecological system through sustainable good management.

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