

Conference Paper

TOWS Analysis of Agricultural Insurance in the Application of a Green Economy

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ABSTRACT

This research aims to find out whether the APBN (State Revenue and Expenditure Budget) provided by the government is appropriate to support a green economy in the Covid-19 era, especially in the agricultural sector, and wants to know how the role of agricultural insurance is in the welfare of farmers. The method used in this research used a literature review. Sources of data obtained from this research are in the form of books, journals, and internet sites related to the topics discussed. The results show that the implementation of SRI in achieving green economy implementation has been going well, but the State Budget (APBN) provided by the government is not fully suitable to support a green economy. In addition, the role of agricultural insurance in the welfare of farmers is considered a fairly good policy.

Keywords: Agricultural insurance, green economy, local government

Introduction

Modernization is a form of change from a less developed state that then develops into an advanced state. Modernization has succeeded in increasing the number of industries in various sectors, but the increase is meaningless if it is only concerned with profit and is not sensitive to the environment. Cases of environmental damage are rife in Indonesia, ranging from erosion, forest fires, extreme weather changes, and others. This of course hurts human life, especially since the COVID-19 pandemic began to attack the world at the beginning of the year 2020.

The global COVID-19 pandemic is a historical story that will not be forgotten. This pandemic has an impact on various sectors of life, one of which is the economic sector. The impact of the COVID-19 pandemic on the national economy can be seen in the second quarter of 2020, Indonesia's economic growth contracted by 5.32% in early August (Elena, 2020). This figure is worse than the first quarter which only reached 2.97%. The Indonesian economy tends to weaken because many people have lost their jobs. To get out of this problem, Indonesia must further optimize the use of natural resources so that they can be managed by the community to increase people's income and help increase state income.

Utilization of natural resources in the agricultural sector is one of the strongest sectors in restoring the economy because it is a basic human need that is certainly still sought after by the community even though the pandemic is ongoing. Utilization in the agricultural sector must be done properly so as not to pollute the environment. Agricultural pollution is one of the pollution that is very harmful to the environment by using excessive by-products such as the use of pesticides, fertilizers, and other chemicals. Therefore, it is necessary to have a green economy to improve human welfare while reducing risks to the environment.

The green economy is part of sustainable development that is needed to improve environmental conservation and reduce conflicts of interest in economic use. Based on data from

How to cite:

Nafi'ah, B. A. (2022). TOWS analysis of agricultural insurance in the application of a green economy. *International Seminar of Research Month 2021*. NST Proceedings. pages 148-153. doi: 10.11594/nstp.2022.2425

the Central Statistics Agency (BPS), national rice production in 2020 was 31.33 million tons, an increase compared to 2019 which produced 31.31 million tons. The increase in rice production is certainly something that should be done to be proud of, but the increase in rice production is also followed by problems that occur in the environment. The excessive and continuous use of chemical fertilizers and pesticides has had an impact on soil conditions. The nutrients in the soil are reduced so that the soil hardens quickly, is less able to store water, and quickly becomes acidic, causing a decrease in plant productivity. Continuous use of pesticides can also lead to an increase in pest populations. To support the existence of a green economy so that environmental damage or climate change does not occur, the government helps in the form of the State Budget (State Revenue and Expenditure Budget). The budget that will be carried out on average reaches 4.1 percent of the APBN.

Indonesia is an agrarian country where most of the population is farmers. This is supported by the agricultural census data conducted by the Central Statistics Agency (BPS) which states that there are 26.14 million households who work as farmers. The increasingly uncertain climate change in this modern era is coupled with the COVID-19 pandemic which makes farmers experience difficulties. Drought and heavy rains that can potentially flood are unpredictable, making farmers experience difficulties and often suffer losses due to increasingly uncertain climate change. Therefore, to help improve the welfare of farmers, the government provides agricultural insurance that will protect the lives of farmers in the form of capital assistance in the event of crop failure caused by climatic factors, pest attacks, and so on. Based on this information, the researcher wants to find out whether the State Budget (State Revenue and Expenditure Budget) provided by the government is appropriate to support a green economy in the Covid-19 era, especially in the agricultural sector. In addition, researchers also want to know how the role of agricultural insurance in the welfare of farmers.

Literature Review

Makmum (2016) defines sustainable development as a development that has the principle of meeting current needs without risking future needs to improve people's welfare. This development covers 3 policy areas, namely economic development, social development, and environmental protection.

From an economic perspective, the world economy has undergone significant changes due to globalization. This change will have an impact on social development and environmental protection. Therefore, the concept of a green economy was developed (Green Economy). According to the United Nations Environment Program, Green Economy is an economic activity that aims to improve welfare and social justice without hurting the environment and natural resources.

In the process of economic development, each country has different policies and responsibilities, and capabilities. Therefore, there is no single model for sustainable development or green economy programs. To strengthen and realize a green economy in Indonesia, the government makes a policy as part of the annual development plan prepared by Bappenas. The effort is to improve the implementation of organic farming by using the SRI (System of Rice Intensification) technique. The development of SRI is a technological innovation by combining fertilizers and pesticides appropriately so as not to cause damage to the soil and the environment (Murniningtyas, 2014). In addition, the government also provides agricultural insurance programs to maintain production and protect farmers by protecting against price fluctuations in the event of drought, flooding, and other factors. Because of the COVID-19 pandemic, the green economy program is expected to help Indonesia's economic growth develop, be inclusive, and fair.

In designing a green fiscal policy (Nurfatriani et al., 2015), a stakeholder or stakeholder analysis is needed to find out the actors and roles in decision-making. This stakeholder analysis is useful for avoiding policy failures that connect various parties as aspects of problem-solving to improve organizational performance and achieve company goals.

In addition, a SWOT analysis is also needed, which is a form of situation analysis by systematically identifying various factors on the strengths and weaknesses of an organization, as well as opportunities and threats from the environment to formulate organizational strategies. This analysis is based on the logic that can maximize strengths and opportunities, but at the same time minimize weaknesses and threats.

Material and Methods

The type of research used in this article is library research or literature review (literature review, literature research). Library research is research that uses library data collection methods such as books, scientific journals, newspapers, magazines, and documents. Research using this method focuses on theories, laws, propositions, principles, or ideas that can be used to analyze or solve a problem to be studied.

In compiling research using literature review, several steps need to be considered according to (Kuhlthau, 2002) as follows: (1.) Topic selection (2.) Information exploration (3.) Determine the research focus (4.) Collection of data sources (5.) Preparation of data presentation (6.) Report preparation. The data collection technique used in the study uses a literature review.

After the data is collected, the next step is to analyze the data so that conclusions can be drawn from the data. In this research, the data analysis technique used is the content analysis technique. The content analysis technique is a technique used in research to understand a more in-depth discussion of written information.

In this study, there are several analyzes used to research green economic fiscal policy on agricultural insurance. Some of these analyzes include (1) Stakeholder analysis (2) Analysis of fiscal policy issues when viewed from a TOWS analysis (3) Identification of supporting factors and obstacles to the effectiveness of the policy.

Results and Discussion

Stakeholder analysis

Based on the power, importance, and influence on an issue, ODA (1995) groups stakeholders into three parts as follows.

- a. Primary stakeholders are stakeholders who are directly affected, both positively and negatively, by the existence of green economy policies.

In this case, the main stakeholders are the community and community leaders. The application of a green economy in the agricultural sector will have a significant impact on society, especially farmers. The green revolution has led to food self-sufficiency in various countries, accompanied by massive modern agricultural technology and the use of pesticides and chemical fertilizers. This resulted in a fairly high increase in crop productivity, but on the other hand, it hurt agricultural land and also had an impact on the commodities produced. To create a green economy in the agricultural sector, farmers must minimize negative impacts on the environment and nature. Therefore, the role of farmers here is not only as of the affected party but also as the main actor in the green economy.

- b. Supporting stakeholders (secondary stakeholders), are stakeholders as intermediaries in the policy implementation process or parties who do not have a direct relationship but have concern for green economic policy decisions.

Community groups and NGOs are part of this stakeholder group. The development of an agricultural system that is in line with green economy concepts and policies has developed quite rapidly in Indonesia. This can not be separated from the contribution of community groups and NGOs that have helped develop organic farming systems so that they increasingly attract the attention of consumers, especially those who experience interference from fertilizers and inorganic materials.

- c. Key stakeholders are stakeholders who legally have the authority or in other words, have high influence and interest in decision making in the process of making green economic policies. The key stakeholder in this regard is the Government, particularly the Minister of Agriculture. The Minister of Agriculture makes regulations related to the implementation of green economy policies in the agricultural sector. These regulations include regulations on the protection of agricultural land

Sustainability as stated in Law no. 41/2009. In addition, the Government also makes partial regulations related to the environment, for example, the Decree of the Minister of Agriculture Number: 42/Permentan/SR.140/5/2007 concerning Pesticide Control which regulates production, and distribution, storage, use, and destruction. To regulate and provide the basis for the implementation of organic agriculture, the Ministry of Agriculture has issued an organic farming standard with the number SNI 01-6729-2002 SNI 01-6729-2002, one of which is through the application of the System of Rice Intensification (SRI).

Agricultural insurance TOWS analysis

Based on the SWOT matrix, strengths must be empowered so that existing opportunities/opportunities can be optimized and existing obstacles/threats can be reduced. Meanwhile, weaknesses (weaknesses) must be overcome so that obstacles in taking advantage of existing opportunities/opportunities can be prevented.

Strength

The implementation of a green economy in the agricultural sector by increasing the implementation of organic agriculture using the development of the System of Rice Intensification (SRI) has proven to be able to increase rice productivity. In addition, this technique is also environmentally friendly and more efficient in water use. The development of SRI has been carried out by the District/City Food Crops Agriculture Service and field officers with APBN funding sources since 2015. The commitment to implementing a green economy has been further strengthened by the recently promulgated Job Creation Law.

Regarding the involvement of SOEs in the insurance sector as implementers of agricultural insurance, the organizational structure is one of the keys that determine the effectiveness and sustainability of the implementation of agricultural insurance. If the form of business entity is BUMN, it must be adjusted to the applicable legal framework. The provisions of Article 38 of Law Number 19 of 2013 stipulate that the implementation of agricultural insurance can be carried out through government assignments to SOEs in the insurance sector. The assignment of SOEs as implementers of agricultural insurance is appropriate to the applicable legal framework and can be categorized as an element of strength (Strength).

Agricultural insurance has also received support from parliament and the government which is manifested in the form of legislation, namely Law Number 19 of 2013 concerning Protection and Empowerment of Farmers. The legal basis in the form of the law is the highest legal rule that becomes a reference in formulating derivative legal rules in more detail by involving parties who have interests in agricultural businesses. The detailed procedure for implementing agricultural insurance that has been determined at this time is a regulation in the form of a Regulation of the Minister of Agriculture (Permentan).

Weaknesses

The absence of fiscal policy schemes to strengthen the transition to a green economy, such as taxation schemes, budget tagging, and ecological-based budget transfers is evidence that the direction of fiscal policy in 2022 does not reflect the transformation to a green economy. This is

exacerbated by the COVID-19 pandemic which has made the economy worldwide experience a downturn. So the government must work extra to restore the economy.

In terms of the contribution of insurance payments, insurance premiums from the APBD that are not sufficient are one of the key elements that determine the effectiveness and sustainability of the implementation of agricultural insurance, namely the funding scheme. At the operational level, modifications to the funding scheme can be made considering the uniqueness of the agricultural insurance system. The provisions of article 37 paragraph (1) of Law Number 19 of 2013 stipulates that the government and local governments following their authority are obliged to protect farming businesses carried out by farmers in the form of agricultural insurance. Article 39 also explains that the government and local governments facilitate every farmer to become a participant in agricultural insurance through easy registration to become a participant, easy access to insurance companies, socialization of insurance programs, and/or premium payment assistance.

Moreover, coupled with the emergence of a pandemic that has made changes to the APBN and APBD, this is a weakness that greatly impacts the sustainability of Indonesian agriculture during this pandemic.

Opportunity

To achieve the implementation of a green economy to minimize environmental damage, community groups and NGOs contribute to the development of organic agriculture. In the year 2010, they made an increase of 10% or an area of 238.8 thousand hectares. With this contribution, farmers can reduce the use of pesticides that damage the soil while increasing the competitiveness of local products against foreign products.

The Coverage and Potential of the Insured Commodities Will Continue to grow. In the Regulation of the Minister of Agriculture No 40/Permentan/SR.230/7/2015 concerning Agricultural Insurance Facilities, regulated the types of agricultural insurance implemented by the Ministry of Agriculture as follows: "Plant Insurance covers food crops, horticulture, and plantations. Starting in 2015, insurance for rice farming has been implemented based on the Decree of the Minister of Agriculture number 782/HK.160/B.1.1/10/2015 concerning Guidelines for Assistance for Rice Farming Insurance Premiums."

This is a good step that has been taken in the last year which is useful and can be used for the current situation. With the existence of agricultural commodity insurance, the APBN issued for the agricultural sector can also be recalculated to be adjusted to other sectors.

Threats

The threat that may arise from the implementation of the green economy is the absence of contributions from the community. Lack of education for farmers has hampered the implementation of the green economy in the agricultural sector. The need for a change in mindset in the use of chemicals and greater accuracy in implementing SRI as an effort to improve the green economy. At present, it is difficult to be careful especially for farmers with limited land because they generally also do other work outside of agriculture to increase family income. Thus, the process of expanding this system requires the assistance of extension workers and efforts to combine various crops/farms to increase family income.

Budget Savings Policy. The mechanism for implementing the AUTF was handed over to the Ministry of Agriculture using the Ministry of Agriculture budget (BA 018) originating from the APBN to pay insurance premiums. The insurance premium payment scheme is charged to the government in the amount of 80% comes from the state budget and the remaining 20% is charged to farmers. The amount of the premium is dependent on the APBN burden of Rp. 144,000.00 per hectare per planting season for AUTF and Rp. 160,000.00 per head per year shows a correlation between the budget allocation and the target to be achieved. The larger the available budget, the

greater the target coverage that can be achieved, and vice versa. The dynamics of policies at the national level, especially those related to budget savings, have more or less influenced the implementation of agricultural insurance activities in the field.

Disaster. In addition to the current global-scale pandemic, Indonesia is one of the most disaster-prone countries in the world. This is caused by several factors, including geographical conditions and natural factors. The geographical condition of Indonesia is above the confluence of 3 tectonic plates with almost 200 volcanoes, of which 70 mountains are included in the very active category. In other words, the territory of Indonesia is above the path of earthquakes and volcanic eruptions. Other potential disasters come from natural factors.

The Associate Expert Policy Analyst at the BKF Center for Climate Change and Multilateral Financing Policy, Noor Syaifudin conveyed related to fiscal policy in responding to the issue of climate change. Furthermore, Noor said that the Indonesian government is committed to controlling climate change through various ratifications of international policies, namely the Paris Agreement. This is also further translated into the National Medium-Term Development Plan (RPJMN) 2020-2024.

But even though the government has prepared various plans to respond to all kinds of threats which include climate change, the government also cannot fight how nature works so this is still categorized as an element of threat.

Conclusion

From the discussion above, it can be concluded that the implementation of SRI in achieving the implementation of a green economy in the agricultural sector has gone quite well, although it is still necessary to introduce and educate farmers about this. On the other hand, the absence of a fiscal policy scheme or direction of fiscal policy in 2022 that reflects the transformation to a green economy, has made the State Budget (State Revenue and Expenditure Budget) provided by the government not fully appropriate to support the existence of a green economy in the COVID-19 era, especially in the agricultural sector.

Meanwhile, the role of agricultural insurance in the welfare of farmers from the risk of crop failure is considered a good policy. This agricultural insurance is important to do so that farmers have protection and certainty from the existence of factors that can cause losses or crop failure. However, this policy is still not running optimally due to the lack of public awareness of the importance of this Rice Farming Business Insurance program.

References

- Elena, M. (2020). *Pertumbuhan ekonomi Indonesia -5,32 Persen, IHSG berbalik melemah*. Diakses tanggal 24 Mei 2021 Pukul 11.17WIB (<https://market.bisnis.com/read/20200805/7/1275222/pertumbuhan-ekonomi-indonesia-532-persen-ihsg-berbalik-melemah>)
- Kuhlthau, C. C., Maniotes, L. K., & Caspari, A. K., (2012). *Guided Inquiry Design: a framework fo inquiry in your school*, ebook: www.abc.clio.com. California.
- Makmun. (2016). Green Economy: Konsep, implementasi, dan peranan kementerian keuangan. *Jurnal Ekonomi dan Pembangunan*, 19(2), 1-15. <https://doi.org/10.14203/JEP.19.2.2011.1-15>
- Murniningtyas, E. (2014). *Prakarsa strategis pengembangan konsep green company*. Deputi Sumber Daya Alam dan Lingkungan Hidup Kementerian Perencanaan Pembangunan Nasional.
- Nurfatriani, F., Darusman, D., Nurrochmat, D., R., & Yustika, A., E. (2015). *Analisis pemangku kepentingan dalam transformasi kebijakan fiskal hijau (Stakeholder Analysis in Green Fiscal Policy Transformation)*. 105-124.