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Does green gross regional domestic product accommodate environmental quality and the public's welfare?

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Abstract

The economic theory of development developed from gross domestic product to observe the development of a sustainable needed connection between environmental quality and welfare society. This research aims to review the green GRDP picture to accommodate ecological quality and the welfare of society. This research uses a descriptive method with secondary data sources from a literature study. It analyzes it in-depth about Green GRDP, which previously used Brown GRDP as a basis for analyzing regional economic growth in Lampung Province. The research results obtained at the level of green GRDP growth have had high economic consequences on the agriculture and plantations sector since environmental constraints corrected them. However, a quality environment can fulfill hope for society for a more decent life. Recommendations that can be given in this study are related to the implementation of green GRDP, potentially accommodating the well-being acquired by society from the agricultural sector and plantations to increase regional economic growth in Lampung Province.

Keywords: Green GRDP, Sector agriculture, Plantation sector

Abstrak

Dalam teori ekonomi pembangunan yang dikembangkan dari produk domestik bruto untuk melihat pembangunan yang berkelanjutan diperlukan keterkaitan antara kualitas lingkungan dan kesejahteraan masyarakat. Penelitian ini bertujuan untuk meninjau gambaran PDRB hijau untuk mengakomodasi kualitas lingkungan dan kesejahteraan masyarakat. Penelitian ini menggunakan metode deskriptif dengan sumber data sekunder dari studi literatur dan menganalisis secara mendalam mengenai PDRB Hijau yang sebelumnya menggunakan PDRB Coklat sebagai dasar dalam menganalisis pertumbuhan ekonomi daerah di Provinsi Lampung. Hasil penelitian yang diperoleh pada tingkat pertumbuhan PDRB Hijau memiliki konsekuensi ekonomi yang tinggi pada sektor pertanian dan perkebunan karena dikoreksi oleh kendala lingkungan. Namun demikian, lingkungan yang berkualitas tetap mampu memenuhi harapan masyarakat untuk mendapatkan kehidupan yang lebih layak. Rekomendasi yang dapat diberikan dalam penelitian ini terkait dengan implementasi PDRB hijau yang berpotensi mengakomodir kesejahteraan yang diperoleh masyarakat dari sektor pertanian dan perkebunan adalah dengan meningkatkan pertumbuhan ekonomi daerah di Provinsi Lampung.

Kata kunci: PDRB Hijau, Sektor Pertanian, Sektor Perkebunan

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1. Introduction

Economic theory often overlooks environmental issues, as they are often considered non-problematic in the context of macroeconomic growth. Arrow et al. (1995) argue that kindly implicitly assumes that the consequences of ecological problems are minor



or will be resolved by themselves. Suryanto's (2009) opinion is that growth is a precondition for environmental improvement.

In economic terms, "development" is usually interpreted as capacity from something economic national, which at first was not static enough for a long enough time to try and produce and maintain an increased annual national gross production (Todaro, 2000). Construction in 1960 and 1970 was often seen as an economic phenomenon, generating rapid per capita GNP growth and providing employment opportunities and broader economic and social benefits.

Economic development is defined in three ways: a) Economic development is measured as an increase in national real income in one long period, b) the increase in real income per capita in the term; economists have the same opinion in defining economic development in a sense increase real income or output per capita, c) There are other Trends to define economic development of a turning point of economic well-being (Jhingan, 2016). Economic development is seen as a process in which income processes national Real per capita increases are accompanied by decreases in gap income in a manner whole.

Problems like poverty, unemployment, distribution of income, and environmental pollution are considered questions. Both are important to complete growth tasks first. Suryanto (2009) argues that thinker development from the neoclassical school of economics and the structures initiated by Robert Solow and Trevor Swan have similar views that capital accumulation, labor, and technological progress are crucial to accelerating development. Third, it is the strength pusher main, which can drive the transformation process structurally. This process presupposes leap redevelopment from agriculture to industrial-based development. Industrialization will absorb the workforce in numbers, with many becoming vital elements in the production process.

Degradation in the environment is increasing in importance throughout Indonesia. The growth of public awareness of environmental issues has spurred an effort to understand the issue and the causes and consequences of ecological degradation more fully, as well as to start taking action and thinking (Febriana et al., 2019).

In the early 1970s, environmental issues became important in economic development. This has become a goal mainly from various policy developments, good level national and international. One crucial moment that considers the environment as a goal at the same time as one framework in the development process—is contained in the report of the World Commission for Environmental and Development, better known as the Commission Bruntland.

Drews and van den Bergh (2017) argue that handling the trade-off between economic development and environmental preservation efforts is a crucial issue in the field. These features of disrespectful development will eventually lead to problems. Please note that short-term economic growth, which only refers to a profit without considering the environment and the continued existence of nature, would affect not only nature but also humanity.



Ratnaningsih et al. (2006) argue that rate one of them is economic growth. Pay attention to GRDP as one indicator of macroeconomics; so far, it is often just plugging in. The economic activity results were satisfactory; however, they negated the damage to or contamination of the goods environment. Putra (2013) argues that traditional GRDP does not yet accurately represent an indicator of well-being since, although income may rise, assets are declining. This is only evident in the traditionally marketed GRDP contribution mark, which does not yet incorporate environmental degradation and power depletion as a source of depreciation. Integrate power nature into the GRDP computation to generate a green mark contribution, commonly called green GRDP (Nugroho & Murtilaksono, 2020).

Hicks proposed the basic idea of green GDP income sustainability in his book in 1946. This concept is based on the notion that track development is sustainable only if the total capital stock is fixed constant or occasionally increasing. Income sustainability is a guaranteed income level without reducing the whole capital level. Measurement of income sustainability needs evaluation of Genre services provided by environmental capital (Huang, 2023).

Green GRDP is a development of brown GRDP, focusing on regional economic growth without market failure. It involves producers paying all costs, including waste disposal, and dividing the economy into nine sectors for easy calculation. This approach avoids impacting consumers and parties involved (Ratnaningsih et al., 2006). In economic theory, this is what is called externality.

This study focuses on agriculture and plantations, the two main sectors in Lampung Province that are contributing to economic growth, based on the definition above. Lampung Province was chosen as the research site because of its substantial contribution to the region's economic growth from the agriculture and forestry industries.

2. Literature Review

Environmental Economics

The various resources in the living environment can be broadly classified into three categories: a) natural resources, b) human resources, and c) artificial resources. Natural resources available to humans (SDAs) include the different types and forms of variants and their potential inclusions. Different types of raw materials can be produced if optimally utilized and exploited.

Human resources (HR) are essential in economic activities because humans have physical and intellectual powers, which are extremely important in production and input/output processes. When utilized functionally, professionally, and optimally, these human resources can be used as one of the inputs and combined with other inputs to produce various goods and services that meet the very needs of humanity. This will significantly contribute to production (Effendie, 2019).



3. Research Method

In this study, researchers used descriptive research. Supomo (2002) argued that descriptive research is a descriptive study phenomenon by describing several variables relating to the problem under study. The descriptive research method solves the medium faced (Azharsyah, 2023). The objective of descriptive research is to create descriptions, pictures, and graphs in a systematic, factual, and accurate manner regarding the property's connection with the phenomenon under study (Nazir, 1985).

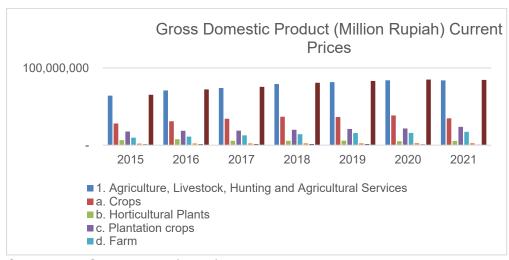
Kuncoro (2013) Descriptive studies aim to describe one or multiple variables using words, numbers, or steps to answer questions about a phenomenon, social context, or connection. Researchers use techniques like surveys, research fields, analysis contents, and comparative history studies (Neuman W.Lawrence, 2014).

According to Ghozali (2013), To create an overview and description from processed data, the descriptive analysis technique can employ statistics such as average value, standard deviation, variance, maximum, minimum, total, range, kurtosis, and slope distribution (skewness). The goal of analysis tools is to examine data or statistics. Sentences, or data, will be analyzed and shown in one of two ways: either in a systematic manner or in another. The descriptive approach is used to describe observed occurrences and associated circumstances. Every piece of information received is crucial information that is important to our study. To make the analytical results in the study more accessible to grasp while viewing the phenomenon, the results will be presented in tables, graphs, drawings, schematics, systematic forms, or another format.

4. Results and Discussion

4.1. Results

Role Sector agriculture and plantations on GRDP are to focus on scope and adjust to this research, as well as to be detailed in providing an overview of green GRDP in Lampung Province's high economic consequences.



Source: BPS Lampung (2021)

Figure 1. GRDP of Lampung Province



Table 1 Index Quality of Lampung Province 2015-2019					
Environmental Quality Index	2015	2016	2017	2018	2019
Index Air Quality	82.26	77.5	85.02	82.98	86.63
Index Water Quality	71.85	68.1	55.56	68.73	55.74
Index Quality Cover Land	42.01	41.66	43.87	35.93	36.65
Index Environmental Quality	63.04	60.34	59.72	59.89	57.37

Source: Ministry of Environment and Forestry, 2020

4.2. Discussion

Figure 1 shows that the GRDP sector of agriculture and plantations experience increase growth every year from 2015 to 2021. This is Because the industry of agriculture and plantations in Lampung Province, which is a sector strategy that contributes to the eye livelihood of the leading resident province Lampung, corrected environmental constraints

This research was done by Waluyati et al. (2010), where the role of sector agriculture in large GRDP can be seen from the increased contribution of sector agriculture in the Jayapura district after it was carried green GRDP calculation. Then, Norhidayah and Nur (2021), who conducted corresponding research, found that green GRDP is higher than the conventional GRDP, causing mark calculation depletion and degradation of the environment.

Observed from Table 1, it can be drawn the height welfare society is not followed by environmental quality; this can be seen from the index environmental quality (IKLH) in Lampung Province, which showed that in 2015, the IKLH value was 63.04% and then experience decreased every year so that in 2019 IKLH became 57.37%. Based on Law No. 32 of 2009 relating to environmental protection and management, the IKLH value is a starting point in creating policies on processing and protection issues and ecological quality.

The concept of brown GRDP, which has been used as a basis for increasing proven regional economic growth in Lampung Province, increases welfare society; however, it ignores environmental quality. The birth of the Green GRDP concept can overcome the weakness of the GRDP of brown. Green GRDP has consistent environmental power because objective green GRDP implementation drip focuses on sustainable development with attention to environmental quality. This research is in line with research conducted by Suryanto (2009), who said increased environmental quality will give people hope for a sustainable life. Green GRDP is more meaningful as a foothold for regional economic indicators because it can comprehensively explain welfare (Nugroho & Murtilaksono, 2020). This study aligns with the research conducted by (Sidjabat & Apsari, 2020). The proportional Green GDP pillar continuity will play a significant role in ensuring cycle continuity development that prioritizes green GDP. Keep improving with development examples of environmental regulations in Bandung, as well as giving constructive insights into the green growth tourism roadmap in Bali. In line with Huang's (2022) policies to encourage green GDP development, the government is expected to form a coordinating body for green development and



designate specifically each department. The coordinating body will coordinate relevant economic departments to discuss and formulate coordination departments in green GDP-based economic activities

5. Conclusion

The application of green GRDP in Lampung Province can increase society's welfare by reducing pressure on environmental quality, which is experiencing a decline every year. Limitations of this study include not including quantitative methods that analyze factors that influence green GRDP and the economic relationship to environmental quality. Recommendations that can be given in this study are related to the implementation of green GRDP, potentially accommodating the well-being acquired by society from the agricultural sector and plantations to increase regional economic growth in Lampung Province. In further research, the analysis of quantitative form regression and regulation form movement using green GRDP will focus on the environmental quality index to create sustainable economic development.

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