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Economic Growth during Covid-19: Empirical Evidence from Buleleng, Bali

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Abstract

Economic growth attempts to expand production capacity to achieve additional output, quantified in Gross Domestic Product (GDP) or Gross Regional Domestic Product (GRDP) in a given area. According to constant prices, the agricultural sector's contribution to Gross Regional Domestic Product (GRDP) in Buleleng Regency is one of the most significant indicators and the largest contributory sector. This study aims to ascertain the magnitude of the agriculture sector's contribution to economic growth from 2010 to 2020. Simple regression analysis was employed to analyze the data. According to this study, the agricultural sector, as the primary sector, accounts for 98.4% of economic growth in Buleleng, Bali. Buleleng Regency has several advantages that contribute to the region's superior potential development, one of which is the natural advantage of land suitability for farming. Agriculture in Indonesia is supported by natural resources and the availability of abundant human resources. However, on the other hand, agricultural technology has problems that always make it difficult for farmers every year. Therefore, technological innovation is needed by implementing the Internet of Things (IoT).

Keywords: Agricultural Sector, Economic Growth, GRDP.

1. Introduction

Economic growth is the gradual improvement of a country's economic conditions over time. Economic growth can be defined as increasing an economy's output capability, as reflected by increasing national income (Syahputra, 2017). In general, a country's economic growth is fueled by the economic growth generated by its regions. Economic growth is the process of increasing production capacity to generate more output, which can be defined in terms of Gross Domestic Product (GDP) or Gross Regional Domestic Product (GRDP) in a specific region (Adisasmita, 2011). Regional economic development is a process in which local governments and their communities manage all available resources and collaborate with the private sector to create new employment and boost regional economic activity (economic growth).

To increase regional economic growth, the central policy that needs to be done is to

maximize the potential of the region concerned (Wahyuni, 2020). Given the different potentials of each region, each region should determine the dominant sector of activity. According to (Todaro & Smith, 2003), undeveloped economies are composed of two sectors. These are traditional agricultural sectors with zero marginal labor productivity that have evolved into modern industrial sectors. Agriculture has a dual effect on a country's socio-economic and industrial fabric due to its multifunctional nature (Ogen, 2007). Meanwhile, (BPS, 2021) indicates that agriculture is the most strategic sector and is critical to the national economy and community existence, particularly in terms of GDP, employment, and domestic food production.

According to (Kholodova & Krinichnaya, 2020), agriculture is a complex socio-economic system characterized by the evolution of many forms of administration and ownership. Effectiveness is contingent upon rural development that is sustainable, preservation of historical appearance, and territorial integrity of the country. The control of agricultural land is one of the national strategic policies to maintain the primary agricultural industry to provide food concerning preventing long-term socio-economic losses considering the multi-function nature of agricultural land. The indications of regional economic development are reflected in the year-over-year growth of GRDP, where the GRDP development will be helpful in development planning (Bembok et al., 2020). Similarly, (Rasyid, 2016), identifies economic growth as one of a region's economic sustainability measures.

Economic growth statistics are one of the derivatives of the Gross Regional Domestic Product statistics. Efforts to increase economic growth need to increase the population's income or GDP per capita. These two economic development strategies need to be carried out simultaneously so that the economic development carried out impacts the level of community welfare. As it is known that economic growth is reflected in the significant percentage increase or decrease in GDP in GRDP at constant prices against constant GRDP in the previous year (Kaneko & Kawanish, 2016; Karen & Sheiner, 2018; Asian Development Bank, 2019). The use of GRDP based on constant prices is intended to eliminate changes in the price level of goods and services. Therefore, regional economic growth describes actual development or the production volume of goods and services in the area concerned.

Agricultural exports and primary commodity exports are currently the principal drivers of economic growth in Indonesia (Bashir et al., 2018). Additionally, while Indonesia's GDP per capita has improved dramatically, the country remains the world's poorest (The World Bank, 2020). According to Wahyuni (2020), while agriculture's contribution to economic growth has declined with the Indonesian economy's improvement, agriculture plays a significant role in labor absorption (Otchia, 2014). Below is a table of labor absorption in Buleleng Regency by business field 2017-2020.

Table 1: The Workforce Working in Buleleng Regency by Field of Business in 2017-2020.

No	Business Field	2017	2018	2019	2020
1	Agriculture	31,88	37,02	31,66	34,81
2	Mining and Excavation	0,28	0,23	0,38	0,13
3	Industry	12,46	9,58	11,62	10,17
4	Electricity, Gas and Drinking Water	0,11	0,50	0,24	0,64
5	Construction	7,56	5,57	6,63	6,70
6	The Buying and Selling of Trade	26,92	29,00	18,48	20,76
7	Communication	2,67	2,64	0,60	0,72
8	Finance	1,93	1,89	2,25	2,06
9	Community Service	16,19	13,40	5,38	4,83

Source: Central Bureau of Statistics of Buleleng Regency

According to Table 1, the agricultural sector is still the sector most engaged in by the people of Buleleng Regency from 2017 - 2020 (an average of 33.85 people), followed by the trade sector (an average of 23.79 people) then the industrial sector (an average of 10.96 people). This statement shows that Buleleng Regency is one of the regencies that rely on agriculture as the primary economic development sector. Based on data from Central Bureau of Statistics (BPS, 2021), it is known that in 2019 the agricultural sector contributed 21.20% and experienced an increase in 2020, which contributed the most to the development of GRDP in Buleleng Regency, reached 22.28%. The achievement of the growth rate of the Buleleng Regency in 2016-2020 can be seen in Figure 1.

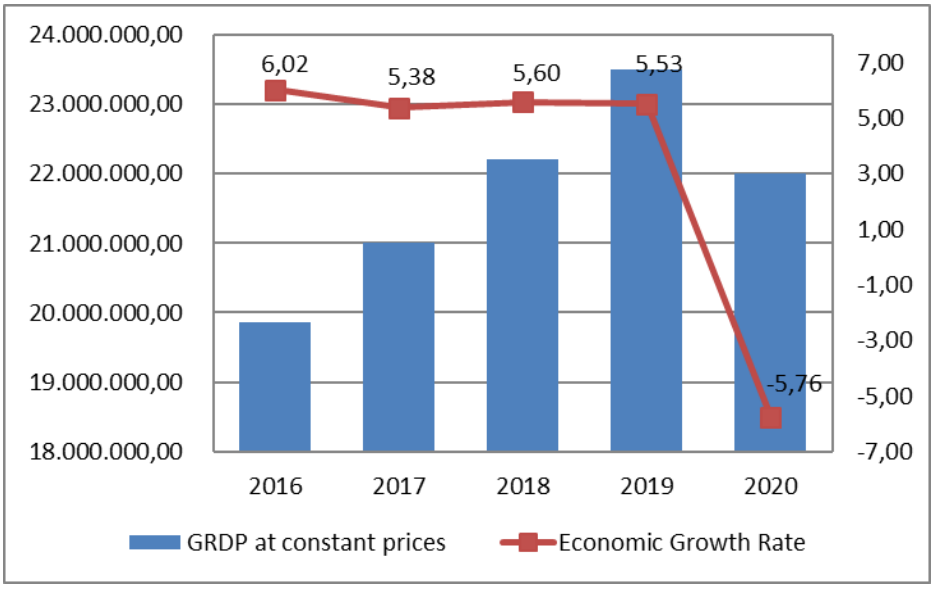

Fig. 1: Buleleng Regency Economic Growth Rate 2016-2020

Meanwhile, the comparison of the GDRP/Economic Growth of Regencies or Cities in Bali Province (Percent), 2016-2020 can be seen in table 2.

Table 2: GRDP/Economic Growth of Regency or City in Bali Province (Percent), 2016-2020

	Year				
Regency/City	**2016**	**2017**	**2018**	**2019**	**2020**
Jembrana	5,96	5,31	5,59	5,56	(4,96)
Tabanan	6,14	5,38	5,71	5,59	(6,14)
Badung	6,81	6,11	6,73	5,81	(16,52)
Gianyar	6,31	5,50	6,01	5,61	(8,38)
Klungkung	6,28	5,34	5,48	5,42	(6,35)
Bangli	6,24	5,35	5,48	5,46	(4,10)
Karangasem	5,92	5,08	5,44	5,50	(4,45)
Buleleng	6,02	5,38	5,60	5,53	(5,76)
Denpasar	6,51	6,05	6,42	5,82	(9,42)

Source: Bank Indonesia, 2021

According to Table 2, the Covid-19 outbreak has resulted in a steep decline in economic growth in each of Bali's Regencies/Cities. Naturally, this has a distinct effect in each municipality/district. For Denpasar City, Badung Regency, and Gianyar Regency, the pandemic had the most significant impact because most tourism activities occurred in those locations, resulting in a significant fall in Regional Original Income from the tourism industry. Meanwhile, they did not suffer as much in other areas, such as Buleleng Regency, Bangli Regency, and Jembrana Regency, where traditional sectors such as agriculture and fisheries could thrive (Ministry of Finance of the Republic of Indonesia, 2021).

Then from the calculation of constant prices in 2010, the GRDP value of Buleleng Regency in 2020 decreased due to decreased production in almost all business sectors free from the influence of inflation. The GRDP of Buleleng Regency in 2020, based on constant 2010 prices, reached Rp. 22.08 trillion. This figure was down from Rp.23.43 trillion in 2019. In 2020 there was an economic contraction of 5.76% due to the Covid-19 pandemic. In 2020, GRDP at constant prices for the Agriculture, Forestry, and Fisheries categories was recorded at Rp4.61 trillion in 2020. This category always grew positively during the 2016-2019 period, which was 3.18% in 2016, 2 .76% in 2017, 3.22% in 2018, 5.77% in 2019, and 2020 should fall -1.58%. With an average Agriculture, Forestry and Fisheries Business Fields recording a growth of 2.67% during 2016-2020. According to constant prices, the percentage of GRDP in Buleleng Regency shows that the agricultural sector's contribution is one of the dominant indicators in Gross Regional Domestic Product (GRDP) and the largest contributory sector.

Based on the description related to the decline experienced, the critical question faced by the Buleleng district government is how to increase economic growth again through the agricultural sector, which experienced a decline even though it was presented with the Covid-19 pandemic outbreak. The fundamental reason is that the declining economic growth is undoubtedly worrying many parties. Moreover, the Buleleng Regency is one of the regencies in Bali Province, which has the most extensive use of rice fields compared to other regencies. The contribution of this research is divided into two. First, this research can be a source of

information for the local government of Bali, especially in Buleleng Regency, in determining the agricultural sector's contribution to economic growth. Second, educate the government on the agricultural sector's importance as a driver of economic growth by facilitating facilities and infrastructure such as agricultural technology innovation.

2. Literature Review

Agriculture plays an essential role in contributing to socio-economic development in many countries (Katircioglu, 2006; Zulhadi, 2009; Chikwama, 2014). The agricultural sector is the primary source of employment, livelihoods, and food security for most rural communities because two-thirds of the rural population depends on agriculture (Jatuporn et al., 2011; Phiri et al., 2020; Nyamekye et al., 2021). Additionally, (Sertoğlu, et al., 2017), suggest that agriculture is critical to economic growth, development, and poverty alleviation in emerging countries. Agriculture is also widely regarded as the most critical engine of economic growth and a significant contributor, including creating jobs and drastically reducing poverty (Myrdal, 1984; Ariani, 2000; The World Bank, 2020). Research reveals that the agricultural and rural sectors dominate the majority of emerging countries (Chikwama, 2014); therefore, agriculture is generally seen as a growth opportunity in developing countries (Katircioglu, 2006; Dim & Ezenekwe, 2013).

Economic transformation and agricultural sector transition have resulted in establishing rural towns and small urban centers as a component of rural socio-economic development (FAO-Food and Agriculture Organization of the United Nations, 2017). In the current digitalization era, agricultural technology is an essential part of improving the quality of agricultural products and making it easier for agricultural sector managers to get optimal work results. This opinion is supported by (Gooch & Gale, 2018), which state that agricultural technology is an essential component of agricultural investment in each country. For example, the need for research and development in agriculture to increase the application of frontier technology (i.e., the application of information technology in agriculture, precision agriculture, post-harvest technology, mechanized agriculture, and organic farming), (Kumari & Devadas, 2017).

Agriculture's first contribution to economic growth is determined by product growth within the sector itself (Kuznets, 1961). Increases in net agricultural output alone represent increases in the country's product, as the latter is the total of increases in the net products of numerous sectors. This form of contribution, which we might refer to as product contribution, can be summarized as the first contribution to the increase of total net or gross product and the second contribution to the growth of product per capita. Conceptually, agriculture produces food, feed, and fiber by systematically growing and harvesting plants and animals (Matthew & Mordecai, 2016). According to (Putong, 2005), agriculture uses biological resources to create food, energy sources, industrial raw materials, and environmental management. For physiocrats, the agricultural sector is the only genuinely productive and surplus-generating economy on which all other sectors depend (Matthew & Mordecai, 2016).

Agriculture is one of the sectors that contribute to Indonesia's economic growth. Biological resources are sectors or commercial fields that include food crops, plantation

crops, livestock, forestry, and fisheries (Dumairy, 1996). Not only in Indonesia, (Jeongbin & Jeong, 2014), agriculture is also critical to the Korean national economy, contributing a relatively large share of GDP and providing employment opportunities compared to other OECD countries. In particular, Korean agriculture contributes to land use and employment, social and economic stability, and rural livelihoods. Meanwhile Johnson (2017) shows that Australian agriculture, as the most significant contributor to national GDP growth in the 2016-2017 period, contributed 0.5 percentage points of the total national growth of 1.9 percent. The agricultural sector also grew the fastest of the 19 existing industries in 2016-2017, experiencing an increase of 23%, mainly driven by the grain and livestock industries but by other agricultural industries.

According to (Olajide et al., 2012), researched the relationship between agricultural resources and economic growth in Nigeria. His research established a positive correlation between gross domestic product (GDP) and agricultural products in Nigeria's economic growth contribution. In line with what was stated by (Ebere & Osundina, 2014). Further (Islam et al., 2020), research to determine the impact of the agricultural and manufacturing sectors on economic growth in Bangladesh and India. The results show a positive impact from the agricultural and manufacturing sectors on economic growth for Bangladesh and India in the short term. The International Trade Administration (2020), supports these results in its publication entitled "The International Trade Administration" stating that agriculture is critical to India's economy, politics, and society. Agriculture not only has a short-term impact, but agriculture also has a significant positive impact on China's economic growth in the short and long term (Bakari et al., 2020). The agricultural sector's contribution to the Chinese economy is critical as a source of added value and job generation.

On the other hand, (Cao & Birchenall, 2013), observed agricultural productivity as the primary determinant of China's economic growth after sectoral reform and reallocation. The results showed that the input of labor in agriculture decreased by 5% annually, the factor of total agricultural productivity grew by 6.5%. Some argue that agriculture does not appear to be the primary factor determining economic growth (Gardner, 2005). The World Development Report (The World Bank, 2007), a country's agricultural-based economy can serve as the primary engine of growth. Meanwhile, in developed countries that have transformed their agricultural systems, this sector is viewed as less essential as a driver of economic activity. Still, it continues to be the primary instrument for poverty alleviation in rural areas. In addition, research conducted by (Verter, 2015; Verter and Becvarova, 2016), shows that the contribution of agriculture cannot be underestimated because it has a crucial role in economic growth. With the various expert opinions described, a hypothesis can be stated in this study as an allegation or a provisional answer, namely:

H1: The agricultural sector gives the most significant role compared to other sectors to economic growth in Buleleng, Bali.

3. Method

This research is located in Buleleng Regency, Bali Province. The research approach used in this research is quantitative. The quantitative method is a method in which numbers dominate

the data presentation, and the data analysis used is statistics to test hypotheses. This type of research is library research, namely research conducted using several kinds of literature in reports on previous research on Economic Growth. The data mining was published by the Central Bureau of Statistics of Buleleng Regency and the Research and Development Agency of the Ministry of Defense of Buleleng Regency.

The population in this study is the amount of data collected from reports on agricultural sector productivity data and the growth rate of GRDP in the economic sector at constant prices according to business fields in Buleleng Regency. The total sample used in this study amounted to 11 samples (data on agricultural sector productivity and GDP growth rate from the economic sector at constant prices according to the business field of Buleleng Regency in 2010-2020). The method used in the sampling technique is purposive sampling, namely the technique of determining the sample with specific considerations or criteria. The purposive sampling technique, also called assessment sampling, is a deliberate choice because it meets the criteria or qualities needed (Etikan et al., 2016). The data analysis used is simple regression analysis, which aims to determine the magnitude of the role of the agricultural sector in its contribution to economic growth. The regression equation formula is formulated as follows:

$$Y = \alpha + \beta X + \varepsilon$$

Information:
Y: Economic growth
X: Agricultural sector productivity
α: Constant
β: Coefficient of regression direction
ε: Confounding variable

4. Results and Discussion

According to Table 3, the adjusted R-square value is 0.984. 98.4% of the dependent variable is economic growth which can be explained by the independent variable, namely the agricultural sector. At the same time, other variables influence 1.6%

Table 3: Coefficient of Determination Test Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.993[a]	.986	.984	4.201

a. Predictors: (Constant), Agricultural Sector Productivity

The influence of the agricultural sector on economic growth was determined using hypothesis testing and simple regression analysis. In this study using 11 samples, with a value of df = n-k-1 = 11-2-1, then the table value of df = 9. The calculation results are shown in Table 4.

Table 4: Simple Regression Analysis Results

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-9.705	1.140		-8.510	.000
	Agricultural Sector Productivity	7.075	.283	.993	25.042	.000

a. Dependent Variable: Economic Growth

According to Table 4, the following is the simple regression equation used in this investigation.

$$Y = -9.705 + 7.075X + \varepsilon$$

Based on the findings of a study examining the agricultural sector's impact on economic growth, the significance value of the agricultural sector is 0.000 <0.05. Therefore, the research hypothesis is accepted: the agricultural sector plays the most crucial role in economic growth in Buleleng, Bali, with 98.4%. Despite being faced with the COVID-19 pandemic, the agricultural sector still plays the most crucial role in economic growth in Buleleng. The economic structure of Buleleng Regency has different characteristics from the economic structure of the Province of Bali. The economy of Bali Province relies more on the non-agricultural sector, especially the tourism industry. While the agricultural sector dominates the economic structure in Buleleng Regency, this condition can be seen from its most significant contribution in the formation of GRDP.

Buleleng Regency has various advantages to develop the superior potential of the region. These advantages include natural advantages, namely the suitability of the land with the plants on it and the culture of the Buleleng people who like to work, especially in farming. The allotment for agriculture is 48,741.51 Ha or 35.68% of the total area of the Buleleng Regency, which includes the designation of food crops, the designation of horticulture, the designation of plantations, the designation of livestock, and the designated area for fisheries. The area designated for food crops is 10,992 hectares, with the types of food crops that are widely developed are rice, corn, cassava, soybeans, peanuts, sweet potatoes, and green beans. Lowland rice production is the largest in Buleleng Regency, amounting to 128,209 tons with a harvested area of 21,135 Ha. Corn is in second place with a production of 15,850 tons. At the same time, the minor food crop production is soybean, with a production of 20 tons. Furthermore, the designated area for horticultural crops is 5,391 Ha, with potential and widely developed commodities, namely; 1) Commodities of fruit crops such as mango and rambutan, 2) Commodities of highland vegetables such as chilies and shallots, 3) Ornamental plants, and 4) Biopharmaceuticals.

Then the allotted plantation area of 20,274 hectares with many types of plantation crops developed in Buleleng Regency such as coconut, coffee, cloves, cocoa, cashew, kapok, and tobacco. Virginia tobacco is the most dominant plantation product with a production of 724,763 tons with a development area of 394.50 Ha. Further, the potential of existing and developed livestock, namely large livestock (cows, pigs, goats, and buffalo) and poultry (duck). In addition, as for fisheries potential, Buleleng Regency has a beach of ± 157.05 km,

which stretches from West to East starting from Sumberkelampok Village in Gerokgak District to Tembok Village in Tejakula District. It contains various types of fish, both pelagic fish, demersal fish, and reef fish which are estimated to have a sustainable potential of 12,358 tons per year. The potential land area for marine cultivation is estimated at ± 1,000 Ha, with details; Grouper and Milkfish cultivation is 500 Ha, Seaweed is 250 Ha, and Pearl is 250 Ha.

5. Conclusion

This study indicates that the agricultural sector has the most crucial role in economic growth in Buleleng, Bali, with a contribution of 98.4%. The agricultural sector's contribution to future economic growth must be increased or at least sustainable by committing to making good agricultural policies. Every year the agricultural sector has problems that make it difficult for farmers, one of the problems in question is agricultural technology. While agricultural technology innovation is critical for increasing agricultural productivity, increasing production through land expansion (extensification) is challenging to implement in Indonesia (mainly in rural areas), given the widespread conversion of productive agricultural land to non-agriculture.

There is nothing wrong if a country reflects on other countries committed to paying attention to the agricultural sector through the Internet of Things (IoT). Likewise, all regions in Indonesia can apply this idea, especially agriculture in Indonesia, which is supported by natural resources and abundant human resources. The role of agricultural technology is expected to improve the quality of agricultural products and make it easier for agricultural sector managers to obtain optimal work results. In addition, it is highly recommended that the government promote long-term agricultural projects to achieve stable economic growth.

References

1) Adisasmita, R. (2011) *Pembiayaan Pembangunan Daerah*. Yogyakarta: Graha Ilmu.
2) Ariani (2000) 'Kajian Perubahan Hukum dan Perekonomian pada Era Perdagangan Bebas di Sektor Pertanian', *Jurnal AKTA YUDISIA Universitas Borneo Tarakan*, 1(2), pp. 173–194.
3) Asian Development Bank (2019) *Asian Development Outlook 2019 Strengthening Disaster Resilience*. doi: 10.22617/FLS190070-3.
4) Bakari, S., Tiba, S. and Ofien (2020) 'Does Agricultural Investment Still Promote Economic Growth In China? Empirical Evidence From Ardl Bounds Testing Model', *International Journal of Food and Agricultural Economics*, 8(4), pp. 311–323.
5) Bashir, A. *et al.* (2018) 'The Relationship Between Economic Growth, Human Capital, And Agriculture Sector: Empirical Evidence From Indonesia', *Iternational Journal of Food and Agricultural Economics*, 6(4), pp. 35–52.
6) Bembok, N., Kapantow, G. H. M. and Rengkung, L. R. (2020) 'Kontribusi Sektor Pertanian dalam Perekonomian di Kabupaten Minahasa', *Jurnal Agri-SosioEkonomi Unsrat*, 16(3), pp. 333–342.
7) BPS (2021a) *Gross Regional Domestic Product of Buleleng Regency by Industry 2016-2020, Singaraja*.
8) BPS (2021b) *Produk Domestik Regional Bruto (Pengeluaran)*. Available at: https://bulelengkab.bps.go.id/statictable.html (Accessed: 8 April 2021).

9) Cao, K. A. and Birchenall, J. A. (2013) 'Agricultural Productivity, Structural Change and Economic Growth in Post Reform China', *Journal of Development Economics*, 104, pp. 165–180.
10) Chikwama, C. (2014) *Agriculture and growth evidence paper series june 2014*. UK London: Department for International development, Heriot-Watt University.
11) Dim, C. and Ezenekwe, U. (2013) 'Does agriculture matter for economic development? Empirical evidence from Nigeria', *Journal of Finance and Economics*, 1(1), pp. 61–77.
12) Dumairy (1996) *Perekonomian Indonesia*. Jakarta: Erlangga.
13) Ebere, C. and Osundina, K. C. (2014) 'Government expenditure on agriculture and economic growth in Nigeria', *International Journal of Science and Research*, 9(3), pp. 188–194.
14) Etikan, I., Musa, S. A. and Alkassim, R. S. (2016) 'Comparison of Convenience Sampling and Purposive Sampling', *American Journal of Theoretical and Applied Statistics*, 5(1), pp. 1–4.
15) FAO-Food and Agriculture Organization of the United Nations (2017) *The future of food and agriculture – Trends and challenges*. Rome: Food and Agriculture Organization of the United Nations.
16) Gardner, B. (2005) 'Causes of rural economic development', *Agricultural Economics*, 32(1), pp. 21–41.
17) Gooch, E. and Gale, F. (2018) *China's Foreign Agriculture Investments*. US: Department of Agriculture, Economic Research Service.
18) Islam, M. S. *et al.* (2020) 'Role of Agriculture and Manufacturing Sectors in the Economic Growth of Bangladesh and India: An ARDL Approach', *The Romanian Economic Journal*, 78, pp. 89–92.
19) Jatuporn, C. *et al.* (2011) 'Does a long-run relationship exist between agriculture and economic growth in Thailand?', *International Journal of Economics and Finance*, 3(3), pp. 227-233.
20) Jeongbin, I. and Jeong, I. (2014) 'The Frame of Agricultural Policy and Recent Major Agricultural Policy in Korea', *FFTC Agricultural Policy Platform (FFTC-AP).*
21) Johnson, R. (2017) *Agriculture Is Now The Powerhouse Driving Economic Growth In Australia, Agricultural Appointments*. Available at: https://www.agri.com.au/agriculture-is-now-the-powerhouse-driving-economic-growth-in-australia/ (Accessed: 8 August 2021).
22) Kaneko, S. and Kawanish, M. (2016) *Climate Change Policies and Challenges in Indonesia*. Japan: Springer. doi: 10.1007/978-4-431-55994-8.
23) Karen, D. and Sheiner, L. (2018) *GDP as a Measure of Economic Well-being*. Washington: Hutchins Center on Fiscal & Monetary Policy at Brookings - Harvard University.
24) Katircioglu, T. (2006) 'Causality between agriculture and economic growth in a small nation under political isolation: A case from North Cyprus', *International Journal of Social Economics*, 33(4), pp. 331–343.
25) Kholodova, M. and Krinichnaya, E. (2020) 'Diversity of the agricultural sector of the Russian economy: regularities of formation and development', *E3S Web of Conferences*, 210(13009), pp. 1–9.

26) Kumari, R. and Devadas, V. (2017) 'Modelling the dynamics of economic development driven by agricultural growth in Patna Region, India', *Journal of Economic Structures*, 6(15), pp. 1–27.
27) Kuznets, S. (1961) *The Role of Agriculture in Economic Development*. London: Oxford University Press.
28) Matthew, A. and Mordecai, D. Ben (2016) 'The Impact of Agricultural Output on Economic Development in Nigeria (1986-2014)', *Archives of Current Research International*, 4(1), pp. 1–10.
29) Ministry of Finance of the Republic of Indonesia (2021) *Bali Tetap Kuat di Tengan Pandemi*. Available at: https://www.kemenkeu.go.id/publikasi/artikel-dan-opini/bali-tetap-kuat-di-tengah-pandemi/.
30) Myrdal, G. (1984) 'International inequality and foreign aid in retrospect.', *Pioneers in development*, pp. 151-165.
31) Nyamekye, A. P., Tian, Z. and Cheng, F. (2021) 'Analysis on the Contribution of Agricultural Sector on the Economic Development of Ghana', *Open Journal of Business and Management*, 9, pp. 1297–1311.
32) Ogen, O. (2007) 'The Agricultural Sector and Nigeria's Development: Comparative Perspective from the Brazilian Agro-Industrial Sector Economy (1960-1995)', *Nebula March 2007@Noble World Archives*.
33) Olajide, O. T., Akinlabi, B. H. and Tijani, A. A. (2012) 'Agricultural resource and economic growth in Nigeria', *European Scientific Journal*, 8(22), pp. 103–115.
34) Otchia, C. S. (2014) 'Agricultural Modernization, Structural Change and Pro-poor Growth: Policy Options for the Democratic Republic of Congo', *Journal of Economic Structures*, 3(8), pp. 1–43.
35) Phiri, J. *et al.* (2020) 'Agriculture as a Determinant of Zambian Economic Sustainability', *Journal Sustainability*, pp. 1–14.
36) Putong, I. (2005) *Teori Ekonomi Mikro*. Jakarta: Mitra Wacana Media.
37) Rasyid, A. (2016) 'Analisis Potensi Sektor potensi pertanian dikabupaten Kediri tahun 2010-2014', *Jurnal Ekonomi Pembangunan*, 14(2).
38) Sertoğlu, K., Ugural, S. and Bekun, F. V. (2017) 'The Contribution of Agricultural Sector on Economic Growth of Nigeria', *International Journal of Economics and Financial Issues*, 7(1), pp. 547–552.
39) Syahputra, R. (2017) 'Analisis Faktor Faktor Yang Mempengaruhi Pertumbuhan Ekonomi di Indonesia (1990-2016)', *Jurnal Samudra Ekonomika*, 1(2), pp. 183–191.
40) The International Trade Administration. (2020) *India-Country Commercial Guide, International Trade Administration website*. Available at: https://www.trade.gov/country-commercial-guides/india-agricultural-sector (Accessed: 9 April 2021).
41) The World Bank (2007) *Agriculture for Development. World Development Report 2008*. Washington, DC.
42) The World Bank (2020) *Agriculture and Food: Agriculture can help reduce poverty, raise incomes and improve food security for 80% of the world's poor, who live in rural areas and work mainly in farming. The World Bank Group is a leading financier of agriculture, The World Bank*. Available at:

https://www.worldbank.org/en/topic/agriculture/overview (Accessed: 9 April 2021).

43) Todaro, M. and Smith, S. (2003) *Economic development (8th Editio)*. Singapore: Pearson Education.
44) Verter, N. (2015) 'The application of international trade theories to agriculture', *Mediterranean Journal of Social Sciences*, 6(6), pp. 209–219.
45) Verter, N. and Becvarova, V. (2016) 'The impact of agricultural exports on economic growth in Nigeria', *Acta universitatis agriculturae et silviculturae mendelinate brunensis*, p. 64.
46) Wahyuni, E. I. (2020) 'Pengaruh Sektor Pertanian, Sektor Pariwisata dan Sektor Keuangan Terhadap Pertumbuhan Ekonomi Kabupaten Selayar Periode 2008-2019', *PARADOKS: JURNAL ILMU EKONOMI*, 3(4), pp. 161–176.
47) Zulhadi, T. (2009) 'Kontribusi Sektor Pertanian terhadap Pertumbuhan Ekonomi di Provinsi Riau', *Jurnal Ekonomi Universitas Riau*, 17(1).