Vol. 17 No. 2, August 2024 ISSN: 1978 – 2063

Agro-Socioeconomic Newsletter

Indonesian Center for Agricultural Socio Economic and Policy Studies (ICASEPS)

Editorial

Dear valuable readers,

Based on our experience, the impact of El Niño on the agricultural sector is important to understand in order to anticipate the negative impacts caused by this natural phenomenon. An analysis of this is outlined in this newsletter along with the history of Indonesia's agricultural resilience achievements over more than fifty years. In addition, information about the role of the agricultural sector in the Golden Indonesia era and the importance of agricultural finance is selected among the current policy issues for your reference.

As usual, we also include other information related to the development of policies and several activities of ICASEPS as an institution that prepares policy recommendations in the field of agricultural economics. We hope you enjoy reading this newsletter as we try our best to provide various important information for your satisfaction.

Thank you and wish you a wonderful day.

The Editor

CONTENT

Policy Update

ANTICIPATING THE IMPACTS OF EL NIÑO ON INDONESIA'S AGRICULTURAL PRODUCTION

Adi Setiyanto, Miftahul Azis, Mohammad W. Effendi, Joko Mulyono, Resty P. Perdana, and Annisa F. Astari

Introduction

One of the main impacts of El Niño on food crop commodity production is extreme drought. Rising temperatures and diminished rainfall can drastically reduce water availability for irrigation, leading to widespread drought. This arid condition subjects food plants to water stress, reducing the efficacy of fertilizers and hindering their growth. Consequently, the productivity of strategic crops such as rice, corn, and soybean can decrease significantly. Apart from drought, El Niño can also trigger erratic and intense rainfall patterns over short periods, as is currently happening in several areas. This can result in devastating floods and landslides that damage crops and agricultural land.

In addition, extreme temperature changes caused by El Niño can affect the availability of pollinating insects, which are important for plant reproduction. Some types of pollinating insects rely on specific temperature ranges for optimal activity. When temperatures become too high or too low, their populations may decline, leading to reduced pollination and subsequent crop seed production. The impact of El Niño on food crop production can extend beyond regional borders. Unstable food supplies in El Niño affected areas can trigger fluctuations in global food prices. Countries heavily reliant on food imports may also be affected by increased prices and potential shortages of these commodities.

It is urgent to analyze El Niño's impact on food crop production to anticipate and reduce potential losses. Efforts to maintain food security, efficiently manage water resources, and employ climate-adaptive technologies can help mitigate the negative impact of El Niño on food crop production.

Important Facts

El Niño is predicted to occur from early June 2023 to mid-2024. This event will affect the production of strategic commodities such as rice, corn, and soybeans. Regarding rice, particular attention should be paid to the following factors:

a) Historically, June to September is a period of low rice production due to declining harvest areas post-main harvest and low productivity levels. This period, particularly in late 2023 and early 2024, is very critical as standard production patterns are already low (historically a deficit

period). The situation could worsen if affected by El Niño.

b) A rice production volume deficit will lead to higher grain prices. Historically, grain prices tend to rise during the June-December period (a deficit period). However, farmers should remain vigilant about grain price trends in 2023. Despite stabilizing above IDR 5,000 per kg during the January-May period, it was stable at above IDR 5,000 per kg; the GKP (dry unhusked harvested rice) price experienced a decline in March but rebounded in April and May. The looming threat of El Niño suggests that the GKP price may increase from June to December 2023, consequently driving up rice prices.

c) After a consistent increase since July 2022, the price of milled rice at the mill remained stable at above IDR 11,500 per kg for premium quality and IDR 11,000 per kg for medium quality from February to May 2023. Given these mill-gate prices, consumer prices are expected to be higher. According to PIHPS data, the average price of medium-quality rice in traditional markets in June 2023 is estimated to be around IDR 13,500 per kg, while premium rice is expected to cost around IDR 14,500 per kg.

Globally, according to FAO Agriculture Market Information System (AMIS) data for June 2023, cereal production is predicted to be minimally impacted by El Niño, as briefly indicated as follows:

a) Global rice production in 2023 is projected to increase by 1.3% compared to 2022, rising from around 516.9 million tonnes to 523.5 million tonnes. This increase is mainly driven by promising harvest prospects in China, India, Indonesia, Vietnam, Thailand, the Philippines, and the United States.

b) Global corn production is projected to recover in 2023, with an increase of 4.2% compared to 2022, rising from around 1,163 million tonnes to 1,212 million tonnes. This recovery is attributed to successful harvests in the United States, Brazil, China, and the European Union (including Ukraine and Russia), which offset the lower-than-expected yield in Argentina.

c) Compared to rice and corn, global soybean production in 2023 is projected to experience the largest increase, estimated at around 9.56% over 2022 levels (from 371.2 million tonnes to 405.7 million tonnes). This optimistic outlook is driven by promising harvests in Argentina, Brazil, the United States, Canada, China, and Ukraine.

Potential Impacts of El Niño

A multi-market analysis comparing 2020-2022 data to the 2017-2019 baseline showed that El Niño events negatively impacted harvested area and productivity across various food crops. The severity of these impacts varied depending on the intensity of El Niño.

The simulation of the impact of El Niño is differentiated based on the intensity of the decrease in rainfall for 2023 and 2024. Two models are used for this differentiation: the Meteorology, Climatology and Geophysics Agency (BMKG) model and the El Niño Southern Oscillation/Southern Oscillation Index (ENSO/SOI) model (Australian BOM). The BMKG model considers rainfall reduction on a scale of 1-4, with a decrease in average annual rainfall ranging from 40 mm to 120 mm over 6 months. The ENSO/SOI model, on the other hand, considers the Southern Oscillation Index (SOI) on a scale of 1-4, with SOI values ranging from above -7 to below -31 over 6 months.

The results of the potential impact assessment for six main food crops (rice, corn, soybeans, cassava, peanuts, and sweet potatoes) indicate that El Niño will negatively affect harvest area, productivity, and overall production. The impact is projected to be more severe in 2024 than in 2023, and simulations based on ENSO/SOI changes suggest a greater impact than changes in rainfall alone. Given the latest information, the intensity of El Niño in Indonesia is predicted to be low to moderate (scale 1 and 2). Under this scenario, the potential decrease in production for several food crops in 2023 (simulated with reduced rainfall) is as follows:

i. *Rice.* Regarding 2022 achievements, rice production is predicted to decline by around 388,725 to 1.12 million tonnes of GKG. This decrease is attributed to reduced harvested area (33,450 - 62,718 ha) and productivity (0.02 to 0.08 tonnes per ha).

ii. *Corn.* Concerning 2022 achievements, corn production is predicted to decline by around 271,973 to 722,743 tonnes. This decrease is attributed to a reduction in both harvested and productivity. The harvested area is expected to decrease by around 32,792 to 64,236 ha, while productivity is projected to decline by 0.02 to 0.08 tons per ha.

iii. *Soybean.* Compared to 2022, soybean production is predicted to fall by around 2,352 to 9,588 tonnes. This decrease occurred due to decreases in harvested area of around 905 to 3,510 ha and productivity of around 0.01 to 0.02 tons per ha.

iv. *Cassava, peanuts, and sweet potatoes.* Vis-à-vis production achievements in 2022, production of these three commodities is predicted to decrease respectively by 149,514 to 644,403 tonnes (cassava), 2,963 to 11,284 tonnes (peanuts), and 9,822 to 35,661 tonnes (sweet potato).

If El Niño continues until 2024, the decline in agricultural production is expected to be more severe than in 2023, mainly triggered by a decrease in harvested area. For this reason, it is crucial to ensure the readiness of agricultural tools and machinery to provide irrigation water.

Policy Recommendations

Accelerating rice planting during the June-October 2023 period requires the following efforts: (i) conducting area mapping that will identify suitable locations for accelerated planting; (ii) ensuring rice seed availability, especially those that are drought tolerant; (iii) recalculating the need for subsidized fertilizer and its allocation for the June-October 2023 period, to anticipate the President's direction regarding accelerating planting; (iv) coordinating with PT Pupuk Indonesia and PT Sang Hyang Seri to ensure the availability of subsidized fertilizer up to line IV; (v) empowering farmers to be able to utilize organic fertilizer from raw materials around their farming locations; and (vi) realizing and optimizing government assistance, especially water pumps, to mitigate the impact of potential irrigation water shortages caused by El Niño.

Coordination with the Ministry of PUPR and state-owned reservoir managers is essential to optimize irrigation water

distribution to rice fields. Additionally, preparedness for potential pest outbreaks must be maintained. To mitigate the risk of harvest failure, particularly for rice, the agricultural insurance program should be expanded,

Furthermore, coordination with the Ministry of Forestry and Environment (KLHK) and the Ministry of BUMN is necessary to identify and utilize land suitable for planting corn and soybeans. To ensure active participation in accelerating planting for the April-September 2023 period, coordination with the Ministry of Home Affairs to encourage regional government (provincial and regency/municipality) is crucial.

Finally, strengthening Central and Regional Government Food Reserves and developing a robust food logistics system, especially regarding information on availability and expedited food distribution, requires coordination with the National Food Agency.

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THE HISTORY OF INDONESIA'S ACHIEVEMENT ON FOOD RESILIENCE: 1966-2021

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Introduction

Indonesia's population is projected to reach 294 million by 2031, driving increased demand for food. The imbalanced growth between national demand and production has led to reliance on food imports, which can affect the stabilization of domestic food supply and prices. Therefore, it is very important for a nation to anticipate economic, environmental, social, political, and health shocks caused by food scarcity. To assess Indonesia's food self-sufficiency, ICASEPS analyzed the FAO Food Balance Sheet from 1961 to 2021, calculating the self-sufficiency ratio (SSR) and import dependency ratio (IDR).

Development of Indonesia's Food Resilience

During the period 1961-2021, the share of food provision from national production showed a declining trend despite its increasing amount. This trend was followed by a rising reliance on food imports to satisfy the growing population's demand.

In the period 1961-1970, Indonesia achieved a relatively high level of food self-sufficiency, with domestic production reaching 96.58%. This shows that Indonesia's food self-sufficiency level at that time was relatively good. However, this figure gradually decreased from year to year. Domestic production has only contributed 86.23% of the total food requirement in the last ten years.

Meanwhile, the share of food imports has steadily increased during the period 1961-2021. In the period 1961-1970, imports accounted for an average of 5.01% of total food needs. This figure has risen significantly, reaching an average of 14.4% in the past decade.

Development of Food Supply of Strategic Commodities

The share of rice provision from national production during the period 2011-2021 shows an increasing trend compared to the period 1961-1980, followed by a decrease in the share of provision from imports. However, by 2023, the volume of rice imports shows a rapid increase. This is because the government (National Food Agency) assigned BULOG to import 2 million tonnes of rice in 2023 to anticipate that the main harvest could not meet the needs of government food reserves.

There has been an increase in the share of maize supply from imports in the period 1961-2021. BPS data (2023) also shows an increase in the volume of maize imports in August 2023 by 141.95% compared to 2022. The increase in maize imports was mainly used to fulfill animal feed needs. The expansion of broiler and layer industries since the early 1990s triggered the increasing demand for poultry feed.

The share of beef supply from national production decreased significantly in the period 2001-2010 by 12.67% compared to the period 2011-2021. The decrease in beef production was accompanied by an increase in supply from imports, which increased by 14.96% in the period 2001-2010 compared to the period 2011-2021. Beef cattle farmers often view cattle farming as a form of savings, typically slaughtering animals only during specific events like the start of the school year, for financial needs, or during religious holidays like Eid al-Adha. This approach contrasts with the consistent demand for beef from industries, hotels, restaurants, and households in urban areas, which requires a daily supply.

In the period 1961-1970, sugar demand was fully met by national production. However, in the subsequent period until now, the share of the sugar supply of national output has continued to decline, reaching an average of 37.44% over the last ten years. Meanwhile, the share of sugar supply from imports increased to an average of 63.97% over the past ten years. The demand for sugar has increased significantly in recent years due to the development of the food processing industry. It can be concluded that Indonesia's food self-sufficiency is declining, as indicated by the declining share of food provision from national production and the increasing share of food imports.

Recommendation

The data shows a declining trend in national food resilience over time for strategic food commodities. Considering the increasing global challenges, such as geopolitical tension, extreme weather events, and health crises like COVID-19, it is important for Indonesia, as the fourth largest population in the world, to establish extraordinary efforts to achieve a secure level of food resilience. Having experienced massive land transformation, land scarcity, and the decreasing trend of land fertility, it is important for the government to increase production by implementing modern technologies adaptable to the specific needs of smallholders in the agriculture sector.

To encourage the achievement of food self-sufficiency by increasing production through (a) providing easy access to production inputs (improving the management of fertilizer subsidies, guaranteeing the provision of certified seeds); (b) optimizing marginal land for food agriculture, saline land or land with high salt content, swampy land, and dry land with special treatment and appropriate cultivation technology; (c) increasing the effectiveness of the implementation of Law No. 41/2009 on the Protection of Sustainable Agricultural Land and PP No. 12/2012 on Incentives for Sustainable Land Protection

to minimize the conversion of agricultural land to non-agricultural use; (d) increasing farmers' access to agricultural technology; and (e) encouraging and increasing the role of the younger generation in agriculture by improving supporting infrastructure and providing capital incentives with subsidized People's Business Credit (KUR).

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Policy Development

THE ROLE OF THE AGRICULTURAL SECTOR TOWARD GOLDEN INDONESIA 2045

Toward Indonesia as a sovereign, developed, and sustainable archipelago in 2045, five main goals of national development until 2045 are set, namely (a) per capita income at the level of developed countries, (b) 0% poverty and reduced inequality, (c) increased international leadership and influence, (d) increased national competitiveness, and (e) decreased greenhouse gas emission intensity toward net zero emission. The seventeen development directions called Indonesia Emas (IE) are organized into nine IEs of Indonesia's transformation (IE1 - IE9) and eight IEs of the Transformation Foundation (IE10 - IE17). *Indonesia Emas* is a long-term vision for Indonesia's sustainable and advanced development by 2045, which also marks 100 years of Indonesian independence. As part of the government's efforts to achieve the vision and goals of inclusive and sustainable development, the National Medium-Term Development Plan (RPJMN) 2025-2029 was developed.

Agriculture is one of the key sectors in the RPJMN as it is the backbone of Indonesia's economy and contributes significantly to employment, food security, and people's welfare. Agricultural sector development supports the achievement of IE4 in economic transformation and IE16 in the foundation of socio-cultural and ecological resilience transformation. IE4 is science and technology, innovation, and economic productivity that mandate the agricultural sector to carry out the task of increasing agricultural productivity and farmers. Meanwhile, IE 16, energy security, water, and food independence mandate the agricultural sector to create food independence and sustainability. This is in line with the vision of Indonesia Emas 2045, which expects the country to be able to fulfill its food needs independently and reduce its dependence on imports.

The log frame of the agricultural development program in IE 4 is focused on Strengthening the Industrialisation Ecosystem and Increasing the Complexity of Industrial Products, which is focused on the downstream of palm oil, rubber, coconut, and cocoa. Downstreaming of palm oil and rubber is carried out to support the increase in added value and competitiveness of plantation commodities. Furthermore, coconut and cocoa downstream development activities are focused on the availability of appropriate plantation facilities, with the output of activities being the level of usefulness of post-harvest and processing facilities. Furthermore, to realize Indonesia Emas 16, five development programs have been prepared, namely (i) PP Food, Energy and Water Nexus, (ii) PP Food Production Centres, (iii) PP Increasing national food availability, (iv) PP Improving the Quality of Food Consumption, and (v) Strengthening Food System Governance. The Food, Energy, and Water Nexus (FEW Nexus) development program aims to create an Indonesia with energy, water, and food self-sufficiency resilience with the output of reducing the number of energy, water, and food insecurity crisis areas. Therefore, the development activities related to the FEW Nexus are building the FEW Nexus Integration Area of the Archipelago Capital and East Nusa Tenggara (NTT). Meanwhile, the food production center development program (KSPP) is focused on the development of KSPP Central Kalimantan, KSPP North Sumatra, KSPP South Sumatra, KSPP NTT, KSPP Papua, and KSPP South Papua.

Furthermore, the National Food Availability Improvement development program includes three development activities: Local Food Development, Aquatic Food Development (Blue Foods), and Multicommodity Irrigation Development and Management. Meanwhile, the Food Consumption Quality development program includes activities to develop Biofortification and Food Fortification. Meanwhile, the two activities formulated in the Food System Governance development program are managing food loss and waste and strengthening One Food Data. The agricultural sector oversees biofortification and food fortification development in this program.

THE IMPORTANCE OF INCLUSIVE AGRICULTURAL FINANCING

In line with population growth, the high demand for various food commodities and their products is increasingly adding to the complexity of problems in the agricultural sector. Farmers do not deal with the impacts of global climate change alone but also with problems associated with the availability of agricultural land, which encourages farmers to work on relatively narrow land. Economic development affects the availability of agricultural land, particularly when farmers struggle to provide necessary inputs for their farming operations. Helping farmers access sources of financing, especially small-holding farmers, has given importance to healthier, inclusive finance to support sustainable farm practices.

Research on the theme of inclusive financing in the agricultural value chain funded by ACIAR and implemented by ICASEPS, the Ministry of Agriculture, and the National Research and Innovation Agency (BRIN) in collaboration with IFPRI is very relevant to the need for important information for the formulation of current agricultural policies. The research entitled "Inclusive Agricultural Value Chain Financing" was carried out from 2019 to 2023 but had to reduce the intensity of research, especially in 2021-2022, due to the constraints of the COVID-19 pandemic. Here are some findings that can be thoroughly considered in reformulating agricultural finance policy.

Small farmers usually rely on working capital to grow crops. The government has subsidized credit for micro, small, and medium enterprises, including small farmers. However, small

farmers have to face several obstacles to access formal credit. Most farmers in Indonesia are unbanked because they do not have bank accounts for money transfers and collateral to obtain formal credit.

The lack of bank accounts experienced by smallholder farmers is common because they rarely save profits for purchasing production factors. Farmers' relatively low profits after harvest mean they do not have cash for the next planting season. They will use the cash after harvest for daily consumption in addition to non-agricultural income. To access formal credit, such as KUR, farmers, as debtors, according to the rules, usually provide collateral. Commercial banks usually require land certificates or vehicle ownership documents, which smallholder farmers rarely own.

The credit market is both promising and challenging. Many farmers need financing to grow crops every season, but their demand for credit is relatively low because their land holdings are small. On the other hand, farmers who do not have access to banks challenge commercial banks. The credit risk for small farmers is relatively high.

Non-formal credit institutions take advantage of the gap in demand for credit. Agricultural input sellers and traders of agricultural products lend their money in cash or in kind to farmers who cannot access formal credit. The relatively easy credit procedures, namely fast service and no collateral, make non-formal credit more attractive to farmers. Non-formal creditors face high risks, such as crop failure and low selling prices at the farmer level, which result in late credit payments.

Government support is essential to encourage inclusive financial institutions to be innovative. Likewise, government incentives are needed to encourage financial institutions to be innovative and inclusive. Small farmers need easily accessible financial support with less bureaucratic administration and less collateral. Credit and agricultural insurance are required to reduce agricultural risks. Facilitating small farmers to sell their agricultural products at remunerative prices at the farm gate is an innovative way to offer credit. Off-taker, in this concern, is highly suggested. Moreover, the government should continue to support education, rural employment, and health facilities by increasing women's participation.

A more in-depth study of financial institutions such as rural cooperatives, credit unions, and agricultural marketing companies is essential. The goal is to better understand the incentives to engage male and female farmers to access innovative and inclusive credit.

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Policy Issues

INVESTIGATING THE CAUSES OF FLUCTUATIONS IN FRESH FRUIT BUNCH PRICES OF OIL PALM

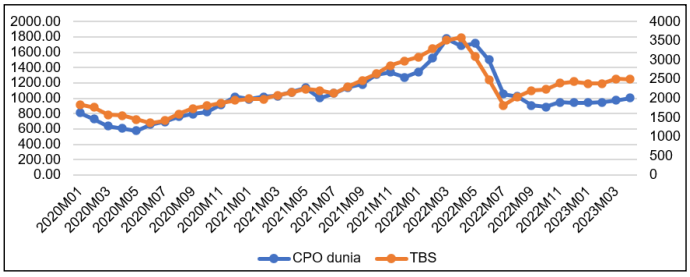
Following a surge during the COVID-19 pandemic, further fueled by the Russia-Ukraine conflict, global crude palm oil (CPO) prices started to fall in July 2022 and leveled off at around USD 900 per tonne between September 2022 and March 2023. This price remains relatively high compared to the usual range of USD 600-USD 800 per tonne.

As Indonesia's primary export, fluctuations in CPO prices directly affect the prices received by oil palm farmers for their fresh fruit bunches (FFB). A notable domestic trend is the price disparity between FFB from partner farmers and non-partner farmers, with partner farmers receiving higher prices from palm oil mills (POM).

The high share of CPO exports compared to domestic consumption makes the global supply and demand fluctuations a significant driver of domestic FFB price trends. As illustrated in Figure 1, global CPO prices strongly correlate with domestic FFB prices (correlation coefficient of 59.25%). Therefore, it is important to understand the factors influencing fluctuations in CPO prices in the global market.

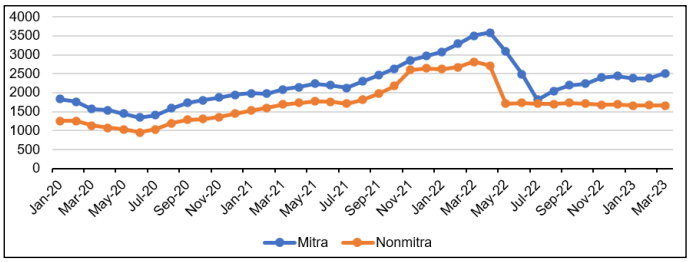
Domestic FFB prices are influenced by several factors. These factors include global CPO prices, the rupiah exchange rate against the US dollar, domestic CPO production and consumption, CPO export volumes, other vegetable oil prices, and the purchasing power of CPO-importing countries. Additionally, the El Niño phenomenon can potentially disrupt domestic CPO production, driving up FFB prices.

Figure 2 shows a consistent price differential between FFB sourced from partner and non-partner farmers, with the former commanding a premium. This price disparity is attributed to non-partner farmers' perceived lower quality of FFB. The "deforestation-free" policy that has begun to be implemented in the European Union can widen the price gap between partner and non-partner FFB, as FFB from partner farmers is generally more traceable and compliant with sustainability standards.



Source: Pink Sheet World Bank and the Directorate General of Estate Crops

Figure 1. Price trends of global crude palm oil (USD/tonne) and Indonesian fresh fruit bunches (IDR/kg)



Source: Directorate General of Estate Crops

Figure 2. Price trends of palm oil fresh fruit bunches for partner and non-partner farmers (in IDR)

Export taxes on palm oil and its derivatives constitute a significant revenue source for the Palm Oil Plantation Fund Management Agency (BPDPKS). In this regard, changes to the provisions on the imposition of export taxes on palm oil and its derivatives directly impact the BPDPKS fund collection.

Given the recurring nature of FFB price fluctuations stemming from various factors, a comprehensive and holistic approach is necessary to address the current decline in FFB prices.

Several strategies are recommended to address the issue comprehensively, including promoting domestic CPO consumption through the B35 biodiesel blend policy and encouraging non-partner farmers to become partners. Efforts to promote non-partner farmers to become partners must be supported by strictly enforcing the mandate of Law No. 39/2014 on Plantation, Article 45 paragraph 2, which requires palm oil processing plants to source at least 20% of their raw material needs (read: FFB) from self-cultivated plantations. The government's lack of lack of strict enforcement of this regulation has led to the persistence of non-partner farmers.

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ICASEPS Publications

Analisis Kebijakan Pertanian Vol 22 No. 1, June 2024

1. *Implementasi kebijakan usaha pakan untuk mendukung pengembangan industri perunggasan* (Implementation of feed business policy to support the development of poultry industry) (Lidya R. Shaffitri, Wahida, Resty P. Perdana, Nyak Ilham, Esty A. Suryana)
2. *Pengembangan model integrasi karet-sapi di daerah sentra perkebunan karet: studi kasus di Banyuasin, Sumatera Selatan* (Development of rubber-cattle integration model in rubber plantation region: a case study in Banyuasin, South Sumatra) (Andrea Akbar, Sahuri)
3. The dynamics of Indonesia's agricultural development and livelihoods in drylands: concepts, actors, and challenges (Komang Ariyanto)
4. *Dinamika perubahan nilai indikator strategis pembangunan pertanian dan transformasi perdesaan* (Dynamics of changes in the value of strategic indicators for agricultural development and rural transformation) (Rangga D. Yofa, Sumedi, Sri H. Susilowati)
5. *Ketersediaan beras menuju kemandiriaan pangan: pendekatan sistem dinamik* (Rice availability toward food resiliency: a dynamic systems approach) (Risna R. Wajdah, Rita Nurmalina, Yusalina)
6. *Hubungan karakteristik mahasiswa dengan minat bekerja di pertanian: studi kasus Fakultas Pertanian, Universitas Sintuwu Maroso* (Relationship between student characteristics and interest in agricultural careers: a case study of Sintuwu Maroso University's Faculty of Agriculture) (Nurmayanti H. Ahmad, Andri A. Managanta, Toyip, Ita Mowidu)

ICASEPS News

MEMORANDUM OF UNDERSTANDING (MOU) SIGNING BETWEEN THE MINISTRY OF AGRICULTURE AND THE AUSTRALIAN CENTER FOR INTERNATIONAL AGRICULTURAL RESEARCH

As the impact of the restructuring of R&D systems, including in agriculture and food, the Indonesian Agency for Agricultural Research and Development (IAARD) has been integrated into the National Research and Innovation Agency (BRIN) as mandated by Presidential Regulation No. 78/2021 and Law No. 11/2019 on the National System of Science and Technology. Given these new mandates, tasks, and responsibilities, the Ministry of Agriculture must establish a new Memorandum of Understanding (MOU) with the Australian Center for International Agriculture Research (ACIAR).

Dr. Prihasto Setyanto, serving as the ad interim Secretary General, signed the MOU on February 2, 2024. Meanwhile, ACIAR's Chief Executive Officer, Prof. Wendy Umberger, signed the MOU on behalf of the organization in Canberra on February 5, 2024. The signing ceremony was witnessed by His Excellency Dr. Siswo Pramono, the Indonesian Ambassador to Australia and Vanuatu.

The areas of cooperation include the following: (a) analyzing to provide policy recommendations for developing more resilient and sustainable farming systems to increase production, reduce poverty, and achieve food security and nutrition; (b) building institutional and human resource capacity within the Ministry of Agriculture; and (c) undertaking other mutually agreed-upon activities to achieve the objectives of the cooperation as outlined in Paragraph 1. The scope of this collaboration will be determined periodically by a joint evaluation team from both parties. This signing strengthens the existing network between Indonesia and Australia in the agricultural sector and marks the continuation of strong collaboration between ICASEPS and ACIAR, which has been implemented since 1995.

2ND INTERNATIONAL CONFERENCE ON AGRICULTURE, NATURAL RESOURCES, AND RURAL DEVELOPMENT PROCEEDINGS

The Indonesian Center for Agriculture Social-Economics and Policy Studies (ICASEPS), in collaboration with the Indonesian Society of Agricultural Economics (ISAE), has organized the Second International Conference on Agriculture, Natural Resources, and Rural Development (2nd ICANaRD) with the theme "Enabling Policies toward Resilient Agriculture and Sustainable Rural Development: The Importance of Rice in Food Systems." The hybrid conference was held over two days, October 17-18, 2023. On the first day, the conference was held offline at the IPB International Convention Center (IPB ICC) in Bogor, while the second day was held virtually.

The Secretary General of the Indonesian Ministry of Agriculture opened the conference, representing the Minister of Agriculture. The event was attended by speakers from the Embassies of Thailand, the Philippines, Vietnam, China, Japan, Bangladesh, Egypt, and the Indonesian Ministry of Agriculture. Other speakers participating in this conference include representatives from the Food and Agriculture Organization (FAO), the World Bank, the Economic Research Institute for ASEAN and East Asia (ERIA), the International Food Policy Research Institute (IFPRI), IPB University, and the Indonesian

Society of Agricultural Economics (ISAE). The main discussion topics centered on world-producing countries' economies and rice policies.

Day 2 featured a series of virtual presentations on supporting articles. These articles were contributed by authors from various national and international institutions. A total of 49 supporting articles have been compiled into a proceedings book, which has been published by the globally indexed publisher, BIO Web of Conferences. The article can be accessed for free via the following link:

https://www.bio-conferences.org/articles/bioconf/abs/2024/38/contents/contents.html

ASSISTANCE IN IMPLEMENTING PUMP IRRIGATION FOR INCREASING RICE PRODUCTION

To accelerate rice production through land optimization, pumping, and expanding upland rice cultivation, the Ministry of Agriculture established a Food Emergency Anticipation Task Force. This was formalized through issuing the Decree of the Minister of Agriculture of the Republic of Indonesia No. 243/2024 on April 1, 2024. The decree designated Directors, Persons in Charge (PIC) of Facilities, and field-level PICs at the provincial/district/city levels. In June 2024, a change in field-level PICs at the provincial and district/city levels necessitated the issuance of a revised Minister of Agriculture Decree No. 265/2024, replacing the previous decree.

The Director of the Indonesian Center for Agriculture Social-Economics and Policy Studies (ICASEPS) was appointed as the PIC of four districts—Banjarnegara, Purbalingga, Temanggung, and Wonosobo—as outlined in the Minister of Agriculture Decree No. 265/2024 In addition to these responsibilities, the Director also serves as the Liaison Officer (LO) for Central Java Province, assisting the Secretary General of the Ministry of Agriculture in overseeing the province.

The primary role of the PIC is to monitor and evaluate the implementation of land optimization, pump irrigation, and expansion of rice planting areas within the designated regions.

The pump irrigation program, which provides water pump assistance to farmer groups, provincial/district/city agricultural offices, and the Military District Command (Kodim), is being implemented in the ICASEPS area of responsibility. In addition to receiving the pump irrigation program, the four districts also received an upland rice planting program. The water pumps are primarily allocated to rain-fed rice fields with a cropping index of less than 2. By enabling farmers to draw water from nearby water sources, these pumps are expected to facilitate irrigation during the dry season (planting seasons 2 and 3). This increased irrigation during the dry season is anticipated to lead to a larger rice planting area and, consequently, increased national rice production.

Most of the water pump assistance provided to the four districts within ICASEPS' area of responsibility has been effectively utilized by farmer groups. Notably, previously limited to single-season cultivation during the rainy season, rainfed rice fields have now transitioned to double-cropping in the second planting season. The water pump assistance provided to the district Agriculture Service offices and military unit, known as "Brigade," is available to farmer groups through a loan-to-use system.

FOCUS GROUP DISCUSSION ON ACCELERATING PEOPLE'S PALM OIL REJUVENATION PROGRAM IN NANGGROE ACEH DARUSSALAM

The People's Palm Oil Rejuvenation program, or "Program Peremajaan Sawit Rakyat (PSR)," launched in 2017, aims to boost palm oil productivity and farmer income by revitalizing aging palm oil plantations. This government initiative has been implemented in various provinces with palm oil plantations. However, the program's realization has been relatively low.

To address this issue, ICASEPS, in collaboration with BPDPKS, has conducted studies from 2022 to 2024 to identify and analyze the obstacles hindering the effective implementation of the PSR program. A diverse group of palm oil industry stakeholders convened in Banda Aceh on June 7, 2024, to discuss strategies to further accelerate and improve the program. The focus group discussion was held at the Office of Agriculture and Plantations of Nanggroe Aceh Darussalam Province.

Attendees included representatives from various organizations such as the Aceh Province Agriculture and Plantations Office, the Aceh Regional Office of the National Land Agency (BPN), the Aceh Province Environmental and Forestry Service (DLHK), the Aceh Forest Area Management Agency (BPKH), the Indonesian Palm Oil Association (GAPKI) Aceh branch, the Indonesian Palm Oil Farmers Association (APKASINDO), and local higher education institutions.

Evaluating Progress and Identifying Challenges

Dr. Adi Setiyanto, the ICASEPS Team Leader, initiated the discussion by recalling the 2021 proposal to evaluate the PSR progress toward the targets set by the President of Indonesia. Subsequent discussions with the Directorate General of Plantations - Ministry of Agriculture and the Palm Oil Plantation Fund Management Agency (BPDPKS) led to the inclusion of PSR acceleration in the evaluation scope. The team further engaged with PSR participants who had received funding over the past four years to compare their outcomes with those who independently rejuvenated their palm oil plantations.

Mr. Azanuddin Kurnia, Secretary of the Aceh Provincial Agriculture and Plantations Office, emphasized the positive outcomes of the PSR program while noting ongoing challenges. He highlighted the importance of enhancing competitiveness through ISPO certification.

Presentations on Key Issues

Dr. Sumedi, team of ICASEPS evaluated PSR development from 2017 to 2023. He pointed out several persistent issues, including land legality, low productivity, and the institutional gaps among farmers.

Mr. Bambang Arianto from the Aceh Provincial Environmental and Forestry Service discussed challenges related to land status and water conservation. Meanwhile, Mr. Alfiansyah from the

Aceh Regional Office of the National Land Agency (BPN) underscored the importance of digital mapping for managing palm oil plantations effectively.

Farmers' Perspective and Future Steps

Mr. Fadhli Ali from APKASINDO shared the farmers' viewpoint, addressing land management, seed distribution, and the discrepancy between official palm oil prices and the prices received by farmers.

The discussions and presentations resulted in several conclusions and recommendations. These include the necessity for improved inter-agency coordination, enhanced farmer understanding of the PSR program, and stronger partnerships between the government, companies, and farmers.

Commitment to Collaborative Efforts

In their closing statements, Dr. Sumedi, Dr. Adi Setiyanto, and the Secretary of the Aceh Provincial Agriculture and Plantations Office emphasized the importance of bolstering partnerships, developing the Cultivation Registration Certificate (STDB), and securing land titles to enhance the success of the PSR in Aceh. They also highlighted the critical need to resolve land tenure issues for smallholder palm oil farmers. All stakeholders concurred that cooperation and collective commitment are essential to overcome challenges and improve the efficiency of the PSR program in Aceh Province.

FOCUS GROUP DISCUSSION AND POLICY ADVOCACY FOR ACCELERATING PEOPLE'S PALM OIL REJUVENATION PROGRAM IMPLEMENTATION IN WEST SUMATRA

On June 12, 2024, in Padang, West Sumatera Province, ICASEPS' policy analysis team conducted a focus group discussion and policy advocacy session. The event, themed "Accelerating Smallholder Palm Oil Replanting (PSR) Program to Improve Cost Efficiency and Competitiveness," brought together key stakeholders in West Sumatra Province to discuss the implementation of the PSR Program in West Sumatra. The event brought together a diverse group of stakeholders, including speakers from the Plantation, Food Crops, and Horticulture Office, Forestry Office, ATR/BPN Regional Office, Indonesian Palm Oil Association (GAPKI), and Indonesian Palm Oil Farmers Association (APKASINDO) of West Sumatra Province. Participants included officials from relevant provincial agencies, academics from local universities, representatives from GAPKI and APKASINDO, and palm oil industry practitioners.

Several key issues were highlighted in the discussion, including (a) challenges faced by seed breeders in preparing seedlings according to farmers' needs, (b) land legality and verification process, (c) land certification, and (d) reluctance of palm oil entrepreneurs to join GAPKI. Participants provided valuable insights and feedback to enhance the ICASEPS study. These included the importance of providing superior seedlings, the need to identify obstacles in land requirements for the PSR program, mitigating environmental impacts of palm oil cultivation, and the need for better regulations to preserve forests and the environment.

WORKSHOP ON POLICY QUALITY IMPROVEMENT TOWARD BUREAUCRATIC REFORM OF THE MINISTRY OF AGRICULTURE

To support the successful implementation of National Bureaucratic Reform, as outlined in the Regulation of the Minister of Administrative and Bureaucratic Reform No. 3/2023, ICASEPS, in collaboration with the Legal Bureau of the Ministry of Agriculture, organized a Workshop on Policy Quality Improvement toward Bureaucratic Reform of the Ministry of Agriculture. The workshop was held on Friday, June 21, 2024, at Dr. Ismunadji Auditorium of ICASEPS.

The Director of ICASEPS emphasized that this workshop serves both short-term and long-term objectives. In the short term, the workshop aims to prepare a self-assessment of the legal products developed by the Ministry of Agriculture. For the long term, it seeks to enhance understanding of the regulatory formulation process, including the steps that should be followed and the important aspects of regulation formulation.

The representatives of the Legal Bureau of the Ministry of Agriculture emphasized the importance of the Policy Quality Index (IKK) measurement conducted by State Administration Institute (LAN) in their speech. This workshop was held to improve (scale up) the (IKK) value obtained. The IKK assessment includes the process of formulating a policy and measuring its implications.

This hybrid workshop aimed to enhance participants' understanding of the IKK measurement process and policy drafting techniques. The agenda included socialization of the IKK measurement, lessons learned from the process of drafting the Minister of Agriculture Regulation, policy drafting techniques, and mapping of existing regulations. By the end of this workshop, participants from various Ministry of Agriculture institutions were expected to gain a comprehensive understanding of the process of drafting policy papers and be able to improve the following Ministry of Agriculture's Policy Quality Index.

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