Vol. 14 No. 3, December 2021 ISSN: 1978 – 2063

Agro-Socioeconomic Newsletter

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

Editorial

Dear Readers,

It has been 14 years since this Newsletter was first published by ICASEPS and this is the last number in 2021 for you. It's been a long journey for the only English language newsletter at the Ministry of Agriculture. We hope to continue publishing this newsletter as we have received strong support from various stakeholders.

We select two interesting research results for your reference, namely Farmers Protection and Empowerment: Toward Competitive, Self-Reliant Food Security (Prof. Erwidodo) and Strategy to Accelerate and Penetrate Processed Local Food Markets (Dr. Ening Ariningsih). This is followed by policy development on corporate farming development which covered through our research. After news about our research activities and journal publications, we also provide information about the inauguration of new Research Professor of ICASEPS, Prof. Dr. Sahat M. Pasaribu and Prof. Dr. Nyak Ilham. The excerpts of their inauguration speeches are also attached.
The new variant of Covid-19 Omicron could have been surrounding us, so be safe and stay alert. Merry Christmas to those who celebrate and as we are approaching the new year, we wish you a Happy New Year 2022.

Thank you
The Editor

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Research Findings

FARMERS PROTECTION AND EMPOWERMENT: TOWARD COMPETITIVE, SELF-RELIANT FOOD SECURITY

Erwidodo, Wahida, G. Susilowati, R.R. Rachmawati

Introduction

National sovereign and self-reliant food security is a constitutional mandate depicted in Law No. 18/2012 on Food. The Government of Indonesia has taken various programs, but the mandate is not met yet indicated by an increased food trade deficit. It is not enough to meet the mandate by conducting the border measures such as no import or limiting import. The key factors are behind-border measures such as improving national production capacity, farmers empowerment, and investment enhancement for R&D and innovation. In general, the study aims to formulate a trade policy for farmers' protection and empowerment. Specifically, the study aims at (i) assessing the border measures such as tariff, safeguard, and other countermeasures; (ii) evaluating the behind border measures, i.e., farmers empowerment and national food production capacity enhancement: and (iii) comparing the domestic policy with the existing WTO rules as well as those implemented in Thailand and Vietnam.

WTO Rules, WTO Members' Rights and Obligation

World Trade Organization (WTO) is a trade organization, and its members are sovereign countries aiming at managing and enforcing an open, fair multilateral trade system. WTO rules are binding to all members and ensure the non-discriminative trade principles consisting of (i) MFN (Most Favored Nations), i.e., all countries' products are equal; and (ii) National Treatment, i.e., equality between imported products and domestic products.

The government is mandatory to protect its farmers from abundant imported products and ensure affordable products to its people. Tariff is allowed as it is not more than the bound tariff. A special safeguard is an instrument to deal with import surges. Anti-dumping and countervailing measures are instruments to cope with unfair trading practiced by other WTO members. Sanitary and phytosanitary protect the health of humans, animals, and plants. The government also has to empower farmers and enhance agricultural food production capacity through domestic support.

To enforce agricultural multilateral trade system, WTO is equipped with rules depicted in various agreements, namely: (i) Agreement on Agriculture (AoA), (ii) Agreement on Sanitary and Phytosanitary, (iii) Agreement on Import Licensing, (iv) General Agreement on Tariffs and Trade (GATT), and (v) Agreement on Technical Barriers to Trade.

Protection Policy on Farmers

Import control using tariff

AoA on market access allows the WTO members to control imports using tariff as long as it is not higher than the bound tariff. Plurilateral (regional) and bilateral agreements make Indonesia bound with lower tariffs, and those MFN tariffs are no more applicable. During the 2012–2020 period, the agricultural products' tariffs increased from an average of 10.5% to 11.2%, or somewhat higher than those of non-agricultural product tariffs. Thailand and Vietnam have lowered tariffs, but Indonesia has increased them. It will result in increased production cost, decreased input quality, low productivity of the sector protected, lack of investment, and inefficiency.

Quantitative Import Control and Import License

GATT's Article XI on General Elimination of Quantitative Restrictions prohibits the WTO members from controlling both quantitative export and import, including import and export quotas or import and export licenses. Import licenses should be transparent, not burdensome to importers, and not additional trade constraints. There are two types of import licenses, namely automatic and non-automatic licenses. Import license procedure is still applied to deal with smuggling, protect farmers, and enhance domestic production. However, many importers complain about the import license applied by the Government of Indonesia due to lack of transparency, complexity, and burdensome. Most import licenses complained about import policies on horticulture, animal, and animal products. Thailand applies both automatic and non-automatic import licenses issued by the Ministry of Trade for people's health protection, national economic security, environment conservation, and price stabilization.

Anti-dumping, Countervailing, and Safeguard Measures

Anti-dumping and countervailing are border measures rarely carried out by the government of Indonesia for agricultural products. Out of 40 anti-dumping investigations during the 2012–2020 period, these cases were applied to wheat flour (India, Sri Lanka, and Turkey) and cavendish banana (Philippines). During the 2012–2020 period, safeguard policies were less than those in the 2006–2012 period.

Standard and Other Technical Requirements

WTO rules on standard and other technical requirements are depicted in the Agreement on Technical Barriers to Trade (TBT). WTO members have to treat all imported products from other WTO members as no less favorable than those similar domestic products, i.e., the National Treatment principle. Up to May 2020, Indonesia has 10,858 SNI (Indonesian National Standard), and almost 18% (1.954 SNI) have been harmonized with the international standard.

Halal Certification

Labeling and certification requirements for halal products are depicted in Law No. 33/2014 on Halal Product Guarantee, and its implementing rule is the Government Rule (PP) No. 31/2019.

Sanitary dan Phyto-Sanitary (SPS) Policy

Agreement on the Application of SPS measures deals with quarantine. The WTO members have to apply SPS measures for human, animal, and plant health based on scientific principles and not import control. It is in accordance with NT principles, and the developing countries are not allowed to implement SPS comprehensively and intensively. In 2017 Indonesia lost when sued by the US and New Zealand for horticulture, livestock, and livestock import. In 2019 also lost due to Brazil's sue on chicken meat import.

Farmers Empowerment Policy

Domestic Support for Agriculture and Food

AoA Article 6 and its annex commit to reducing domestic support except (i) not distorting trade in the production process (green box), and (ii) domestic support and subsidy for rural and agriculture development in the developing countries. The government spent domestic support and subsidy for agricultural inputs, e.g., crop and livestock seeds, fertilizers, agricultural machines, as well as irrigation. It also includes subsidized credit for farmers and off-farm activities. It seems that domestic support and subsidy are not effective as Indonesia is still one of the biggest food-importing countries, and its agricultural products are not competitive.

Consequences and Impacts of Import Control

Trade Dispute Settlement

Each WTO member has the right to question the other member's trade policy harmful to their counties. All the appealing countries always win the case as their lawyers have assessed the evidence sufficiently before coming to the DSB (Dispute Settlement Body). It implies that we should avoid all opposing trade policies to the WTO rules.

Economic Rent and High-Cost Economy

Food import is implemented when domestic supply is not sufficient. It aims to meet the domestic demand and to lower domestic prices such that the price is not profitable to importers anymore. Sometimes, import continues and becomes harmful to domestic farmers. WTO prohibits quantitative import restrictions, but the tariff is allowed. Corn import control made corn domestic retail price higher than its import parity. The quota rent is the importer's and rent seekers' advantage. Import control policies on garlic, soybean, and beef cause those commodities' retail prices to be much higher than the import parities. It is burdensome to consumers, boosts inflation, and worsens the overall economy.

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STRATEGY TO ACCELERATE AND PENETRATE PROCESSED LOCAL FOOD MARKETS

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Introduction

Along with the outbreak of the Covid-19 pandemic, food production, distribution, and consumption patterns have undergone an extraordinary transformation, including changes in expenditure and consumption patterns. Building social

construction and extracting the latest information to respond to consumer behavior, local food development, and communication of behavior change are very important and urgent. However, information related to the marketing strategy, especially the market penetration of processed local food products, is still limited. Therefore, targeted research related to strategy for accelerating and penetrating the local processed food market to support food diversification is essential.

In general, this study aims to develop policy recommendations for the development of processed local food to support food diversification, while specifically, the objectives of this study are as follows: (1) analyze the performance of processed local food, (2) map consumer preferences for processed local food products, (3) examine the marketing pattern of processed local food products, and (4) formulate a strategy for accelerating and penetrating the processed local food market.

Consumer Preference for Processed Local Food Products

Almost all respondents spread throughout Indonesia have heard, seen, and consumed processed cassava products. With the open-ended question "mention the processed food products you have ever consumed and liked," the respondents' answers were quite diverse. They like chips, *getuk*, *tape*, boiled/fried cassava, *and combro, while they do not like lemet/timus* and *tiwul*. Cassava chips are the most preferred food by respondents, available in the market in various flavors, shapes, and packaging. However, the quality of cassava chips still needs improvement in taste, texture, packaging, and nutritional value.

Food from sago is still rarely found in the market, especially in areas not production centers of sago. This can also be seen from the proportion of respondents who have heard or seen sago plants or their processed products and consume them is smaller (63.2%) than cassava (94.0%). Foods from sago often consumed are papeda, sago cheesecake, *pempek*, *cilok*, *cireng*, and *kapurung*, which are obtained mainly by buying them to be consumed at home. Cakes, pastries, and sago noodles are the sago processed products millennials desire. Based on their experience in consuming processed sago products, it is still necessary to improve their quality, especially in taste, texture, nutritional value, and packaging. Consuming sago not only gets carbohydrates but also other nutritional values such as protein, vitamins, and minerals.

Strategy for Acceleration and Penetration of the Processed Local Food Market

Based on the results of the SWOT analysis, a strategy for developing cassava-based local food can be drawn up, including (1) increasing the number of business actors involving Generation Z and millennials; (2) increasing cassava product processing innovation according to the preferences of Generation Z and millennials; (3) expanding the marketing network of processed cassava products online through the marketplace; (4) establishing a cassava cluster area to strengthen the cassava agribusiness system; (5) strengthening the cassava agribusiness system by involving offtakers; (6) strengthening and developing cassava processing business; (7) promotion, dissemination, education, and advocacy of cassava processed products systematically and regularly; (8) support for cassava processing business management to overcome the threat of imported-based food processing; (9) support for government policies and regulations to support local food development; and (10) improvement of product quality and variants, as well as the packaging of cassava-based processed products.

Strategies for the development of local sago-based food that can be prepared based on a SWOT analysis include (1) revision of the spatial layout of the sago area to become a sustainable production forest; (2) determination and development of sustainable sago areas; (3) increasing innovation in processing sago products according to the preferences of Generation Z and millennials; (4) the development of modern sago processing SMEs; (5) expanding the marketing of processed sago products online; (6) capacity building for sago human resources; (7) promotion, dissemination, education, and advocacy of sago processed products systematically and regularly; (8) improvement of business climate and investment in sago processing business; (9) infrastructure development and facilitation of modern sago processing technology; (10) management and funding support for sago processing business development; (11) institutional strengthening of regional sago development; and (12) improving the quality, variant, and packaging of sago-based processed products.

Policy Implications

Increasing the competitiveness of cassava and sago-based processed local food products can be started from upstream through clustering of raw material production areas to increase production efficiency, reduce distribution costs, and sustain the supply of raw materials to the processing industry, which will ultimately reduce the cost of raw materials.

Future market expansion needs to be carried out by taking advantage of the demographic potential that relies on the millennial and Z generations, which currently occupy the most considerable portion of the composition of the age structure of the Indonesian population. The government needs to provide facilities for developing local food MSMEs built by the millennial generation. Innovative promotion strategies for processed local food products also need to use an influencer, a public figure who attracts the public, especially millennials and Z generations, by utilizing social media, print media, and other media.

MSMEs gathered in an economic institution need to improve their managerial capabilities through targeted and systemic technical guidance/training assistance, especially aspects of processing technology to increase productivity, quality, the competitiveness of local food sago and cassava, and product marketing. For this reason, it is necessary to prepare experienced practitioners in the field of cassava and sago management.

It is necessary to facilitate and facilitate MSME access to sources of financing to overcome the limited capital faced by MSMEs processing processed food products based on cassava and sago. The existing financing scheme provided for MSME business actors needs to be continuously socialized and made easy to reach and use.

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THE STRATEGY OF CORPORATE FARMING DEVELOPMENT IN SUPPORTING CENTRAL KALIMANTAN FOOD ESTATE

Background

The Indonesian government put its best effort into developing a national food logistic reserve. A new food barn is developed through a program that aims to increase national food reserve based on an integrated ecosystem known as a food estate located in Central Kalimantan. A strong food reserve is required to anticipate global food crises caused by natural disasters or climate change and reduce dependency on food imports. This program is a follow-up from President Instruction No. 109/2020 about the Acceleration of National Strategic Project Implementation.

Food estate is developed under several important targets such as increasing national food production, strengthening local food security, area development, and increasing farmer income and welfare. It is also considered a special integrated food system area to produce large-scale food production. It has developed based on National Medium Term Development Plan 2020-2024. Food estate is designed by empowering farmers in a corporation and established under a legal entity.

In history, Indonesia has been experienced in developing a "food estate" program. To our knowledge, in the mid-1990s, Indonesia developed a food estate program called as One Million Hectare Peatland Project (*Proyek Lahan Gambut Sejuta Hektare*) located in Central Kalimantan. Meanwhile, in 2010, Indonesia also established Merauke Integrated Food and Energy Estate (MIFEE) on 2.5 million hectares. A similar program has been implemented in smaller sizes in West Kalimantan, South Sumatera, and Maluku. However, there is a huge variation in the success rate between programs.

Food estate is designed as an integrated food production system that includes food crops and horticulture, estate crops, and livestock that developed in large-scale areas. The development of food estate is based on clusters and using a multi-commodities approach in a value chain system. Food estate is also used as the platform for technology adoption and innovation by implementing the most-advanced agriculture machinery and mechanization, digitalization, and farmer corporation.

Research Methodology

ICASEPS conducted research to formulate the strategy and determine the approach used for implementing agriculture technology, business development, and management. Data and information are collected to explore and learn social-economic development in a corporation format. The research is conducted in Pulang Pisau and Kapuas district, Central Kalimantan.

Preliminary Research Results

Food estate is developed based on a region and a cluster. The size of each region is around 10,000 hectares. Each region consists of clusters with a land size of approximately between 2,000–5,000 hectares for each cluster. The area delineation for each cluster follows the administrative boundaries, integrated with geographical areas and social-economic attributes. In 2020, the main activities were focused on the area of 30,000 hectares which distributes to 10,000 hectares in Pulang Pisau district and 20,000 hectares in Kapuas district. Main commodities are paddy, vegetables, ducks, coconut, and oranges. This program also built two demonstration farms in Belanti Siam village, Pulang Pisau district, and Terusan Karya and Terusan Mulya villages in Kapuas district.

The research results show that too many delays occurred, for example, delays in land preparation and planting time for paddy. Nevertheless, horticulture and livestock commodities work well on the location. The horticulture sector dominates in Pulau Pisau by developing 110 ha durians, 100 ha longans, 30.07 hectares oranges (from target area 100 ha), 13 hectares of Chinese cabbage, 10 hectares of water spinach, and 20 hectares of chili. It also includes a 1,000 heads of duck breeding program. While in Kapuas I region, the main commodity is paddy and durian (2.5 ha). In Kapuas II, it is also dominated by paddy with supporting commodities oranges (48.65 ha from targeted 140 ha), Chinese cabbage (4.5 ha from targeted area 20 ha), and 5 hectares of chili. This location also manages 2,550 heads of duck. From the budget used, the program costs 203.1 billion rupiahs.

The main problems that occur during the implementation period are the irrigation systems still underdeveloped, limitation in agriculture machinery and delays in the supply of fertilizer, lack of skill and knowledge at farmer level, pests and diseases attack, lack of capacity in human resources in managing farmer's group association, and unavailability of supporting facilities and infrastructure to accelerate the business climate and opportunities. In summary, the projects find huge problems in creating a corporate farming working condition in the location.

Creating added value for farmers by developing off-farm activities is still unsuccessful. The food estate program is still unable to maximize the involvement of multi-stakeholders across ministries in Indonesia, including private sectors.

To improve the program's implementation, the team has provided recommendations such as increasing the role of local government in participating, providing technical assistance, and being involved directly in the activities. The way to empower farmer's group association is by having consolidated action toward establishing a farmer corporation. Re-consider the size of the area, the need to develop a division with the size of land around 200–400 hectares.

Recommendation

An integrated farming approach developed in a large-scale area requires a certain planning and development strategy process. By nature, Indonesian agriculture is dominated by smallholder farmers. To push these farmers to work in a corporate ambiance with integrated multiple commodities and farming systems creates significant challenges and problems.

The government should take prudent technical, social, and economics, such as preparing water resources facilities. There is a need to develop irrigation systems for 165,000 hectares. The system is designed by considering the topography area and type of land (swamp, tidal, and peat).

For the economic factors, it is important to increase the engagement level of farmers who participated in the food estate program. Having trust from the farmer is the key to accelerating

the process, and it will help farmers to be familiar with the business climate.

The key to building successful corporate farming is the ability to consolidate the smallholder farmer into a group of farmers. Technical assistance is required and the sharing knowledge and technology to help the farmers run their business under a corporation platform.

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Research Activities

2021 RESEARCH REPORT

By the end of 2021, ICASEPS' research activities are set to finalize. All researchers of the seven research titles conducted since January 2021 have done their respective presentations in a seminar to mark the final phase and then the final report. For your information, the seven research titles are: (1) Strategi pengembangan korporasi petani mendukung pengembangan food estate di Kalimantan Tengah (Farmer's corporation development strategy to support food estate development in Central Kalimantan); (2) Pengembangan mata rantai pasok dan strategi pemulihan agribisnis sayuran dan dampak pandemi Covid-19 (Suppy chain development and strategy to recover vegetable agribusiness and the impact of COVID-19 pandemic); (3) Strategi akselerasi dan penetrasi pasar pangan lokal olahan mendukung diversifikasi pangan (Strategy to accelerate and penetrate market of processed local food to support food diversification); (4) Strategi penguatan cadangan pangan pemerintah daerah dan masyarakat (Strategy to strengthen regional government food reserve and the community); (5) Strategi peningkatan ekspor komoditas pertanian unggulan (Strategy to increase export of strategic agricultural commodities); (6) Kemanfaatan BPP sebagai simpul pelayanan pembangunan pertanian di tingkat kecamatan (Benefit of BPP as agricultural development service node at sub-district level); and (7) Monitoring dan evaluasi dinamika pembangunan pertanian dan perdesaan: Patanas (Panel Petani Nasional) (Monitoring and evaluation of agricultural and rural development dynamics): PATANAS (National Farmers Panel).

ICASEPS Publications

Analisis Kebijakan Pertanian Vol. 19 No. 1, December 2021

1. *Penanggulangan Kemiskinan di Sektor Pertanian: Kasus Pada Program* BEKERJA (Poverty Alleviation on Agricultural Sector: Case on the BEKERJA Program) (Endro Gunawan, Bambang Irawan)
2. *Model Pengelolaan Dana Desa dan Pemberdayaan Petani di Desa Perbatasan Indonesia dengan Timor Leste* (Model of Village Funds Management and Farmers' Empowerement in the Border Village of Indonesia with Timor Leste) (Boanerges Putra Sipayung, Theodorus Fobia, Werenfridus Taena, Umbu Joka)
3. *Strategi Pengembangan Usaha Kopi di Daerah Tertinggal Melalui Pendekatan Bisnis Inklusif di Kabupaten Sumba Barat Daya* (Coffee Business Development Strategy in Underdeveloped Region through Inclusive Business Approach in Southwest Sumba District) (Febtri Wijayanti, Carolina)
4. *Program Menciptakan Manfaat Bersama untuk Meningkatkan Pendapatan Petani Pisang di Kabupaten Tanggamus, Provinsi Lampung* (Creating Shared Value Program to Increase Income of Banana Farmers in Tanggamus District, Lampung Province) (Abdur Rofi)
5. *Peningkatan Kompetensi Penyuluh Pertanian di Balai Pengkajian Teknologi Pertanian (BPTP) dengan Pemanfaatan Media Komunikasi* (Increasing Competency of Agricultural Extension at the Assessment Institute for Agricultural Technology (AIAT) with the Utilization of Communication Media) (Eni Kustanti, Agus Rusmana, Purwanti Hadisiwi)
6. *Kesesuaian Lahan untuk Komoditas Unggulan Pertanian di Kabupaten Labuhanbatu Utara* (Land Suitability for Agricultural Commodities in North Labuhanbatu District) (Regan Leonardus Kaswanto, Ruth Mevianna Aurora, Doni Yusri, Sofyan Sjaf, Simon Barus)
7. *Neraca Ketersediaan Beras di Kalimantan Timur Sebagai Calon Ibukota Baru Indonesia dengan Pendekatan Sistem Dinamik* (Balance of Rice Availability in East Kalimantan as a Candidate for the New Capital of Indonesia with a Dynamic Systems Approach) (Aswan Adi, Dwi Rachmina, Y Bayu Krisnamurthi)

Forum Agro Ekonomi Vol. 39 No. 1, July 2021

1. *Pengembangan Usaha Integrasi Sawit Sapi: Dukungan Legislasi dan Stakeholder* (Development of Integrated Cattle and Oil-Palm Business: Legislation and Stakeholder Supports) (Nyak Ilham, Ashari, IGAP Mahendri, S. Wulandari)
2. *Tinjauan Kritis Terhadap Kebijakan Harga Gabah dan Beras di Indonesia* (The Critical Review of Unhulled Rice and Rice Price Policy in Indonesia) (Rizka Amalia Nugrahapsari, Manuntun Parulian Hutagaol)
3. The Performance of the UPSUS Program Implementation on Rice Production and Farmers' Income (Adi Setiyanto)
4. *Kinerja Agribisnis Mangga Gedong Gincu dan Potensinya Sebagai Produk Ekspor Pertanian Unggulan* (Agribusiness Performance of Gedong Gincu Mango and Its Potential as a Superior Agricultural Export Product) (Ening Ariningsih, Ashari, Handewi P. Saliem, Mohamad Maulana, Kartika Sari Septanti)
5. *Kinerja, Kendala, dan Strategi Program Kredit Usaha Rakyat Sektor Pertanian ke Depan* (Performance, Constraints, and Strategy of the Future Agriculture Sector Public Credit Program) (Rusli Burhansyah)

ICASEPS ASSISTANCE ON APPLICATION OF BROAD-SCALE FRUIT FLY MANAGEMENT TECHNOLOGY (AWM FRUIT FLIES) ON MANGO PLANTS IN SUMEDANG

ICASEPS, in collaboration with the Directorate of Horticultural Crop Protection, Ministry of Agriculture, as part of ACIAR's IndoAWM Project, has conducted important strategic socialization about fruit fly control in tropical fruits. This activity was delivered on October 12th, 2021, in Sumedang, West Java Province. The ICASEPS team was led by Prof. Dr. Handewi P. Saliem and accompanied by Prof. Dr. Saptana. They explained the IndoAWM study from the socio-economic aspect based on the results of the implementation of area-wide management (AWM) activities on mango cultivation in Indramayu and Cirebon, both in West Java province, which is expected to be adopted by farmers in other areas.

The IndoAWM study is an ACIAR-funded project in collaboration with several related institutions. Indonesian Tropical Fruits Research Institute (ITFRI) has been requested to design its technology. Meanwhile, the University of Gajah Mada observes the behavior of fruit flies and designs trap-mounted spots to catch flies. The socialization event in Sumedang was attended by about 80 participants, mainly consisting of mango farmers, extension workers, and plant disrupting organism control officers.

REDESAIN KEBIJAKAN PEMBANGUNAN PERTANIAN: KONTRIBUSI PROFESOR RISET PSEKP 1995–2021

On Thursday, December 30th, 2021, ICASEPS organized an important end-year activity: Launching a book titled Redesain *Kebijakan Pembangunan Pertanian: Kontribusi Profesor Riset PSEKP 1995–2021* (Redesign of Agricultural Development Policy: Contribution of ICASEPS' Research Professors 1995–2021). The event officially opened by the Secretary-General of the Ministry, Dr. Kasdi Subagyono, and presided over by the Director of ICASEPS, Dr. Sudi Mardianto, was attended by about 60 people coming from universities, research institutions, and other related organizations.

During the past 25 years, from 1995 to 2021, ICASEPS has led 18 Senior Researchers to achieve a Research Professor rank within the Ministry of Agriculture, the highest research ranking portfolio for research activities in Indonesia. This is the research rank prepared by the Indonesian Agricultural Research and Development Agency (IAARD) in collaboration with the Indonesian Institute of Sciences (LIPI), which now has been transformed into a new institution, the National Research and Innovation Agency (BRIN). The 18 ICASEPS' Research Professors who make contribution to the publication of this book and the year the Research Professor rank was awarded are Pantjar Simatupang (1995), Effendi Pasandaran (2005), Kedi Suradisastra (2006), Achmad Suryana (2007), Budiman F. Hutabarat (2009), Tahlim Sudaryanto (2009), Muhammad Husein Sawit (2010), I Wayan Rusastra (2010), Dewa K. Sadra Swastika (2010), Erizal Jamal (2011), Agus Pakpahan (2013), Benny Rachman (2019), Saptana (2020), Mat Syukur (2020), Erwidodo (2020), Handewi Purwati Saliem (2021), Sahat M. Pasaribu (2021), and Nyak Ilham (2021).

The entire manuscript was taken from each Research Professor's oration and packed into four different subjects, namely, (a) Agricultural Revitalization for Farmers (consisting of five manuscripts); (b) Land Resource Management for Farmer's Welfare (three manuscripts); (c) Institutional Innovation for Agribusiness Development (five manuscripts); and (d) Redesign of Food and Nutrition Security Development (five manuscripts).

During the opening address, Dr. Kasdi Subagyono expressed his appreciation to ICASEPS for its initiative to publish a compilation book of the ICASEPS's Research Professors as one of the strategic plans to provide an important reference that the agricultural policymakers could revisit. Meanwhile, in his keynote, Dr. Sudi Mardianto emphasized that the preparation of this book was purposively intended to unify all scientific oration into a book that could be useful in development policy preparation now and in the future. Furthermore, this book is also considered as a legacy of knowledge for the next generation.

The book could be accessed through pse.litbang.pertanian.go.id

TECHNICAL GUIDANCE: MARKETING OF MANGO TO MODERN AND EXPORT MARKETS

One of the research collaborations between ICASEPS and ACIAR is titled "Development of Area-Wide Management Approach for Fruit Flies in Mango for Indonesia, Philippines, Australia and the Asia-Pacific Region" (IndoAWM). This study has been carried out since 2018, and recently there has been a dissemination of research results**.** The study sites are Indramayu and Cirebon districts of West Java province, two gedong gincu mango production centers.

ICASEPS plays an important role in focusing on social and economic aspects with the impact analysis of the large-scale technology application of fruit fly control (area-wide management) on mango farmers' income. The potential of increasing mango production should need a broader market with a better price level to improve farmers' income. So far, the main market for gedong gincu mango is limited to traditional markets. The price received by farmers often does not consider the quality of the fruit. Strategic efforts are needed to expand the marketing of this mango to modern and export markets.

To open the horizons of mango farmers, the ICASEPS team held a Technical Guidance titled "Marketing *Gedong Gincu* Mango to Modern Markets and Exports." This technical guidance activity was conducted back to back in Indramayu and Cirebon on November 16–17th, 2021, to help the farmers reduce the fruit flies attack significantly and improve production and its quality through better area-wide management. This technical meeting event was

also directed to improve post-harvest practices and marketing and trade activities.

In her speech to officially open the meeting, Dr. Erma Suryani, on behalf of the Director of ICASEPS, expressed her sincere thanks for the participation of stakeholders. She expected that the meeting could improve mango cultivation with Good Agricultural Practices (GAP) and keep the cultivation direction in business-oriented marketing and farm record keeping while maintaining a friendly and sustainable environment. The event was attended by about 40 participants in each location, consisting of farmers, including youth farmers and women farmer groups, extension workers, and plant protection officers. The participants also obtained direct consultation on penetrating the modern market and entering the global/export market.

Selected resource persons were also invited to deliver their respective expertise during the event, including local agricultural services officers, large mango traders, other business actors, and exporters. Among the delivered materials during the event are (a) Standard Operating Procedure (SOP) - Good Agricultural Practices (GAP), land registration, Good Handling Procedure (GHP), and Prima Certification 3 on mango farming; and (b) Income improvement through *gedong gincu* agribusiness development.

All participants were shown their strong enthusiasm during the event. With communication built through this technical guidance meeting, specific cooperation among the participants is expected. This event initiated the strategic collaboration, and the participants could develop ways to enter modern and global markets for their high-quality mango.

MERDEKA BELAJAR PROGRAM: COLLABORATION BETWEEN ICASEPS AND TIDAR UNIVERSITY

In the context of the Belajar Merdeka Program (Independent Learning), the Faculty of Agriculture at Tidar University in Magelang Regency, East Java Province, collaborates with ICASEPS. Tidar University was sending five students from the Agrotechnology Study Program for an internship at ICASEPS for one week in November 2021.

Dr. Sudi Mardianto, Director of ICASEPS, welcomed and appreciated the collaboration with the academic community of Tidar University. This was conveyed when the Director of ICASEPS received a visit of the Dean of the Faculty of Agriculture and his entourage to the ICASEPS office in November 2021. During the visit, the Dean explained all about the *Merdeka Belajar Program*, which is currently a Ministry of Education and Technology program and is implemented in all universities. On this occasion, the Director of ICASEPS also elaborated the mandate of ICASEPS and several collaborations with other universities.

During the internship, students were given various information about the profile of ICASEPS and material on agricultural development, particularly related to the agriculture socio-economic aspects. The material is provided by ICASEPS researchers on a scheduled basis every day for one week. Among the materials delivered during this one-week meeting are: (a) Agribusiness and commodity supply chains: agricultural commodity agribusiness systems; (b) Marketing of agricultural commodities (domestic and export/import); and (c) Analysis of the competitiveness of agricultural commodity businesses, analysis of agricultural commodity farming, and analysis of agribusiness institutions.

INAUGURATION CEREMONY OF RESEARCH PROFESSORS

ICASEPS congratulates two newly acknowledged senior researchers for their achievement to the rank of professorship, the highest position in research activity in Indonesia, namely Prof. Dr. Sahat M. Pasaribu and Prof. Dr. Nyak Ilham. They have been officially registered as research professors number 156 and 157 at the Ministry of Agriculture level and 623 and 624 at the national level, respectively. They were awarded this prestigious rank in a ceremony held on December 7th, 2021. This is to recognize their achievement through their research activities in the field of agricultural economics.

Professor Sahat M. Pasaribu has been well recognized for his valuable thoughts on agricultural finance and contribution to the development of agricultural insurance in Indonesia. Smallholding farmers are so weak that they need full support to continue farming. To this point, agricultural insurance would be an appropriate response to meet the farmer's interests. Prof. Pasaribu's oration titled *Reformulasi Arsitektur Asuransi Pertanian Mendukung Sistem Pangan Berkelanjutan* (Architecture Reformulation of Agricultural Insurance to Support Sustainable Food System) and summarized as follows.

The demand for agricultural production will continue to increase in line with population growth, while farmers still face difficulties in financing their farming. They are also faced with the risk of crop failure due to natural disasters. Agricultural insurance is intended to reduce the burden of these risks and help the availability of agricultural capital. With the indemnity-based model currently being implemented, agricultural insurance has a high cost and is vulnerable to moral hazard. Therefore, other models are needed that are supported by technology, such as regional yield-based insurance models.

Rice crop insurance (AUTP, introduced in 2015) and cattle/buffalo business insurance (AUTS/K, 2016) schemes have been implemented to protect farmers from losses due to farming risks. The application of agricultural insurance architecture in these two schemes has benefited farmers by using the claim proceeds as working capital.

The government should reduce direct involvement in the implementation of agricultural insurance. The role of the private sector is expanded, and competitive opportunities in the insurance industry must be opened. Insurance partnerships can be further strengthened by providing an integrated credit package that incorporates insurance premiums into loans. The government facilitates the credit scheme and supports the private sector to take part in the implementation of farm business financing. Microfinance institutions in rural areas, both cooperatives and other institutions, are encouraged to help small farmers obtain working capital and protect their farming businesses.

The application of insurance to various strategic commodities also contributes to poverty alleviation. Among the strategic

commodities studied and eligible for insurance are corn, soybeans, shallots, chilies, sugar cane, cocoa, and goats/sheep. Application of productivity-based insurance (area yield-based) can (a) reach more farmers, (b) significantly reduce operating costs, (c) improve production and productivity data of insured commodities, (d) simplify administrative management, and (e) open a healthy competition between insurance models.

The use of information technology in building a database is very relevant to facilitating agricultural insurance implementation. Dissemination of comprehensive information through planned socialization, promotion, and advocacy is very significant in determining the success of a program.

The reformulation of the agricultural insurance architecture is proposed to support a sustainable food system, among others through (a) increasing partnerships and integrating agricultural insurance with farm business financing; (b) developing strategic commodity insurance schemes; (c) providing alternative yield-based agricultural insurance models with the use of technology; and (d) increasing socialization, promotion, and advocacy activities.

Professor Nyak Ilham has been continuously helping the government and contributing thoughts and ideas to improve livestock farmers' income. Beef cattle is one of the protein sources. As a strategic commodity the government prioritizes, his thoughts on how to increase cattle production through policy development reformulation should improve farmers' welfare. The following is the excerpt of Prof. Nyak Ilham oration titled *Reformulasi Kebijakan Pengembangan Sentra Produksi Sapi Potong Berbasis Sumber Daya Pakan* (Policy Reformulation on the Development of Feed-Based Beef Cattle Production Centers):

In agriculture history, Indonesia is experienced in cattle export. However, for the last five decades, Indonesia has been known as the net importer of beef (live cattle and meat). The increasing demand for beef import shows that current policies (on the beef sector) are not adequate to solve the problem of national demand for beef.

The current production system for the beef sector in Indonesia is not designed to measure the competitiveness level nor the comparative advantage that the sector owns. It is reflected in the import and domestic production ratio for beef that showed an increasing trend from 1980 to 2019.

This inauguration is presented to deliver ideas in reformulating national policies on the development of major production areas for beef cattle based on the availability of feed resources. One of the comparative advantages for Indonesia is the integration of beef cattle production at palm oil plantations. Oil Palm by-products from palm oil are considered as the source of feed, and Indonesia also benefits from the richness of local beef cattle genetics.

The concept of the proposed-reformulation policy is to increase the competitiveness of beef cattle products at the on-farm and off-farm levels. At the on-farm level, the important variable is introducing the least-cost diet. While at the off-farm level, competitiveness can be reached by reducing marketing costs and minimizing the weight loss during transportation of the live cattle (distribution process).

The concrete proposal from this concept is to develop a new production area for beef cattle in the oil palm plantation areas. The proposed policy needs to be supported by efforts, among others, (i) to establish self-funded cattle farmers in a group of farmers (cooperative); (ii) to develop feed industry that used oil palm-by products as the ingredients; (iii) to strengthen the institutional supports for the new policy such as Animal Health Centre, the Beef Cattle Breeding Centre and (iii) the Assessment Institutes for Agricultural Technology (AIATs).

Reformulation of the policy on the development of major producing areas for beef cattle needs significant changes of the mindset of decision-makers within the ministries and local government. It sometimes shifts the approach from the centralized decision-making process to the multi-stakeholders' (ministries and local institutions) decision-making process. At this moment, the Ministry of Agriculture has been implementing the strategy by (a) enhancing the collaboration across ministries and local government, (b) empowering the smallholders, and (c) working with the farmers on technology dissemination and assessment.

This collaboration is projected to provide feed for 35.7 million head cattle and will increase the gross domestic product in the agriculture sector to around IDR 357 trillion. Besides the government budget, this policy need supports from Special Allocation Budget (Dana Alokasi Khusus/DAK), Local Government Budget (Anggaran Pendapatan dan Belanja Daerah/APBD), and private sectors involvement (oil palm plantation companies) through their Corporate Social Responsibility/Community Development Budget.

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