Report Highlights:

In June 2020, President Joko “Jokowi” Widodo announced the establishment of a national Food Estate project to increase agricultural production and provide food security for Indonesia’s growing population. The project, which focuses on improving yields on existing farmland as well as developing new agricultural lands, faces an uphill challenge to deliver sustainable production gains following the failure of similar programs under previous administrations.
Background

As Indonesia and other countries began to implement lockdown polices to combat the spread of COVID-19 in the spring of 2020, food security quickly moved to the forefront of policy makers’ pandemic related concerns. On March 31, 2020, the Government of Indonesia (GOI) issued a regulation implementing Large-Scale Social Distancing (locally known as PSBB) to mitigate the spread of COVID-19. The restrictions included the temporary closure of schools and offices, restricted religious activities, limited access to public spaces, closure of social and cultural sites and transportation restrictions. Although businesses that provided services related to food and agriculture and other “strategic industries” were exempt from mandatory closure, officials began to seek ways to ensure both price and availability of key food staples such as rice, which saw prices increase up to 15 percent in March-April. In May 2020, the UN Food and Agriculture Organization (FAO) warned of possible food crises, citing four key areas where the global pandemic could cause or exacerbate existing food crises: declining employment and wages; disruption to world food production and supply; decreasing government revenue; and increasing political instability and conflict. In response, President Jokowi announced the launching of a national Food Estate Project in June 2020, with the goal of increasing food security and agricultural self-sufficiency. The project intends to increase production of strategic crops outside of Java island, where fertile land is increasingly converting to non-agricultural use, and has been added to the 2020-2024 National Strategic Programs (PSN, Program Strategis Nasional). The Jokowi vision for food estates is not new; it follows previous attempts to increase food production through similar projects. In December 1995, President Soeharto issued Presidential Decree No. 82 regarding the One Million Hectare Peatland Development Project (PLG, Proyek Lahan Gambut) in Central Kalimantan. The PLG was designed to support national rice production following years of area decline by converting one million hectares of peatland and swamp for rice cultivation. Between 1983 – 1993, total paddy area decreased from 16.6 million hectares to 13.4 million hectares, a decline of nearly 20 percent. At its time of selection, Central Kalimantan had 5.8 million hectares of swamp area with a population of 1.6 million or only 9 people per square kilometer. The project ended in failure with much of the new lands proving unsuitable for rice cultivation and the majority of the 15,000 trans-migrant families assigned to the area leaving the site. Local populations also reported destruction of natural resources and negative hydrological impacts related to the project. Before the project was halted in 1999, media reported the construction of 222 kilometers of long source canals, 620 kilometers of primary canals, 82 hectares of surrounding embankments, 61,000 hectares of business land, 144,440 hectares of paddy fields, and 14,375 hectares of yard land (land immediately surrounding housing or other buildings).

Based on similar aspirations for boosting food production through expanded agricultural area outside Java island, the administration of President Susilo Bambang Yudhoyono established the so called Merauke Integrated Food and Energy Estate (MIFEE) on August 11, 2010. The vast area of Merauke in Papua, the most eastern province of Indonesia, was selected to align with Presidential Decree No. 5/2007 regarding the Acceleration of Development in Papua and West Papua. MIFEE was designed to be executed in collaboration with 36 investor companies engaged in estate crop plantations, food crops, inland fisheries, animal husbandry, construction, and wood processing industries. Total new agricultural area was targeted at 1.28 million hectares, with an estimated 50 percent for food crops, 30 percent for sugar cane plantation, and 20 percent for palm. Like PLG, MIFEE also failed to reach its goals, encountering resistance from locals and legal challenges. Approximately 90 percent of the targeted area were forest areas which provided a source of livelihood for many locals. Accordingly, the development

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1 See Global Report on Food Crisis, 2020
plans became a flashpoint for local activists concerned about environmental and biodiversity impacts. Additionally, galvanizing private sector investment proved challenging as legal issues related to overlapping land concessions allocated to businesses precluded many investments from moving forward.

**Food Estate 3.0 – Third time’s a charm.**

Despite previous challenges, the Jokowi administration is betting that lessons learned and the comparative advantages of available land, water resources, climate, and socio-cultural conditions will lead the latest Food Estate Project to success where prior iterations failed. In issuing “General Guidelines of Development of a Food Estate Area Based on the Farmer Corporation in Swamplands of Central Kalimantan”, the administration set its sights on turning the former PLG site and other surrounding areas in the Kapuas Regency and Pulang Pisau into a vibrant food estate. The Coordinating Ministry for Economic Affairs reported the potential for developing new rice fields in Central Kalimantan could reach as high as 255,000 hectares. However the Minister of Public Works stated that currently only 165,000 hectares are being planned, 85,456 hectares of which have existing irrigation networks while the remaining 79,142 hectares will require varying degrees of clearing for development. Progress through 2020 includes the rehabilitation of irrigation facilities on approximately 2,000 hectares and identification of a swamp irrigation network that could irrigate another 28,000 hectares by 2021. Planting activities in 2020 were focused on planting intensification on 30,000 hectares of existing rice fields in Pulang Pisau and rice field intensification, duck farming, and coconut plantations in Kapuas District. Additional areas for oranges, coconuts, and shallots are still in the planning phase.

In addition to Central Kalimantan, the new project calls for developing food estates on land in North Sumatera, which also began in 2020, and in South Sumatera, Papua, and East Nusa Tenggara (NTT), which are scheduled to being in a second phase in late 2021 - 2022. In North Sumatra, which is also part of the first phase of development, the target area of 60,000 hectares spreads across four districts: Humbang Hasundutan, North Tapanuli, Central Tapanuli, and Pakpak BharatAn. Commodities planned for development include potatoes, shallots, and garlic. In NTT the development is expected to include 10,000 hectares, 5,000 of which are already being prepared for planting (3,000 hectares for rice and 2,000 hectares for corn). Estates in South Sumatera and Papua are expected in the next several years, with the Papua estate covering some of the same lands under the MIFEE project. Much of the existing agricultural lands that will become part of the food estates are currently owned by farmers or farmer groups. Current plans call for the formation of farmer corporations (legal entities that can take the form of cooperatives or other farmer owned structures) to implement strategic planting programs and reach minimum economies of scale under the project.

The responsibility for implementing the food estate projects falls to various ministries, including the Ministry of Agriculture (establishing farmer institutions, cultivation and harvest guidance), Ministry of Public Works and Public Housing (irrigation and other infrastructure), Ministry of Environment and Forestry (provision of forest areas for food estate development and environmental impact assessment), Ministry of State-Owned Enterprises (investment), Ministry of Villages (transmigration), and Ministry of Agrarian Affairs and Spatial Planning / National Land Agency (land administrative management and certification).
Chart 1. Food Estate Development Areas.

Source: MOA. Blue Provinces are First Phase Food Estate locations. Red Provinces are Second Phase Food Estate locations.

The Ministry of Defense is also involved in food estate development, bearing responsibility for assisting cultivation on newly opened areas through the soon-to-be-established Strategic Logistics Reserve Agency (BCLS, Badan Cadangan Logistik Strategis). The Ministry of Environment and Forestry (MOEF) is expected to take the lead on opening new forested areas for use in food estates. To legally allow the conversion of designated forest area, on October 26, 2020, MOEF issued regulation P.24/2020 on the Provision of Forest Area for Food Estate Development.

The regulation states that ministers, heads of institutions, governors, regents / mayors, or heads of authority bodies who are specially assigned by the government can submit a request to change forest area designation or determination of Forest Area for Food Security (KHKP, Kawasan Hutan untuk Ketahanan Pangan). Changes in the designation of forest areas for food estate development may be carried out in Convertible Production Forest Areas (HPK, Hutan Produksi yang dapat dikonversi) under a Forest Area Release scheme. The HPK area must meet the following criteria:

a) is not burdened with a Forest Area use permit, Forest Utilization Permit and / or other permits from the Minister, and is not in a Forest Area designated as a Forest Area with Special Purpose (KHDTK, Kawasan Hutan Dengan Tujuan Khusus);

b) burdened with a forest utilization permit, after being released from the working area;

c) unproductive and / or productive; and

d) unproductive, can be in areas that have or have not been reserved for land redistribution for agrarian reform.

As is often the case in Indonesian regulations, the language used is less than clear. However, observers believe it provides a mechanism for converting existing protected forest areas into areas eligible for food estate development.
Doubts and Concerns

Regulation P.24/2020 has raised concerns, especially from NGOs focused on the environment and deforestation, that the latest food estate project will strengthen corporate dominance over Indonesia's forest areas. The regulation adds new licensing variants in forest areas which they expect will lead to significant clearance rate increases. A prominent environmental NGO in Indonesia reported that currently 33.45 million hectares (26.5 percent) of forest areas have been plotted for corporate business interests. In the past 20 years, more than 26 million hectares of forest area have been released for business purposes, including areas under the PLG and MIFEE projects which resulted in environmental damage.

Experts have expressed concerns related to land worthiness, infrastructure, cultivation technology, and social and economic impacts due to the compressed timeline for implementation and a lack of government capacity and feasibility studies. Such skepticism has been expressed by a scholar from IPB University (Agricultural Institute of Bogor), who noted previous failed attempts and highlighted ongoing socio-cultural challenges to bring trans-migrants to remote locations such as Central Kalimantan. Additionally, a member of the Central Food Security Council Expert Working Group (an inter-ministerial group that reports directly to the President), suggested that such large-scale projects are unlikely to provide much additional food security, citing previous failed attempts. During a September 14, 2020 hearing, a member of the House of Representatives (DPR) from Agriculture Commission IV also expressed concerns, questioning MOA’s target of planting 30,000 hectares in Central Kalimantan during the period of September to December 2020 when most of the supporting infrastructure appeared heavily damaged during an official visit to the area in February 2020. As recent as March 2021 another member of Commission IV raised concerns over conditions in the food estate areas meeting production expectations. He emphasized that the DPR has the right to terminate the food estate program if it cannot demonstrably boost national food production.

Evaluating the progress of recent food estate projects has proved challenging due to travel restrictions and often contradictory statements from public officials regarding the scale and types of activities undertaken. Public pronouncements have often conflated various statistics for increasing area across different land types in numerous regions. Exactly what GOI resources will be allocated to food estate production remains difficult to determine. Under the 2021 National Budget, the GOI states the development of food estates in Central Kalimantan, South Sumatera, and Papua are aimed at increasing food production by empowering existing farmers’ land and small farming investment on a total area of 165,000 hectares. However, Ministry of Finance Circular Letter No. S-30/2021 notes a reduction in the national budget allocation for the agricultural sector by Rp. 6.3 trillion ($434.8 million). Meanwhile, some crop harvests under the new food estate plan have commenced, often with great fanfare. However, recent reports also indicate that initial paddy harvests in Pulang Pisau have generated significantly lower yields (1.5 tons of dry paddy per hectare compared to an average 3.5 to 4 tons per hectare) due to the timing of planting and pests.

It remains to be seen if the Jokowi administration can learn from the failures of past food estates to expand production of staple food crops without incurring environmental degradation and deforestation. In addition to challenges related to land title, human rights, infrastructure, and weather, expanding agriculture to newly opened areas or increasing productivity will require more farmers, new technologies, and better agricultural practices and supply chains. One certainty remains, as the pace of
agricultural land conversion on Java increases, the need to increase productive agriculture outside of Indonesia’s most fertile region will remain a priority for years to come.

Attachments:

No Attachments.