

Implementation of the Food Estate Program from the Perspective of Spatial Planning and Environmental Law in Indonesia

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ABSTRACT

The food estate program initiated by the government since the new order era until now has experienced dynamics in its implementation. In various periods, this program often has negative impacts on the environment, ranging from the conversion of forest land, damage to peat ecosystems, to agrarian conflicts with local communities. In the modern era, the implementation of the food estate still faces the same challenges, especially in terms of spatial planning law and environmental sustainability, which have drawn criticism from various parties. However, the government has also shown an adaptive response to this failure by designing various improvement efforts. Through land suitability evaluation, infrastructure optimization, empowerment of local farmers, and the application of the Social-Ecological System (SES) approach, the government is trying to realize more sustainable food governance and maintain national food security. The findings revealed failures in spatial planning for food policy, resulting in land conversion, environmental and ecosystem damage, forest fires, and a lack of environmental carrying capacity. Recommendations call for the readiness and synchronization of spatial planning with master plans for food regions, using an ecological approach.

Keywords: Environment; Food Estate; Spatial Planning,

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INTRODUCTION

Food estate is a concept or program for developing the agricultural sector designed to encourage massive increases in food production through the use of agricultural land on a large scale. According to Law Number 18 of 2012 concerning Food (the Indonesian Food Law), food is defined as anything that comes from biological sources of agricultural products, plantations, forestry, fisheries, livestock, water, and water, both processed

and unprocessed, which are intended as food or drink for consumption.¹ To meet the increasing need for food, the government has finally promoted the food estate program to meet food security. Food Estate launched by the government Indonesia to increase national food production to meet food needs and maintain food security which is usually caused by several factors, such as the large amount of land that has changed function infrastructure, climate change and disasters. Food estate is designed to encourage massive increase in food production through the utilization of agricultural land on a large scale. To meet the increasing need for food, the government has finally promoted the food estate program to meet food security. Food security is meant according to isa condition where food is fulfilled for the country and individuals, which is reflected in the availability of sufficient food, both in quantity and quality. Also means that a food estate is a large-scale food business which is a series of activities carried out to utilize natural resources through human efforts by utilizing capital, technology and natural resources a others fork produce food products for use fulfilling human needs in an integrated manner including food crops, horticulture, plantations, livestock, and fisheries in a Forest Area. The forest area used is a forest area that is indeed designated for food security interests with the development of a food estate.² But what often becomes a problem is use of an area that is not in accordance with its function, so that it can have a significant impact on spatial planning, the environment and the surrounding community.

The failure of food estates is not a new phenomenon. One study found that food estate failure is a recurring pattern resulting from weak spatial planning, inaccurate land allocation, and low compliance with environmental sustainability principles. The legalization of food estates in Central Kalimantan actually encouraged the conversion of forest areas that were not in accordance with spatial planning designations, resulting in ecological damage and conflicts over land use.³ Similar findings describe food estates as a form of "ecocide," as massive land clearing results in soil degradation, loss of biodiversity, and disruption of the hydrological balance vital to indigenous communities.⁴

Meanwhile, a study by Mohammad Hidayaturrahman et al. showed that food estate projects in Central Kalimantan failed to achieve their food production targets and were instead dominated by political interests and weaknesses in forestry law. Many food estate locations did not align with land suitability and regional spatial plans, thus potentially failing agronomically and ecologically from the outset. This scientific evidence demonstrates that the primary problem in food estate projects lies in the

¹ Law Number 18 of 2012 concerning Food (Food Law), art. 1.

² Law Number 26 of 2007 concerning Spatial Planning, art. 1.

³ Katriani Puspita Ayu, "Kebijakan Perubahan Lahan Dalam Pembangunan Food Estate Di Kalimantan Tengah," *Journal Ilmu Sosial, Politik Dan Pemerintahan* 11, no. 1 (2022): 24–36, <https://doi.org/10.37304/jispar.v11i1.4203>.

⁴ Felisitas Friska Dianing Puspa and Nicolas Kriswinara Astanujati, "Ekologi Politik Dan Pengelolaan Pangan Di Kalimantan Tengah: Food Estate Sebagai Bentuk Ekosida Dan Eksternalitas Negatif Pembangunan Berkelanjutan," *BALAIRUNG: Jurnal Multidisipliner Mahasiswa Indonesia* 3, no. 2 (2022): 81–101, <https://doi.org/10.22146/balairung.v3i2.96412>.

disharmony between policy, spatial planning, and the ecological conditions of the region, not solely in agricultural technical aspects.⁵

Previous experiences across different administrations show that food estate initiatives repeatedly fail not only due to technical agricultural issues but also because of weak spatial planning and environmental mismanagement. From the Suharto era to the SBY, Jokowi, and now Prabowo administrations, food estate projects often resulted in land conversion that conflicted with designated spatial functions, leading to environmental degradation and adverse impacts on surrounding communities. These recurring failures highlight that the main problem does not lie solely in farming techniques but rather in the absence of coherent spatial planning, ecological suitability, and legal certainty.

Several environmental law studies indicate that the food estate policy has created regulatory inconsistencies, particularly where protected forest areas are converted under lower-level regulations that contradict higher forestry norms. Maskun et al. (2021) provide a comprehensive legal analysis showing that the food estate program introduced through Minister of Environment and Forestry Regulation Number 24 of 2020 creates a serious norm conflict because it allows the conversion of protected forests into agricultural zones. This policy contradicts higher forestry laws that classify these areas as conservation zones with restricted activities. They argue that such regulatory inconsistencies not only weaken the hierarchy of environmental regulations but also open the door to massive deforestation, disruption of forest ecosystems, and loss of biodiversity. This research also highlights that the food estate expansion threatens Indonesia's climate change mitigation goals, especially because forest conversion represents one of the largest sources of greenhouse gas emissions. Their study ultimately shows that the food estate program fails to align with sustainable spatial planning principles and creates long-term environmental risks.⁶

Meanwhile, Abdulgani & Savitri (2025) take a historical and political economy approach, demonstrating that Indonesia's food estate initiatives are not merely agricultural programs, but instruments of state power intertwined with capital expansion. They trace food estate projects from the Dutch colonial era, the PLG project during Suharto, MIFEE in Merauke, to contemporary programs under Jokowi and Prabowo. Their study reveals that these initiatives consistently rely on coercive mechanisms such as land dispossession, militarization, and the marginalization of Indigenous communities. They argue that food estates operate under a plantation governance model, where land is treated as an extractive commodity rather than a socio-ecological system. This model results in monocropping, ecological degradation, and failures rooted in environmental unsuitability particularly when food estates are placed in peatlands, drylands, or

⁵ Mohammad Hidayaturrehman et al., "Food Estate Development: Political-Economic and Legal Perspectives," *Indonesian Journal of Advocacy and Legal Services* 7, no. 2 (2025): 467–506, <https://doi.org/10.15294/ijals.v7i2.31423>.

⁶ M Napang et al., "Detrimental Impact of Indonesian Food Estate Policy: Conflict of Norms, Destruction of Protected Forest, and Its Implication to the Climate Change," in *IOP Conference Series: Earth and Environmental Science*, vol. 824 (IOP Publishing, 2021), 12097, <https://doi.org/10.1088/1755-1315/824/1/012097>.

ecologically fragile forest zones. Their findings emphasize that the persistence of food estates reflects state capital interests rather than genuine food security needs.⁷

In addition, Lasminingrat & Efriza (2020) explain the revival of food estate programs as part of Indonesia's response to global food crisis threats and rising non-traditional security issues. However, their study examines how major food estate projects—such as the Mega Rice Project (PLG) in Kalimantan and MIFEE in Papua—collapsed due to weak institutional coordination, poor environmental planning, and the absence of ecological feasibility studies. They show that policy decisions were often made rapidly at the political level without adequate assessment of soil conditions, water availability, forest function, or community land tenure. As a result, these projects triggered environmental damage, social conflict, and economic inefficiency. Their research highlights a persistent gap between the government's political narrative of food security and the limited capacity of institutions to manage land use sustainably.⁸

Collectively, these expanded studies demonstrate that the recurring failure of food estate programs is rooted in structural regulatory inconsistencies, coercive land governance, and weak spatial planning, not merely technical farming problems. This underscores the need for a legal and spatial planning-based analysis, which remains underexplored in the existing literature.

This is also exacerbated by the impact of the Job Creation Law on the environmental, spatial planning and food legal regime, which has systemically shifted the orientation of natural resource protection towards accelerating investment and national strategic projects. In the environmental aspect, changes to Law Number 32 of 2009 through the Job Creation Law have simplified licensing instruments and weakened the preventive function of AMDAL as a tool for controlling environmental impacts, so that large-scale business activities including food estate programs have the potential to be carried out without adequate environmental supervision.⁹ This weakening is considered to be contrary to the precautionary principle and risks increasing land degradation, water pollution and loss of biodiversity.¹⁰

At the same time, the Job Creation Law also has serious implications for spatial planning, especially through weakening the binding force of regional spatial planning (RTRW) and centralizing licensing authority at the central level. The flexibility of changes in spatial use for the sake of investment and large-scale food projects has led to increased conversion of agricultural land and forest areas, which is not always in line with the

⁷ Fuad Abdulgani and Laksmi Adriani Savitri, "State, Capital and Coercion in Indonesia's Food Estates," *Journal of Agrarian Change* 25, no. 4 (2025): e70031, <https://doi.org/10.1111/joac.70031>.

⁸ Lula Lasminingrat and Efriza Efriza, "The Development of National Food Estate: The Indonesian Food Crisis Anticipation Strategy," *Jurnal Pertahanan Dan Bela Negara* 10, no. 3 (2020): 229–48, <https://doi.org/10.33172/jpbh.v10i>.

⁹ Indonesian Center for Environmental Law, "Berbagai Problematika Dalam UU Cipta Kerja Sektor Lingkungan Dan Sumber Daya Alam," #3 - Seri Analisis, 2020, <https://icel.or.id/media/pdf/BerbagaiProblematikaDalamUUCiptaKerjaSektorLingkungandanSumberDayaAlam1.pdf>.

¹⁰ Sigit Riyanto et al., "Kertas Kebijakan Catatan Kritis Terhadap UU No 11 Tahun 2020 Tentang Cipta Kerja," *Sell Journal* 5, no. 1 (2020): 1.

carrying capacity and capacity of the environment.¹¹ This condition creates disharmony between development policies and the principles of sustainable spatial planning, as well as increasing the potential for agrarian conflict in food estate development areas.

In conclusion, the Job Creation Law has weakened environmental and spatial planning safeguards by prioritizing investment and national strategic projects, thereby reducing preventive environmental controls and increasing land conversion risks. This shift not only threatens ecological sustainability but also undermines orderly spatial planning and intensifies agrarian conflicts, particularly in the implementation of large-scale food estate programs.

METHOD

The research method used in compiling this article is qualitative legal research, with qualitative descriptive analysis. According to Sukmadinata, research with descriptive analysis is a form of research that aims to describe systematically, factually, and accurately the phenomena that occur, both natural phenomena and phenomena produced by humans. These phenomena can include activities, characteristics, changes, relationships, similarities, or differences between one phenomenon and another.¹² The data used are secondary data, with primary legal materials of related laws and regulations. The approach used in this study is the approach of laws and regulations, while other secondary data are various literature books, journals, and research articles, as well as news media. This article not only discusses the food estate policy as a contemporary program, but also traces its traces from the New Order era to the present. This approach provides a historical dimension. This historical approach provides a more comprehensive dimension in understanding how food security policies develop, including planning patterns, implementation, and their impacts on spatial planning and environmental law from time to time.

Factors of Food Estate Failure from Spatial Planning & Environmental Law Aspects, as well as the Impact of the Job Creation Law on the Food Law, Spatial Planning Law, and Environmental Law.

Factor The cause of the failure of the food estate programs that were launched was generally due to the selection of locations that were not in accordance with the spatial designation, such as protected forest areas and peatlands that were used as food estate land. without going through a thorough study of land suitability and ecological carrying capacity. This failure ultimately brings about various impacts, in terms of space, environment, society or social and economic. This is contrary to the principles of safe, comfortable, productive, and sustainable spatial planning as mandated in Article 3 of Law Number 26 of 2007 concerning Spatial Planning. In addition, it also contradicts the

¹¹ I Gede Yudi Arsawan and I Gede Yusa, "Dampak Perubahan Pengaturan Penataan Ruang Pasca Pengesahan Undang-Undang Cipta Kerja," *Amsir Law Journal* 5, no. 1 (2023): 13–22, <https://doi.org/10.36746/alj.v5i1.294>.

¹² Nana Syaodih Sukmadinata, *Metode Penelitian Pendidikan, Cet. 12, Remaja Rosdakarya* (Bandung: Remaja Rosdakarya, 2017).

principles of environmental management based on Law Number 32 of 2009 concerning Environmental Protection and Management. The impact is quite significant, there is deforestation, loss of peat ecosystems, increased potential for disasters such as fires and floods, and agrarian conflicts due to land conversion that does not involve local communities.

Based on peat monitoring data, the following is a table of rice production results planted on peat and non-peat lands in West Aceh, Jambi, Central Kalimantan, Lumajang, East Java, Semarang, Central Java, and Badung, Bali.

Table 1. Rice Production on Peatland and non-peatland

	Rice on Peatlands			Rice on Mineral Lands		
	Blang Ramee Village, West Aceh	Tanjung Jabung Timur District, Jambi	Katingan District, Central Kalimantan	Senduro Lumajang Village	Banyu Biru Sub-District, Semarang	Badung District, Bali
Rice productivity	1.5 tons/ha	2.9 tons/ha	1.9 tons/ha	7.2 tons/ha	7.3 tons/ha	6.2 tons/ha

Description: This comparison only considers the rice production on peatland and non-peatland. Parameters such as type of rice, climate/weather, management/cultivation techniques, and other treatments for rice were not taken into consideration.

Sources: Pantau Gambut (2021), Food Estate in Central Kalimantan: Instant Policy Full of Controversy.

Data from Pantau Gambut shows that many areas targeted by food estates, such as Central Kalimantan, Papua, and Sumatra, are experiencing environmental damage and loss of biodiversity. Failure which arises not only due to errors in spatial and environmental planning, but also driven by non-technical factors. Such as lack of infrastructure, lack of adoption of modern technology and rarely involving the surrounding community, so that many people are affected by this food estate project, even to the point of agrarian conflict.¹³

Based on the description, this study also highlights the importance of the government's role in designing preventive and responsive measures to prevent and overcome various problems, especially in food security projects such as food estates. These efforts include more mature planning and studies, involving local communities in every stage of policy, and strengthening social, economic, and environmental aspects. Responding to this, the government together with the Indonesian House of Representatives and the Ministry of National Development Planning/Bappenas proposed strategic steps, such as evaluating land suitability, strengthening agricultural infrastructure, and preparing a master plan based on the Social-Ecological System (SES) approach. This approach emphasizes the principles of sustainability, inclusiveness, and integration from upstream to downstream, in order to realize a modern, resilient, and environmentally friendly agricultural system.

¹³ Pantau Gambut, "Food Estate Incentral Kalimantan,Instant Policy Full of Controversy," 2021, [https://foodestate.pantaugambut.id/frontend/files/Kajian Food Estate PG_translated.pdf](https://foodestate.pantaugambut.id/frontend/files/Kajian_Food_Estate_PG_translated.pdf).

The food estate policy is one of the government's strategies in responding to the challenges of national food security through large-scale land intensification and extensification. However, in practice, this program often faces obstacles that cause a mismatch between the stated objectives and the results achieved. One important dimension that determines the success or failure of this program is the spatial and environmental aspects. Problems such as location mismatch, environmental degradation, and land use conflicts are often the main causes of failure.

The following are the failure factors of the food estate program in each era of government

a) One Million Hectare Peatland Project (PLG) - 1995

First time food estate initiated during the Soeharto administration in the year 1995, President Soeharto launched a food estate project through the One Million Hectare Peatland Project (PLG) based on Presidential Decree Number 82 of 1995. The main objective of this project was to increase national rice production in order to achieve food self-sufficiency and reduce dependence on rice imports. However program food estate Soeharto is considered a failure due to factors that caused by land incompatibility, resulting in forest and land fires.¹⁴ One of the main factors in the failure of the 1955 peatland project was weak planning. Lack of in-depth study of peatland characteristics, including aspects of humidity, topography, and soil element content cause. The land that was developed turned out to be unsuitable to support agricultural activities optimally.¹⁵ Factor a see the function of peatlands in the food estate program in the past resulted in the loss of forest cover and peat ecosystems on a large scale. Peatlands are often considered unproductive or "idle land," whereas in reality, peat ecosystems have an important role as a life support for the surrounding community and a habitat for various flora and fauna. If peatlands are damaged, the recovery process is very difficult and takes a long time. Even until now, the former Peatland Project (PLG) area from the 1995 era still experiences repeated fires every dry season. Peatlands that have been cleared for this project continue to experience degradation, and forest fires that occur every year further worsen the condition of the ecosystem. This impact shows that large-scale agricultural policies that do not consider the ecological characteristics of the land can actually lead to environmental destruction that is difficult to repair.¹⁶

b) Merauke Integrated Food Energy Estate (MIFEE) - 2010

Next, the Merauke Integrated Food Energy Estate MIFEE food estate program in Papua is a program that was continued by the 6th president Susilo Bambang Yudhoyono at that time, this project was expected to provide food security to

¹⁴ Devi Junita, "Melihat Food Estate: Solusi Atau Kontroversi?," *Jurnal Post*, 2024, <https://jurnalpost.com/melihat-food-estate-solusi-atau-kontroversi/67580/>.

¹⁵ Alsafana Rasman, Eliza Sinta Theresia, and M Fadel Aginda, "Analysis of the Implementation of the Food Estate Program as a Solution to Indonesia's Food Security," *HJTAS (Holistic: Journal of Tropical Agriculture Sciences)* 1, no. 1 (2023): 36–68, <https://doi.org/10.61511/hjtas.v1i1.2023.183>.

¹⁶ Pantau Gambut, "Food Estate, #KenapaBuruBuru?," 2023, <https://foodestate.pantaugambut.id/>.

the Papuan people and improve the welfare of the local community. However, the peatland development project at that time ignored the social dimensions and economic conditions of the local community. The implementation of the project did not consider the rights of the community to the land and natural resources that they had managed for generations. The government immediately granted logging concession permits and began land conversion without recognizing or respecting the rights to use land that was legally owned by the local community.¹⁷ This is one of the factors that caused the failure of the MIFEE project with minimal support from the local community. The implementation of this project also did not consider the aspirations and rights of the indigenous Papuan people who have inhabited the area for hundreds of years.¹⁸

c) Ketapang Food Estate - 2013

Lack of Manpower and social impacts are seen in the food estate project in Ketapang in the era SBY becomes some of failure factors are also caused by lack of available labor to work the land. Managing rice fields on peatlands requires around 40 to 60 people per hectares for the harvesting process, but the project is unable to meet the labor needs in that number. In addition, farmers who work the land do not receive adequate assistance, either in terms of training in sustainable peatland management or in terms of financial support. The lack of certainty of wages for workers in the loss-making rice field printing project further exacerbates the situation. As a result, many transmigrant communities who were initially expected to be the main workforce in this project have to find other income as casual laborers or odd jobs to survive. This condition shows that the planning of the food estate project does not consider social and economic aspects, society can actually worsen their welfare, instead of providing the promised benefits.¹⁹

d) Food Estate in the Jokowi Administration

OnThe 3rd era of Jokowi's government, where the rice field printing program on peat land and the MIFEE project were continued under the name of food estate. The project area was expanded to include Papua, Maluku, Kalimantan, Sumatra, NTT, and Java with a target of printing 3.1 million hectares of land in 21 locations spread across 11 provinces. one of them The factor causing the failure of this food estate project was the forced change in planting patterns which resulted in crop failure and less than optimal production results for the following period. Although various parties have warned of the potential for failure and conflict with the Constitution and the Agrarian Reform agenda, the government continues with this project. Food estate in the Jokowi era is considered a new form of *cultuur stelsel* that has the characteristics of land exploitation. The

¹⁷ Rasman, A. Theresia, S, E. Aginda, F, M., *Op.Cit.*

¹⁸ Longgena Ginting and Oliver Pye, "Resisting Agribusiness Development: The Merauke Integrated Food and Energy Estate in West Papua, Indonesia," *Advances in Southeast Asian Studies* 6, no. 1 (2013): 160–82, <https://doi.org/10.4232/10.ASEAS-6.1-9>.

¹⁹ *Ibid.*

Jokowi era food estate project is the same as throwing yourself into the same hole, on the grounds of fulfilling the food crisis due to the Covid-19 pandemic but instead showing many failures like the previous food estate style, again the project failed due to incorrect use of land. This means that the Jokowi era food estate program is a repeat of the failure that threatens the sustainability of spatial planning for the community and habitat as well as sustainability for the environment.

e) Food Estate in the Prabowo Administration

Under Prabowo's administration, the Ministry of Agriculture continued and expanded the food estate program with the target of increasing national food production and achieving self-sufficiency in the next 3-4 years. Tasked the Ministry of Agriculture to accelerate the program to create 3 million hectares of rice fields in Merauke, Papua, Kalimantan, and Sumatra.²⁰ In the first 100 days of President Prabowo's leadership, the Pantau Gambut organization mapped a number of evidences of the failure of the food estate program in Central Kalimantan. The findings include forest fires and unproductive rice field intensification, with dry grain production reaching only 3.5 tons per hectare. On Friday, January 31, 2025, the National Coordinator of Pantau Gambut said that in addition to land incompatibility, his party also found areas that were left abandoned and forest fires that caused the release of hundreds of thousands of tons of carbon dioxide into the air.²¹ However, in an interview with several journalists with the theme "the president answers" President Prabowo stated that in 150 days of his leadership, he managed to overcome the rice crisis that occurred in early 2025 with food self-sufficiency. This statement certainly gives hope to the community that Indonesian agriculture will continue to develop without causing negative impacts, while being able to improve community welfare.

Food estate program placed in a location that is not in accordance with its intended use such as protected forests and peatlands became one of the main factors of the failure of the program, considering that land is a key element in the success of agriculture. For example, the food estate program in Central Kalimantan tried to change protected forest areas into agricultural land, even though peat land has an important ecological role in maintaining biodiversity and the balance of its own environment. Because of its unsuitable nature for agriculture, forced conversion of peatlands actually risks causing ecosystem damage and failing to support optimal agricultural productivity. Therefore, the government should stop the practice of converting peatlands and protected areas

²⁰ Sri Nurhayati Qodriyatun and Rachmat Sawalman, "Food Estate Di Era Prabowo: Solusi Swasembada Atau Ulangi Kesalahan Lama?," *Kajian Kebijakan Pertanian Nasional*, 2024, [https://berkas.dpr.go.id/pusaka/files/isu_sepekan/Isu Sepekan---I-PUSLIT-November-2024-189.pdf](https://berkas.dpr.go.id/pusaka/files/isu_sepekan/Isu%20Sepekan---I-PUSLIT-November-2024-189.pdf).

²¹ Dian Rahma Fika et al., "100 Hari Kabinet Prabowo: Food Estate, Lumbung Pangan Atau Masalah?," *Tempo.co*, 2025, <https://www.tempo.co/ekonomi/100-hari-kabinet-prabowo-food-estate-lumbung-pangan-atau-masalah--1202006>.

for agriculture and instead choose more productive and strategic land, in accordance with the principles of sustainability and good spatial planning.²²

Table 2. Failure Factors of the Food Estate Program Regarding Spatial Planning and Environmental Law Aspects

Program Name	Key Factors of Failure	Legal Aspects of Spatial Planning	Environmental Law Aspects
1 Million Hectare Peatland Project (PLG)	Inconsistencies in the selection of food estate locations, especially with spatial plans and the absence of land suitability analysis, caused the project to fail ecologically.	The land mismatch was caused by the project not taking into account the Spatial Planning Law and Regional Spatial Planning Regulation (RTRW) and the lack of in-depth government studies in selecting the land location.	There is damage to peat ecosystems, decline in biodiversity, release of large amounts of carbon emissions due to drying of peat, and forest fires, which are contrary to the principles of environmental management in the Environmental Protection and Management Law, Forestry Law.
Merauke Integrated Food Energy Estate MIFEE	Its implementation does not take into account the rights of the community to the land and natural resources that they have managed for generations.	The project is not in line with local spatial planning and does not accommodate customary areas that have been managed by the community for generations.	Large-scale land expansion causes deforestation, soil degradation and damages community water resources.

²² Pranowo, Ganjar. (2025). *Malapetaka Food Estate*, Youtube. Accessed on Maret 24, 2025. <https://www.youtube.com/watch?v=KQu9MplbSeE&t=102s&pp=ygUaZ2FuamFyIHByYW5vd28gZm9vZCBlc3RhdGU%3D>

<p>Ketapang Food Estate</p>	<p>Around 50 farming families claim that their land was taken over by the company without consent or compensation, giving rise to serious conflicts that hamper the smooth running of the agribusiness project and land clearing that damages fertile soil layers causes crop failures throughout the area.</p>	<p>Land acquisition without consent and compensation indicates weak control over spatial use and neglect of land rights, especially those held by local communities through customary or hereditary means.</p> <p>Land clearing without paying attention to regional spatial planning (RTRW) has the potential to result in land use that is not in accordance with its intended use,</p>	
<p>Third Era Food Estate</p>	<p>There is forced change in planting patterns which results in crop failure and many water channels are not made for agricultural irrigation.</p>	<p>The lack of irrigation channels indicates weak integration between agricultural planning and regional spatial infrastructure.</p>	<p>Forcing changes in cropping patterns can damage the balance of the soil ecosystem, losing fertility due to inappropriate cropping patterns. The incompatibility of plants with environmental conditions causes less than optimal harvest results, which has an impact on food security. The lack of adequate irrigation channels has the potential to cause waterlogging or local drought, which has an impact on soil moisture and plant water needs.</p>

Source: Rasman, A. Theresia, S, E. Aginda, F, M. (2023). Ginting, L., & Pye, O. (2013). Monitor Peat. (2025).

Based on the above failure factors, this generally occurs due to a lack of in-depth study of land suitability, environmental carrying capacity, and ecological risks. Mapping of food estate land is often done in a hurry without considering spatial zoning and environmental management based on the Environmental Protection and Management Law and the Spatial Planning Law Spatial Planning to Regional Regulations on Regional Spatial Planning (RTRW). As a result, many unsuitable lands such as peatlands and protected forests are converted into agricultural land. This mismatch not only results in low land productivity, but also increases the risk of environmental damage that impacts the surrounding community and project failure due to incorrect land selection.²³ And The failure of Food Estate is not only caused by technical and ecological obstacles, but also by neglected social impacts, where project location determination often ignores the rights of indigenous communities and local land use rights. Implementation that does not involve adequate community participation has triggered serious agrarian conflicts, such as what occurred in Kapuas Regency, Central Kalimantan, which ultimately hampered the smoothness and sustainability of large-scale agricultural programs.²⁴

Some of the factors of this failure were also exacerbated by regulatory changes in the Job Creation Law. The Job Creation Law No. 11 of 2020 jo No. 6 of 2023 is an omnibus law that revises more than 70 previous laws, including Law No. 18 of 2012 on food, Law No. 26 of 2007 on spatial planning, and Law No. 32 of 2009 on the environment. This revision aims to simplify regulations, facilitate investment, and encourage economic growth, but has often been criticized for its potential to weaken environmental protection, food safety, and spatial planning.

a) Impact on the Food Law

Changes to food regulations through the Job Creation Law tend to weaken protection for domestic food production. Several import restrictions have been relaxed, allowing food imports without having to wait for a national production shortage. In its article, "World Food Day Commemoration: SPI Urges Revocation of the Job Creation Law, Which Hinders Indonesia's Food Sovereignty," the Indonesian Farmers Union (SPI) emphasized that these changes have the potential to threaten food sovereignty and harm smallholder farmers. When imports are facilitated, the government's incentive to develop national production, including through food estates, becomes increasingly weak. As a result, food estates tend to develop into large-scale agribusiness projects, rather than strategies to strengthen food security based on local farmers.²⁵

b) Impact on the Spatial Planning Law

The most significant impact of the Job Creation Law on spatial planning is the opening of space for national strategic projects to be implemented even though

²³ Law Number 26 of 2007 concerning Spatial Planning, art. 3.

²⁴ B. Kurniawan and I. Setiawan, "Konflik Agraria Di Tengah Proyek Food Estate: Studi Kasus Kabupaten Kapuas, Kalimantan Tengah," *Jurnal Ilmu Sosial Dan Ilmu Politik (JSP)* 28, no. 23 (2024): 280.

²⁵ Admin SPI, "Peringatan Hari Pangan Sedunia, SPI Desak Cabut UU Cipta Kerja Yang Menghambat Kedaulatan Pangan Indonesia," Serikat Pekerja Indonesia, 2024, <https://spi.or.id/peringatan-hari-pangan-sedunia-spi-desak-cabut-uu-cipta-kerja-yang-menghambat-kedaulatan-pangan-indonesia/>.

they are not in accordance with regional spatial plans (RTRW). The Job Creation Law also weakens the role of local governments in spatial control and reduces public participation in the spatial determination process. The impact on the food estate program is significant, as food estate locations can be determined in a top-down manner, including in ecologically vulnerable areas such as forests and peatlands.²⁶ Furthermore, the simplification of business licensing after the Job Creation Law increased the potential for overlapping permits and unclear spatial use. This situation accelerated the emergence of spatial conflicts and land use that was not based on ecological suitability, ultimately contributing to the failure of the food estate.

c) Impact on the Environmental Law

In the environmental sector, the Job Creation Law introduces changes that substantially weaken environmental protection instruments. Changes to the Environmental Impact Assessment (EIA) mechanism reduce public participation, simplify permitting procedures, and increase the likelihood of large projects proceeding without adequate environmental impact assessments. A risk-based licensing model replaces formal environmental permits, significantly easing oversight.²⁷

From a law enforcement perspective, the changes to environmental criminal provisions in the Job Creation Law actually weaken the deterrent effect on polluters, both individuals and corporations. The weakening of sanctions and corporate accountability provisions has emboldened companies to undertake large-scale land clearing without adequate ecological protection. The consequences are evident in the implementation of food estates, particularly in Central Kalimantan and East Nusa Tenggara, where reports of forest destruction, increased sedimentation, and peat degradation have followed massive land clearing, facilitated by relaxed licensing arrangements post-Job Creation Law.²⁸

Thus, amendments to the Food Law, the Spatial Planning Law, and the Environmental Law through the Job Creation Law create a legal framework that tends to "facilitate projects" while ignoring the principles of ecological sustainability and spatial certainty. The cumulative impact of these three revisions to the law accelerates the failure of food estates because food policy becomes incompatible with the sovereignty of local farmers, spatial planning loses regulatory power and ecological control, and environmental protection is weakened through the simplification of the Environmental Impact Assessment (EIA) and sanctions. Thus, the failure of food estates is not only technical but also a direct result of structural changes in legislation influenced by the Job Creation Law.

²⁶ I Gede Yudi Arsawan & I Gede Yusa, *Loc.Cit.*

²⁷ Fauzan Ramon, "Tinjauan Yuridis Undang-Undang Nomor 11 Tahun 2020 Tentang Cipta Kerja Terhadap Perubahan Substansi Analisis Mengenai Dampak Lingkungan," *Yuriska: Jurnal Ilmiah Hukum* 13, no. 2 (2021): 203–18, <https://doi.org/10.24903/yrs.v13i2.1897>.

²⁸ Rizki Zakariya, "Menyoal Aspek Pemidanaan Pada Kluster Lingkungan Di Undang-Undang Cipta Kerja Terhadap Arah Pembangunan Berkelanjutan," *LITRA: Jurnal Hukum Lingkungan, Tata Ruang, Dan Agraria* 1, no. 2 (2022): 153–70, <https://doi.org/10.23920/litra.v1i2.589>.

The failure factor of the food estate program in Indonesia is not only caused by inadequate planning and studies, but also by the lack of adequate supporting infrastructure. The government should be able to pay more attention to the development of proper infrastructure, such as providing road and land access to the surrounding community, an efficient irrigation system, and storage facilities for harvested crops. Turning away from modern technology is also one of the causes of failure, the need for modern technology for agriculture, to increase food productivity without damaging the environment by adopting precision agricultural technology that has been proven to increase productivity.²⁹

Harmonization of Laws and Policy Synchronization in the Implementation of the Food Estate Program

Harmonization of Legislation and Policy Synchronization are absolute prerequisites for the successful implementation of the Food Estate Program (National Food Barn), a National Strategic Project characterized by multi-sector and massive scale. The complexity of this program requires a coherent regulatory framework to avoid overlapping authorities and ensure legal certainty, especially considering that Food Estate often involves the use of land that has high ecological sensitivity, such as forest areas and peatlands. One of the main challenges in harmonization of laws and regulations is the potential for cross-sector authority conflicts. This program touches on various pieces of legislation, starting from the Forestry Law, the Spatial Planning Law, to the Environmental Protection and Management Law. For example, the existence of a Ministerial Regulation regulating the provision of forest areas for Food Estates (such as Minister of Environment and Forestry Regulation Number P.24/MENLHK/SETJEN/KUM.1/10/2020) has raised the spotlight because it is considered to have the potential to relax the provisions thereon, especially in the context of the release of Protected Forest Areas, which underlines the need to test the harmonization of these legal regulations with the perspective of sustainable development principles.³⁰ In addition, there is an urgent need to harmonize regulations at the central and regional levels, especially regarding permits and compliance with Regional Spatial Planning, so as not to hinder program implementation in the field and minimize socio-economic impacts.³¹

Meanwhile, policy synchronization is needed to unify the actions of the various Ministries/Institutions involved, such as the Ministry of Agriculture, the Ministry of Environment and Forestry, and the Ministry of Defense. Without effective

²⁹ Ganjar Pranowo, "Malapetaka Food Estate," YouTube: Ruang Ganjar, 2025, <https://youtu.be/KQu9MplbSeE?si=R1wFmtNrX0xkCPJw>.

³⁰ Abdul Malik Akdom, "Sinkronisasi Aturan Hukum Tentang Pemanfaatan Kawasan Hutan Lindung Untuk Pembangunan Food Estates Di Indonesia (Perspektif Prinsip Pembangunan Berkelanjutan)" Tesis (UNIVERSITAS ATMA JAYA YOGYAKARTA, 2024).

³¹ Nur Aisyah, "Analisis Dampak Alih Fungsi Lahan Pertanian Pada Proyek Tol Solo-Jogja Terhadap Kondisi Sosial Ekonomi Masyarakat Di Kabupaten Klaten" (Universitas Islam Negeri Prof. K.H. Saifuddin Zuhri Purwokerto, 2024), https://repository.uinsaizu.ac.id/23996/1/NUR_AISYAH_ANALISIS_DAMPAK_ALIH_FUNGSI_LAHAN_PERTANIAN_PADA_PROYEK_TOL_SOLO-JOGJA_TERHADAP_KONDISI_SOSIAL_EKONOMI_MASYARAKAT_DI_KABUPATEN_KLATEN.pdf.

synchronization, the risk of policies running independently and not being integrated is very high. Synchronization efforts must ensure that every food production policy is balanced with environmental protection policies. The importance of using Strategic Environmental Studies adequately and not hastily is emphasized as part of the government's administrative responsibility in environmental protection.³² Failure to synchronize, especially on sensitive land such as peat in Central Kalimantan, requires environmentally sound legal policies and synergy with other laws, such as the Plantation Law.³³ In general, experience shows that planning failures and lack of synchronization of action programs can lead Food Estates to become high-risk projects, so that a more holistic reinterpretation and more participatory planning is needed.³⁴

Thus, the sustainability and success of the Food Estate is highly dependent on the state's ability to review and harmonize all related regulations (harmonization) and strengthen coordination mechanisms between agencies (synchronization) to ensure investment certainty, environmental protection and the welfare of local communities.

³² Zaskiya Amalina and Radian Salman, "Tanggung Jawab Administratif Pemerintah Dalam Perlindungan Lingkungan Hidup Pada Proyek Food Estate," *Jatiswara* 40, no. 1 (2025): 71–85, <https://doi.org/10.29303/jtsw.v40i1.1180>.

³³ Mispansyah Nurunnisa, Agus Mulyawan, and Muhammad Al Faqih, "Kebijakan Hukum Program Lumbung Pangan Nasional (Food Estate) Pada Lahan Gambut Di Kalimantan Tengah Yang Berwawasan Lingkungan," *Prosiding Seminar Nasional Lingkungan Lahan Basah* 9, no. 3 (2024): 196–223.

³⁴ Rahmad Supriyanto, Asmara Maharani, and Aditya Alta, "Menafsir Ulang Food Estate Indonesia: Jejak, Dinamika, Dan Masa Depan Ketahanan Pangan Nasional," *Central for Indonesia Policy Studies (CIPS)*, 2025, <https://repository.cips-indonesia.org/media/publications/619003-menafsir-ulang-food-estate-indonesia-jej-b027889a.pdf>.

CONCLUSION

The repeated failure of the Food Estate program across eras, starting from the 1995 Peatland Project (PLG) to subsequent programs, stems from the location's incompatibility with spatial allocation and ecological carrying capacity. Selecting protected forest areas and vulnerable peatlands without in-depth study has violated Law Number 26 of 2007 concerning Spatial Planning and Law Number 32 of 2009 concerning Environmental Protection and Management, which has resulted in massive environmental damage (deforestation, peat ecosystem degradation, fire disasters) and agrarian conflict. Structurally, this failure factor is exacerbated by the Job Creation Law (UUCK). UUCK substantially weakens legal protection in three key sectors: Food Law (by relaxing imports that harm local farmers), Spatial Planning Law (by facilitating National Strategic Projects outside the RTRW), and Environmental Law (by simplifying licensing and AMDAL mechanisms). This regulatory change creates a legal framework that favors project facilitation rather than the principles of sustainability and spatial certainty, thus *de jure* increasing the potential for failure of Food Estates in ecologically sensitive areas.

To stop the cycle of failure of the Food Estate program, two integrated pillars of reform are needed:

1. Harmonization of Legislation

The state must immediately review and harmonize regulations on accelerated development with basic ecological and spatial planning laws. Harmonization must be carried out vertically and horizontally to eliminate conflicts of authority between sectors (for example between Forestry and Agriculture) and ensure that all policies, including technical policies such as Minister of Environment and Forestry Regulation P.24/2020, comply with the principles of sustainable development and no longer facilitate the conversion of protected areas or sensitive land.

2. Synchronization of Cross-Sector Policies

It is necessary to synchronize action programs between Ministries/Institutions by adopting a Social-Ecological System (SES) approach. This approach requires careful planning, active involvement of local communities at every stage, strengthening infrastructure (irrigation) and adopting modern technology (precision agriculture), as well as an absolute balance between food production targets and the government's administrative responsibility for environmental protection. Effective synchronization will transform Food Estate from a land exploitation project into an inclusive and sustainable modern agricultural model.

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