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# AGRICULTURAL LAND DEGRADATION UNDER JAYAPURA CITY'S HOME OWNERSHIP CREDIT DEVELOPMENT POLICY 2022–2023

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**ABSTRACT**
This study examines agricultural land degradation resulting from the home ownership credit development policy in Koya Barat Subdistrict, Jayapura City, during 2022–2023. Jayapura City has 2,135.31 hectares of agricultural land, of which 1,211.5 hectares were damaged following the construction of 25,040 housing units financed through home ownership credit in 2022. Drawing on top-down policy implementation theory, agricultural land theory, and government economic investment theory, this qualitative study analyzed data from 25 informants, including farmers, housing developers, traditional leaders, government officials, and traders. Data were collected through interviews, observation, and documentation. The findings indicate that agricultural land degradation increased to 104,496 hectares as housing credit development expanded to 116,080 units in 2023, resulting in extensive conversion of agricultural land into residential areas. The study recommends halting permits for housing construction on agricultural land, as land conversion has contributed to rising agricultural commodity prices in Jayapura City markets.

**Key words:** loss of agricultural land; factors; policy; home ownership credit; Jayapura City

# KERUSAKAN LAHAN PERTANIAN DISEBABKAN KEBIJAKAN PEMBANGUNAN KREDIT PEMILIKAN RUMAH KOTA JAYAPURA 2022-2023

**ABSTRAK**
Penelitian ini mengkaji degradasi lahan pertanian akibat kebijakan pembangunan kredit pemilikan rumah di Kelurahan Koya Barat, Kota Jayapura, pada periode 2022–2023. Kota Jayapura memiliki luas lahan pertanian sebesar 2.135,31 hektar, di mana sebanyak 1.211,5 hektar mengalami kerusakan akibat pembangunan 25.040 unit rumah melalui program kredit pemilikan rumah pada tahun 2022. Penelitian ini menggunakan teori implementasi kebijakan top-down, teori lahan pertanian, dan teori investasi ekonomi pemerintah. Metode yang digunakan adalah penelitian kualitatif dengan melibatkan 25 informan yang terdiri dari petani, pengembang perumahan, tokoh adat, pejabat pemerintah, dan pedagang. Teknik pengumpulan data dilakukan melalui wawancara, observasi, dan dokumentasi. Hasil penelitian menunjukkan bahwa kerusakan lahan pertanian meningkat hingga mencapai 104.496 hektar seiring dengan bertambahnya pembangunan kredit pemilikan rumah menjadi 116.080 unit pada tahun 2023, yang mengakibatkan alih fungsi lahan pertanian secara luas menjadi kawasan permukiman. Penelitian ini merekomendasikan penghentian pemberian izin pembangunan perumahan di atas lahan pertanian karena alih fungsi lahan terbukti berkontribusi terhadap kenaikan harga hasil pertanian di pasar-pasar Kota Jayapura.

**Kata kunci:** kerusakan lahan pertanian; diakibatkan; kebijakan; pembangunan kredit rumah; Kota Jayapura

## INTRODUCTION

Between 1990 and 2018, greenhouse gas–driven climate change significantly degraded agricultural land quality in Peru (Raihan & Tuspekova, 2022). Declines in land quality have also been attributed to urbanization, rapid population growth, deforestation, and reduced water availability (Kumar et al., 2025). In China, the development of high-speed rail infrastructure since 2005 substantially reduced urban agricultural land (Yu et al., 2022). In South Korea, floods damaged major national assets, including agricultural land, residential areas, and infrastructure (Yang & Jung, 2026). In the United States, an overpopulation of white-tailed deer, estimated at one million, has caused extensive agricultural land damage (Bell et al., 2026). Across Africa, from 2000 to 2018, the cultivation of crops such as maize, rice, soybeans, wheat, and alfalfa has been constrained by declining soil productivity. These challenges

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stem from unfavorable climatic conditions and the degradation of essential ecological components, including trees, water resources, grasses, and soil biodiversity, ultimately leading to reduced agricultural productivity and soil quality (Akinyemi & Ifejika Speranza, 2022). In Indonesia, during the administration of President H. R. Soeharto, agricultural policy prioritized national strategic interests by expanding agricultural land with the goal of achieving self-sufficiency and positioning Indonesia as a leading agricultural exporter in Southeast Asia and beyond. This policy was implemented across regencies, cities, and provinces, including Koya Barat Village in Jayapura City, Papua Province, where it was closely tied to the national transmigration program. Under this program, farmers from Java were relocated to Koya Barat Village to manage agricultural land and strengthen both regional and national food security. Today, the village remains a vital agricultural center, with cultivated land dedicated to crops such as maize, chili, tomato, peanut, vegetables, and rice. The agricultural land area of Koya Barat Village is approximately 2,135.31 hectares, and it continues to be the largest contributor of agricultural products for communities.

Government Regulation No. 12 of 2012 on Incentives for the Protection of Sustainable Food Agricultural Land provides support for farmers who refrain from converting their land through measures such as infrastructure improvements, tax relief, agricultural production facilities, and awards for high-performing farmers. In addition, Government Regulation No. 1 of 2012 on the Determination and Conversion of Sustainable Food Agricultural Land designates agricultural land as a protected sector that must be developed consistently to ensure the production of staple foods for national food independence, resilience, and sovereignty. These regulations are intended to safeguard land resources so that their utilization and availability remain secure for sustainable agricultural use.

This policy framework is reflected in Koya Barat Village, Jayapura City, which has become an important agricultural center supplying staple food to Jayapura and surrounding areas. The village covers 2,135.31 hectares of cultivated land, including maize, chili, tomato, peanut, vegetables, and rice. Its agricultural role originated from President H. R. Soeharto's national program that expanded farmland and strengthened food security through transmigration. Farmers from Java were relocated to Koya Barat to cultivate the land and support regional as well as national food supply.

During the administration of President Joko Widodo, infrastructure development became a strategic priority across Indonesia, including Jayapura. In 2019, the construction of public highways and the Youtefa Bridge, which connected Hamadi Beach and Koya Barat, improved access between central Jayapura and the border region near Papua New Guinea. As a result, entrepreneurs lobbied the Jayapura City Government to establish a home ownership credit program for housing development in Koya Barat. This triggered widespread land acquisition and accelerated farmland conversion, with agricultural land loss reaching 1,211.5 hectares by 2021.

This problem can be analyzed using three theoretical perspectives. First, the Top-Down Policy Model (Muminah & Suprajogo, 2025) shows how the Jayapura City Government identified the destruction of agricultural land caused by mortgage-based housing and responded with a regulation prohibiting such development. Second, theory of agricultural land highlights its unique role as a productive resource based on plant growth, which in Koya Barat includes maize, chili, tomato, peanut, vegetables, and rice (Nathan et al., 2024) . Third, the theory of government economic investment explains how infrastructure such as subsidized housing, hospitals, offices, bridges, roads, markets, sanitation, water facilities, ports, drainage, electricity, and public parks can improve community welfare and support long-term economic growth (Simangunsong & Barika, 2025). Together, these perspectives situate the tension between agricultural preservation and infrastructure expansion within the broader context of development policy.

Prior to this study, relevant literature was reviewed to identify research novelties, strengths, and limitations. Previous studies show that the Russo-Ukrainian War has reshaped strategies for sustainable agricultural production amid global and local crises (Ivanov et al., 2025) and has caused widespread cropland degradation and damage to grain storage infrastructure *(Nehrey et al., 2025).* Agricultural land productivity is further constrained by greenhouse gas effects and extreme weather conditions (Sieber et al., 2022), land-use change since the 1970s that has led to habitat destruction and biodiver-

sity loss (Ockermüller et al., 2023), and pollution from wastewater sludge disposal (Singh et al., 2023). Additional pressures include wildlife damage, such as that caused by the Indian crested porcupine, which threatens agricultural livelihoods and requires coordinated pest management (Ashraf et al., 2023), and intensive monoculture systems that reduce landscape resilience (Singh et al., 2023), as observed in olive groves affected by Xylella fastidiosa in southern Italy (Semeraro et al., 2021). In China, the absence of robust agricultural land evaluation methods has increased the vulnerability of high-quality farmland to degradation under rapid industrialization and urbanization (Qian et al., 2021).

Beyond climatic pressures, other socio-economic and institutional challenges have been identified. Issues of customary land and agricultural security have contributed to declining yields (Singirankabo et al., 2022). Distortions in agricultural land sales have inflated market prices for crops such as maize and beans (Britos et al., 2022). Acid mine drainage continues to threaten ecosystems by contaminating soil and water, as high sulfate concentrations lower soil pH and reduce land productivity, thereby decreasing arable land availability (Anekwe & Isa, 2021). In Brazil, agricultural systems remain highly dependent on animal fertilizers, underscoring the need for economic policies that integrate climate disaster mitigation (Cummings et al., 2020). Flood analysis using Sentinel-1 SAR data in the Gumare River catchment of the Blue Nile basin revealed that extreme flooding in July and August 2021 exceeded watershed limits and destroyed agricultural land in several localities (Kassaw & Nebere, 2025). Rapid urbanization also poses major threats, as road infrastructure development, unbalanced economic growth, high-rise construction, and large-scale urban expansion have reduced vegetation cover (Jin et al., 2024), depleted groundwater resources, degraded air quality (Chai et al., 2024), and undermined the sustainability and quality of agricultural land (Tsigdinos et al., 2024). In addition, the 2023 Israeli–Hamas conflict caused extensive damage to agricultural land in Gaza, necessitating long-term recovery efforts *(Yin et al., 2025).*

Comprehensive reconstruction of agricultural infrastructure requires additional financial capital, effective public–private partnerships, and initiatives to facilitate labor repatriation, providing a basis for improving agricultural investment strategies and collaboration among local communities, governments, and international funding agencies (Kliuchnyk et al., 2025). Agricultural sustainability is further undermined by forest ecosystem destruction (Viana et al., 2021), which intensifies pest pressure, farmland damage, agricultural diseases, and water scarcity (Zhang et al., 2024), as well as by land abandonment and socio-economic drivers such as road construction and drainage development that reduce crop productivity (Perpiña Castillo et al., 2021). In Pakistan, termite infestations cause annual crop losses of 20 to 45%, severely affecting major crops and stored agricultural products (Hussain et al., 2024). Armed conflict has also emerged as a critical factor, as evidenced by Russian aggression in Ukraine, which has damaged agricultural assets, contaminated land, disrupted infrastructure and logistics, and increased production costs, leading to reduced agricultural land access and output (Cherevko, 2024). Similar challenges are observed in Indonesia, where uncontrolled development in Depok, West Java (Luthfiah et al., 2023), and rapid infrastructure expansion elsewhere have degraded environmental conditions and agricultural productivity (Alajizah, 2024).

Comparative research highlights contrasting trajectories between China and India: China's infrastructure development is considered more sustainable due to the preservation of urban vegetation and agricultural land, whereas India's rapid expansion has eliminated vegetation and farmland (Zhao et al., 2024). Scholars further emphasize that sustainable infrastructure development must integrate ecological protection to preserve urban agricultural systems (Giofandi et al., 2024). However, accelerated infrastructure growth has frequently led to vegetation loss, water depletion, rising temperatures, and the deterioration of urban agricultural land (Teng, 2024.; Thien et al., 2024). In Nanjing, China, deforestation linked to infrastructure and population pressures has even forced wild boars into urban settlements (Shen et al., 2023). In Saudi Arabia, infrastructure expansion has reduced vegetation cover, disrupting the urban carbon cycle (Mallick et al., 2022). The expansion of agricultural fields and the associated destruction of terraced vineyards and olive grove fences have reduced the aesthetic value of the Douro landscape; therefore, the conservation and management of terraces and olive grove fences should be prioritized

(Medeiros et al., 2024). A review of these studies reveals a consistent focus on the deterioration of agricultural land as a consequence of urban infrastructure expansion. The present research addresses this gap by offering a distinct novelty: it identifies agricultural land damage in Koya Barat Subdistrict, Jayapura City, as being driven not only by infrastructure development but specifically by the implementation of the Home Ownership Credit Development Policy during 2022–2023.

In 2022, the West Koya Subdistrict of Jayapura City experienced a significant reduction in agricultural land due to the implementation of a low-cost housing development policy. The agricultural land area has decreased by 1,211.5 hectares, resulting from the construction of 25,040 housing units. An additional 923.81 hectares of agricultural land were destroyed due to the development policy. The combined destruction of agricultural land amounted to 2,135.31 hectares, equivalent to the total area of low-cost housing development. In total, 116,080 housing units were constructed, marking a considerable impact on the region. This research highlights the novel finding that the destruction of agricultural land is directly linked to the low-cost housing development policy in the West Koya Subdistrict of Jayapura City in 2022-2023, emphasizing the need for further investigation and contributions to scientific knowledge.

The agricultural land area in West Koya Village, Kota Jayapura, in 2022 is 2,135.31 hectares. However, fertile agricultural land with various crops such as paddy fields, corn fields, chili fields, tomato fields, peanut fields, vegetable fields, and dry land is under threat of destruction due to the KPR Development Policy in West Koya Village, Kota Jayapura, in 2022. The total area of destroyed agricultural land is 1,211.5 hectares, which has been utilized by the KPR Development Policy in West Koya Village, Kota Jayapura, in 2022.

Consequently, the extent of destroyed paddy fields is 186.75 hectares, accounting for 0.15% of the total. The extent of destroyed dry land is 590.25 hectares, accounting for 0.49%. The extent of destroyed corn fields is 178.75 hectares, accounting for 0.15%. The extent of destroyed chili fields is 62 hectares, accounting for 0.05%. The extent of destroyed tomato fields is 68.25 hectares, accounting for 0.06%. The extent of destroyed peanut fields is 13.25 hectares, accounting for 0.01%. The extent of destroyed vegetable fields is 112.25 hectares, accounting for 0.09%.

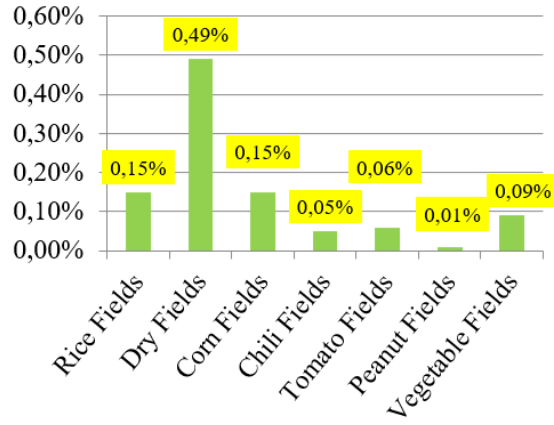


**Figure 1. The percentage of agricultural land, Jayapura City, in 2022.**
Data Source: Agricultural land destruction in West Koya Village in 2022.

The dynamic trend of global population growth has led to policies accelerating the conversion of agricultural land to housing, infrastructure, and urbanization, causing environmental changes and impacting agricultural land in West Koya Village, Kota Jayapura, in 2022. This destruction affects harvest yields, including paddy fields, corn fields, chili fields, tomato fields, peanut fields, and vegetable fields, resulting in diminishing productivity that fails to meet daily needs in Kota Jayapura. The decline in harvested produce sold at markets like Pasar Youtefa, Pasar Hamadi, Pasar Cigombong, and mobile markets exacerbates shortages and price hikes, posing challenges for small-scale economic communities. The consequences extend to high market prices in Kota Jayapura, highlighting the dependence on basic goods from agricultural land outside the city. This destruction is attributed to the Home Ownership Credit (KPR) development policy in West Koya Village, Kota Jayapura, in 2022, involving a total of 25,040 planned housing units. The development policies in West Koya Village, Kota Jayapura, in 2022, include the Rollo Green Diamond Home Ownership Credit (KPR) with a total of 7,000 units, accounting for 0.28%. The Apernas Police Home Ownership Credit has 6,000 units, representing 0.24%. PT. Aura's KPR development policy comprises 3,000 units, making up 0.12%, while Permata Indah's KPR development policy also has 3,000 units, accounting for 0.12%. The Apernas Nabire Road Home Ownership Credit involves 30 units, representing 0.001%. Similarly, the Aper-

nas Manokwari Road Home Ownership Credit comprises 10 units, accounting for 0.0004%. The Mega Purah Home Ownership Credit development policy includes 3,000 units, making up 0.12%, and the Tenda Dua Home Ownership Credit involves 3,000 units, accounting for 0.12%.

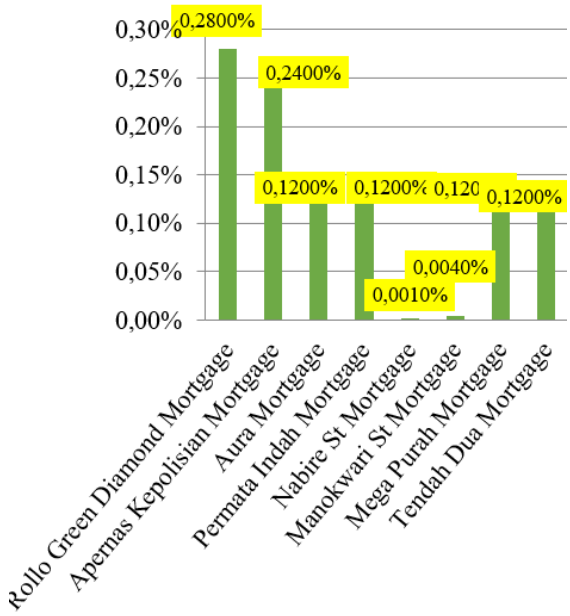


**Figure 2. The percentage of Home Ownership Credit (KPR) development policy in West Koya Village, Jayapura City, in 2022.**

Data Source: Personal research on the Home Ownership Credit development policy in West Koya Village, Jayapura City, in 2022.

## METHOD

Interviews involved 25 informants representing diverse stakeholder groups. These included seven farmers who provided information on agricultural land damage, six housing developers involved in Home Ownership Credit (KPR) projects who explained the scale of credit distribution, and two traditional leaders who addressed customary land release permits. Four officials from the Regional Development Planning Agency discussed development zoning and spatial planning. Representatives from the Department of Agriculture and Food Security explained issues related to food security in Jayapura City, while officials from the Department of Public Works provided information on infrastructure development. Officials from the Department of Investment and One-Stop Integrated Services addressed KPR development permits and environmental impact assessment permits. Three agricultural product traders from Jayapura City Market discussed agricultural prices and supply shortages, and agricultural lecturers explained the long-term impacts of agricultural land degradation on the local community.

Interviews were conducted in a familiar and informal setting to encourage open communication. The researcher used a structured interview guide, read the key questions to informants, and recorded responses using a voice recorder with the informants' consent.

Documentation data included records related to KPR housing development, agricultural land conditions, market-based agricultural trading activities, and official documents from the Regional Development Planning Agency, the Department of Agriculture and Food Security, the Department of Public Works, and the Department of Investment and One-Stop Integrated Services. All collected data were analyzed to reflect the actual conditions in Koya Barat Village, Jayapura City.

## RESULTS AND DISCUSSION

### *Very High Rate of Agricultural Land Damage in Koya Barat Village, Jayapura City, 2023*

Agricultural land refers to land used for agricultural activities, including rice fields, dryland farming, plantations, aquaculture ponds, grazing areas, abandoned land, and forests that serve as sources of livelihood for entitled communities (Nathan et al., 2024). The protection of such land is regulated under Government Regulation Number 12 of 2012 on Incentives for the Protection of Sustainable Food Agricultural Land, which provides support to farmers who maintain agricultural land through incentives such as infrastructure development, tax relief, provision of agricultural inputs, and awards for high-performing farmers. In addition, Government Regulation Number 1 of 2012 on the Designation and Conversion of Sustainable Food Agricultural Land defines protected agricultural areas intended to ensure food self-sufficiency, national food security, and food sovereignty. These regulations aim to control land use, suitability, and availability to sustain agricultural production in the long term.

Despite this regulatory framework, the study findings indicate a very high rate of agricultural land loss in Koya Barat Village, Jaya-

pura City, in 2023. Land conversion reached 104,496 hectares, resulting in severe agricultural land damage totaling 923.81 hectares out of a total agricultural area of 2,135.31 hectares. Consequently, the extent of agricultural land damage during the 2022–2023 period is equivalent to the total agricultural land area of Koya Barat Village.

The damage varied by land type. Rice paddy fields experienced damage of 166.64 hectares, representing 89.2% of the total area. Dry agricultural land recorded damage of 380.14 hectares, or 64.4%. Corn cultivation areas declined by 156.65 hectares, equivalent to 87.6%. Chili fields were reduced by 52 hectares, or 83.9%, while tomato fields declined by 46.13 hectares, or 67.6%. Peanut cultivation areas decreased by 10.12 hectares, representing 76.4%, and vegetable cultivation areas suffered the most severe impact, with 112.13 hectares damaged, or 99.9% of the total area.

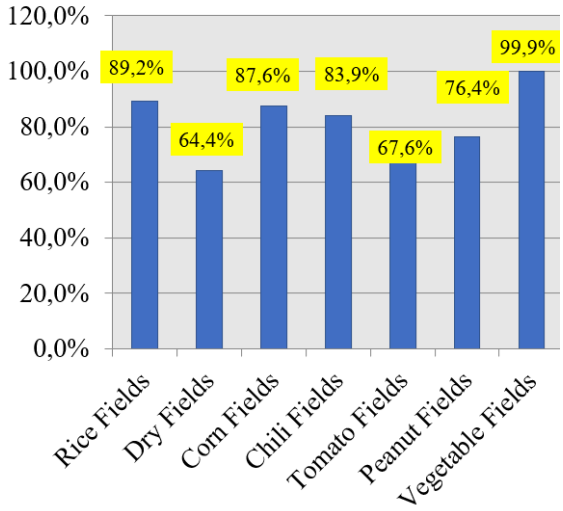


**Figure 3. The percentage of Agricultural Land, Jayapura City, in 2023.**

Data Source: Research conducted by the researcher on Agricultural Land, Jayapura City, in 2023.

The very high level of agricultural land damage in Koya Barat Village, Jayapura City, in 2023 was primarily driven by the construction of 116,080 housing units and inadequate infrastructure development. This expansion reduced the remaining agricultural land to 2,135.31 hectares and was implemented in accordance with housing development policies for Koya Barat District. These policies were formulated through a top-down and politically driven process, as noted by Muminah and Suprajogo (2025), and were decided within government offices without comprehensive assessment of agricultural land loss experienced by local communities. The policy process also excluded key stakeholders, including farmers' associations, community and traditional leaders, academics, and non-governmental organizations in Jayapura City. As a result, policy implementation disproportionately benefited the Jayapura City Government and housing developers, leading to poorly targeted interventions that accelerated agricultural land conversion. In contrast to other studies that identify urbanization, population growth, vegetation loss, and air pollution as major drivers of declining agricultural land quality (Marcus et al., 2024; Kumar et al., 2025), the case of Koya Barat Village highlights policy-driven land conversion as the dominant factor.

The extensive loss of agricultural land had serious economic and social consequences, particularly in the form of food shortages and sharp price increases in Jayapura City markets in 2023. Staple food prices rose substantially as local production declined. The price of locally produced rice increased to Rp 10,000 per kilogram, making it increasingly unaffordable for low-income households. Corn prices also rose, with boiled corn selling at Rp 5,000 per cob, while corn used for poultry feed increased by Rp 15,000, contributing to higher prices for chicken meat at Rp 75,000 per kilogram and eggs at Rp 60,000 per tray. These increases further affected prepared food prices, including chicken rice, which rose by Rp 30,000 per portion.

Vegetable and spice prices experienced similar increases. Chili prices rose to Rp 120,000 per kilogram, influencing the prices of garlic and shallots, which increased by Rp 10,000. Vegetable prices increased by approximately Rp 10,000 per bunch, contributing to higher prices for meals sold at food stalls, including fish and vegetable dishes, which increased by Rp 25,000 per portion. Tomato prices also rose significantly, reaching Rp 30,000 per kilogram, and were accompanied by increases in the prices of other staple foods such as mackerel, peanuts, and peanut-based foods.

These price increases disproportionately affected low-income individuals, families, and small urban communities in Jayapura City, who struggled to access affordable agricultural products for daily consumption. Local residents became increasingly dependent on agricultural products transported from outside Jayapura

City, including from Java and Sulawesi, which require long transportation times and are sold at higher prices. Consequently, Koya Barat District, which once functioned as the primary food-producing area for Jayapura City, has lost its role as the city's agricultural base due to extensive housing development and poorly planned infrastructure expansion.

### *High Intensity of Housing Loan Development, Jayapura City, 2023*

Housing loan, or Home Ownership Credit (KPR), development in Koya Barat Village, Jayapura City, increased sharply in 2023. The implementation of this policy followed a top-down and politically driven approach, as described by Muminah and Suprajogo (2025). Policy decisions were made within government offices without a comprehensive assessment of agricultural land degradation experienced by local communities and without the involvement of key stakeholders, including farmers' associations, community and traditional leaders, academics, and non-governmental organizations in Jayapura City. Consequently, policy outcomes disproportionately benefited the Jayapura City Government and housing developers operating in Koya Barat Village. As a result, housing construction expanded significantly, with a total of 91,040 KPR units developed in 2023. The largest share was the Rollo Grand Diamond project, comprising 15,000 units or 16.48% of the total. This was followed by the Apernas Police housing project with 14,000 units, representing 15.38%. PT Aura developed 8,000 units, accounting for 8.79%. Several medium-scale developments each contributed 7,000 units, or 7.69%, including Mega Pura, Tendah Dua, and PT Efra Sukses Abadi. Additional developments included Pondok Pinang with 5,000 units or 5.49%, KPR Cenderawasih with 5,000 units or 5.49%, and KPR Permata Indah Dua with 5,000 units or 5.49%. PT Bintang Maher Subsidy, PT Rizkia Anugerah Jaya, and Koya Regency developments each contributed 6,000 units, representing 6.59% per project. Smaller-scale projects included KPR Jalan Manokwari with 30 units or 0.03% and KPR Apernas Jalan Nabire with 10 units or 0.01%.

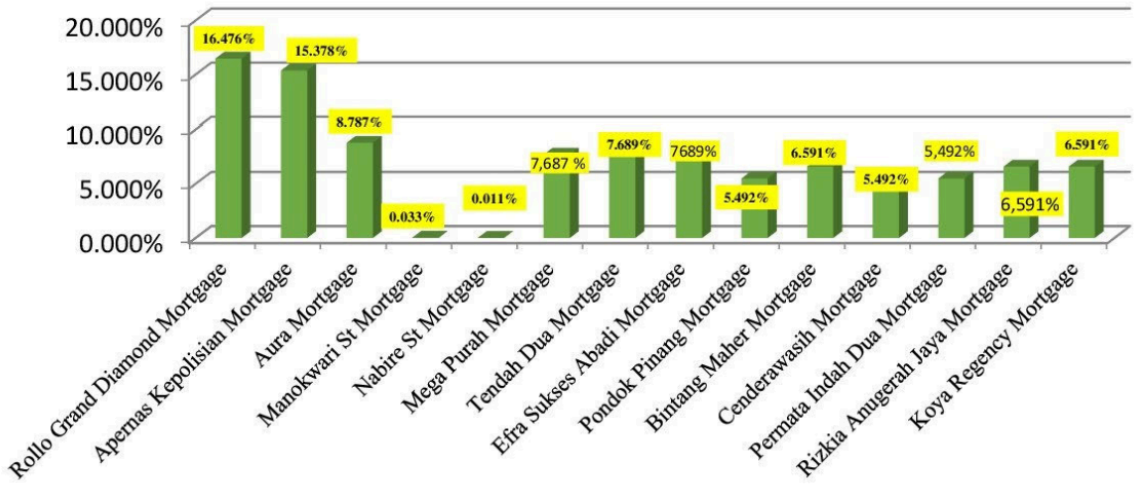


**Figure 4. Percentage of Home Ownership Credit (KPR) Development, Jayapura City, 2023**
Data source: Field research on housing development policies in Koya Barat Village, 2023.

Property developers in Koya Barat Village operate with a profit-oriented approach, purchasing agricultural land from local communities and traditional leaders for conversion into housing projects with segmented market prices. Housing units are sold at approximately IDR 200,000,000 for low-income households, IDR 400,000,000 for middle-income households, and up to IDR 1,000,000,000 for government officials and business actors in Jayapura City.

The study found that 34,000 housing units were developed without Environmental Impact Analysis (AMDAL) permits, despite already being constructed and occupied. These unpermitted developments include PT Rizkia Anugerah Jaya with 6,000 units (6.59%), PT Efra Sukses Abadi with 7,000 units (7.69%), Pondok Pinang with 5,000 units (5.49%), PT Bintang Maher Subsidized with 6,000 units (6.59%), Cenderawasih with 5,000 units

(5.49%), and Permata Indah Dua with 5,000 units (5.49%).

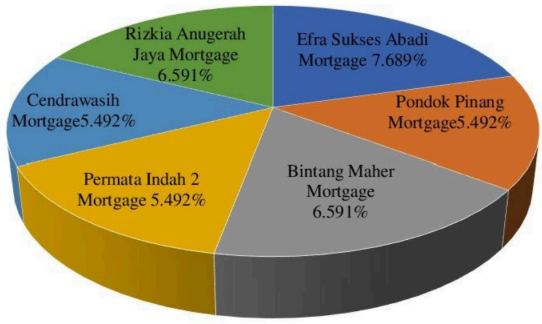


**Figure 5. Percentage of Mortgage Development without Environmental Impact Analysis Permits in Koya Barat Village, Jayapura City, 2023**

Data source: Field research on housing development without AMDAL permits in Koya Barat Village, Jayapura City, 2023.

The issuance of Environmental Impact Analysis (AMDAL) permits in Koya Barat Village reflects a highly political process. Although AMDAL permits had not been granted by the Jayapura City Government, many Home Ownership Credit (*KPR*) housing projects were already completed, occupied, and functioning in 2023. Property developers assumed that administrative requirements had been implicitly approved and therefore proceeded with construction. However, field findings show that the residential environment in these *KPR* areas is poorly planned, characterized by inadequate drainage systems, the absence of household waste management facilities, and a lack of government-provided clean water infrastructure. More critically, large areas of agricultural land were converted into housing developments.

Housing expansion in 2023 was accompanied by extensive supporting infrastructure, including roads, commercial facilities, utilities, public buildings, and recreational spaces. While this development stimulated short-term economic growth and attracted population migration to Koya Barat District, the benefits were concentrated among government institutions and private investors. The focus on immediate economic gains neglected the broader consequences for food security in Jayapura City. The loss of agricultural land in Koya Barat District disrupted local food production, leading to increased dependence on imported agricultural products that are costly, lower in quality due to long transportation times, and less accessible to low-income households. Consequently, the degradation of agricultural land has undermined the food resilience of the Jayapura City community.

## CONCLUSION

This study examined agricultural land degradation resulting from the Home Ownership Credit (*KPR*) policy in Koya Barat Village, Jayapura City, during 2022–2023, using interview, observation, and documentation data collected in 2023. The findings indicate that the policy was implemented through a top-down and politically driven process that primarily served the interests of the Jayapura City Government and *KPR* developers in maximizing economic returns. Consequently, approximately 2,135.31 hectares of agricultural land were degraded following the construction of 116,080 housing units, an area equivalent to the village's total agricultural land.

Housing expansion was accompanied by the development of government offices, ministerial facilities, private businesses, commercial outlets, transportation infrastructure, and electricity networks. In addition, six *KPR* projects were constructed and occupied without Environmental Impact Analysis (AMDAL) permits. The degradation of agricultural land is expected to result in reduced agricultural production in 2024–2026, increased dependence on food supplies from Java and Sulawesi, and heightened vulnerability to national economic instability that affects agricultural input availability and prices.

These findings support the relevance of the Top-Down Policy Model (Muminah & Suprajogo, 2025), demonstrating how state-driven investment policies can stimulate short-term economic growth and influence living standards (Simangunsong & Barika, 2025), while simultaneously undermining agricultural land, a production system inherently dependent on ecological processes (Nathan et al., 2024). To prevent

similar outcomes in other agricultural areas of Jayapura City, the study recommends the enactment of a regional regulation that strictly prohibits the sale and conversion of farmland for housing development, supported by clear legal sanctions and substantial financial penalties for both land sellers and housing developers.

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