MIKAILALSYS
Journal of Multidisciplinary Sciences

e-ISSN : 2987-2286
p-ISSN : 2987-3924

Index: Harvard, Boston, Sydney, Copernicus, Sinta 4, Scilit, Semantic, Google, etc

https://doi.org/10.58578/mikailalsys.v4i2.11060

The Impact of Spatial Planning Policy Implementation on Food Security in Padang City

Hidayah Retno Saputri & Adil Mubarak
Universitas Negeri Padang, Indonesia
hidayahretno28@gmail.com; adilmubarak@fis.unp.acid

Article Info:

Submitted:	Revised:	Accepted:	Published:
May 23, 2026	Jun 20, 2026	Jul 2, 2026	Jul 7, 2026

Abstract

The continued decline of productive rice fields in Padang City has weakened local food production capacity and increased dependence on rice supplies from other regions, highlighting the importance of effective spatial planning policy in protecting agricultural land. This study aims to examine the implementation of Padang City Regional Regulation Number 3 of 2019 concerning Regional Spatial Planning and its impact on food security, particularly in controlling the conversion of productive agricultural land. A descriptive qualitative approach was employed, with data collected through interviews, observation, and documentation. Research informants were selected using purposive sampling and included relevant government agencies and farmers affected by land conversion. The findings indicate that the implementation of Regional Regulation Number 3 of 2019 has not been optimal. Compliance among officials remains largely formal and procedural, while substantive supervision of agricultural land conversion is still ineffective. Policy implementation is also constrained by several structural problems, including weak inter-agency coordination, limited legal protection for sustainable agricultural land, inadequate data on land-use changes, and increasing pressure from regional

Mikailalsys is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License

development. These conditions have contributed to the continued reduction of rice fields, declining local food production, and growing dependence on food supplies from other regions. This study concludes that spatial planning policy implementation in Padang City requires stronger oversight, improved cross-sectoral coordination, and sustainable protection of productive agricultural land. The study contributes to public policy and food security studies by emphasizing the strategic role of spatial governance in safeguarding local agricultural resources and strengthening regional food resilience.

Keywords: Policy Implementation; Spatial Planning; Land Conversion; Food Security; Padang City

INTRODUCTION

The conversion of productive agricultural land to non-agricultural areas is a strategic issue in urban development. The development of infrastructure, housing, trade, and economic activity in urban areas often drives increasing demand for space, while the availability of productive agricultural land, particularly rice paddies, is increasingly critical. This reality not only impacts changes in the structure of spatial use but also impacts the sustainability of regional food systems. Rice paddies play an essential role in maintaining food availability, particularly rice, the staple food of the Indonesian people. Therefore, the shrinking of agricultural land due to land conversion caused by urbanization, development, or other uncontrolled non-agricultural activities can reduce local food production capacity and increase regional dependence on food supplies from other regions.

Within the scope of food security, Law Number 18 of 2012 affirms that food security is a condition where food is achieved for a country and for individuals, reflected in the availability of sufficient, safe, high-quality, nutritious, equitable, and affordable food. This regulation defines food security not only as related to food availability but also as concerning access, stability, distribution, and sustainability of food for the community. Thus, when productive agricultural land experiences continuous land conversion, a region's ability to produce food self-sufficiency is potentially weakened. From a public policy perspective, this phenomenon cannot be viewed solely from an agricultural perspective, but also as a problem of spatial governance, the effectiveness of spatial planning control, and regulatory implementation.

Padang City is an example of an urban area experiencing pressure from the conversion of productive land, particularly rice paddies. As the capital of West Sumatra Province, Padang City has experienced rapid development of infrastructure and residential areas. This development has increased the demand for non-agricultural land and has the potential to erode the rice paddies that have traditionally been the basis for local food production. To control land use and land conversion, the Padang City Government has enacted Padang City Regulation Number 3 of 2019 concerning Regional Spatial Planning. This policy serves as a regulatory instrument for spatial management, including ensuring the sustainability of food crop agricultural areas to prevent uncontrolled conversion to infrastructure, residential areas, or other development activities that could reduce land productivity.

Thus, the reality on the ground shows that spatial planning regulations cannot guarantee the achievement of their objectives if they are not implemented optimally. This is evidenced by research data from Syahreni, Zuriyani, and Despisca (2023) which explains that the area of rice fields in Padang City decreased from 7,060 ha in 2010 to 5,744.19 ha in 2020, resulting in a land shrinkage of 1,315.81 ha. The areas experiencing the largest reduction in rice fields are Kuranji, Pauh, and Kota Tangah Districts, where these areas are used for housing and development. Data from the Central Statistics Agency shows that the area of rice fields in Padang City decreased significantly in the 2021-2024 period. The area of rice fields in 2023 was recorded at 5,189.62 ha, which decreased to 4,341.76 ha in 2024, or a decrease of approximately 847.76 ha in one year. This fact indicates that pressure on rice fields in Padang City continues despite the establishment of spatial planning policies.

This shrinking agricultural land has implications for local food production capacity. Data from the conversion of unhusked rice to rice based on the Area Sampling Framework shows that rice consumption production in Padang City has fluctuated, reaching 27,363.65 kW in 2021, 26,196.06 kW in 2022, 33,595.32 kW in 2023, and 28,477 kW in 2024. This fluctuation indicates that regional food production has not yet reached a stable level. Furthermore, interviews conducted at the Padang City Agriculture Office indicate that local rice production in Padang City still does not meet the food needs of its residents, leaving Padang still dependent on other regions such as Padang Panjang, Solok, Pesisir Selatan, and Tanah Datar. This condition shows a pattern of interconnectedness between the shrinking of agricultural land, weak control of land conversion activities, and the vulnerability of regional food security.

Based on this situation, the first argument in this study is that Padang City's food security issues are not solely caused by the decline in rice paddy area but are also related to the implementation of spatial planning policies. Padang City Regional Regulation Number 3 of 2019 provides basic regulations for the regulation and control of spatial use. However, its implementation still shows indications of weak oversight, suboptimal coordination between Regional Government Organizations, a lack of synchronization between spatial planning regulations and the protection of sustainable agricultural land, and the pressures of urbanization and housing development. Furthermore, the local context of Padang City demonstrates the dynamics of customary or customary land that can influence the process of controlling land conversion. Therefore, research on the impact of spatial planning policy implementation on food security is crucial to clarify the extent to which established regulations are truly effective within social, administrative, and institutional realities.

Several previous studies have discussed the relationship between agricultural land protection, spatial planning, and food security. Yao et al. (2023) emphasized the importance of cross-sector collaboration in implementing land protection in China, while Chen et al.'s (2021) research demonstrated that urban food system planning integrated with spatial planning can be an important instrument in maintaining food sustainability in Nanjing, China. In the Indonesian context, Miranda (2024) examined efforts to address sustainable agricultural land conversion in Padang Lawas. Ramadhani and Fitri (2025) examined the conversion of agricultural land into residential areas in Aie Pacah, Padang City, using a land-use change modeling approach. Putra and Frinaldi (2024) discussed local government strategies for maintaining land and food sustainability in Padang Panjang City. Although previous research on land conversion exists, it tends to focus on overall land protection, local government strategies, or land-use change modeling. Research specifically addressing the implementation of Padang City Regional Regulation Number 3 of 2019 as a spatial planning policy instrument and assessing its impact on Padang City's food security is still limited. This gap serves as the primary basis for this research, as land conversion is not merely viewed or understood as a spatial phenomenon, but rather as a consequence of the public policy implementation process, involving official compliance, oversight mechanisms, coordination of Regional Apparatus Organizations, and the achievement of policy outputs and outcomes.

This research's innovation lies in its analytical focus, linking spatial planning policy implementation to regional food security within the Padang City area. This research utilizes Ripley and Franklin's policy implementation perspective, assessing implementation success

through the level of official compliance, smooth implementation, and implementation performance, encompassing both outputs and outcomes. Furthermore, in terms of impact, this research draws on James Anderson's perspective to examine the impact of spatial planning policies on the condition of productive agricultural land, regional food sustainability, and the phenomenon of agricultural land conversion. Based on this, this research focuses on analyzing the implementation of Padang City Regional Regulation Number 3 of 2019 concerning Regional Spatial Planning in controlling the conversion of productive agricultural land and its impact on regional food security. Thus, this research is expected to provide a more comprehensive understanding of the implementation of spatial planning policies as an instrument for protecting agricultural land as well as part of a strategy to strengthen regional food security.

METHODS

This research uses a qualitative approach with descriptive methods. This approach was chosen because the research aims to gain a deeper understanding of the implementation process of spatial planning policies and their impact on food security in Padang City. Through a qualitative approach, this study not only provides an overview of Padang City Regional Regulation Number 3 of 2019 concerning Regional Spatial Planning as the basic regulation for controlling spatial use, but also analyzes how this policy is implemented, monitored, and perceived by relevant parties. This research design is descriptive qualitative, focusing on two main aspects: policy implementation and policy impact. The research location is in Padang City, encompassing Regional Apparatus Organizations related to spatial planning, development planning, licensing, agriculture, food, and actors affected by land conversion.

Informants for this study were selected using a purposive sampling technique, which selects informants based on specific considerations in accordance with the research data needs. The criteria for research informants were those with knowledge, authority, experience, or direct involvement in policy implementation within the scope of spatial planning, land management, and food security, as well as those directly impacted by changes in the function of rice fields. The informants consisted of eight individuals: a Spatial Planning Analyst from the Padang City Public Works and Spatial Planning Agency, a Junior Expert Spatial Planner from the Padang City Public Works and Spatial Planning Agency, the Head of the

Infrastructure and Regional Affairs Division of the Padang City Regional Development Planning Agency (Bappeda), a Senior Expert Licensing Administrator from the Padang City Department of Public Works and Spatial Planning (DPMPTSP), a Junior Expert Plant Seed Supervisor from the Padang City Agriculture Agency, the Head of the Food Availability and Distribution Division from the Padang City Fisheries and Food Agency, and two active farmers affected by the conversion of rice fields.

The research data consisted of primary and secondary data. Primary data was obtained from interviews organized based on the research focus. Primary data was also obtained from official documents provided by the informants. Meanwhile, secondary data is obtained through a study of legal regulations, government documents, data from the Central Statistics Agency (BPS), scientific articles, journals, and other official sources relevant to the implementation of spatial planning policies and regional food security.

The validity of the data in this study was tested using source triangulation techniques. Triangulation was conducted by comparing information obtained from several interviewed informants, both from the local government and farmers affected by rice field conversion. This technique was used to ensure the consistency and credibility of the data, particularly in comparing administrative data with actual conditions on the ground regarding the implementation of Regional Regulation No. 3 of 2019 concerning land conversion control and its impact on food security in Padang City. Data analysis employed qualitative data analysis techniques systematically through data reduction. Researchers sorted, simplified, and grouped data relevant to the research focus. At the data presentation stage, the interview results and documentation were systematically organized based on key themes, such as mechanisms, supervision, spatial utilization, inter-agency coordination, changes in productive rice fields, and local food production. Next, at the conclusion drawing stage, the researcher interprets the data to answer the research objectives, namely analyzing the implementation of Padang City Regional Regulation Number 3 of 2019 in controlling land conversion and its impact on Padang City's food security.

RESULTS

The research results indicate that the implementation of Regional Regulation Number 3 of 2019 concerning Regional Spatial Planning to control the conversion of productive rice fields has not been effective. These findings are based on two main focuses:

the implementation of spatial planning policies to control the conversion of rice fields in Padang City and its impact on Padang City's food security. Referring to the first focus, namely policy implementation, this research is categorized into three factors: apparatus compliance, smooth implementation, and implementation performance. For the second focus, the research findings are grouped into five indicators: expected and unanticipated policy impacts, external impacts, impacts on direct and indirect costs, and impacts on current and future conditions.

In implementing this policy, the Padang City Public Works and Spatial Planning (PUPR) Office has implemented administrative spatial utilization control procedures. These procedures are evident in the implementation of inspections of the Conformity of Spatial Utilization Activities (KKPR), the Issuance of City Plan Information (KRK), Activity Plan Approval (PRK), and technical recommendations for Building Approval (PBG). Each applicant submitting a spatial utilization request will be reviewed for compliance with the prevailing monetary policy and spatial utilization regulations. The Padang City Investment and One-Stop Integrated Services Agency (DPMPTSP) then issues permits based on recommendations from the Ministry of Public Works and Housing (PUPR). However, research findings indicate that official compliance is still more evident in administrative procedural orientations, while substantive control over the conversion of productive rice fields in the field is not yet fully effective. This is evident in the ongoing conversion of rice fields in Padang City.

Other findings indicate that the implementation of land conversion control often faces challenges in coordination, data collection, and strengthening of technical regulations. One significant finding is the lack of implementation of Sustainable Food Agricultural Land (LP2B), a regional legal product with clear regulations. This situation means that many rice fields will lose their productive functional position because there are no regulations governing their conversion. This is because rice fields not registered in the Regional Regulation cannot be declared as protected sustainable agricultural land. This statement is contained in Regional Regulation No. 3 of 2019, Article 67 B Paragraph (6), which states, "Agricultural areas as referred to in paragraph (1) can be designated as sustainable agricultural areas with criteria in accordance with statutory provisions related to the implementation of government affairs in the agricultural sector and stipulated in a separate Regional Regulation."

In response, the Padang City Agriculture Office responded by taking action, namely measuring and mapping rice fields, including through collaboration with the Andalas University LPM (LPM), resulting in 5,900 ha of land being recorded. It also re-initiated land data collection based on name and address. However, until this research was conducted, the results of this mapping had not been officially recognized as a Regional Regulation specifically for LP2B. This condition indicates that efforts to protect agricultural land have been carried out administratively, but have not been fully reinforced by specific regional legal instruments.

Table 1. Findings of the Implementation of the Padang City Spatial Planning Policy

Research	Finding Indicator	Description
Compliance of the apparatus	The KKPR, KRK, PRK procedures and PBG technical recommendations have been implemented.	Compliance of the apparatus is still dominant in the administrative aspect
Smooth implementation	Coordination between agencies has been carried out, but it has not been fully integrated well.	Spatial planning, licensing, agriculture, and food data are not yet optimally connected.
Implementation performance	Conversion of rice fields is still occurring in Padang City	Administrative output is available, but the outcome of land control is not yet effective, this is proven by the data that there are still many rice fields that have experienced land conversion.
LP2B Protection	Mapping of rice fields has been carried out	LP2B has not been established as a special regional regulation
Field supervision	Monitoring of space utilization is carried out by relevant agencies	Supervision has not been able to significantly reduce the conversion of rice fields.

Source: Interview results and research documentation, processed by the researcher

Tabel 2. Data Pendukung Kondisi Lahan Sawah dan Produksi Pangan Kota Padang

Indikator	Temuan Data	Keterangan
Rice field area in 2023	5.189,62 ha	Rice field area before significant decline
Rice field area in 2024	± 4.341,76 ha	Rice field area after subsidence
Rice field shrinkage 2023–2024	±847,76 ha	Shows that there is still pressure for land conversion
Rice production in 2021	27.363,65 kw	Data on the results of converting paddy to rice
Rice production in 2022	26.196,06 kw	Experienced a decline from the previous year
Rice production in 2023	33.595,32 kw	Increased

Indikator	Temuan Data	Keterangan
Rice production in 2024	28.477,90 kw	Back to decline
Food fulfillment from local production	±30%	Local production is not sufficient to meet community needs
Dependence on supplies from outside the region	±70%	Supply comes from buffer zones

Source: BPS data and interview results, processed by researchers

The table above shows that the implementation of spatial planning policies has created an administrative mechanism for controlling spatial use. However, research shows that this mechanism has not been fully effective in curbing changes in the function of rice fields. The effectiveness of spatial planning policy implementation is evident in data on the declining area of rice fields in Padang City. In 2023, the area of rice fields was recorded at 5,189.62 ha, decreasing to 4,341.76 ha in 2024. This represents a reduction in rice fields of approximately 847.76 ha in one year. This data supports the fact that spatial planning policies have not been fully effective in maintaining productive rice fields.

The impact on food security is evident in the limited capacity of local food production in Padang City. Informants from the Department of Fisheries and Food stated that local food production can only meet approximately 30% of Padang City's population needs, with the remainder supplied by other regions, such as Solok, Padang Panjang, Pesisir Selatan, Tanah Datar, and other buffer zones. Food distribution to Padang City is largely market-driven, so food supply is highly dependent on smooth distribution from outside areas.

This research also uncovered several negative findings. First, despite the implementation of spatial utilization control procedures, land conversion continues to occur. Second, despite rice field mapping, the LP2B (Land Use Management System) has not yet been established as a binding regional regulation. Third, rice production increased in 2023 but declined again in 2024. Fourth, affected farmers reported that the reduction in rice field area has resulted in decreased harvest yields and household income. These findings indicate that the administrative results of the policy are not fully aligned with the actual conditions on the ground.

DISCUSSION

Research findings indicate that the implementation of Padang City Regional Regulation Number 3 of 2019 concerning Regional Spatial Planning remains strongly procedural, but has not been effective in substantive aspects in controlling the conversion of productive agricultural land. Multi-layered licensing mechanisms such as KKPR, KRK, PRK, and PBG technical recommendations demonstrate that Padang City Public Works and Housing Agency officials have consistently implemented the administrative stages of the policy. However, the reduction of 847.76 hectares of rice fields in one year demonstrates that procedural compliance does not automatically guarantee successful control of land conversion. From the perspective of Ripley and Franklin in Kadji (2015), these findings confirm that official compliance is evident in the formal dimension, but smooth implementation is still marred by structural issues, and implementation performance has not yet produced outcomes in accordance with policy objectives. These findings address the research focus on spatial planning policy implementation and emphasize that implementation success cannot be measured solely by administrative compliance but must be seen in terms of its real impact on the ground.

The non-establishment of Sustainable Food Agricultural Land (LP2B) as a special regional regulation is an important finding that indirectly impacts the weakness of policies on agricultural land protection in Padang City. The findings in this study are in line with research conducted by Dwiyanti and Mubarok (2024) which shows that the government's role in supporting the agricultural sector is still not optimal, this can be seen from the limited guidance, assistance, and government involvement in responding to various problems faced by farmer groups. The RTRW Regional Regulation does function as a basis for controlling the use of space in general, but the protection of productive rice fields requires more specific instruments and has strong legal binding power, as emphasized in Article 67 B Paragraph (6) of Regional Regulation Number 3 of 2019. Without LP2B regulations, agricultural land protection still depends on general spatial planning control and inter-agency coordination which in practice runs sectorally. This explains why the mapping of 5,900 hectares of rice fields conducted by the Department of Agriculture in collaboration with the Andalas University Research and Development Institute (LPPM) has not been able to fully stem the pressure of land conversion, as the mapping results lack a legally binding basis due to the rejection of the LP2B approval by the Regional People's Representative Council (DPRD).

From James Anderson's perspective (Yohanis Turambi, 2023), the intended effects of spatial planning policies are controlled land conversion and maintained regional food security. However, research findings indicate a significant gap between the expected impacts and the actual impacts on the ground. Shrinking rice fields, local food production capacity that only meets approximately 30 percent of the population's needs, and a dependence of approximately 70 percent on supplies from other regions indicate that spatial planning policies have not had a substantive impact on regional food security. Unintended effects also emerge in the form of price competition between regions for food supplies and the erosion of the value of local wisdom on customary lands due to economic pressures. Meanwhile, external impacts were identified in the form of food distribution vulnerabilities for consumers not directly involved in land conversion dynamics, as well as the reduced ecological function of rice fields as water catchment areas, which has resulted in an increased risk of urban flooding. These findings directly address the research objective, which is to reveal how weak implementation of spatial planning policies has multidimensional implications for regional food security.

The finding of strong procedural compliance but weak substantive outcomes is consistent with the theoretical framework of Ripley and Franklin in Kadji (2015), which emphasizes that apparatus compliance cannot be measured solely by formal adherence to procedures, but must also be analyzed from the actual impacts produced. The phenomenon of ongoing land conversion activities into buildings without permits that was only recently discovered by the PUPR reinforces that coordination is a critical variable in policy implementation, where fragmentation between agencies such as the lack of substantive coordination between PUPR, BAPPEDA, the Department of Agriculture, and the Department of Fisheries and Food will always result in partial and suboptimal implementation. This finding is also in line with Mazmanian and Sabatier (1983) who emphasized that the availability of consistent implementation instruments is a fundamental prerequisite for effective implementation. This phenomenon illustrates the gap between Regional Regulation No. 3 of 2019, which has limited scope, and Mayoral Regulation No. 51 of 2021, which does not contain specific Standard Operating Procedures regarding rice field conversion activities.

Regarding policy impact, this study's findings align with James Anderson's theory (Kadji, 2015), particularly regarding externalities and future impacts. Padang City's experience during the COVID-19 pandemic and the flash floods (galodo) that disrupted food

distribution channels empirically demonstrates Anderson's argument that the impact of policies on future conditions is often more serious than the current situation, especially when problems are cumulative and not promptly intervened.

This finding is also relevant to the research of Yao et al. (2023), which emphasizes the importance of cross-actor collaboration in agricultural land protection. In the context of Padang City, inter-agency collaboration has been conducted, for example, through Focus Group Discussions on the RTRW review, but has not been fully supported by data integration and robust legal instruments, resulting in the collaboration not producing the expected effectiveness. This finding also supports Chen et al. (2021) showed that urban food security requires integration between spatial planning and food systems, as reflected in Padang City's structural dependence on external food supplies due to weak protection of productive land within the city. However, this study also showed findings that differ from the general assumption regarding farmer motivation. In contrast to the view that places low farming enthusiasm as the cause of land conversion, interviewed farmers stated that they still wanted to maintain their land, and that land conversion was more caused by structural pressures such as weak incentives and minimal irrigation infrastructure. This difference can be explained in the local context of Padang City, which still has Minangkabau customary ties to customary land, a variable not always present in similar studies in other regions. Compared with studies that only highlight changes in land use spatially, this study shows that land conversion needs to be understood as a matter of public policy implementation that directly impacts regional food security.

CONCLUSION

This study aims to analyze the implementation of Padang City Regional Regulation Number 3 of 2019 concerning Regional Spatial Planning in controlling the conversion of productive agricultural land and its impact on Padang City's food security. Based on the findings and discussions that have been described, it can be concluded that the implementation of Regional Regulation Number 3 of 2019 is still strongly oriented towards administrative procedural aspects, but has not been effective in substantive aspects. Compliance by officials in implementing layered licensing mechanisms such as KKPR, KRK, PRK, and PBG technical recommendations is not followed by the ability to curb the rate of rice field shrinkage, as indicated by data on shrinkage of 847.76 hectares within a period of

one year. From the perspective of Ripley and Franklin in Kadji (2015), this condition confirms that formal compliance of officials is not directly proportional to the smooth implementation and performance of policy implementation. The lack of establishment of Sustainable Food Crop Land (LP2B) as a special regional regulation has also contributed to the structural weakening of the legal framework for agricultural land protection. Consequently, existing rice field mapping efforts have been unable to significantly stem the pressure of land conversion. Regarding impact, James Anderson's framework (Yohanis Turambi, 2023) confirms a gap between expected and actual impacts, such as local food production capacity meeting only about 30 percent of community needs, approximately 70 percent dependence on external supplies, and the emergence of external impacts in the form of food distribution vulnerabilities and reduced ecological function of rice fields as water catchment areas. This indicates that spatial planning policies have not fully contributed to strengthening regional food security.

This research contributes to scholarship by positioning agricultural land conversion not merely as a spatial phenomenon but as a consequence of the public policy implementation process that directly impacts regional food security. Theoretically, this research strengthens the relevance of integrating Ripley and Franklin's policy implementation framework with James Anderson's policy impact framework as complementary analytical approaches to evaluating the effectiveness of spatial planning policies, while demonstrating that measuring policy success cannot be limited to procedural compliance indicators alone. Practically, these findings provide an empirical basis for strengthening agricultural land protection policies in Padang City, particularly regarding the urgency of establishing the LP2B as a binding legal instrument and the need for data integration across agencies dealing with spatial planning, agriculture, licensing, and food.

Future research is recommended to develop a mixed-methods design that combines qualitative data on the policy implementation process with quantitative data on changes in land area and food production, so that the relationships between variables can be measured more precisely. Expanding the research context to other regencies/cities in West Sumatra with similar customary land characteristics is also relevant, to test the consistency of the role of Minangkabau local wisdom as an instrument for controlling land use change outside the context of Padang City. Furthermore, the use of longitudinal spatial data in future research can strengthen the measurement of the relationship between land use change dynamics and production fluctuations.

REFERENCES

Abidin, M. Z. (2015). Dampak Kebijakan Impor Beras dan Ketahanan Pangan dalam Perspektif Kesejahteraan Sosial. *Sosio Informa, 1*(3), 213–230. https://doi.org/10.33007/inf.v1i3.168

Anderson, J. E. (2015). *Public policymaking: An introduction* (8th ed.). Cengage Learning.

Anggara, S. (2014). *Kebijakan Publik*. Pustaka Setia.

Ansari, M. N., Bachri, S., & Lahae, K. (2020). Efektivitas terhadap Pelaksanaan Pengaturan Lahan Pertanian Pangan Berkelanjutan. *Repertorium: Jurnal Ilmiah Hukum Kenotariatan, 9*(2), 135–151. https://doi.org/10.28946/rpt.v9i2.863

Badan Pusat Statistik Kota Padang. (2024). *Luas Lahan Sawah Menurut Jenis Pengairan di Kota Padang Tahun 2021–2024*. Badan Pusat Statistik Kota Padang. https://padangkota.bps.go.id/id/statistics-table/2/MTI3IzI=/luas-lahan-sawah.html

Badan Pusat Statistik Provinsi Sumatera Barat. (2024). *Produksi Beras Hasil Kerangka Sampel Area (KSA) Menurut Bulan dan Kabupaten/Kota di Provinsi Sumatera Barat*. Badan Pusat Statistik Provinsi Sumatera Barat. https://sumbar.bps.go.id/id/statistics-table/2/NzE1IzI%3D/produksi-beras-hasil-kerangka-sampel-area-ksa-menurut-bulan-dan-kabupaten-kota.html

Dewi, D. S. K. (2022). *Buku Ajar Kebijakan Publik: Proses, Implementasi, dan Evaluasi*. Penerbit Samudra Biru.

Dwyanti, S. A., & Mubarak, A. (2024). The government's role in empowering farmer groups in Kuta Baru Village, Tebing Tinggi District, Serdang Bedagai Regency. *Jurnal Dialektika: Jurnal Ilmu Sosial, 22*(3), 153–162. https://doi.org/10.63309/dialektika.v22i3.329

Jumroh, & Pratama, M. Y. J. (2021). *Implementasi Pelayanan Publik: Teori dan Praktik*. PT Insan Cendekia Mandiri Group.

Kadji, Y. (2015). *Formulasi dan Implementasi Kebijakan Publik: Kepemimpinan dan Perilaku Birokrasi dalam Fakta Realitas*. UNG Press.

Miranda, N. R. (2024). Upaya Penaggulangan Alih Fungsi Lahan Pertanian Pangan Berkelanjutan di Kecamatan Lubuk Barumun, Kabupaten Padang Lawas. *Jurnal Sostekmas: Jurnal Ilmu Sosial, Teknologi, dan Pengabdian Masyarakat, 1*(1), 1–7. https://doi.org/10.65434/jst.v1i1.9

Pemerintah Kota Padang. (2019). *Peraturan Daerah Kota Padang Nomor 3 Tahun 2019 tentang Perubahan atas Peraturan Daerah Nomor 4 Tahun 2012 tentang Rencana Tata Ruang Wilayah Kota Padang Tahun 2010–2030*. https://peraturan.bpk.go.id/Details/135135/perda-kota-padang-no-3-tahun-2019

Putra Tri Rezeki, A., & Frinaldi, A. (2024). Strategi Pemerintahan Daerah Kota Padang Panjang dalam Menjaga Keberlanjutan Lahan dan Pangan. *Jurnal Ilmu Administrasi Negara AsIAN (Asosiasi Ilmuwan Administrasi Negara), 12*(2), 204–214. https://doi.org/10.47828/jianaasian.v12i2.250

Ramdhani, D. K., & Fitri, H. (2025). Rencana Tata Ruang dan Konversi Lahan Pertanian Menjadi Permukiman 2005–2030 di Kawasan Aie Pacah, Kota Padang, Sumatera Barat. *Media Bina Ilmiah, 19*(8), 5323–5336. https://binapatria.id/index.php/MBI/article/view/1186

Ran, C., Rui, P., Songtang, L., & Hongxia, L. (2025). Gap reduction and collaborative empowerment: How can farmland protection policies be effectively implemented? Based on the case study of Y County, China. *Review of Policy Research, 42*(2), 393–422. https://doi.org/10.1111/ropr.70002

Republik Indonesia. (2012). *Undang-Undang Republik Indonesia Nomor 18 Tahun 2012 tentang Pangan*. https://peraturan.bpk.go.id/Details/39100

Ripley, R. B., & Franklin, G. A. (1986). *Policy implementation and bureaucracy* (2nd ed.). Dorsey Press.

Sonnino, R., & Coulson, H. (2021). Unpacking the new urban food agenda: The changing dynamics of global governance in the urban age. *Urban Studies, 58*(5), 1032–1049. https://doi.org/10.1177/0042098020942036

Syahyeni, R., Zuriyani, E., & Despica, R. (2023). Dampak Alih Fungsi Lahan Sawah bagi Perkembangan Infrastruktur Wilayah di Kota Padang Tahun 2010–2020. *Journal on Education, 5*(4), 1716–1722. https://doi.org/10.31004/joe.v5i4.4305

Turambi, J., Lengkong, F. D., & Plangiten, N. (2023). Dampak Kebijakan Pengembangan Pariwisata bagi Masyarakat Kelurahan Woloan Satu Utara Kecamatan Tomohon Barat. *Jurnal Administrasi Publik, 9*(4), 580–587. https://doi.org/10.35797/jap.v9i4.52084

Zhong, T., Si, Z., Scott, S., Crush, J., Yang, K., & Huang, X. (2021). Comprehensive food system planning for urban food security in Nanjing, China. *Land, 10*(10), Article 1090. https://doi.org/10.3390/land10101090