

The Institutional Role of Slum Management in Denpasar **City Area**

Anak Agung Gde Sutrisna Wijaya Putra^{1*}, Syamsul Alam Paturusi², I Nyoman Darma Putra³, A.A. Ngr. Anom Kumbara⁴

Udayana University, Denpasar, Bali, Indonesia^{1,2,3,4}

Email: gungtrisna@unmas.ac.id1, syamsul_alam_paturusi@yahoo.fr2, idarmaputra@yahoo.com3,

anom kumbara@vahoo.com4

| Keywords | ABSTRACT | | | |
|----------|--|--|--|--|
| | ABSTRACTThe limited availability of land in major cities like DKI Jakarta, Surabaya, and Denpasar City has forced residents to compromise on ideal settlement locations, leading to a switch in land use patterns. Failure to secure ideal locations exacerbates settlement issues, ultimately contributing to the proliferation of urban slums. Denpasar City, in particular, grapples with various problems stemming from slum growth. As part of its responsibilities in urban development, the government is tasked with providing public services, safeguarding low-income communities, promoting regional growth, ensuring environmental sustainability, and upholding national integrity. However, the phenomenon of migrant influx in Denpasar City presents an additional challenge for governance. Traditional villages play a pivotal role in managing migrant populations by leveraging pecalang (traditional Balinese security forces) and customary rules to maintain community cohesion. To effectively address slum proliferation, customary villages must align their development goals and strategies. This qualitative research utilizes primary and secondary data to explore the role of institutions in slum management. Despite | | | |
| | explore the role of institutions in slum management. Despite various programs aimed at mitigating urban challenges, the effectiveness of institutions like the PKP Working Group and DLHK remains suboptimal. Therefore, there is a pressing need for customary villages to play a more active role in tackling slum issues within their jurisdictions. | | | |

INTRODUCTION

Rapid urbanization, especially in densely populated cities like DKI Jakarta, Surabaya, and Denpasar City, has led to the increasingly limited and expensive availability of land. This scarcity prompts residents to settle in less-than-ideal locations, thereby shifting land usage patterns (Salim & Hudalah, 2020; Takyi et al., 2021; Wiryasa & Dwijendra, 2021). However, this lack of suitable land choices often exacerbates various settlement issues, culminating in the proliferation of slums (Ascensão, 2018; Marutlulle, 2021). These problems stem from several factors: inadequate control over housing and settlement development, limited capacities in housing provision by governmental, private, and community sectors, suboptimal development of human resources and community institutions, and insufficient understanding of technical criteria for residential land use, notably regarding environmental carrying capacities and spatial limitations (Greiving et al., 2018; Myeni & Mvuyana, 2017; Sette Whitaker Ferreira et al., 2020; Williams et al., 2018).

Urban slum issues primarily arise from the expansion of housing onto both legal and illegal lands (Ezeh et al., 2017; Henderson et al., 2021; Safitri et al., 2020). Legal land slums occupy areas designated for residential use in spatial plans, while illegal land slums encroach upon non-residential zones. Additionally, slum dwellings on illegal lands often occur on state-owned parcels claimed by individuals



or entities (Michiani & Asano, 2019; Yunisuryandari & Widyawati, 2019; Zain et al., 2018). These slum areas, whether on private or state-owned land, share common characteristics of unhealthy environmental conditions, including dirtiness, pollution, dampness, exacerbated by their dual function as living and working spaces (Marks & Miller, 2022; Mayer & Boston, 2022; Sarkar & Bardhan, 2019). Such ecological degradation results from the environment's incapacity to sustain the activities burdening the region.

In Denpasar City, the capital of Bali Province, these slum problems manifest in various detrimental ways, such as aesthetic degradation, susceptibility to fire disasters, poor sanitation, heightened crime rates, and increased risk of disease outbreaks. The unsanitary conditions prevalent in slums contribute to the spread of diseases like dysentery, malaria, tuberculosis, and dengue fever. To address these challenges and maintain the city's image, the Denpasar City Government has undertaken various initiatives in slum management, aligning with its responsibilities in urban development and public welfare (Anasta & Ambarwati, 2023; Bustani et al., 2022; Nugroho & Malkhamah, 2018; Sun, 2021; Tarno et al., 2023).

Key stakeholders involved in these efforts include governmental bodies, private entities, and community institutions. Notably, traditional villages, acting as essential development stakeholders, hold significant sway over environmental regulation, particularly in Bali Province (Widiadnyana, 2018). These customary villages, governed by traditional laws and customs, possess the authority to manage their territories, including addressing slum-related issues. Despite their regulatory powers, customary villages' involvement in slum management programs has yet to yield substantial reductions in slum levels. Enhancing their role in future initiatives necessitates clear delineation of goals and strategies within local regulations pertaining to their duties in development and environmental management.

This research adopts a pentahelix collaboration approach, emphasizing institutional roles in accelerating slum eradication efforts. By partnering with various stakeholders, including customary villages in Denpasar City, the study aims to assess the effectiveness of collaborative slum management endeavors.

METHODS

This research approach follows the steps of qualitative research work (Creswell, 2020). This study's primary and secondary data are primary and secondary. Primary data are obtained through direct observation and recording in the field, sampling, discussion, interviews, and filling out questionnaires related to slums and the role of customary villages in environmental management. Secondary data is obtained by searching various sources, such as the results of previous research, literature studies reports, and documents from multiple agencies related to slum management policies and customary village policies in protection in the protected areas.

Research Sites

This research was conducted in Denpasar City, the capital of Bali Province, located in the central part of the island of Bali, longitudinally from west to east, between 08° 35' 31" – 080 44' 49" South Latitude and 1150 10' 23 "–1150 16' 27" East Longitude. With an area of 127.78 km2 or 12,778 Ha. The boundaries of Denpasar City are as follows:

- North : Mengwi and Abiansemal sub-districts (Badung district)
- East : Sukawati District (Gianyar District) and Badung Strait
- South : South Kuta District (Badung Regency) and Benoa Bay
- West : North Kuta and Kuta Districts (Badung Regency)

Object and Subject of Research

Data sources to obtain the required information are divided into government elements in Bali Province and Denpasar City, academics, practitioners, community leaders, and non-governmental organizations. Elements of practitioners who will be sources of information in this research activity are institutions related to housing and housing infrastructure development activities, such as the Indonesian Planning Experts Association (IAP) Bali, the Indonesian Architectural Association (IAI) Bali, the Indonesian Association of Sanitary and Environmental Engineering Experts (IATPI), the Indonesian Consultants Association (INKINDO), and the Association of Consultants Indonesian National (Perkonindo). Elements of community leaders and non-governmental organizations as sources of information and data are PHDI Bali, MDA Bali, Walhi Bali, PPLH Bali, traditional leaders and community leaders at the research site, and slum dwellers.

Research Instruments

This research adopts a qualitative descriptive approach, utilizing various data collection instruments tailored to the research objectives. These instruments comprise (1) a Map delineating housing and slum areas in Denpasar City as per the Denpasar City Slum Decree; (2) the RTRW Spatial Pattern Map of Denpasar City; and (3) a Map detailing traditional villages in Denpasar City. Additionally, questionnaire instruments, base map sheets, thematic maps, and planning maps are employed to further enrich the data collection process.

Data Collection Methods and Techniques

1. Observation

This phase entails direct field observation by researchers to ascertain the location of the study, assess the area's conditions, identify potentialities, existing activities, and obtain a general overview of the research area.

2. Survey

Researchers conduct surveys to gather data on the policies and roles of customary villages in Denpasar City concerning environmental management, aligning with the previously outlined data collection model.

3. Interview

Interviews, discussions, and Focus Group Discussions (FGDs) are conducted with pertinent stakeholders including government representatives, academics, practitioners, and community leaders. These stakeholders are categorized into two aspect groups: settlements and traditional villages, and community leaders. Government representatives, serving as policy managers in settlement-related domains, include regional apparatus organizations (OPD) associated with settlement planning and management in both Bali Province and Denpasar City. These entities consist of the Regional Development Planning Agency, Department of Housing and Settlement Areas, Department of Public Works and Spatial Planning, Environmental Agency, and Regional Disaster Management Agency.

Data Analysis

This analysis of customary villages' role aims to examine their role in environmental management in their areas, especially slum management. The role of customary villages in environmental management can be measured at least through how far customary villages have regulated the sustainability of their environment through the rules / *awig-awig* or *perarem* that apply in their area. Not only binding rules but also what customary villages have done to keep their environment free from environmental problems such as land use change or slums.

Primary and secondary surveys were first carried out to analyze this customary village's role. Primary and secondary surveys were conducted to obtain data on the implementation of customary village tasks in realizing *sakala* and *niskala* concreteness following their duties related to settlement environmental management (palemahan). Some concrete tasks of customary villages can be described, such as mutual aid activities in the customary environment, customary assistance in improving the quality of the homes of its residents, or improving the quality of the housing environment in the area of the customary village concerned.

RESULTS

Characteristics of Slums in Denpasar City

Land Use in Denpasar City can be classified into 5 (five) types of land use including rice fields, tegal / huma, yards, plantations and others. Based on the compilation of sub-district data in 2020 figures in Denpasar City, the largest total use of paddy fields is South Denpasar District (800 Ha) while the smallest paddy field is in West Denpasar District (242 Ha). The largest yard land in South Denpasar District (2,718 Ha), while the smallest yard area in East Denpasar District (1,257 Ha). The largest Tegal / Huma land and plantation are located in South Denpasar District with their respective land areas, namely tegal / huma 183.00 Ha and plantations 21.00 Ha.

This condition shows that the direction of development of physical development for settlements, offices, trade and services as well as other built-up land uses is quite significant in South Denpasar District even though the agricultural land reserves are still the largest compared to other districts. A more detailed picture of the land use area of each sub-district in Denpasar City can be seen in table 1.

| Table 1. Land Use of Denpasar City in 2019 | | | | | | | | | |
|--|----------------|---------------|----------------|----------------|----------------|--------|--------|--|--|
| | District | Land Use (Ha) | | | | | | | |
| No | | Paddy | Tegal/ Huma | Pekara ngan | Perkebu Nan | Others | Sum | | |
| 1 | South Denpasar | 800 | 183 | 2.718 | 21 | 1.271 | 4.993 | | |
| 2 | East Denpasar | 690 | 144 | 1.257 | 20 | 120 | 2.231 | | |
| 3 | West Denpasar | 242 | - | 1.871 | - | 293 | 2.406 | | |
| 4 | North Denpasar | 677 | 46 | 2.288 | 7 | 124 | 3.142 | | |
| Amount/Total | | 2.409 | 373 | 8.134 | 48 | 1.808 | 12.772 | | |

Source : Compilation of Districts in 2020 Figures

Settlements are part of the environment outside protected areas in the form of urban and rural areas that function as residential environments or residential environments and places of activities that support livelihoods and livelihoods. Residential Areas in Denpasar City consist of Urban Residential Areas and Rural Settlement Areas. The settlements all started from traditional housing groups. The physical appearance of the residential area in Denpasar City is currently a combination of the form of Traditional Settlement Groups, Semi-Traditional Settlement Groups (rejuvenation of traditional settlements) and New Development Settlement Groups consisting of (Settlements by developers, natural growing settlements, Ready-to-Build Kaveling, Shop Houses (Ruko) and Office Houses (Rukan), Rental Houses, and Rental Land

The spread of residential areas is seen clustered in the City Center area and its surroundings, then radially spread on main roads leading out of the city, and in groups of old rural settlements and wista activities (Sanur Area). In the downtown area and some residential groups, the density of settlements appears denser, but in some places there are groups of medium and low density settlements. A rather low density of settlements is seen in areas that still have rice fields, namely: in the corridor of the Peguyangan Kaja - Penatih area, Kesiman Kertalangu and Petilan areas, Renon - Sanur Kauh areas, Pemogan - Pedungan areas, and Pemecutan Kelod areas, and around the southern Padang Sambian, but in some blocks there are new settlement groups with high density.

Characteristics of Denpasar City Slums

In accordance with the Decree of the Mayor of Denpasar No. 188.45/932/HK/2020, concerning the determination of the location of Housing and Kaw. Denpasar City Slums in 2020 set 10 slum locations

spread across each sub-district in Denpasar City with an overall area of Housing and Slum Areas reaching 50,520 Ha. Based on the Decree of the Mayor of Denpasar in 2020, it is recorded that Denpasar City has 2 locations of slum areas with an area of more than 15 Ha, namely, Suwung Pesangaran Area, Pedungan Village, South Denpasar District with an area of 25.20 Ha with a moderate level of slum; and Karya Makmur Area, Ubung Kaja Village, North Denpasar District has an area of 17,600 Ha with a moderate level of slums. For more details regarding the extent and level of slums according to the Decree of the Mayor of Denpasar no. 188.45/932/HK/2020 can be seen in table 2 below.

| No. | Location Name | Area (Ha) | Administration | | Population Density | Slumber |
|-----|-----------------------|--------------|-----------------------|----------------|-----------------------|---------|
| | | | Village/Village | District | (soul/Ha) | Level |
| 1 | Jematang | 3,78 | Dauh Puri Kauh | West Denpasar | < 150 | Tall |
| 2 | Panca Chess | 0,14 | Dauh Castle | West Denpasar | > 400 | Keep |
| 3 | Faucet Kaw. | 0,28 | Dismissal | West Denpasar | > 400 | Tall |
| 4 | Pesanggaran Suwung | 25,20 | Pedungan | South Denpasar | < 150 | Кеер |
| 5 | Batan Poh | 0,58 | Sanur Kaja | South Denpasar | < 150 | Low |
| 6 | Tohpati | 0,62 | Kesiman Kertalangu | East Denpasar | 151-200 | Кеер |
| 7 | Panti Gede | 0,52 | Kaja's dismissal | North Denpasar | 201-400 | Tall |
| 8 | Margajati | 0,68 | Kaja's dismissal | North Denpasar | 201-400 | Tall |
| 9 | Belong Menak Kaw. | 1,12 | Kaja's dismissal | North Denpasar | 201-400 | Tall |
| 10 | Prosperous Works | 17,60 | Ubung Kaja | North Denpasar | < 150 | Low |
| Тс | otal Slum Area | 50,52 | | | | |

Table 2. Location and Area of Housing and Slum Areas Denpasar City in 2020

Source :Mayor Decree no 188.45/932HK/2020

Judging from the distribution of housing locations and slums in Denpasar City, North Denpasar District is a sub-district that has the highest number of housing and slums, namely 4 (four) housing and slums, of which 3 (three) locations are in Pemecutan Kaja village and 1 location is in Ubung Kaja Village. South Denpasar District is a sub-district that has the largest housing and slums with a total area of 25.78 Ha, there are 2 (two) housing locations and slums including the Pesanggaran Suwung area located in Pedungan Village and the Batan Poh area located in Sanur Kaja Village. West Denpasar District recorded 3 (three) slum locations spread across Dauh Puri Kauh Village, Dauh Puri Village and Pemecutan Village with a total area of 4.20 Ha, while South Denpasar District is a district that has the smallest area / slum point of 0.62 Ha located in Tohpati, Kesiman Kertalangu Village. The map of the distribution of housing and slums in Denpasar City can be seen in figure 1 below.

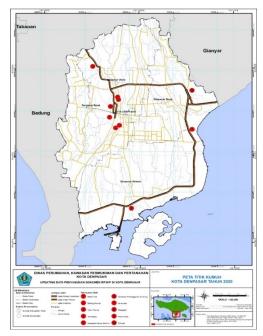


Figure 1. Map of the Distribution of Housing Locations and Slum Areas in Denpasar City in 2020

The Role of Indigenous Villages in Urban Development

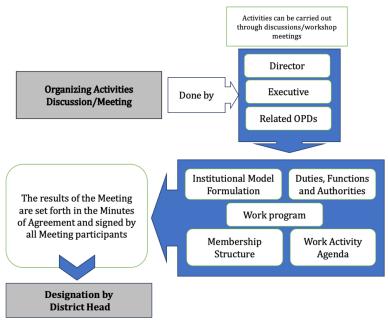
The success of urban development cannot be separated from local culture and politics (Henderson et al., 2021), because various city problems can only be solved with political awareness and local identity. Some local cultural concepts that can be used as examples of success in urban development are the radius of local uniqueness, local spatial existence, local spatial resilience, strengthening local communities and local solutions. The life of Balinese people in the social system cannot be separated from the existence of customary law in the unity of its customary law community. The atmosphere of harmonious life, in the community in Bali in institutions called traditional villages. Customary village is an association of community organizations with a cultural system that is closely related to religious values and is regulated at the level of local regulations, the basis of customary village authority in making awig-awig (Bali Provincial Regional Regulation Number 3 of 2001).

Customary villages as autonomous villages have the authority to manage and organize their own household life which is socio-religious, socio-economic, and social. Customary villages have three types of power, namely: the power to set rules; the power to conduct the life of organizations of a socio-religious nature; and the power to resolve disputes (Maulana et al., 2021; Sukadana et al., 2023). The broader authority of customary villages (Law No. 6 of 2014) is: Regulation and implementation of government based on the organizational system of customary village life; Regulation of indigenous territories; traditional rights ownership; land management of customary village treasuries; customary land management; agreement in people's lives. With this system, basically traditional villages are resilient villages, relatively resistant to the times (Ozel et al., 2014). However, these systems also have a greater adaptive capacity than non-modular systems so that without strict control changes can occur (Jha et al., 2013). The key to the high level of cultural resilience in indigenous peoples is the ability to control both physical control (natural environment, built environment) and human resources so that local uniqueness is maintained (Fauziatunnisa et al., 2021).

The ability to control their environment in regional development is found in village managers who are skilled in controlling the environment from the challenges of changing times, especially the negative influence of urbanization. The role of customary villages and village managers (bendesa) in controlling environmental development is the spearhead for the success of regional development. Good environmental management will certainly be able to minimize the negative impacts that can be caused by an activity. In the development of development in Bali, tourism is an activity that has economic, cultural and environmental impacts (Then et al., 2021).

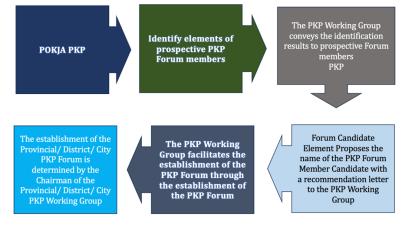
The Role of Housing Institutions and Residential Areas of Denpasar City

The importance of the role of housing institutions and settlement areas which can later become a forum for coordinating problems, development and planning of housing and residential areas in Denpasar City. It is stated in PUPR Regulation No. 12 of 2020 in article 1 point 5 where it is stated that the working group on housing and settlement area development or called POKJA PKP is an institution that coordinates the development of housing and residential areas. The function of the PKP Working Group is as a forum for communication, coordination and synchronization across government sectors in the implementation of the Housing and Settlement Area sector. PKP Working Group institutions in the regions are the staff of local governments whose entire or part of their duties are related to housing and residential areas such as; Planning, Public Works and Spatial Planning, Housing and Residential Areas, Environment and Land (Article 33 paragraph 2, PUPR Regulation No.12 of 2020). To answer problems in the field of housing and residential areas, especially coordination problems and strengthening the role of stakeholders, an institution for coordination, collaboration and communication is needed, namely the PKP Working Group.



Source: PUPR Regulation No. 12 of 2020 Figure 2. PKP Working Group Establishment Scheme

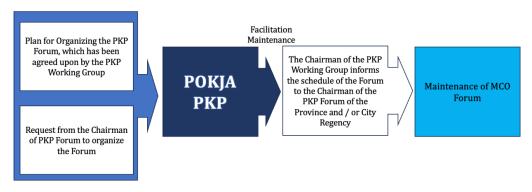
The flow of PKP Forum Formation is facilitated by the PKP Working Group where the stages in the formation and implementation of the PKP Forum are described in the following picture.



Source: PUPR Regulation No. 12 of 2020 Figure 3. The flow of PKP Forum Formation

The PKP Working Group Chairman determines the establishment of the PKP Forum. The stages of forming the PKP Forum start by identifying elements of the PKP Forum, then submitting the names of prospective members with recommendation letters addressed to the PKP Working Group, and then the PKP Working Group facilitates the formation of the PKP Forum.

More details about the flow of organizing the Housing and Settlement Area Forum or PKP Forum can be seen in the following picture.



Source: PUPR Regulation No. 12 of 2020 Figure 4. PKP Forum Implementation Flow

The role of official and customary institutions is very potential in taking the initiative because they have the authority and ability to move the community in the area they lead, producing asymmetrical relationships to determine the potential of the community that grows there. The role of institutions is not only as a driving force in carrying out growth in the community, but also community institutions can plan independently both physically and non-spatially. In planning, community institutions must also collaborate with community action plans so that people are equipped with various values and problems by conducting surveys in their respective areas. In minimizing this slum area, the institutions play a vital role so that they can support the community in developing concepts in the residential environment so that they remain supervised and the community is still in the context of integrating local cultural values. The government not only plans and supervises but also evaluates every environmental arrangement that is carried out so that everything that is designed and planned follows the plan made and shows the quality of the work done so that the environment is not included in the slum area.

Penta Helix Collaboration in Minimizing Denpasar City Slums

The collaboration carried out by Denpasar City in minimizing slums in Denpasar City is carried out by collaborating in the penta helix concept, where this collaboration is carried out between the fields of academics, business, communities, the role of government institutions, and also the media. This collaboration is carried out to synergize and minimize slums in Denpasar City to achieve sustainable development, competition, and advantage in Denpasar City. This collaboration in the academic field aims to create the best drafter who can apply the latest and relevant concepts and theories to development in the Denpasar City area. Collaboration in the business field will later create high sales and added value in maintaining sustainable growth to develop and present decent infrastructure for the people of Denpasar.

The current digital era does require communities of various ages, adolescents, and even adults as intermediaries who can become liaisons between stakeholders, making it easier to achieve the expected goals of minimizing slums in Denpasar City. The role and support of the government in addressing the problem of slums is also vital because the government is the regulator and the controller who has the rights regulations and responsibilities in minimizing slum areas. The role of the media in minimizing slums is no less important because the current digital era media acts as an expender or supporter of publications in promotion and making images in the Denpasar city area known in various regions, nationally, and even internationally through websites or other information media.

The new concept of penta helix collaboration involving various parties provides new ideas for developing an area by minimizing slums. The concept of collaboration from the penta helix is the key to synergistic development to improve the Denpasar City area, which is far from slums, and become the strength of the Denpasar City government to involve all stakeholder institutions in minimizing slums in Denpasar City.

CONCLUSION

This study concludes that the institutions involved are vital in managing *kumus* settlements in the area, especially Denpasar City. However, based on observations, the role of institutions is still not optimal, which is shown by several factors such as the role of Customary Villages on the strength of customary law in managing communities, the PKP Working Group in organizing related settlement infrastructure that is not optimal and the role of DLHK which is still not optimal in handling The waste problem even though various programs have been launched to overcome the volume of waste. In addition, the penta helix collaboration provides a contribution involving multiple fields, such as academic, business, government, and media, to minimize slums in Denpasar City.

REFERENCES

- Anasta, L., & Ambarwati, V. (2023). Menganalisis Program Kinerja pada Laporan Keuangan Pemerintah Daerah Kabupaten dan Kota Serang: Studi Kabupaten dan Kota Serang 2017-2021. *Reviu Akuntansi, Manajemen, Dan Bisnis, 3*(1), 31–36.
- Ascensão, E. (2018). Slum gentrification. In *Handbook of Gentrification Studies* (pp. 225–246). Edward Elgar Publishing.
- Bustani, B., Khaddafi, M., & Ilham, R. N. (2022). Regional Financial Management System of Regency/City Regional Original Income In Aceh Province Period Year 2016-2020. International Journal of Educational Review, Law And Social Sciences (IJERLAS), 2(3), 459–468.
- Creswell, J. W. (2020). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* Pearson Higher Ed.

- Ezeh, A., Oyebode, O., Satterthwaite, D., Chen, Y.-F., Ndugwa, R., Sartori, J., Mberu, B., Melendez-Torres, G. J., Haregu, T., & Watson, S. I. (2017). The history, geography, and sociology of slums and the health problems of people who live in slums. *The Lancet*, 389(10068), 547–558.
- Fauziatunnisa, Z. A., Rengganis, P. I., & Asyraf, M. A. (2021). Pesona Pegringsingan: Mengulik Sejarah dan Dinamika Resiliensi Adat Tradisi Masyarakat Desa Tenganan Pegringsingan Bali dalam Mendukung Pembangunan Pariwisata Berkelanjutan. *El Tarikh: Journal of History, Culture and Islamic Civilization*, 2(2), 81–93.
- Greiving, S., Du, J., & Puntub, W. (2018). Managed retreat—A strategy for the mitigation of disaster risks with international and comparative perspectives. *Journal of Extreme Events*, *5*(02n03), 1850011.
- Henderson, J. V., Regan, T., & Venables, A. J. (2021). Building the city: from slums to a modern metropolis. *The Review of Economic Studies*, *88*(3), 1157–1192.
- Jha, A. K., Miner, T. W., & Stanton-Geddes, Z. (2013). *Building urban resilience: principles, tools, and practice*. World Bank Publications.
- Marks, D., & Miller, M. A. (2022). A transboundary political ecology of air pollution: Slow violence on Thailand's margins. *Environmental Policy and Governance*, *32*(4), 305–319.
- Marutlulle, N. K. (2021). A critical analysis of housing inadequacy in South Africa and its ramifications. *Africa's Public Service Delivery & Performance Review*, 9(1), 16.
- Maulana, R. Y., Wahid, M., Efendi, D., Rakhman, M. A., Yusuf, M., & Lega, M. (2021). Powerful custom, dominated country: Domination of functionary custom over village government in Kerinci. *Journal of Governance and Public Policy*, 8(1), 60–70.
- Mayer, B., & Boston, M. (2022). Residential built environment and working from home: A New Zealand perspective during COVID-19. *Cities*, *129*, 103844.
- Michiani, M. V., & Asano, J. (2019). Physical upgrading plan for slum riverside settlement in traditional area: A case study in Kuin Utara, Banjarmasin, Indonesia. *Frontiers of Architectural Research*, 8(3), 378–395.
- Myeni, S., & Mvuyana, B. (2017). An evaluation of the effects of the private sector participation in housing development in South Africa. *Journal of Public Administration*, *52*(3), 601–613.
- Nugroho, D. A., & Malkhamah, S. (2018). Manajemen sistem transportasi perkotaan yogyakarta. *Jurnal Penelitian Transportasi Darat, 20*(1), 9–16.
- Ozel, B., Dipasquale, L., & Mecca, S. (2014). Resilience and intangible heritage of vernacular architecture. *Vernacular Architecture: Towards a Sustainable Future*, 591–596.
- Safitri, I., Yuliastuti, N., & Maryono, M. (2020). Structuring urban slum areas based on social enrichment in Gumelem Village. *E3S Web of Conferences*, *202*, 06021.
- Salim, W., & Hudalah, D. (2020). Urban governance challenges and reforms in Indonesia: towards a new Urban Agenda. *New Urban Agenda in Asia-Pacific: Governance for Sustainable and Inclusive Cities*, 163–181.
- Sarkar, A., & Bardhan, R. (2019). A simulation based framework to optimize the interior design parameters for effective Indoor Environmental Quality (IEQ) experience in affordable residential units: Cases from Mumbai, India. *IOP Conference Series: Earth and Environmental Science*, 294(1), 012060.
- Sette Whitaker Ferreira, J., Rojas, E., De Souza Carvalho, H. R., Rago Frignani, C., & Santi Lupo, L. (2020). Housing policies and the roles of local governments in Latin America: recent experiences. *Environment and Urbanization*, *32*(2), 333–350.
- Sukadana, I. K., Mahayuni, C. I. A., & Anomsari, A. A. I. A. C. (2023). Wisdom in the Implementation of Ngerampag Sanctions in Balinese Customary Law. *International Conference on "Changing of Law: Business Law, Local Wisdom and Tourism Industry"* (ICCLB 2023), 646–655.

- Sun, X. (2021). Green city and regional environmental economic evaluation based on entropy method and GIS. *Environmental Technology & Innovation, 23,* 101667.
- Takyi, S. A., Amponsah, O., Yeboah, A. S., & Mantey, E. (2021). Locational analysis of slums and the effects of slum dweller's activities on the social, economic and ecological facets of the city: insights from Kumasi in Ghana. *GeoJournal*, *86*, 2467–2481.
- Tarno, T., La Djamudi, N., Nazar, A., & Susiati, S. (2023). Aktualisasi Manajemen Kelas di Sekolah Dasar Wilayah Pesisir Kota Baubau. *Jurnal Pendidikan Tambusai*, *7*(1), 2866–2882.
- Then, J., Felisa, H., & Irene, N. (2021). Sustainable Tourism Development in the Mandeh Tourism Area, Padang, West Sumatra. *International Conference on Sustainable Development Goals (ISCIS)*, 1(1), 48–62.
- Williams, D. S., Máñez Costa, M., Celliers, L., & Sutherland, C. (2018). Informal settlements and flooding: Identifying strengths and weaknesses in local governance for water management. *Water*, 10(7), 871.
- Wiryasa, N. M. A., & Dwijendra, N. K. A. (2021). Socio-physical transformation towards sustainable urban morphology through land readjustment in Indonesia. *Civil Engineering and Architecture*, 9(3), 874–882.
- Yunisuryandari, R., & Widyawati, F. (2019). Development Characteristics of a Coastal Slum Area in Indonesia: a Case Study of Fishermen Settlements in Muara Angke, North Jakarta. Lifeways. International Journal of Society, Development and Environment in the Developing World, 3(1), 37– 54.
- Zain, D. P., Salman, D., & Baja, S. (2018). Model of Slum Area Management Based on Socio-Spatial Approach. The Case of Baubau City, Indonesia. *Journal of Settlements & Spatial Planning*, 9(2).

Copyright holder:

Anak Agung Gde Sutrisna Wijaya Putra, Syamsul Alam Paturusi, I Nyoman Darma Putra, A.A. Ngr. Anom Kumbara (2024)

First publication rights:

International Journal of Social Service and Research (IJSSR)

This article is licensed under:

