



Independent Village Agrotourism Based on Regional Innovation System Governance in Jayapura Regency, Papua Province

Andjar Prasetyo¹(✉), Bakti Putri Harwijayanti², Syahrudin Kadir³, Heri Wahyudianto³, Dewi Gartika⁴, and Mursid Zuhri⁵

¹Regional Development Planning Agency of Magelang City, Magelang, Indonesia
andjar.prasetyo1@gmail.com

²Poltekkes Kemenkes Semarang, Semarang, Indonesia

³Regional Development Planning Agency of Papua Province, Jayapura, Indonesia

⁴Research and Development Agency of West Java Province, Bandung, Indonesia

⁵Regional Development Planning Agency of Central Java Province, Semarang, Indonesia

Abstract. Jayapura Regency is a strategic area in Eastern Indonesia, which is supported by natural resources in the agricultural sector and tourism potential. In managing natural resources, especially agriculture towards tourism is influenced by policies that erode the community into patterns that eliminate work culture systems, innovation systems, and low farmer knowledge. Therefore, holistic, thematic, integrative, and spatial governance is needed with an upstream initiation in the form of an independent village. This study aims to describe the concept of mechanisms and governance needed to encourage the growth of independent villages in Jayapura Regency within the limits of collaboration, involvement, and communication based on regional innovation systems. The research method uses a description of mechanisms and governance which is limited to five components, including partnerships, networks, and collaborations; Community presence and engagement; External communication strategy; Communication material; and Advocacy and policy involvement based on RIS. The study focus was carried out in Jayapura Regency with the target of independent villages in Sentani Timur District and Kemtuk Gresi District. The results show that the mechanism and governance model with the limitations of partnership, network, and collaboration; community and engagement; external communication strategy; communication material; and advocacy and policy engagement based on regional innovation systems can be implemented in independent village agrotourism. This study implies that policymakers have references to pilot projects for village-level economic development based on local potential and pilot projects for local governments in managing the concept of development from a holistic, thematic, integrative, and spatial perspective.

Keywords: Independent Village, Agrotourism, Regional Innovation System, Governance, network and collaboration, advocacy, policy engagement.

1 Introduction

Geographically, Papua's location on international trade routes will certainly be an advantage. The Regency of Jayapura (part of Papua) is a strategic area in the east of Indonesia, which is supported by natural resources in the agricultural sector and the potential of tourism. Policies that erode the community into patterns that eliminate work culture systems, innovation systems, and low farmer knowledge are influencing the management of natural resources, especially agriculture for tourism. However, for the last five decades, there has not been a single economically independent village. Another condition is that the concept of program implementation is technically partial. The absence of an economically independent village indicates that economic development in Papua Province has not been maximized by not focusing on the concept of economic development built by sector and by having too many places to be served. The other thing is the support from the regional apparatus itself, which is not in the perspective of progressive development, upstream - downstream, holistic, thematic, spatial integration, besides, it is rather in a project-based pattern of implementing economic development. Therefore, with an upstream initiation in the form of an independent village, there is a need for holistic, thematic, integrative, and spatial governance.

Preparing an area requires planning in stages and involving various indicators. In this study, the initial indicators used as a basis consisted of partnership [1], [2], network [3]–[5], and collaboration [6]; community and engagement [7], [8]; external [9], [10] communication strategy [11]; communication material [12]; and advocacy and policy [13], [14] engagement. The indicator being argued refers to the character of the region, population, and natural resources. The establishment of an independent village is also planned through integrated interaction [9] of relevant stakeholders, this is in line with the regional innovation system (RIS) [15]–[18] that has been carried out in various regions in Indonesia. The development of independent villages also has a correlation with the concept of creating entrepreneurs [19] based on the availability of natural resources in an area concerning aspects of economic [20], [21], social, health [22], [23], cultural [24], [25] and regional development [17], [18], [26], [27] policies. This study aims to describe the concept of mechanisms and governance needed to encourage the growth of independent villages in Jayapura Regency within the limits of partnership, network, and collaboration; community and engagement; external communication strategy; communication material; and advocacy and policy engagement based on RIS.

2 Method

The research method uses a description of mechanisms and governance which is limited to five components, including partnerships, networks, and collaborations; Community presence and engagement; external communication strategy; communication material; and advocacy and policy involvement based on RIS. The study focus was carried out in Jayapura Regency with the target of independent villages in Sentani Timur District and Kemtuk Gresi District. The analysis is based on indicator conditions which are used as the basis for preparing the maturity level of the study object. The composition of the

indicators is suggested as a starting point for achieving the expected goals in independent village planning. The indicators used in detail include partnership, network, and collaboration; community and engagement; external communication strategy; communication materials; and advocacy and policy engagement. Completeness of indicator conditions provides scientific arguments for carrying out independent village activities.

3 Result and Discussion

The regency of Jayapura includes the districts of Kemtuk Gresi and Sentani Timur and between 1390-1400 degrees east. Jayapura Regency has the following geographical boundaries: Total area of Jayapura Regency up to 17,516.6 km² and divided into nineteen districts.

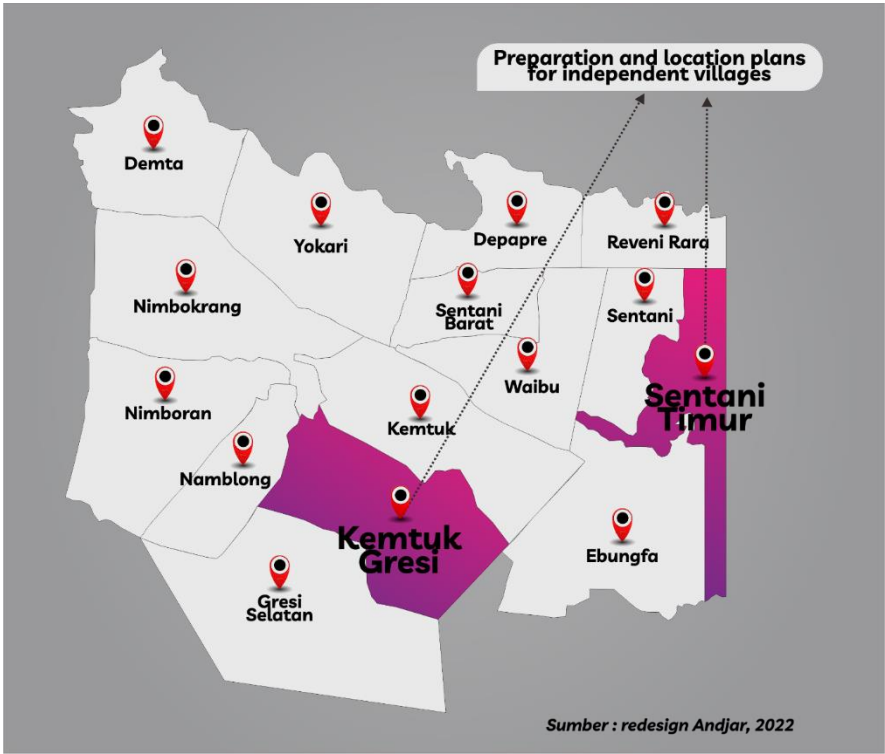


Fig. 1. Kemtuk Gresi District and Sentani Timur District

The target villages for independent villages are located in two districts, the district locus (Fig 1) consists of Kemtuk Gresi District and Sentani Timur District, part of Jayapura Regency, Papua Province, Indonesia. The target villages for independent villages are located in two districts, the location of districts (Fig. 1) consists of Kemtuk Gresi District and Sentani Timur District which are part of Jayapura Regency, Papua Prov., Indonesia. Figure 2 shows the framework used to create and strengthen independent villages.

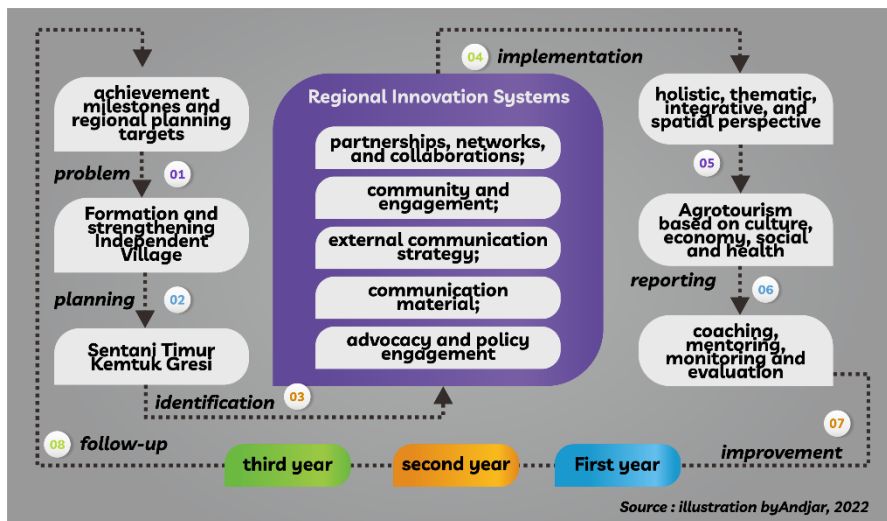


Fig. 2. Framework Independent Village Agrotourism.

Issues, needs, and opportunities in independent villages are identified through the indicators of partnership, networking, and collaboration; community and engagement; external communication strategy; communication tools; and advocacy and policy engagement. This indicator includes RIS for the acceleration process carried out with a planning approach based on holistic, thematic, integrative, and spatial perspectives. The expected outcome is the emergence of self-sustaining village agro-tourism based on culture, economy, society, and health. At the technical level, the project coaches, mentors, monitors, and evaluates the improvement of the independent communities.

3.1 Independent Village Agrotourism Locus

Bordered by Kentuk district to the north, South Gresi district to the south, Namblong district to the west, and Kerom Regency to the east, Kentuk Gresi district covers an area of 227.92 km². Kentuk Gresi District has twelve villages and Nembu Gresi Village is the largest with thirty-nine km² or sixteen percent of Kentuk Gresi's total area. Jagrang village is the smallest with an area of 7.8 km². This is three percent of the total area of Kentuk Gresi district. The village of Bring is the furthest from the district capital, which is nine kilometers away, and the closest is the village of Hatib. In the year 2021, Kentuk Gresi District has twelve village areas, twenty-three community associations, and forty-six neighborhood associations. Of all these villages, only Braso Village has one community association and two neighborhood associations. The number of village officials in 2021 in Kentuk Gresi District is sixty-nine people. There are twelve headmen, twelve secretaries, and four heads of affairs in each village. The total population of Kentuk Gresi in 2021 is 5.097.

The male population was highest with 2662 persons, while the female population was 2435 persons. The highest percentage of the population is 22.33 percent at Tablasupa, while the lowest is 6.63 percent at Waiya. The sex ratio is 109.3, which means that for every 100 women, 109.3 men live in this district. Crops of seasonal vegetables and fruits in 2021 in Kemtuk Gresi county, including large chilies, fourteen acres. Seventy tonnes of large chilies will be produced in 2021. Biopharmaca's harvested areas include 135 acres of ginger, 170 acres of turmeric, and 142 acres of galangal. In addition, 297 tonnes of ginger, turmeric, and 426 tonnes of galangal were produced. Fruits and vegetables produced include 5.25 tonnes of durian, 7.7 tonnes of mango, and 547.2 tonnes of banana. In Kemtuk Gresi Regency, there are no hotel and accommodation facilities. The mode of transport is by land. Public transport is available in all villages of Kemtuk Gresi regency.

Except for Hyansip village, which is paved/gravel/stone, the roads in Kemtuk Gresi district are asphalt/concrete. Mobile phone service providers are located in ten villages, except for Braso and Hyansip. Nine villages except for Demetim, Yanbra, and Braso villages have very strong mobile phone signals. Eleven villages are already connected to the 4G network. In the Kemtuk Gresi regency, there are no financial institutions. The same applies to cooperative facilities. Markets with semi-permanent buildings can be found in the villages of Braso, Bring, and Hyansip in the Kemtuk Gresi district. Non-built markets are found in three villages, namely Kampung Hatib, Yanbra, and Swentab. There are only seventy restaurants in Papehabu village. Except for Demoi Kati and Demetim villages, there are sixty food stalls/shops in ten villages. There are twenty-two stores/grocery stores, most of them in the hamlet of Numbugresi, with nine stores. The villages that do not have any shops include the villages of Bring, Habib, Hyansip, Ibub, Jagrang, and Papehabu.

Sentani Timur regency has an area of 484.3 km² and is bounded by Mount Cyclops in the north, Kemtuk and Arso regency in the south, Sentani regency in the west, and Heram regency (Jayapura city) in the east. Kampung Asei Kecil is the largest area. It covers 140.78 km² or 29.07 percent of the district's total area. Meanwhile, with an area of 7.29 km² or 1.51 percent of the total area of Sentani Timur Regency, Itakiwa Village is the smallest area. There will be seven villages, twenty-one community associations, and forty-two neighborhood associations in Sentani Timur District in 2021. Among all villages, Kampung Nolakla has the most neighborhood association and community associations, five community associations, and ten neighborhood associations. Sentani Timur has a total of 45 senior defense officials in each town, with the most in the town of Nolakla. There will be 23 heads of affairs in each village, namely the head of administration, head of development, head of treasury, and head of administration.

The 2021 population of Sentani Timur District is 9,665. The male population is the largest, namely 4,898 people. The female population is 4767 people from the total population in Sentani Timur District. Kampung Nolakla, with 38.47%, has the highest percentage of the population. On the other hand, Yokiwa village has the lowest percentage of female population at 3.09 percent. The gender ratio is 102.7, i.e. there are 102.7 men per 100 women. In 2021, seven hectares of chilies will be harvested. In 2021, 31.5 tonnes of large chilies will be produced from seasonal vegetables and fruits. Sentani Timur District has three hotels in Nendali Village and one accommodation unit in

Yokiwa Village. The transport modes are land transport for five villages and land and water transport for Itakiwa Village and Asei Besar. Except for Yokiwa Village, which has no transport, all villages in Sentani Timur District have public transport with regular routes. Except for Itakiwa village, where the roads are gravel and stone, the roads in Sentani Timur District are asphalt/concrete. There are mobile phone towers in all Sentani Timur villages except Itakiwa. All villages now have mobile phone service providers. All villages have strong mobile phone coverage and all villages have 4G internet access. In Sentani Timur district, there is one unit of government commercial bank in Nolakla village. In the Sentani Timur district, there are no cooperatives. A group of shops totaling one unit in Nolakla village is the type of trading facility in the Sentani Timur district. One-unit, semi-permanent markets are located in Nolakla, Nendali, and Yokiwa townships. Nolakla has a one-unit mini-market. Restaurants in Asei Kecil village, Nolakla and Nendali. There are grocery stores/stalls in the village and the largest number is twenty units in Nolakla village. Food stalls can be found in all villages, with the highest number in Nolakla Village with eighteen units.

3.2 Create an Independent Village Agrotourism

An independent village is argued as an area in the form of a village/village that has a synergy of local government and citizen activities, dynamic interaction [9], [28] in formulating the independence agenda, active communication with internal and external regions [9], [10], in utilizing the potential of superior natural resource products to develop the region, increasing competitiveness regions [15], [29] with the support of gradual and sustainable innovation [30]–[32], entrepreneurship [19], [33], stakeholders. In the early stages, it is necessary to identify various matters related to needs, potentials, and problems with the creation of an independent village. The agricultural ecosystem is the main potential of the study locus, so it is directed at fulfilling the identification of the agricultural sector, besides that the ability of the agricultural sector also has the potential to be developed into a tourism destination [34]–[36] referring to the health protocol [37]–[39]. Therefore, the identification stage is directed at the agricultural sector and the potential of the tourism sector. To get the results of technical identification, indicators are needed in the form of partnerships, networks, and collaborations [6], [16], [40]. This indicator is based on the characteristics of the Sentani Timur and Kemtuk Gresi districts. The argumentation of this indicator is a basic element so that in technical implementation it has a clear direction and provides a reference in monitoring and evaluation.

1. Partnerships, networking, and collaboration. In the initial identification, it was assumed that the object/community implementing the program did not yet have an organization. Targeted indications are that the organization knows the organization's strategy [9], [41], [42] and works, and consults when planning/implementing and collaborating with partners. This parameter starts with the assumption that there is no independent village group, nor is there any information about the strategy of independent village groups. A measure [43] of readiness when several parameters have

emerged, including independent village groups having good knowledge of the strategies and work of independent village groups in the local area and at other levels; independent village groups consult widely when planning programs and activities to ensure that there is no duplication; independent village groups implement more than one program in partnership with other organizations and make recommendations to stakeholders/regional apparatus/stakeholders; and independent village groups are active in existing ecosystem networks.

2. Community and engagement. A necessary indication of community substance and involvement is that the organization [44], [45] is recognized and seen as a constructive and empowering presence by the community. The commitment of stakeholders, particularly in Sentani Timur and Kemtuk Gresi, played a crucial role in socializing and ensuring the widespread recognition of independent village groups within the respective communities, portraying them as empowering entities that are responsive to community needs, demonstrating periodic and transparent accountability, and actively involve and empower all community members, including youth, women, and vulnerable groups.
3. External communication strategy. The need for this indicator is to support the success and sustainability of independent villages. An external communication strategy [9], [10], [46] needs to be prepared and used to communicate effectively with key stakeholders, including the community in independent village loci. To ensure effective communication, it is crucial for independent village groups to either develop or document their communication strategy, which should be comprehensive, widely known among all stakeholders, regularly reviewed, and encompass key messages tailored for various stakeholder groups, with a focus on conducting stakeholder analyses to identify priority stakeholders at the local, district, and provincial levels and regularly updating this information.
4. Communication materials [12], [25], [44], [47]–[49], the next indication of the need for independent village groups leads to appropriate communication materials being made available and used to communicate effectively with key stakeholders. The desired outcome is for independent village groups to transition from their initial state of lacking communication materials to having a diverse range of updated materials designed for different purposes and targeted at various audiences, ensuring a consistent visual identity and overall aesthetic appeal.
5. Advocacy and policy engagement [13], [50]–[53]. The last and most important indication is to maintain the sustainability of activities in the planned period/stage. The transformation of independent village groups from a state of limited understanding and involvement in policy to actively engaging in advocacy and policy discussions at various levels, such as within the independent village groups, village, district, and even province, rely on their development of a comprehensive understanding of the policy context. Additionally, the identification and documentation of short, medium, and long-term advocacy priorities based on local needs and evidence, along with the formulation of strategies and plans for policy engagement, are essential to ensure that independent village groups effectively influence policy-making and are regularly called upon to participate in substantive policy discussions.

3.3 Regional Innovation System Governance

The concept of village development and empowerment [54]–[57], which was built by involving all economic sectors together and continuously and integrated, is directed at building the skills of farming communities, strengthening village economic institutions, and driving the village economy [58]–[66] based on local potential, and reducing dependence on local government. This target is directed at realizing the achievement of the vision of Papua rising independently, prosperous, and just; it is the responsibility of the government in the sector, to realize regional economic independence based on the economic independence of the village-level community; as a balancing of planning patterns with regular patterns, which in reality, there are constraints in terms of the quality of program activities that are down-to-earth and sustainable.

To achieve this, it is planned with budget support, the budget for the implementation of independent villages is carried out using a special funding pattern, based on the results of the mapping of funding needs carried out by the Development Planning Agency as the activity coordinator and related agencies as technical executors on the results of identifying the needs needed in an independent village [67]–[69]. Planning is carried out in three years and can be developed based on evaluation results both technically and substantively. In the first year, the focus is on the sector that is upstream to build the foundation for the village that is the object, in which the upstream service will oversee the implementation of activities from the perspective of the concept of activities that are integrated and organized within village institutions [70]. The target is individual farmers' human resources [71], [72] and building village institutions, with the parameters set by Development Planning Agency. Furthermore, in the second year, funding is directed at the development level while ensuring budget consistency at the reinforcement level. With provisions, the results of the evaluation and development [47], [73]–[75] of the strengthening process in the upstream sector through monitoring and evaluating program implementation and taking into account strategic issues. Finally, in the third year, funding is primarily directed with a smaller portion of the budget [76] for the upstream sector and a larger portion for the downstream sector.

The implementation of the RIS approach, which follows a standardized roadmap and is harmonized within regional planning documents, provides a solid foundation in the policy context and has been successfully applied in multiple regions to accelerate development. RIS emphasizes stakeholder integration and addresses specific themes derived from collective agreements, resulting in the creation of regional competitiveness, fostering innovation, and empowering local communities.

4 Conclusion

The results of the research show that governance mechanisms and models with partnerships, networks, and collaborations; community and engagement; external communication strategy; communication material; and advocacy and policy engagement in the independent village groups of Sentani Timur and Kemtuk Gresi need to be carried out as the initial foundation for sustainability and planning as well as a basis for monitoring

and evaluation. The RIS approach has positive relevance in supporting and implementing independent village groups towards independent village agro-tourism. This study implies that policymakers have a reference for village-level economic development pilot projects based on local potential based on indicators of partnership, network, and collaboration; community and engagement; external communication strategy; communication material; and advocacy and policy engagement. The self-sustaining village group, which began with pilot projects in East Sentani and Kemtuk Gresi, has had a positive impact on RIS and the management of development concepts from a holistic, thematic, integrative, and spatial perspective.

References

1. G. Dauliyeva, A. Yeraliyeva, G. Sadykhanova, and L. Bimendiyeva, "The partnership of governments for sustainable development," in *E3S Web of Conferences*, EDP Sciences, Mar. 2020. doi: 10.1051/e3sconf/202015902004.
2. S. Tobin and A. Zaman, "Regional Cooperation in Waste Management: Examining Australia's Experience with Inter-municipal Cooperative Partnerships," *Sustainability (Switzerland)*, vol. 14, no. 3, 2022, doi: 10.3390/su14031578.
3. S. Mancini and J. L. C. González, "Role of Technology Transfer, Innovation Strategy and Network: A Conceptual Model of Innovation Network to Facilitate the Internationalization Process of SMEs," *Technol Invest*, vol. 12, no. 02, pp. 82–128, 2021, doi: 10.4236/ti.2021.122006.
4. A. Zhou and Y. Zhou, "Research on the relationship network in customer innovation community based on text mining and social network analysis," *Tehnicki Vjesnik*, vol. 27, no. 1, pp. 58–66, 2020, doi: 10.17559/TV-20190924140134.
5. V. Dhameria, I. Ghazali, A. Hidayat, and V. D. W. Aryanto, "Networking capability, entrepreneurial marketing, competitive advantage, and marketing performance," *Uncertain Supply Chain Management*, vol. 9, no. 4, pp. 941–948, 2021, doi: 10.5267/j.uscm.2021.7.007.
6. K. Broomfield, C. Craig, S. Smith, G. Jones, S. Judge, and K. Sage, "Creativity in public involvement: supporting authentic collaboration and inclusive research with seldom heard voices," *Res Involv Engagem*, vol. 7, no. 1, Dec. 2021, doi: 10.1186/s40900-021-00260-7.
7. R. M. Pinto, S. (Ethan) Park, R. Miles, and P. N. Ong, "Community engagement in dissemination and implementation models: A narrative review," *Implement Res Pract*, vol. 2, p. 263348952098530, 2021, doi: 10.1177/2633489520985305.
8. R. Yusuf and I. Fajri, "Differences in behavior, engagement and environmental knowledge on waste management for science and social students through the campus program," *Heliyon*, vol. 8, no. 2, p. e08912, 2022, doi: 10.1016/j.heliyon.2022.e08912.
9. A. Prasetyo, B. Putri Harwijayanti, M. N. Ikhwan, M. Lukluil Maknun, and M. Fahlevi, "Interaction of Internal and External Organizations in Encouraging Community Innovation," *Front Psychol*, vol. 13, Jul. 2022, doi: 10.3389/fpsyg.2022.903650.
10. B. I. Ehikioya, A. E. Omankhanlen, G. O. Osuma, and O. I. Inua, "Dynamic relations between public external debt and economic growth in African countries: A curse or blessing?" *Journal of Open Innovation: Technology, Market, and Complexity*, vol. 6, no. 3, Sep. 2020, doi: 10.3390/JOITMC6030088.
11. M. Gordeladze, "What Is 'Strategic Communications'?", *Vectors of Social Sciences*, vol. 1, no. 1, pp. 100–114, 2021, doi: 10.51895/vss1/gordeladze.

12. R. Palmieri and S. Mazzali-Lurati, "Strategic Communication with Multiple Audiences: Polyphony, Text Stakeholders, and Argumentation," *International Journal of Strategic Communication*, vol. 15, no. 3, pp. 159–176, 2021, doi: 10.1080/1553118X.2021.1887873.
13. P. Chiu, G. G. Cummings, S. Thorne, and K. Schick-Makaroff, "Policy Advocacy and Nursing Organizations: A Scoping Review," *Policy Polit Nurs Pract*, vol. 22, no. 4, pp. 271–291, 2021, doi: 10.1177/15271544211050611.
14. E. Bell, A. H. Fryar, and T. Johnson, "Exploring public perceptions of nonprofit policy advocacy," *Nonprofit Policy Forum*, vol. 12, no. 2, pp. 311–340, 2021, doi: 10.1515/npf-2019-0052.
15. U. Fratesi, "Regional innovation and competitiveness in a dynamic representation," *J Evol Econ*, vol. 20, no. 4, pp. 515–552, 2010, doi: 10.1007/s00191-009-0169-1.
16. I. Ramos-Vielba, M. Fernández-Esquinas, and E. Espinosa-de-los-Monteros, "Measuring university–industry collaboration in a regional innovation system," *Scientometrics*, vol. 84, no. 3, pp. 649–667, 2010, doi: 10.1007/s11192-009-0113-z.
17. A. Prasetyo, H. Asmoro, H. Sipahutar, D. Nuryadin, and C. S. Wibowo Budi, "Human Resource Productivity Development Strategy in the Regional Innovation Process," *Proceedings of the 1st Borobudur International Symposium on Humanities, Economics and Social Sciences*, 2020.
18. A. Prasetyo, D. Gartika, A. Hartopo, B. P. Harwijayanti, S. Sukamsi, and M. Fahlevi, "Capacity Development of Local Service Organizations Through Regional Innovation in Papua, Indonesia After the COVID-19 Pandemic," *Frontiers in Psychology*, vol. 13. Frontiers Media S.A., May 30, 2022. doi: 10.3389/fpsyg.2022.912692.
19. Habiburrahman *et al.*, "Determination of Critical Factors for Success in Business Incubators and Startups in East Java," *Sustainability*, vol. 14, no. 21, p. 14243, Oct. 2022, doi: 10.3390/su142114243.
20. A. Prasetyo and D. Gartika, "Strategic Planning Analysis of Grand Design of Population Development," *Economics Development Analysis Journal*, no. 4, 2021, [Online]. Available: <http://journal.unnes.ac.id/sju/index.php/edaj>
21. A. Prasetyo, H. Sipahutar, C. S. Wibowo Budi, and D. Nuryadin, "Policy and Economy Analysis on the Application of the Smart on Grid Actuator to Public Road Lighting in Magelang City," *Proceedings of the 1st Borobudur International Symposium on Humanities, Economics and Social Sciences*, 2020.
22. A. Benis, O. Tamburis, C. Chronaki, and A. Moen, "One digital health: A unified framework for future health ecosystems," *J Med Internet Res*, vol. 23, no. 2, 2021, doi: 10.2196/22189.
23. R. Monroy-Torres *et al.*, "Food security, environmental health, and the economy in mexico: Lessons learned with the covid-19," *Sustainability (Switzerland)*, vol. 13, no. 13, pp. 1–18, 2021, doi: 10.3390/su13137470.
24. T. Zacharias, M. A. Rahawarin, and Y. Yusriadi, "Cultural reconstruction and organization environment for employee performance," *Journal of Ethnic and Cultural Studies*, vol. 8, no. 2, pp. 296–315, 2021, doi: 10.29333/ejecs/801.
25. Marni *et al.*, "Cultural communication strategies of behavioral changes in accelerating of stunting prevention: A systematic review," *Open Access Maced J Med Sci*, vol. 9, pp. 447–452, 2021, doi: 10.3889/oamjms.2021.7019.
26. N. Kuznetsov, S. Tyaglov, M. Ponomareva, N. Rodionova, and K. Sapegina, "Development Priorities for the Regional Innovation System Based on the Best Available Technologies," *Sustainability (Switzerland)*, vol. 14, no. 3, Feb. 2022, doi: 10.3390/su14031116.
27. V. Zikria, "Area Analysis of Commodity and Contribution of Coffee to Regional Development in Central Aceh Regency," *Jurnal Social Economic of Agriculture*, vol. 9, no. 2, p. 92, 2020, doi: 10.26418/j.sea.v9i2.42966.

28. O. Wulandono, E. Rustiadi, and M. Ardiansyah, "Spatial Interaction Based on Sub-District Development Index in Pandeglang Regency," *Economics Development Analysis Journal*, vol. 10, no. 1, pp. 1–11, 2021, doi: 10.15294/edaj.v10i1.40708.
29. A. Prasetyo *et al.*, "Comparison of Innovation Processes In The Perspective of Local Government Policy and Regional Competitiveness," *Riset Ekonomi Pembangunan*, vol. 5, no. 1, 2020, doi: 10.31002/rep.v5i1.
30. W. Banmairuoy, T. Kritjaroen, and W. Homsombat, "The effect of knowledge-oriented leadership and human resource development on sustainable competitive advantage through organizational innovation's component factors: Evidence from Thailand 's new S- curve industries," *Asia Pacific Management Review*, vol. 27, no. 3, pp. 200–209, 2021, doi: 10.1016/j.apmr.2021.09.001.
31. S. Barile, M. Grimaldi, F. Loia, and C. A. Sirianni, "Technology, value co-creation and innovation in service ecosystems: Toward sustainable co-innovation," *Sustainability (Switzerland)*, vol. 12, no. 7, 2020, doi: 10.3390/su12072759.
32. C. Zhou and H. Etzkowitz, "Triple helix twins: A framework for achieving innovation and un sustainable development goals," *Sustainability (Switzerland)*, vol. 13, no. 12, 2021, doi: 10.3390/su13126535.
33. M. Tajpour and E. Hosseini, "Entrepreneurial Intention and the Performance of Digital Startups: The Mediating Role of Social Media," *Journal of Content, Community and Communication*, vol. 13, no. 7, pp. 2–15, 2021, doi: 10.31620/JCCC.06.21/02.
34. M. Roman, M. Roman, P. Prus, and M. Szczepanek, "Tourism competitiveness of rural areas: Evidence from a region in Poland," *Agriculture (Switzerland)*, vol. 10, no. 11, pp. 1–19, 2020, doi: 10.3390/agriculture10110569.
35. P. Chanplin, "TOURISM : CASE OF CHALOEM PHRAKIAT DISTRICT OF NAN Thailand major agricultural import sources," vol. 58, pp. 5352–5364, 2021.
36. F. Polese, A. Botti, M. Grimaldi, A. Monda, and M. Vesci, "Social innovation in smart tourism ecosystems: How technology and institutions shape sustainable value co-creation," *Sustainability (Switzerland)*, vol. 10, no. 1, 2018, doi: 10.3390/su10010140.
37. F. Mascayano *et al.*, "The impact of the COVID-19 pandemic on the mental health of healthcare workers: study protocol for the COVID-19 HEalth caRe wOrkErS (HEROES) study," *Soc Psychiatry Psychiatr Epidemiol*, vol. 57, no. 3, pp. 633–645, Mar. 2022, doi: 10.1007/s00127-021-02211-9.
38. F. Mascayano *et al.*, "The impact of the COVID-19 pandemic on the mental health of healthcare workers: study protocol for the COVID-19 HEalth caRe wOrkErS (HEROES) study," *Soc Psychiatry Psychiatr Epidemiol*, vol. 57, no. 3, pp. 633–645, Mar. 2022, doi: 10.1007/s00127-021-02211-9.
39. P. Parvaie and F. Osmani, "Dentistry during COVID-19: patients' knowledge and satisfaction toward health protocols COVID-19 during dental treatment," *Eur J Med Res*, vol. 27, no. 1, Dec. 2022, doi: 10.1186/s40001-021-00629-0.
40. S. Manyullei and M. Fajaruddin Natsir, "Implementation of Cross-Sectoral Collaboration in the Leptospirosis Control in Jenepono Regency: A Qualitative Approach," *Medico-legal Update*, vol. 21, no. 1, 2021.
41. C. Alaimo and J. Kallinikos, "Organizations Decentered: Data Objects, Technology and Knowledge," *Organization Science*, vol. 33, no. 1, pp. 19–37, 2022, doi: 10.1287/ORSC.2021.1552.
42. S. Salvador, "Innovative Organization within Local Government: An Innovation Class," *Journal of Asian Multicultural Research for Social Sciences Study*, vol. 1, no. 1, pp. 17–21, 2020, doi: 10.47616/jamr.2020.v1i1.25.

43. A. Prasetyo, H. Wahyudianto, and A. Hartopo, "Measurement of Partnerships, External Relations and Networks in Building Districts in Jayapura Regency," *Advances in Social Science, Education and Humanities Research Proceedings of the 3rd Borobudur International Symposium on Humanities and Social Science 2021 (BIS-HSS 2021)*, Dec. 2022, doi: 10.2991/978-2-494069-49-7_28.
44. S. FRUNZA and I. GRAD, "The Role of Ethical Factors in Organizational Communication," *Postmodern Openings*, vol. 11, no. 1, pp. 178–194, 2020, doi: 10.18662/po/114.
45. Z. al Kashari, "The Role of Knowledge Sharing in Organizational Performance," *Information and Knowledge Management*, vol. 10, no. 2, pp. 37–42, 2020, doi: 10.7176/ikm/10-2-05.
46. T. F. Gulema and Y. T. Roba, "Internal and external determinants of corporate social responsibility practices in multinational enterprise subsidiaries in developing countries: evidence from Ethiopia," *Future Business Journal*, vol. 7, no. 1, Dec. 2021, doi: 10.1186/s43093-021-00052-1.
47. D. Gupta, N. Jai P, and J. S. Yadav, "Strategic Communication in Health and Development: Concepts, Applications and Programming," *J Health Manag*, vol. 23, no. 1, pp. 95–108, 2021, doi: 10.1177/0972063421994943.
48. B. McGreavy *et al.*, "How Does Strategic Communication Shape Transdisciplinary Collaboration? A Focus on Definitions, Audience, Expertise, and Ethical Praxis," *Front Commun (Lausanne)*, vol. 7, no. February, pp. 1–14, 2022, doi: 10.3389/fcomm.2022.831727.
49. N. Strauß, "Communicating sustainable responsible investments as financial advisors: Engaging private investors with strategic communication," *Sustainability (Switzerland)*, vol. 13, no. 6, 2021, doi: 10.3390/su13063161.
50. N. Schmid, S. Sewerin, and T. S. Schmidt, "Explaining Advocacy Coalition Change with Policy Feedback," *Policy Studies Journal*, vol. 48, no. 4, pp. 1109–1134, 2020, doi: 10.1111/psj.12365.
51. M. L. Derrington and L. S. Anderson, "Expanding the role of teacher leaders: Professional learning for policy advocacy," *Educ Policy Anal Arch*, vol. 28, pp. 1–17, 2020, doi: 10.14507/EPAA.28.4850.
52. P. Leifeld, T. Henrichsen, C. Buckton, G. Fergie, and S. Hilton, "Belief system alignment and cross-sectoral advocacy efforts in policy debates," *J Eur Public Policy*, vol. 0, no. 0, pp. 1–24, 2021, doi: 10.1080/13501763.2021.1945131.
53. M. A. Calderon, D. E. Chand, and D. P. Hawes, "Final lines of defense: Explaining policy advocacy by immigrant-serving organizations," *Nonprofit Policy Forum*, vol. 12, no. 2, pp. 285–310, 2021, doi: 10.1515/npf-2020-0023.
54. R. Indra Priambada, R. Hidayat, and W. Purwanto, "Evaluation of Community Empowerment Program Based on Community Satisfaction Index," *E3S Web of Conferences*, vol. 232, 2021, doi: 10.1051/e3sconf/202123201009.
55. N. N. Yuliarini, M. Dunggio, and I. N. M. Yasa, "Improving public welfare through strengthening social capital and cooperative empowerment," *Cogent Business and Management*, vol. 7, no. 1, 2020, doi: 10.1080/23311975.2020.1841075.
56. A. Ilham, M. Rahman, and W. Tune Sumar, "Community Empowerment Through Waste Management With Reduce, Reuse and Recycle System (3r) In Bulota Village," *Devotion : Journal of Community Service*, vol. 3, no. 4, pp. 353–360, 2022, doi: 10.36418/dev.v3i4.123.
57. C. R. Rabaoarisoa *et al.*, "The importance of public health, poverty reduction programs and women's empowerment in the reduction of child stunting in rural areas of Moramanga and Morondava, Madagascar," *PLoS One*, vol. 12, no. 10, pp. 1–18, 2017, doi: 10.1371/journal.pone.0186493.

58. A. Prasetyo, Hotnir Sipahutar, D. Nuryadin, and Wibowo Budi Catur, "Komparasi Proses Inovasi Dalam Perspektif Kebijakan Pemerintah Daerah Dan Daya Saing Daerah," *Prosiding SEMINAR NASIONAL DAN CALL FOR PAPERS Fakultas Ekonomi Universitas Tidar*, 2020.
59. A. Prasetyo and D. Gartika, "Spatial Economy Approach to Assess the Effectiveness of Poverty Treatment Policy Models and Regional Economic Impacts," in *IOP Conference Series: Earth and Environmental Science*, IOP Publishing Ltd, Nov. 2021. doi: 10.1088/1755-1315/887/1/012019.
60. Andjar Prasetyo, Asrorti, Catur Wibowo Budi, Deden Nuryadin, and Gunawan, "Inovasi Sosial dan Kebijakan Daerah dalam Percepatan Penanggulangan Kemiskinan di Kabupaten Magelang," *Prosiding SEMINAR NASIONAL DAN CALL FOR PAPERS Fakultas Ekonomi Universitas Tidar*, 2019.
61. A. Prasetyo and D. Gartika, "Strategic Planning Analysis of Grand Design of Population Development Article Information," *Economics Development Analysis Journal*, no. 4, 2021, [Online]. Available: <http://journal.unnes.ac.id/sju/index.php/edaj>
62. A. Prasetyo and H. Sipahutar, "Impact of Policy and Economy on Market Aspects in Regional Competitiveness in Central Java," *The 4th International Conference on Regional Development Rural Development in Urban Age: Do Rural-Urban Linkages Matter?*, 2020.
63. A. Prasetyo and Muh Sofyan Budiarto, "Monitoring and Supervision of The Readiness of Small Medium Industry Processing Products in Magelang City Industrial Development Plan," *Jurnal Kebijakan Pembangunan Daerah*, vol. 5, no. 2, pp. 57–70, 2021.
64. Andjar Prasetyo, "Pemulihan Lanskap Ekonomi Pasca Pandemi Covid-19 Di Kabupaten Labuhanbatu," *Jurnal Administrasi Publik*, vol. 17, no. 2, pp. 267–282, Dec. 2021, doi: 10.52316/jap.v17i2.71.
65. M. L. Maknun, U. Muzayanah, M. K. Muna, A. Prasetyo, and M. Eliza, "The Library Development Based on Social Inclusion: SWOT Analysis and Socio-Religious Role," *Jurnal Fuaduna : Jurnal Kajian Keagamaan dan Kemasyarakatan*, vol. 5, no. 2, p. 111, Dec. 2021, doi: 10.30983/fuaduna.v5i2.4915.
66. A. Prasetyo, H. Asmoro, H. Sipahutar, D. Nuryadin, and C. S. Wibowo Budi, "Human Resource Productivity Development Strategy in the Regional Innovation Process," *Atlantis Press*, 2020.
67. J. H. G. Purwasih, E. Kurniawati, N. Hadi, and I. W. P. Utami, "Developing an Independent Curriculum: Village Development Project as an Equalization of Thesis," *International Journal of Emerging Technologies in Learning*, vol. 16, no. 7, pp. 135–145, 2021, doi: 10.3991/ijet.v16i07.21225.
68. T. Febrian, Im. Weni, and P. Sukowati, "Social Capital as the Basis for the Developmental Movement of the Independent Village and Integrated Honey Village," *International Journal of Research in Social Science and Humanities*, vol. 02, no. 03, pp. 44–53, 2021, doi: 10.47505/ijrssh.2021.9190.
69. S. Surahman, S. Ali, A. Adhiksana, Y. Regiyana, and N. Hayati, "Implementation of appropriate technology programs in Tanjung Batu Village, Kutai Kartanegara, to realize an environmentally friendly independent village," *Community Empowerment*, vol. 6, no. 9, pp. 1648–1653, Oct. 2021, doi: 10.31603/ce.5964.
70. A. Prasetyo, H. Wahyudianto, and A. Hartopo, "Strategy for Developing Institutional Service Models for Regional Innovation in Indonesia," *Advances in Social Science, Education and Humanities Research Proceedings of the 3rd Borobudur International Symposium on Humanities and Social Science 2021 (BIS-HSS 2021)*, Dec. 2022, doi: 10.2991/978-2-494069-49-7_27.

71. L. Muñoz-Pascual, J. Galende, and C. Curado, "Contributions to sustainability in smes: Human resources, sustainable product innovation performance and the mediating role of employee creativity," *Sustainability (Switzerland)*, vol. 13, no. 4, pp. 1–20, 2021, doi: 10.3390/su13042008.
72. A. R. Yusefi, M. Sharifi, N. sadat Nasabi, E. R. Davarani, and P. Bastani, "Health human resources challenges during COVID-19 pandemic; evidence of a qualitative study in a developing country," *PLoS One*, vol. 17, no. 1 1, pp. 1–20, 2022, doi: 10.1371/journal.pone.0262887.
73. M. F. Hassan and Z. Shareefdeen, "Recent Developments in Sustainable Management of Healthcare Waste and Treatment Technologies," *Journal of Sustainable Development of Energy, Water and Environment Systems*, vol. 10, no. 2, pp. 1–21, 2022, doi: 10.13044/j.sdwes.d9.0384.
74. K. Nordberg, Å. Mariussen, and S. Virkkala, "Community-driven social innovation and quadruple helix coordination in rural development. Case study on LEADER group Aktion Österbotten," *J Rural Stud*, vol. 79, no. April, pp. 157–168, 2020, doi: 10.1016/j.jrurstud.2020.08.001.
75. G. Dahal, "Women Participation in Local Development: A Study of Kaski District," *J Polit Sci*, vol. 21, no. August, pp. 49–59, 2021, doi: 10.3126/jps.v21i1.39285.
76. W. v. Padula *et al.*, "Economic value of vaccines to address the COVID-19 pandemic: a U.S. cost-effectiveness and budget impact analysis," *J Med Econ*, vol. 24, no. 1, pp. 1060–1069, 2021, doi: 10.1080/13696998.2021.1965732.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

