



Cultural-Based Spatial Management: Lesson Learnt from The Collective Intelligence of The Gayo Community, Aceh

Ade Ikhsan Kamil¹, Richa Meliza², Mujiburrahman³, Rizki Yunanda⁴, Shadiva Ramadhani⁵, Galang Bayhaqie⁶

¹ Anthropology Department, Malikussaleh University, ade.ikhsan.kamil@unimal.ac.id

² Anthropology Department, Malikussaleh University, richa.meliza@unimal.ac.id

³ Anthropology Department, Malikussaleh University, mujiburrahman@unimal.ac.id

⁴ Anthropology Department, Malikussaleh University, rizky.yunanda56@unimal.ac.id

⁵ Anthropology Department, Malikussaleh University, shadiva.ramadhani@gmail.com

⁶ Anthropology Department, Malikussaleh University, galang.bayhaqie@gmail.com

* Corresponding Author: ade.ikhsan.kamil@unimal.ac.id

Abstract: Cultural spaces represent a heritage passed down through generations. Today, these cultural spaces are in a worrying state, with the advent of globalization and the increasing influence of foreign cultures. Recognizing this situation, researchers aim to contribute and participate in examining the Gayo community's ability to manage these cultural spaces, as the Gayo are known for their rich cultural spaces. This study aims to explore the knowledge the Gayo people possess in managing cultural spaces and the methods by which this knowledge is passed down. Furthermore, this research intends to equip the Gayo community with insight derived from the cultural spaces that have been inherited over the years. The knowledge of these cultural spaces, when passed to future generations, becomes a foundation for the sustainability of the Gayo community's way of life. The research employs an ethnographic approach, aimed at exploring social realities in a natural context. The findings indicate that the Gayo community has a set of rules known as always, which forms the basis for determining their living spaces managed based on cultural principles. Among the Gayo community, there are five collective living spaces that have become the foundation of their way of life: Bur Perutemen, Bur Peruweren, Wih Aunen, Bur Mulo, and Hutan Keuramat.

Keywords: Spatial Management; Cultural Space; Gayonese Cultural; Collective Intelligence; Aceh

1. Introduction

As a producer of coffee with a unique taste and distinctive aroma, Gayo coffee is renowned across the globe. This exceptional coffee originates from a distant place nestled within the Barisan mountain range of Sumatra Island. Known for its world-class coffee, Gayo is also rich in unique local culture, encompassing various forms of arts, crafts, and local wisdom, including the management of cultural spaces. As part of their heritage, the Gayo community has developed a system of cultural space management that integrates cultural values aligned with their social way of life.

Located in the highlands with stretches of fertile hills, the Gayo community lives with innate knowledge of sustainable practices in farming, building settlements, and managing natural resources influenced by their geographic and climatic conditions. Their traditional

farming systems, including intercropping techniques and crop rotation, as well as the layout of homes and public spaces, reflect their deep connection to the land and sensitivity to the ecosystem.

Cultural spaces act as guardians of the natural heritage of the Gayo community. In this context, space refers to a range of activities that are not limited to passive actions but are also produced through social practices (Lefebvre, 1999; Stuart Hall, 1990). These spaces are embodied in providing existential support for their cultural heritage, such as coffee farming, buffalo herding, rice cultivation in paddies, tourism management, and the management of spaces to ensure water availability.

Cultural-based spatial management represents all forms of cultural expression, practices, and traditional values of the community. Expressions of cultural identity reflect the unique values, beliefs, and traditions of the Gayo community, making it an essential part of their cultural space and a collective source of pride for the Gayo people. Overall, the spatial management of the Gayo community forms a unique configuration, embodying cultural spaces that encompass identity, social values, religious practices, tradition preservation, and cultural adaptation

The results of observations with traditional figures and cultural actors, spaces based on cultural knowledge continue to live in the lives of Gayo people. Even cultural spaces are preserved as traditions, integration in education, community participation, and policy support. Along with the development of the modern world, cultural spaces have begun to erode and be displaced by the arrival of western culture which has more appeal and is spread massively through social media. Socio-anthropologically, efforts to preserve cultural spaces are an obligation for all Gayo people in maintaining their cultural values.

At this point, this research begins. This research wants to see further how the Gayo community maintains its cultural space from the challenges of globalization. In addition, the researcher wants to know what knowledge the Gayo community has in managing cultural space in responding to the challenges that arise when the discourse of the tourist area is formed.

Management room culture in Indonesia in general set up through various regulation legislation that covers aspect preservation culture , usage room public , as well as preservation inheritance culture not objects . Law No. 11 of 2010 concerning Cultural Heritage , regulates preservation reserve culture that includes sites, buildings , and areas that have mark history , science knowledge , education , religion, and culture . Regulation This give guide about management , maintenance and protection recognized spaces as reserve culture to avoid from damage or changes that are not in accordance . Law No. 5 of 2017 concerning Advancement Culture , Regulating about advancement culture national which includes protection , development , utilization , and guidance . This regulation regulates the management of cultural spaces in order to support cultural sustainability. This includes public spaces used for cultural activities such as art, traditions, and traditional ceremonies.

Regulation This aiming For ensure that room culture good in nature physique both physical and non- physical can managed with good , preserved and utilized For interest public . A number of studies literature that has relevance with focus successful research collected author and can used as review literature in research is as following ;

First book Clifford Geertz's work (1973) with title " *The Interpretation of Cultures*" approach culture must understood as system complex meaning . It to argue that For understand culture , researcher must interpret symbols and meanings held by the society being studied . Furthermore book Franz Boas (1911) entitled " *The Mind of Primitive Man: A Course of Lectures* " Boas argues culture must understood based on the context Alone without compare it with other cultures . He reject idea that There is more culture superior or inferior. Next Stuart Hall's book (1997) with title " *Representation: Cultural Representations and Signifying Practices* " According to Stuart Hall, culture is an arena where meaning produced , exchanged , and negotiated between member society . Hall sees culture as an ideological battleground where identity, difference, power, and resistance are involved. Overall, culture is a field where meaning and identity are formed and waged through social interactions, symbols, and practices, and where power and ideology interact.

In general , the study area literature mentioned above understood as system dynamic where meaning and identity formed and negotiated through interaction social and symbolic , without existence hierarchy mark between culture , the modern era today should maintain room culture important For protect inheritance culture , strengthening identity social , providing source education , support welfare community , and encourage development economy sustainable . Then in a way specific study this also aims For explore about How knowledge Gayo society in management room culture that has been passed down from generation to generation. How implications social consequence the entry of new cultures . And those that don't lost importance How Gayo people care for room its culture in face progress civilization .

2. Materials and Methods

Study This is study ethnography that aims explore a fact social naturally . Types of research This put object study as subject active in in natural environment and efforts are made For described reciprocally with explanation of a nature *thick description* (Mely G Tan; Koentjaraningrat , 1991: 87; Faisal, 1989: 18).

Study This will implemented Takengon Central Aceh. location study consider a number of reason following ;

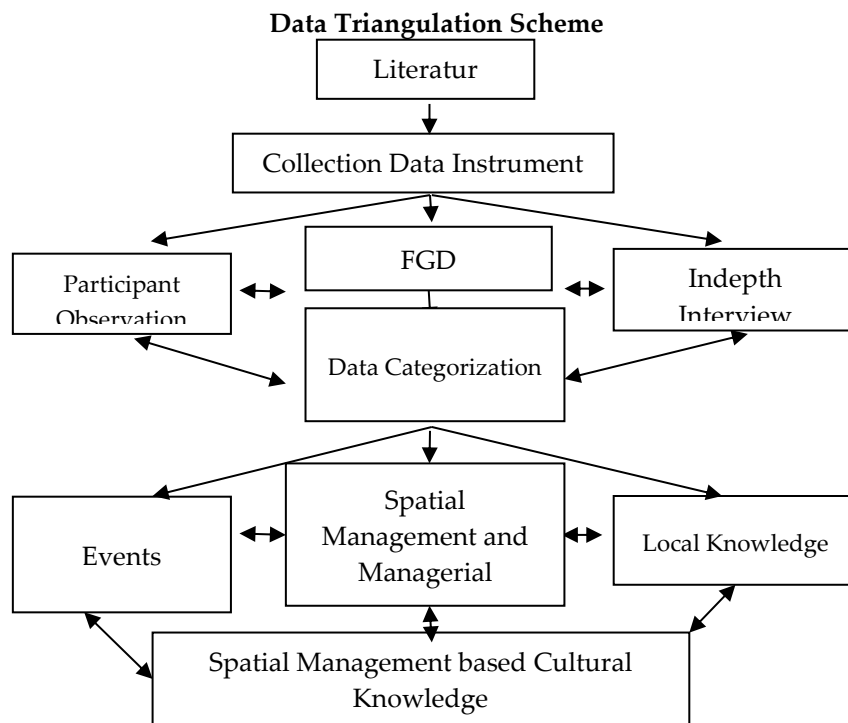
1. Central Aceh as area with distribution the dominant Gayo community .
2. Development and existence room based on knowledge culture in the Central Aceh region.
3. Sub-resources human in aceh middle as area with ethnicity original Gayo .
4. Own uniqueness , namely locality from interaction public .

2.1. Data Collection Stages and Data Validity Testing Techniques

Stages data collection in research This consists of from (Bungin , 2010):

1. Literature study
2. Observation participation
3. Discussion group focused (FGD)
4. Interview deep

After all data collected through various technique data collection such as above , then researcher will do data analysis will done in a way inductive where the researchers build patterns , categories and themes from lower to above , with process data to in more detailed units of information abstract . Ultimately , the research This will produce A a complex picture from a problem or the issues being researched (Creswell, 2010: 261). In general , the data analysis process will done like scheme following This :



2.2. Data and Data Sources

Study This will using qualitative data . Some of the data that will be collected among others is :

- a) Document related management room culture .
- b) Document implementation management room culture .
- c) Media archives about space processes culture that is carried out
- d) Policy government district , province and government center related room culture
- e) Knowledge of related services about context and dynamics cultural space
- f) Knowledge public in understand room culture

3. Results and Discussion

1.1. Gayo Community Knowledge of Space Based Culture

Gayo society, one of the ethnic group natives who inhabit the plains area high in Aceh, has close and deep relationship with spaces the surrounding culture . The existence of room based on culture This No only as place physical , but also as center life social , spiritual and economic society . Gayo society has strong awareness to mark ecological , spiritual , and social related with spaces this . Among room important culture for The Gayo community is Bur Perutemen , Bur Peruweren , Wih Aunen, Bur Mulo , and Keuramat Forest . Each room This set up through

principles inherited customs in a way hereditary , which guarantees balance between need humans and sustainability environment .

1.1.1. Bur Rutemen : Preserved Living Space Through Wisdom Local

Bur Routing , which is literally can translated as " allocated forest ," is one of the the most sacred and important space in life Gayo community . This forest No only as source Power nature , but also as a spiritual place that provides life for society . In Gayo tradition , the forest considered as the " mother " who provides all needs — start from wood , food , to medicines . Therefore that is , the management of Bur Perutemen always based on the principle wisdom local emphasizing importance guard balance ecosystem and inherit forest This to generation upcoming .

In general hereditary , the Gayo people have apply rule customs that prohibit logging tree without permission chairman customs . In addition , before do activity logging tree , society required For do ceremony custom specific purpose For begging permission to nature and ancestors . This is reflect how sacred forest this is in the eyes society . They believe that If rule This violated , will There is serious spiritual consequences , both for individual and also for community in a way overall .

As for example , the Gayo community regulates utilization source Power forest in a way tight . They own system rotation in logging tree , which allows forest For recover and stay sustainable . In the management of Bur Perutemen , the community No only take what they need , but also think about How method For guard balance nature . Awareness of importance guard ecosystem make management This as a sustainable model in guard source Power nature , especially wood .

Ecological awareness this is very high Because Gayo people understand that forest No only owned by generation now , but also belongs to the generation that will come . Therefore that , they feel responsible answer For guard forest This still sustainable and not ruin it For interest moment . The Bur Rutemen Forest also functions as place protection for various the types of flora and fauna that live in it , all of which contribute to balance ecosystem .

1.1.2. Bur Peruweren : Guarded Grazing Space Through System Rotation

While Bur Routing known as room forest , Bur Peruweren is managed space For herding livestock , especially buffalo . Management room this is also not let go from principle wisdom local emphasizing importance guard balance between humans , livestock , and the environment . Bur Peruweren is very important for Gayo society because buffalo No only livestock that provide meat , milk and energy For agriculture , but also has mark symbolic in life social and religious rituals .

Management of Bur Peruweren done with very wise way , to ensure land herding No experience degradation . One of the principle main applied Gayo society is system rotation grazing , which allows land still productive and not overgrazing. Overgrazing is conditions in which land herding used in a way excessive so that cause degradation land and subsidence quality land . For prevent matter This , the Gayo community in general alternate utilise existing land , so that when One part land currently used , other parts can be recover in a way experience .

With approach this , sustainability herding cattle can guarded , while land still fertile and productive . In addition , the system rotation this also allows public For Keep going look after buffalo without damage environment surrounding areas . Buffalo being herded in Bur Peruweren

play a role important in cycle life Gayo society , especially in ceremony customs and activities agriculture . Therefore that , wise management against Bur Peruweren No only problem economy , but also part from guard continuity tradition and identity Gayo society .

1.1.3. Wih Aunen: Managed Water Resources Fairly and Sustainably

Wow Aunen is managed space For source water power , which is vital for Gayo community . Water in the area mountains This used For various needs , such as agriculture , needs daily life , and livestock . Because of the importance of water for life , the Gayo people really appreciate and protect source this water power with full caution . Water management in Wih Aunen is carried out in a way collective with principle justice and sustainability .

In Gayo tradition , the division regulated water usage through rule customs that regulate turn water use among farmers . Every farmer own timetable certain When they may use water for irrigate their rice fields or fields . The system This No only prevent conflict between farmers , but also ensure that water use is carried out with efficient and fair manner . With method this , source water power can Keep going utilized by all community without damage ecosystem .

Apart from that , the Gayo people are also very aware will importance guard water quality . They keep from There is pollution that occurs in the area water source , good That from waste House stairs , agriculture , and industry . Forest around Wow Aunen is also guarded with Good For ensure that the water discharge remains constant stable and not experience decline consequence deforestation or destruction environment . This awareness based on belief that water is source life that must be inherited to generation upcoming in good condition .

management in Wih Aunen reflects How Gayo society prioritizes welfare community above interest personal . They believe that sustainability source water power only Can achieved through Work same and sense of responsibility answer together .

1.1.4. Bur Mulo : Protecting Bird Habitat For Balance Ecosystem

Besides forests and land herding , the Gayo people also have a special space used For protect the bird habitat , namely Bur Mulo . Birds own role important in ecosystem , especially in distribution seed plants and control population insects . Therefore Therefore , maintaining bird habitat is also considered as part important from guard balance nature .

In Bur Mulo , the Gayo community decided area certain in the forest as area protection Birds . Activities hunting bird prohibited in this area , and anyone who violates this rule custom This will charged sanctions heavy social . Determination area protection This is form commitment Gayo community for protect diversity live and maintain balance the surrounding nature .

Birds that live in Bur Mulo No only give benefit ecology , but also has spiritual values in Gayo tradition . The presence bird often considered as sign from ancestors or sign nature is important for life society . With protecting the bird habitat , the Gayo people do not only protect species this , but also maintain spiritual balance in community they .

1.1.5. Sacred Forest : Sacred Area with Spiritual and Ecological Values

Between all room based on culture in Gayo community , Keuramat Forest or Bur Teungku Tue maybe is the most sacred . This forest considered as area that has high spiritual value . The Gayo people believe that forest This is place stay for spirits ancestors who must respected and guarded its sustainability . Therefore that , every Activities in the Keuramat Forest set up very strictly by law custom .

Logging trees and hunting Animals in the Keuramat Forest forbidden hard without permission from chairman customs . Even If somebody get permission , they must do ceremony custom moreover formerly For begging blessing from ancestors . Beliefs This show how strong connection between Gayo society with forest this , which is not only seen as source Power nature , but also as guard spirituality community .

Apart from the value With its high spirituality , the Keuramat Forest also has mark ecologically unsustainable inseparable from life Gayo society . As area buffer , forest This functioning protect ecosystem surrounding area from damage environment caused by activities humans , such as deforestation , poaching and exploitation source Power nature that is not sustainable . With guard preservation of the Keuramat Forest , the Gayo community as a whole No direct guard diversity the life contained in it , incl various species of flora and fauna that are part important from balance ecosystem .

Keuramat Forest also plays a role role important in guard stability climate local and water cycle . With existence the trees large and dense vegetation , forest This capable absorb carbon dioxide from atmosphere and help in the process of filtering rainwater so that the water flow flows to rivers and other water sources still stable . Function ecological This become very crucial , especially considering the plains area vulnerable Gayo height to change climate and degradation environment If No guarded with Good .

Principle wisdom local applied in management of the Keuramat Forest ensure that Gayo people do not only utilise source Power forest in a way wise , but also understanding importance guard balance between humans and nature . With existence rule strict customs , society expected No exploit forest This in a way excessive . The public is prohibited do activities that can damage environment , such as to cut down tree For interest commercial , except If There is permission special from chairman customs and accompanied with ceremony custom .

Prohibition This No only aiming For guard sustainability ecosystem , but also a form respect to ancestors and spirits are believed in live in the forest said . In passed down from generation to generation , the Gayo people are taught that destroying the Keuramat Forest without legitimate cause can bring in disaster for community , good in form disaster natural and also instability social . Therefore that , every step in utilise source Power forest always done with careful and full consideration .

Trust This create a sense of responsibility answer collective among public For guard sustainability environment and spiritual values that exist in the Keuramat Forest . With Thus , the Keuramat Forest No only functioning as source Power precious nature , but also as symbol sustainability life harmonious Gayo society with nature .

In general Overall , the existence of the Keuramat Forest be a model for management room based on culture in Gayo society which is based on the principle respect to nature and conservation inheritance ancestors . This is show that public custom , with wisdom local , capable become guard effective and playful environment role important in guard balance ecological as well as culture . The collective consciousness that is awakened through values This become runway strong for Gayo society in face challenges modernization and change an increasingly environment big.

The practice of cultural space management in the Gayo community shows that locally inherited traditions play a significant role in maintaining the balance between human needs and environmental sustainability. For example, the management of Bur Perutemen as a sacred forest not only meets the community's needs for natural resources but also strengthens the spiritual bond between humans and nature. The principle of caution in harvesting forest resources, such as tree-cutting rotation and ceremonial rituals before engaging in logging activities, illustrates how the Gayo people understand the importance of ecosystem sustainability. This demonstrates that the ecological knowledge held by the Gayo community is not only practical but also carries profound spiritual values, reflecting their recognition of nature's rights and the importance of maintaining balance in the relationship between humans and the environment.

Additionally, the management of Bur Peruweren and Wih Aunen reflects the Gayo community's ability to apply principles of justice and sustainability in the use of natural resources. The rotational grazing system in Bur Peruweren prevents land degradation and ensures the sustainability of the grassland ecosystem, while the water resource management in Wih Aunen demonstrates the community's commitment to efficiency and equitable distribution. In both cases, adat-based management not only focuses on economic needs but also maintains a harmonious relationship between humans, nature, and the community. This shows that local wisdom in cultural space management plays a holistic role in sustainability, where social, cultural, and environmental aspects are interconnected and mutually supportive.

4. Conclusions

Knowledge Gayo society towards room based on culture , especially in The management of Bur Rutemen , Bur Peruweren , Wih Aunen, Bur Mulo , and the Keuramat Forest is greatly influenced by the wisdom of local inherited in a way hereditary . Every room own function ecological , social and spiritual importance for life everyday , and set up through rule strict customs. Routing Bur Management based on awareness will importance guard forest as source life , while Bur Peruweren managed with system rotation For guard balance between land grazing and population livestock . Wih Aunen is source regulated water power its use in a way fair For fulfil need agriculture and domestic , while Bur Mulo protected as an important bird habitat for balance ecosystem . Keuramat Forest , as area sacred , protected No only Because mark ecologically , but also because mark his spirituality is very important for Gayo community .

With understanding this , we can concluded that knowledge Gayo society towards space based on culture No only rooted in need practical , but also on spiritual values and wisdom local guide method they live and interact with environment around . Heritage This allow Gayo community for Keep going guard sustainability spaces culture This even though faced with various challenge modernization.

References

- [1] Boas, F. (1911). *The Mind of Primitive Man: A Course of Lectures*. New York: The acmillan Company.
- [2] Endraswara, S. (2006). *Metodologi Penelitian Kebudayaan*. Yogyakarta: Gadjah Mada University Press.
- [3] Geertz, C. (1973). *The Interpretation of Cultures*. New York: Basic Books.
- [4] Hall, S. (1997). *Representation: Cultural Representations and Signifying Practices*. London: Sage Publications.

- [5] **Haryono, T.** (2017). *Kebudayaan Nusantara: Identitas dan Pluralisme Budaya di Indonesia*. Yogyakarta: Kanisius.
- [6] **Koentjaraningrat.** (1985). *Kebudayaan, Mentalitas dan Pembangunan*. Jakarta: Gramedia.
- [7] Republik Indonesia. (2010). *Undang-Undang Nomor 11 Tahun 2010 tentang Cagar Budaya*. Jakarta: Kementerian Hukum dan Hak Asasi Manusia Republik Indonesia.
- [8] Republik Indonesia. (2017). *Undang-Undang Nomor 5 Tahun 2017 tentang Pemajuan Kebudayaan*. Jakarta: Kementerian Hukum dan Hak Asasi Manusia Republik Indonesia
- [9] Stuart Hall. (1990). *Cultural Identity and Diaspora*. Lawrence & Wishart.
- [10] Lefebvre, H. (1999). *The Production of Space*. Blackwell.
- [11] Abas, A., Aziz, A., & Awang, A. (2022). A Systematic Review on the Local Wisdom of Indigenous People in Nature Conservation. In *Sustainability (Switzerland)* (Vol. 14, Issue 6). <https://doi.org/10.3390/su14063415>
- [12] Garrido, N. (2017). THE METHOD OF JAMES SPRADLEY IN QUALITATIVE RESEARCH. *Enfermería: Cuidados Humanizados*, 6(Especial). <https://doi.org/10.22235/ech.v6iespecial.1450>
- [13] Komara, E., & Rahman, S. (2019). Local Wisdom in Kampung Naga Tasikmalaya. *International Journal of Innovation, Creativity and Change*. *Www.Ijicc.Net*, 6(12).
- [14] Martin, D., & Aluri, A. (2015). Etic interpreting of emic reports of tourism behaviour: cross-cultural introspections of Hawaii. *International Journal of Tourism Anthropology*, 4(1). <https://doi.org/10.1504/ijta.2015.067641>
- [15] Miles & Huberman. (2014). Qualitative data analysis: An expanded sourcebook (3rd ed.). In *Qualitative data analysis: An expanded sourcebook (2nd ed.)*.
- [16] Mungmachon, M. R. (2012). Knowledge and Local Wisdom : Community Treasure. *International Journal of Humanities and Social Science*, 2(13).
- [17] Murni, N. G. N. S., Kanca, I. N., & Antara, D. M. S. (2018). Local cultural conservation to support sustainable tourism in Kuta tourist area. *Journal of Physics: Conference Series*, 953(1). <https://doi.org/10.1088/1742-6596/953/1/012085>
- [18] Naylor, R. S., Hunt, C. A., Zimmerer, K. S., & Taff, B. D. (2021). Emic views of community resilience and coastal tourism development. *Societies*, 11(3). <https://doi.org/10.3390/soc11030094>
- [19] Nazaruddin, M., Kamil, A. I., Nasution, A. A., & Aulia, F. (2023). THE SURVIVAL OF ACEHNESE TRADITIONAL MARKETS IN THE MODERNIZATION ERA. *Jurnal Ilmiah Peuradeun*, 11(3). <https://doi.org/10.26811/peuradeun.v11i3.1021>
- [20] O'Reilly, K. (2019). Ethnography methods. In *Ethnography: Principles in Practice*.
- [21] Pesurnay, A. J. (2018). Local Wisdom in a New Paradigm: Applying System Theory to the Study of Local Culture in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 175(1). <https://doi.org/10.1088/1755-1315/175/1/012037>
- [22] Pranata, J., Wijoyo, H., & Suharyanto, A. (2021). Local Wisdom Values in the Pujawali Tradition. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(1). <https://doi.org/10.33258/birci.v4i1.1642>
- [23] Prasetyo, S. F. (2023). Harmony of Nature and Culture: Symbolism and Environmental Education in Ritual. *Journal of Contemporary Rituals and Traditions*, 1(2). <https://doi.org/10.15575/jcrt.361>
- [24] Salahudin, Siswanto, B., & Dwijatmiko, S. H. (2018). Local Wisdom As Social Capital Of Gampong Development. *IOSr Journal of Humaities and Social Science*, 23(8).
- [25] Sudarwanto, B., Hardiman, G., Suprpti, A., & Sardjono, A. B. (2018). The Concept of

- Emic Knowledge of Bustaman in Surviving and Adapting as an Urban Kampong in Semarang, Indonesia. *International Journal of Scientific and Research Publications (IJSRP)*, 8(9). <https://doi.org/10.29322/ij srp.8.9.2018.p8136>
- [26] Walker, K., & Moscardo, G. (2016). Moving beyond sense of place to care of place: the role of Indigenous values and interpretation in promoting transformative change in tourists' place images and personal values. *Journal of Sustainable Tourism*, 24(8–9). <https://doi.org/10.1080/09669582.2016.1177064>
- [27] Zainal, S., Nirzalin, N., Fakhurrazi, F., Yunanda, R., Ilham, I., & Badaruddin, B. (2024). Actualizing local knowledge for sustainable ecotourism development in a protected forest area: insights from the Gayonese in Aceh Tengah, Indonesia. *Cogent Social Sciences*, 10(1). <https://doi.org/10.1080/23311886.2024.2302212>