

## Tourism Governance Based-On Penta-Helix Model in Samosir Island, Indonesia

Siti Hajar<sup>1</sup>, Ramlan<sup>2</sup>, Nur Ambia Arma<sup>3</sup>

### Abstract

*Tourism is the main sector that provides the largest contribution to regional income so that economic growth in Samosir Island relies heavily on this sector. The advantages of tourism in Samosir Island include cultural diversity which is a characteristic in addition to its natural beauty. The cultural diversity of every village in Samosir Island makes this area an opportunity to produce superior and competitive tourist villages and produce tourism innovations in this 4.0 era. However, the readiness of the community in developing tourism has not been realized properly, so it takes the intervention of various parties to be able to assist the development of tourism in Samosir Island, especially assisting local communities and promoting tourism. The method used in this research is a survey which is analyzed through a qualitative approach. This research resulted in an integrated collaboration with the Penta-Helix model concept, covering components of government, academics (universities), communities (associations or community groups), the private sector (industry) and the media. This Penta-Helix model collaboration illustrates a pattern of cooperation that can build and develop a tourism based on the characteristics and advantages possessed by the area.*

**Keywords:** Governance, Village Tourism, Tourism Policy, Penta-Helix, Local Wisdom.

### INTRODUCTION

The implementation of governance in the tourism sector is a priority program that must be implemented by the local government of Samosir Island, this is related to the economic growth of this area depending on the tourism sector. So, the regional and central governments are very serious and focused on supporting tourism development in Samosir Island, moreover this area is also included in the Lake Toba Region as one of the prioritized tourist destinations as the key to national development in Indonesia. The tourism sector has contributed 81% to Samosir Island regional income in 2018 so that economic growth has increased.

Governance in the tourism sector implemented in Samosir island is a program that can continue to increase regional income and promote community welfare so that tourism development in Samosir island will continue to develop in accordance with the times and science. The tourism program in Samosir Island, has led to building cooperation and investment networks for the development of tourism potential that does not eliminate the local content of the area, but the government develops the tourism potential of Samosir by elevating local regional values which include culture, customs, history and religion. Activities carried out related to the development of tourism potential based on local wisdom are related to cultural arts

performances in collaboration with the media, universities, community communities and private parties as sponsors, this is related to the components that exist in the Penta-Helix concept. The world of tourism in the 4.0 era must be strengthened by synergistic collaboration between various parties as an effort to prepare competent human resources so that they can face the challenges and opportunities that exist in the era of the industrial revolution 4.0. The components in building this synergistic collaboration are the government, academia/universities, the private sector/business/industry, communities/associations and the media. These five components must be mutually reinforcing and integrated in a sustainable manner so as to produce innovation in the tourism sector.

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<sup>1</sup> Universitas Muhammadiyah Sumatera Utara, Email: [sitihajar@umsu.ac.id](mailto:sitihajar@umsu.ac.id), (Corresponding author)

<sup>2</sup> Universitas Muhammadiyah Sumatera Utara, Email: [ramlan@umsu.ac.id](mailto:ramlan@umsu.ac.id)

<sup>3</sup> Universitas Terbuka, Email: [nurambia@ecampus.ut.ac.id](mailto:nurambia@ecampus.ut.ac.id)

Penta-helix defines as a joint interaction of the four established helixes of the so-called quadruple-helix (the public sector, the private sector, academia, and civic society) being intermediated and activated by the fifth helix (social entrepreneurs/activists) (Calzada, 2020). Penta-Helix is made up of 5 (five) components that work together, contribute, and communicate with one another, including 1) The government is one of the stakeholders who has regulation and responsibility; 2) Business is an entity that has activities in processing goods or services; 3) Academics/universities are knowledge resources, including concepts and theories; 4) Communities/Associations are people who have the same interests and are relevant to existing developments; 5) Media are stakeholders who have more information to develop and promote (Sturesson et al., 2009). Penta-Helix is an ideal concept that can support the establishment of cooperation and partnerships between parties who have mutual interests (Halibas et al., 2017). Five elements in the Penta-Helix are very reliable for establishing strategic partnerships so as to produce synergy between one party and another as an effort to strengthen and accelerate business in all sectors of life. This synergistic collaboration is being processed and as a preventive measure that can develop tourism through tourism village governance in Samosir Island. Tourism in Samosir Island is in dire need of cooperation between parties or the components described above by interacting and contributing according to their functions.

The world of tourism also urgently needs collaboration that is mutually synergistic, especially related to the management of tourist villages which aims to preserve local wisdom so as to produce excellence in innovation in the tourism sector (Arismayanti, 2021). The tourism innovation in question is the potential of tourist villages that can develop Samosir tourism to be superior and competitive. Not only that, but it is hoped that it can prepare competent and professional human resources in the tourism sector. This is where the role of stakeholders is expected to be involved in the development of tourist villages through tourism management based on mutual trust, cohesiveness and mutual benefit.

The involvement of stakeholders in the management of tourist villages in Samosir Island is still not stable and must continue to be improved, especially regarding collaboration with the University as a party that can provide direction on concepts and theories in developing tourism that can accept challenges and implement opportunities in the era of the industrial revolution.

4.0 Moreover, Samosir Island has tourism potentials that can be developed and are able to compete at the national and international levels, so it really needs a partnership pattern developed in the penta helix model.

Tourism village governance in Samosir Island is a priority program to support tourism development in the 4.0 era. Borges et al., (2014) stated that governance in tourism is conceptually multidimensional through the approach of government, private and public sectors as well as actors who collaborate to provide solutions and provide synergies to face challenges and issues in sustainable tourism development. In order to give intervention in sustainable tourist development, which involves trust and power in social interactions, governance in tourism development, particularly in an area, is a collaborative action in a relational perspective. As a result, it is crucial for all parties to work together to balance obligations while carrying out an action or endeavor to enhance tourism, especially village tourism because it can result in innovations in this field (Bramwell, 2011; Nunkoo, 2017).

Cultural diversity, customs, history and others are advantages for tourism in Samosir Island, so there is a lot of potential that can be developed through grouping tourist villages to produce superior village tourism. Samosir Island has cultural and historical values from each region, namely Sianjur Mula-mula, Harian, Sitionio, Onan Runggu, Nainggolan, Palipi, Ronggur Nihuta, Pangururan and Simanindo. So, the local government of Samosir seeks direction that can contribute to local communities to participate in managing and developing tourist villages and encouraging the creation of tourism business units, MSMEs so that employment can be carried out optimally. As stated by Peng & Lin (2016); Steiner (2018) that tourism can produce entrepreneurial innovations that support the development of human resources and reduce structural unemployment so as to create changes to the development of rural tourism.

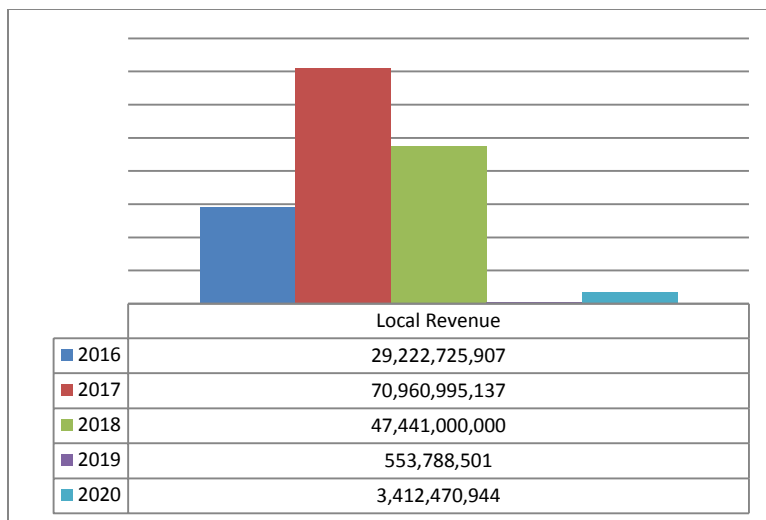
The development of a tourist village in Samosir Island is expected not to eliminate the cultural and historical preservation which is considered important for the local community. The tourist villages in Samosir Island, each have their own characteristics and advantages in introducing their village through tourism so as to produce village tourism that can be developed into a superior tourist object or destination. However, the results of research conducted by Hajar, (2019) show that the development of tourism objects in Samosir Island still requires support from both internal and external parties as an effort to produce innovations for tourist attractions in tourist villages. Furthermore, Yoeti (2016) that the attraction of tourist objects is based on the existence of resources that can cause a sense of pleasure, beauty, comfort and cleanliness; the existence of high accessibility to be able to visit it; the existence of special features/specifications that are rare; the existence of supporting facilities/infrastructure to serve the tourists who attend. Based on the opinion above, it is very important commitment and cooperation between stakeholders so that the management of tourism villages based on local wisdom in Samosir Island can be carried out optimally and effectively through the penta helix model. Integrated and integrated collaboration can also result in the grouping of tourist villages based on the characteristics of villages that excel the potential of tourist villages and realize superior village tourism and increase community productivity that is oriented towards professional management of tourism objects and has added economic value and contributes on local revenue (PAD). Based on this reality, this research is here to see how stakeholder collaboration is in the management of local wisdom-based tourism villages on Samosir Island with the pentahelix model.

## **METHODS**

This research was conducted with a qualitative approach, which was carried out through a direct survey to the research location, namely Samosir Island. This survey activity was carried out by taking a personal approach to respondents who were selected as informants. Parga Dans & Alonso González (2018) that survey research was designed with a personal approach, which was supported by a questionnaire as a list of questions and also made observations which were answered with open comments. In addition to questionnaires, this study also uses direct interviews as stated by Pilving et al., (2019), that in conducting interviews, it must include special topics that are directly related to the research focus that has been determined, and have a predetermined time duration. Then, the data obtained from the results of questionnaires and interviews were grouped as material for analysis which was supported by several other documents. Goldkuhl & Cronholm (2010) in carrying out research, data analysis needs to be carried out on all data obtained, through initial coding, conceptual refinement, pattern coding and theoretical condensation, the data analysis that has been carried out also needs to be supported by Adie & Amore (2020) document management that is relevant to the theme and focus of research so as to obtain maximum research results. The data analysis technique also uses the help of the nvivo 12 plus application. By coding the script data from the interview results, then doing crosstabs to produce visualization of research data in graphical form.

## **RESULT**

Samosir Island is one of the areas located in the Lake Toba Tourism Area, and is an island in the middle of Lake Toba. Tourism is the main sector that provides the largest contribution to the local revenue of Samosir Island. Farazmand (2020) argues that tourism has a positive impact on the economic sector and provides opportunities for the interests of the community.

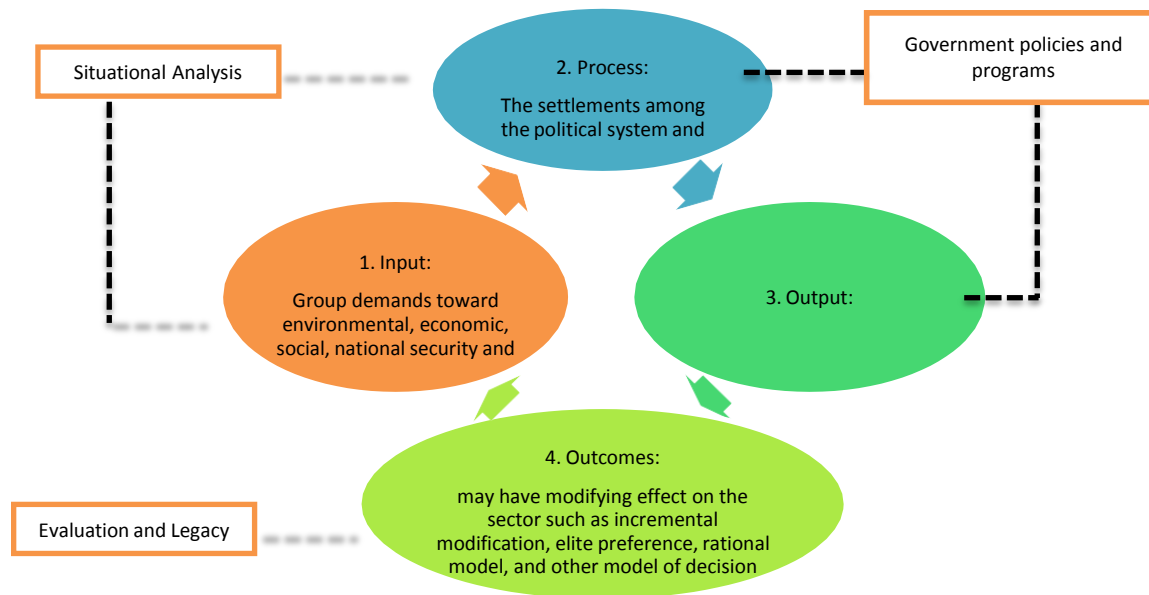


**Figure 1.** Local Revenue of Samosir island in 2016-2020

Source : Indonesian statistical center, 2021

In 2017 the contribution given by the tourism sector to local revenue (PAD) of Samosir Island was 81%, and when compared to 2016 there was an increase of  $\pm$  about 50% from Rp. 39,222,725,907 (2016) to Rp. 70,960,995,137, which includes hotel, restaurant, entertainment and billboard taxes, an increase of 105% from 2016 of 6.94 billion and 2017 of 14.2 billion. an increase of  $\pm$  10% to reach Rp. 58,823 billion. Tourism in Samosir Island continues to develop even though in 2020 it experienced a drastic decline in regional income which had an impact on regional economic growth, this was due to global problems experienced by the whole world related to COVID-19. This case brought deep sorrow to Samosir tourism which ultimately had a major impact on regional development so that the government tried to return to developing tourism through the tourism village program. This program is one of the tourism policy priorities planned by the government of Samosir Island, in accordance with its vision, namely the Realization of a Prosperous, Independent and Competitive Samosir Community Based on Tourism and Agriculture.

The designed tourism village development program is the government's response through a tourism policy that aims to restore the area as seen from economic, socio-cultural conditions and the development of science. Blackstone et al., (2017) stated that competitive local governments must be able and responsive to the management and recovery of a disaster experienced by the region, so as to realize community security and welfare. Government policy makers must be very attentive to the requirements of the public, namely society, which is adaptable to the circumstances in the face of globalization and competition, in order for the government to achieve good governance (Edgell et al., 2018; Hajar, 2021) . Thus, tourism policies that are implemented must first be well planned so that the management of tourist villages can be realized as they should, as stated by Judisseno (2019), the importance of the decision-making process in tourism development, namely:



**Figure 2.** The Decision Making Process Model

Source: Judisseno, 2017

Figure 2, illustrates the decision-making process in tourism development. This process is not easy and requires a long process, to accommodate various pressures from various interests, namely stakeholders, which are viewed from certain positions and conditions. The interest of the community in the decision-making process is related to the demands for revitalizing policies that are oriented towards comfort and security, the government on the other hand evaluates its performance on the demands and pressures of the community through programs implemented, especially in the tourism village program.

The development of a tourist village that is expected by the Government of Samosir Island, includes the preservation of ancestral cultural heritage so that tourism developed does not forget the culture that has existed since the formation of this area. Samosir Island has 47 tourist villages that are ready to be developed and produce village tourism that leads to local wisdom. The tourism village policy based on local wisdom in Samosir Island that is implemented must be right on target and sustainable, so to produce a good and correct implementation it is better to collaborate with actors or stakeholders in the tourism sector. Åberg (2020) that in implementing policies, both in general and in particular, stakeholders must be involved in accordance with the substance. The emphasis is on tourism policies related to issues that can encourage economic development so that it requires institutional arrangements that are dominated by stakeholder involvement oriented to multi-sectoral strengthening (Airey & Ruhanen, 2014).

Tourism policy can also be implemented properly and correctly if it is carried out according to its function, as stated by Judisseno (2019) namely 1) If the policy is a cost center, then the policy should not be aimed at entrepreneurs, but must be borne by the government; 2) If the policy is a profit center, then the policy can be imposed on the entrepreneur. Being a cost center, it means that the government provides subsidies for airlines or hotels to be able to sell airplane tickets or rent cheaper accommodation so that foreign tourist visits can increase. While it is a profit center, meaning the involvement of entrepreneurs to beautify the destination by maintaining and adding hotel facilities to make it more comfortable in accordance with the times.

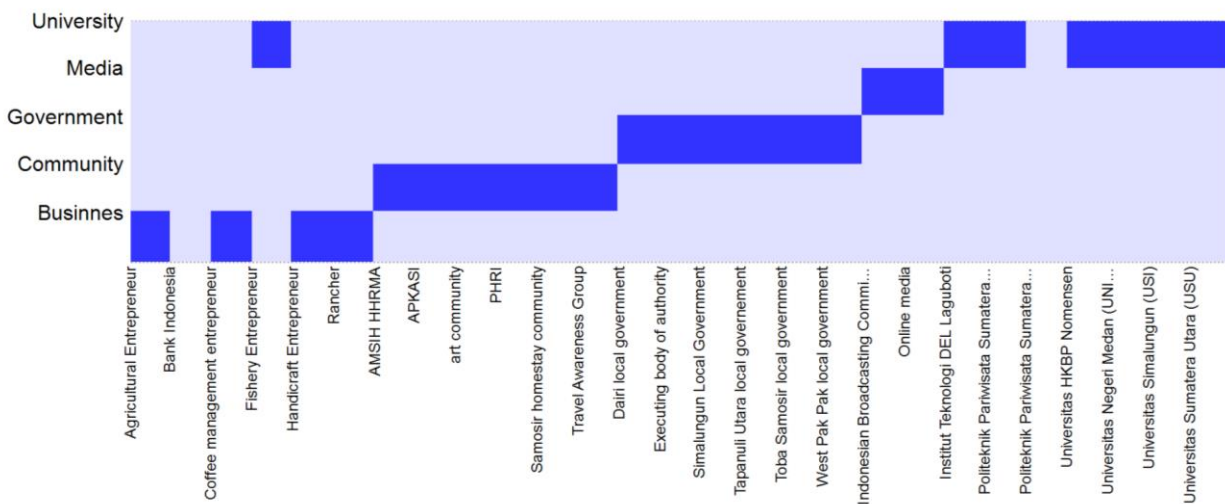
Stakeholder involvement in the implementation of tourism policies can create an integrated and integrated collaboration and unification of commitments so as to produce cooperation oriented to regional strengthening through networks. This collaboration is one of the efforts in realizing good governance in the tourism sector. (Hajar et al., 2022) in principle, in realizing good tourism governance, includes coordination

and synchronization between stakeholders or stakeholders (government, private/industry, community) who are actively and synergistically involved as well as the unification of commitments so that they can strengthen each other in tourism development.

To support tourism development, especially in tourism village governance that is oriented to local potential, it must have important components, including attractions, accessibility, amenities or facilities, and tourism institutions.

The stakeholder component proposed by Reid (2015); Sisto et al. (2018), includes public participation (individual and community) who continue to carry out the dynamics of tourism development development, which is related to motivation, interests, demands and needs as well as human behavior (tourists) related to the use of regional resources in promoting tourism programs through a territorial approach. Stakeholders are individuals or groups with an interest in the results and actions that exist in an institution or organization, especially in the tourism sector which has very diverse stakeholders (Tomsett & Shaw, 2015). Public participation proposed by (Lin & Simmons, 2017), is created as a foundation in sustainable tourism planning and results in structured collaboration between stakeholders from both government and non-government that is organized and has the potential to develop tourism in the future.

The opinion above is also in accordance with (Calzada, 2021; Sturesson et al., 2009), multi- stakeholder policy operations include 5 important components, namely government, private sector, academics, civil society and entrepreneurs/social activists/media who are stakeholders. very strategic in the future.

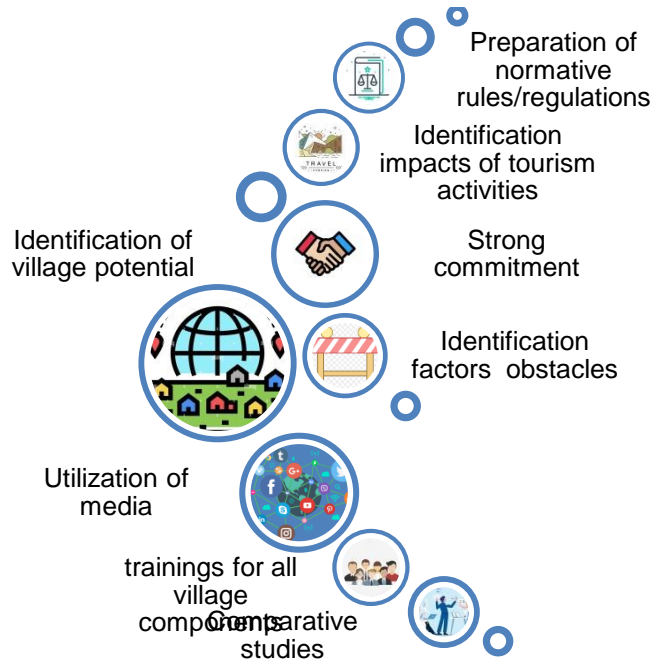


**Figure 3.** Stakeholders in the management of tourism villages on samosir island

Source: processed by researchers, 2022

Tourism village management oriented to the preservation of cultural heritage in Samosir Island has been implemented in 47 tourist villages that have been grouped by the government through program planning. The development of tourist villages carried out by the Regional Government of Samosir Island has collaborated with several components, namely from universities, the private sector, the community and the media. On the government side, there is the Executing Body of Authority (BOPDT) and several local governments such as Simalungun, Dairi, Karo, Pak Pak Barat, Toba Samosir, North Tapanuli and Humbang Hasudutan. The government cooperates with several business actors such as agricultural entrepreneurs, fisheries entrepreneurs, livestock entrepreneurs, and coffee processing entrepreneurs. Then collaboration was also built with several media as a forum to promote tourism in Samosir Island. Well-established cooperation can be realized, such as tourism awareness groups who need assistance not only from the government, but also from non-government sources such as academics/universities.

The local government of Samosir Island, in this case the Tourism Office, is still collaborating with academics who come from the tourism sector specifications and are located adjacent to Samosir Island, including the Universitas Sumatera Utara (USU), Universitas Simalungun (USI), Universitas Negeri Medan (UNIMED), Politeknik Pariwisata Sumatera Utara (POLTEKPARSU), Universitas HKBP Nomensen, Institut Teknologi DEL Laguboti. This form of collaboration is still related to work as experts in the preparation of planning documents and academic manuscripts that are more specific to the implementation of research, but for community service it is still categorized as low because tourism assistance implemented by the Tourism Office collaborates with local governments, associations and industry parties but does not involve academics.



**Figure 4.** Developing the potential of the village into a tourism village, as follows ([www.berdesa.com](http://www.berdesa.com))

Source: processed by researchers based on data from [berdesa.com](http://berdesa.com), 2022

Collaboration in the management of tourist villages as a tangible manifestation of implementing tourism policies, Law Number 10 of 2009 concerning Tourism, that the government is obliged to organize cooperation both nationally and internationally in accordance with applicable regulations. The main objectives in implementing cooperation in the tourism sector are related to maintaining and preserving regional potential that can become a tourist attraction that can be developed, facilitating tourism promotion and marketing so that it can attract investors to invest in the implementation of tourism. Efforts to realize this goal really require integrated collaboration across sectors and regions so that they can unite commitments in the implementation of tourism, especially the tourism village program.

The tourism village governance policy, which is implemented by realizing stakeholder collaboration in Samosir Island, is still inadequate through the 5 (five) important components in the Penta-Helix. Based on the data obtained, that of the five components, the existing collaboration is still with the industry in addition to local communities, associations or communities (tourism awareness groups, tourism associations), then on the media as a forum to promote tourism in Samosir Island, but it is still minimal with academics from universities. Meanwhile, in the era of the industrial revolution 4.0, it is very important to have an integrated and integrated collaboration such as the Penta-Helix model, so that the implementation of tourism through wisdom-based tourism village governance can be carried out in accordance with applicable regulations.

The Penta-Helix collaboration, which is implemented in a tourism village management policy based on local wisdom in Samosir Island, has resulted in regional strengthening in the implementation of tourism. The results obtained, an increase in community empowerment and tourism potential that can be developed. The components in the tourism principle have been adequate, namely access to tourist destinations including to the destination tourist village  $\pm 75\%$  has been well realized. The potential that supports tourism in Samosir Island, includes:

Tomok, Tuktuk (Development of Tourist Attractions Based on the Potential of Rural Culture and Lake Waters/Tourism Villages)

Simanindo (Development of Tourism Ports and Tourist Attractions Based on the Potential of Rural Culture/Tourism Villages)

Nainggolan (Development of Tourism Ports and Tourist Attractions Based on the Potential of Rural Culture and Lake Toba Waters/Tourism Villages)

Infrastructure development is an important component that must be owned in tourism development including tourism village governance, as stated by Cooper (2005) which is called dimension 4A as follows:

Attractions, including attractive nature, regional culture and captivating performing arts.

Accessibility, including local transportation and terminals or stations.

Amenities or facilities, including the availability of accommodation, restaurants and travel agents.

Aucillary Services, namely tourism organizations needed for tourism services (travel tours, tourism service bureaus and others).

The development of the potential of tourism villages in addition to the importance of the above components also requires promotion and information in this 4.0 industrial revolution era, it must be supported by the existence of social networks as an effort to assist, manage and develop tourism services so that integrated collaboration can be realized properly. The Penta-Helix concept used in tourism village governance has contributed to the development of tourism in Samosir Island, among others

Tourism Awareness Community Education and Vocational Activities

Implementation of the formation and training of English language groups for community groups

Implementation of Focus Group Discussion (FGD) on homestay management

Implementation of the establishment of Micro, Small and Medium Enterprises (MSMEs) as a forum to promote the creativity of tourist villages, including souvenirs, souvenirs and others.

Mentoring and training of handicrafts as a typical tourist village

Mentoring and coaching for tourism awareness groups (POKDARWIS)

Facilities and Support Activities for Partnership and Creative Industries

Tourism awareness group training to increase creative economy business

Formation of cooperation with local government institutions, the private sector as an industry for the development of Samosir tourism

Establishing cooperation and partnering with travel services at both national and international levels regarding the promotion of Samosir tourism

Implementation of music events in tourist destinations as well as tourism promotion

Implementation of the cool chat program in the development of tourist villages

Implementation of the tourism village excellence exhibition program



Implementation of the Lake Toba festival event

Collaboration that results in partnerships in all programs in tourism development in Samosir Island is the government's top priority for tourism village governance, which is more specifically for excellence innovations that can characterize the tourist village. The innovation in question is to build partnerships in preserving the local potential of tourist villages which makes the 47 tourist villages in Samosir Island have their own characteristics that can be developed and promoted into village tourism. Planning and programming village tourism based on the community's ability to develop village potential through local wisdom so that it can be understood and then become ideas or ideas in developing local potential that is valuable and can be the pride of the community (Komariah et al., 2018). The innovation process in developing local potential requires planning and design and ideas that can avoid conflicts in the community so that they can become assets that can be developed into local wisdom in the management of tourist villages such as museums, homestays and others (Steiner, 2018). Developing local wisdom in sustainable development can be an increase in knowledge both individually and in groups, which become ideas and ideas in preserving culture so that it becomes a productive tourist attraction, but requires partnerships with institutions that can develop local tourism. So that it can become a framework and policy Then (Schwann, 2018). However, the cooperation that was built in the tourism village program in Samosir Island there are still several obstacles faced in the management of tourist villages, including the unpreparedness of the community to be involved in tourism development that is oriented to local values and has not well understood the 4A dimension as a carrying capacity. for the development of tourist villages so as to create comfort in traveling.

The local wisdom possessed by tourism in Samosir Island is the main attraction in improving the quality of tourist visits in the form of marketing and promotion, development of facilities and infrastructure, investment and development of local values that can involve the government, private sector and community groups as well as media and universities that can effectively together to manage and develop tourism, especially in tourist villages. (Heiner et al., 2019), argues that compiling social and cultural values as an effort to strengthen the government system and can proactively strengthen stakeholders in the decision-making process so as to improve the position of local authorities in development. As stated by (Edgell et al., 2018), that tourism is very closely related to socio-cultural activities, economic development, the environment so it is important to collaborate in sustainable tourism development. In accordance with this statement, the tourism village governance policy designed by the local government of Samosir Island is oriented to creating collaboration so that it can produce cooperation in tourism development in Samosir Island. Based on the results obtained, namely.

**Table 1. Directions for the Development of Tourist Attractions in Samosir Island**

Development Area	Potential Tourist Attractions	Development Concept	Development Component
Tuk Tuk, Tomok	a. Accommodation and hospitality complex b. Water tourism attraction (LakeToba waters) c. Tuktuk Villagecultural tourismattraction	Development of tourist attraction based on the potential of rural culture and lake waters (Tourism Village, SelusurDanau)	a. Tuktuk tourismvillage development b. Water rfront and Board Walk c. Craft Center/ArtMarket d. Community Center e. Eco Resort/EcoLodge f. Culinary Center

Simanindo	a. Ferry port b. Cultural tourism attraction c. Lake beach	Development of tourist ports and tourist attractions based on rural	a. Development of cultural tourism village b. Waterfront and Board
	tourist attraction	cultural potential (tourist villages)	Walk c. Tourist Port/lake to bacruise port d. Culinary Center e. Ulos Lumban Soi-Soi Center f. Community Center
Nainggolan	a. Ferry port b. Cultural tourism attraction c. Lake shore attraction data	Development of tourist ports and tourist attractions based on the potential of rural culture and lake waters (tourist village/selusurdabau)	a. Culinary Center b. Tourist port d. Ulos. Center
Pusuk Buhit	a. Hot spring attraction b. The attraction of geological sites/geological sites	Development of tourist attraction based on geological and mineral resources (geopark, geoscience, volcanic park, research center)	a. Museum Budaya b. Geo Science center c. Eco lodge d. Adventure and Sporting activities: Trekking, biking and hiking e. Pemandian Air Panas

Source: Data processing, 2021

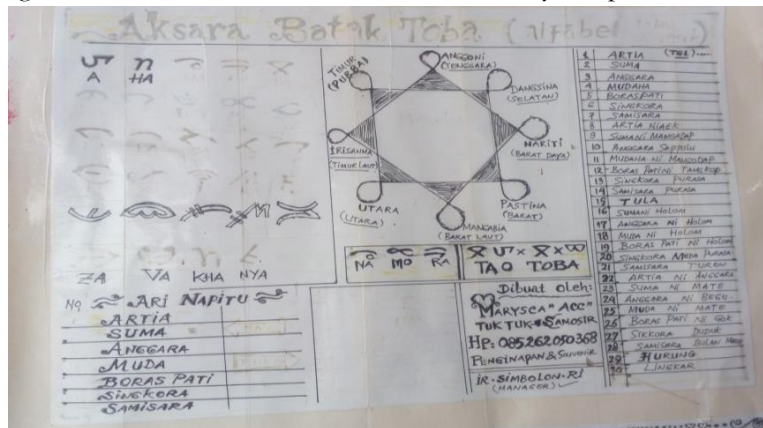
Based on table 1 above, the tourism village development plan for Samosir Island has been well structured and designed, but in implementing specific policies on tourism village governance it has not been maximally implemented, because the 4A dimensions that must be met in tourism development are not adequate, and the attractiveness of tourism is still monotonous and not well managed. Not only that, the management of tourism objects in tourist village locations, related to information and promotions, is constrained by inadequate facilities. This requires cooperation with various parties to maximize tourism policy in Samosir Island

## DISCUSSION

The tourism policy of Samosir Island, namely Samosir Regent Decree Number 474 of 2017 aims to declare villages that have potential tourist objects to be developed in accordance with the determination of criteria and classification of tourist objects based on: 1) Physical space; 2) Number and type of attraction; 3) Number and types of tourist facilities; 4) Number and types of public facilities; 5) Accessibility; 6) Community readiness; 7) Number of tourists. This policy, becomes a reference and guide in the management of tourism villages that are oriented to local values so that it really requires cooperation as a tourism development partner in Samosir Island. Determination of criteria and classification of tourist objects aims to attract various investors or local and foreign tourists to visit the land of pieces of heaven (the term Samosir as the icon of tourism).

The management of a tourism village based on local wisdom developed in Samosir Island has become a tourist attraction that is very influential on the living order of the local community. The local wisdom possessed in Samosir Island includes rondam beans, handicrafts in the form of woven ulos, sculptures, souvenirs and others. If this is developed automatically, it will be able to improve the welfare of the community as well as regional income, especially ulos weaving becomes a cultural symbol that must be preserved and has a social impact on the Toba people so that this is also an attraction for visitors/tourists to understand Toba culture through ulos weaving. So, it is important that there is training that directly specializes in increasing the ability of human resources in developing the creativity of local wisdom.

In addition, ulos weaving which can be a local wisdom that is typical of Samosir is also a religious teaching that is a belief for religious adherents of some communities, namely the parmeline belief as a historical relic



that can be a tourist attraction. Another historical heritage that is unique and has advantages in the tourist village of Samosir Island, namely the Toba Batak script.

Figure 5. Toba Batak script Source:

Samosir Island Tourism, 2021



Figure 6. Samosir Wisata Tourism Cruise Ship Source: Research Documentation Results, 2021

The Toba Batak script has become one of the cultures that characterizes Lake Toba, so many tourists want to know more about the history of this Toba Batak script. The Toba Batak script is proof that there is history and stories about the birth of Batak descendants in the Lake Toba area. Then, the results of cooperation in the development of tourism in Samosir Island also produced cruise ships that were characterized by Toba culture so that they became a tourist attraction. This cruise ship can be found in the Tuk Tuk Siadong Tourism Village, part of the Tomok Region. Not only cruise ships are the tourism advantages of Samosir Island, there are still many tourism village programs that are oriented towards local values, such as activities carried out by the tourist village in Lumban Suhi Suhi Toruan Village known as Kampung Ulos, namely Martonun Sadari (One Day of Weaving). ) through the Hita Do Hutaraja Event as an activity that showcases how to weave in the younger generation and in collaboration with the Batak Zone media (Information Media About Batak and North Sumatra Tourism), Samosir Indah Media as a Samosir tourism information center, weaver community groups as well as the Samosir regional government represented by the Department of Tourism. Activities carried out by tourist villages in Samosir Island are strengthening the socio-cultural potential by preserving the authenticity of local culture so that culturalization can be maintained, but must be coordinated and continue to be carried out in stages of sustainable development from the local government.

The target of the tourism village governance developed is to involve all parties including the government, the community, business actors/community groups, the private sector/industry, universities and the media that must be in line with and have a commitment to developing competitive tourism in Samosir Island. So, with the Penta-Helix concept developed in tourism village governance, it is expected to be able to build cooperation and collaborate with all stakeholders, where this collaboration is an interaction that can open access to data and all information in the development of tourist villages so as to create an MoU to implement and support development tourism together by looking at the potential of the tourist village.

The Penta-Helix model used in tourism village governance in Samosir Island, as a strategy to design tourism programs that lead to the unification of commitments between stakeholders and design regulations that lead to the implementation of cooperation in the development of tourism villages based on local wisdom. The strategy built through the penta helix model is an effort to unify commitments and interact with each other to support tourism development in Samosir Island, especially related to integrated and integrated local wisdom-based tourism village programs.

Based on the results of research conducted by (Guo & Sun, 2016), that there are 4 (four) problems faced by the Chinese state in developing rural tourism through a system of building state cooperation, namely 1) countries generally require the tourism industry to be locally encouraged and developed; 2) cross-border cooperation and coordination between adjacent countries is considered a prerequisite for joint strengthening of the regional tourism industry; 3) tourism is considered to be an important driver for the modernization of conservation policies, and rural development arising from conservation; 4) The rural tourism literature shows that tourism encourages local job creation, these jobs tend to be creating sales of handicraft products, cultural performance, hospitality and accommodation services. Then, Mason (2015) explains that there are (4) four key players in tourism planning and management, namely tourists, local

communities, tourism businesses and the government consisting of local, regional, national and even international governments. However, Tomsett & Shaw (2015) argues that public policy can increase stakeholder understanding proactively by understanding the impact and classification of policy makers from a theoretical and practical point of view through a consultative approach and process in determining alternative tourism industry policies.

The opinions above explain the importance of collaboration that can build integrated partnerships and cooperation, especially the management of tourist villages in Samosir Island. However, the above opinion also has an impact on decision making for future tourism development, so Yoeti (2016) provides solutions, namely 1) Before a plan is made it is necessary to hold consultations with all parties/levels given the plan to be made; 1) Explain the plan that will be made to all parties, what are the benefits if the project is completed later; 3) The tourism organization concerned must be able to be linked from higher institutions in the area to realize the plan; 4) Determine the budget that will be used for the plan so that the plan can be completed on time, and this budget should be completely separate from other planning costs; 5) Form a team that is responsible for the planning project that coordinates and collects all tourism potentials to be utilized for access to the planning. The main key is the government as the legitimate power holder in the political system at the local, central or national level and is responsible for making policies and setting policy guidelines, as part of decision making in all public sectors including tourism, and also as the main party coordinating and controlling the implementation of tourism programs.

The management of tourism villages based on local wisdom in Samosir Island through the Penta-Helix model needs to be strengthened with strategic planning that is prepared with the principle of partnership so that it can produce tourism policies that directly emphasize stakeholders. This is related to the emphasis that occurs as a result of differences in implementing coaching and providing better opportunities to achieve development goals, which an institution must focus on. Thus, in a planned change process such as in the tourism sector, the relevant parties or institutions within the same process vessel must be able to assess, review and implement successful changes. the most important thing for the management of a tourism village based on local wisdom with the penta-helix model is to establish good cooperation with all the stakeholders involved (Budhi et al., 2022; Sjögren Forss et al., 2021; Sumarto et al., 2020).

The process of change that must be carried out by an institution, both government and private, must be able to realize the goals that have been set. So, in carrying out a change it is necessary to have a framework that has been prepared by the parties involved in decision making so that the plans to be formulated can be in accordance with the vision, mission and goals and targets to be achieved in a development including the tourism sector. Thus, institutions in the tourism sector must be able to raise standards, increase focus and objectives, build professionalism, lead in the sector and be able to be proactive and collaborative with all parties involved. As explained by Lin & Simmons (2017), namely that there are 3 (three) contributions that can be generated from integrated planning, namely 1) There is a new pattern of collaborative planning in the tourism sector; 2) The role of key stakeholders (who have social and institutional capital) in tourism planning; 3) As a coordinator to promote effective collaboration and can contribute to sustainable tourism outcomes. Thus, local wisdom-based tourism village governance through the penta helix becomes a collaborative process and network that aims to increase efficiency and potential which is a strong motive for future action that results in innovation and regional strength in developing dynamic tourism.

## CONCLUSION

Tourism development is carried out through institutional arrangements, local strengths and values, the role of tourism groups, empowering and developing the potential of natural resources and local communities and becoming regional advantages in producing tourism village governance based on local wisdom. Tourism development that is based on partnership can result in good interaction between stakeholders so that the collaboration of the Penta-Helix model can be implemented according to the needs and demands of the public.

The Penta-Helix model used provides convenience for the local government of Samosir Island in developing tourism village governance based on local wisdom. The tourism village governance program implemented with the principle of partnership through the Penta-Helix model has made it easy to build networks or networks in promoting tourism in the era of the industrial revolution 4.0. The partnership formed based on the Penta-Helix strengthens institutions involved in tourism development in Samosir Island, especially the tourism village program which is oriented to local values owned by villages in Samosir Island. The tourism policies that have been implemented that lead to grouping the characteristics and criteria of potential possessed, require preventive action in tourism development that is oriented to local values, especially the tourism village program. This action requires integrity and unification of commitments between stakeholders who are components in the Penta-Helix so that it can result in the optimization of sustainable partnerships in tourism development through local wisdom-based tourism village governance.

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