PENTAHELIX TO BUILD SUSTAINABLE VILLAGE AND TOURISM: A THEORETICAL STUDY

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Abstract: The strength of developing the potential of villages and rural areas needs to be supported by all elements. The potential development of Villages and Rural Areas cannot be carried out by one element alone. Commitment and synergy between one element and another is the main key. So the pentahelix or multi-stakeholder concept where elements of the Government, academics, business entities or actors, communities or communities, and the media unite to coordinate and commit to developing the local potential of villages and rural areas. Local potential Villages and rural areas that continue to prioritize local wisdom and local resources. Likewise in Sustainable tourism development in Indonesia can never run alone, there is a need for cooperation in tourism development. The development of human resources, natural resources, infrastructure, social and culture needs to be developed between the parties related to tourism development. The Pentahelix concept is one of the offers from the Ministry of Tourism related to tourism development in Indonesia. It is stated in the Regulation of the Minister of Tourism of the Republic of Indonesia No. 14 of 2016 concerning Guidelines for Sustainable Tourism Destinations. The goal is to ensure and quality activities, facilities, services and create experiences and value tourism benefits. The concept is expected to have a positive impact on the surrounding community. All parties are expected to unite and cooperate so that village development and developed tourism progress.

Keywords: pentahelix, sustainable tourism, village development, tourist village, ecotourism

I. PRELIMINARY

Sustainable development can be interpreted broadly as activities in an area to meet the needs of development in the present without endangering the carrying capacity of resources for future generations to meet their needs (Butler, 1999; Kim & Todorovic, 2013). The challenge of sustainable development is to find ways to increase welfare while using natural resources wisely. In the era of globalization, which is getting stronger, it must also be balanced with awareness in solving the problem of inequality in natural resources (Gray, 2010). Development policies should pay more attention to the need to reorganize the basis of the asset management system in the region, especially in rural areas (Di Salvo et al., 2017; Rasoolimanesh et al., 2020). The rearrangement of the area is more in the form of integration into dual use, namely increasing economic value, preserving the environment or ecosystem and strengthening local social and cultural structures (Kim & Todorovic, 2013; Thornton, 2013).

In the future, in the context of sustainable rural development or realizing a Sustainable Village, resource management in the village must be carried out in a pattern that ensures environmental sustainability and maintains biological balance (Astawa et al., 2018; Fu et al., 2020). In maintaining the preservation of nature and improving the quality of natural resources, an efficient and sustainable resource utilization model can be applied. One of the things in realizing sustainable village development is the development of independent villages by utilizing available resources (Sara & Saputra, 2021; Xu et al., 2018). An independent village is a village that can meet the need for basic infrastructure and basic needs, and can prosper the community in a sustainable manner, namely using and utilizing resources to meet current needs by paying attention to social, economic, and social aspects, and the environment so as not to sacrifice the needs of future generations (Jayawarsa et al., 2021). Patterns of human, physical, social and economic development greatly affect sustainability at the local and global level (Saputra, Sara, et al., 2019).
In village development, synergy from various parties is needed. It is impossible for the village apparatus to work and realize sustainable development only by relying on government capabilities alone (Aminudin, 2019; Xu et al., 2018). Harmonious cooperation needs to be established to create a sustainable independent village. Synergy between government, community or community, academics, entrepreneurs, and the media are very important to build togetherness in sustainable village development (De Jong & Sauerwein, 2021; Saputra, Anggiriawan, et al., 2019). The development strength of a country or region needs to be supported by all elements. Acceleration of development cannot be done by one party. So the concept of building a pentahelix that unifies these elements needs to be implemented (Saputra, Sara, et al., 2019).

In the pentahelix concept, the government element has political power, to formulate a policy through decisions (Chamidah et al., 2020). While society or community is called social power (Castells, 2011). This is where the role of the community and the communities in the village play a role in development. The local community should not play a passive role, but must be active and progressive and care about the environment (De Jong & Sauerwein, 2021; Matei et al., 2016). Academics through the power of knowledge power present knowledge that makes life faster, cheaper, more useful. The fourth element of the pentahelix, namely the businessman or entrepreneur (Chamidah et al., 2020). The last (fifth element) in the pentahelix is the medium. Business people here need to understand Pancasila so that there is concern for social justice. "If our economy is not based on Pancasila, it is feared that there will be capitalists who do not care about social justice in society. In addition, business people must care about the preservation of the surrounding environment. In terms of business in the village, the village community must be prioritized and environmental sustainability is important to be the main requirement for doing business in the village (Di Salvo et al., 2017; Milanés Batista et al., 2020).

Business does have a very wide space in realizing development in the village. As is the case in current village development, for example in Kerobokan Village, Sawan District, Buleleng Regency, Bali, Indonesia. The village has a very good beach potential. Development into a tourist village is very possible. Bringing local businessmen to fulfill this potential space is the right decision. With a capital of business knowledge that is not so qualified, business people in this tourist village area have tremendous potential in sustainable village development, especially the preservation of the coastal environment and the area of Hindu shrines that are around (Saputra, Anggiriawan, et al., 2019; Saputra, Sara, et al., 2019). This beach tourist attraction presents beautiful beaches, coral reefs that have a special attraction for divers and serve special food dishes for visitors. For this reason, with the extraordinary potential of this village, it needs the concept of sustainability so that it remains an area that remains beautiful, not polluted, and has a local cultural concept that is thick with Balinese characteristics. To preserve all of this, a harmonious cooperation of the five elements of the pentahelix is needed.

II. LITERATURE REVIEW

Village Development

National development planning in rural areas is concerned with determining how, where and when human development occurs, which affects the use of natural resources. In preparing a village development plan, it is very important to be oriented towards improving the sustainability of the life of the village community (Sara & Saputra, 2021). The Sustainable Village concept can maintain a stronger village function, namely as a provider and as a national food reserve as well as maintaining the quality of the local ecology (Dewi, 2014). For this reason, in realizing sustainable village development, cooperation between the central government and local governments is needed in an effort to provide quality infrastructure that is in accordance with the needs of rural communities (Xu et al., 2018).

Villages based on Law no. 6 of 2014 is a legal community unit that has territorial boundaries that are authorized to regulate and manage government affairs, the interests of local communities based on community initiatives, origin rights, and/or traditional rights that are recognized and respected in the government system of the Unitary State of the Republic of Indonesia (Atmadja et al., 2021; Saputra et al., 2020). In short, the village is a territorial unit inhabited by people who have their own system of government. The total villages in Indonesia are 73,670 villages. It is not surprising that the Minister of Villages, Development of Disadvantaged Regions, and Transmigration stated that villages are the shapers of Indonesia (Atmadja & Saputra, 2018; Ekayani et al., 2020). The concept of sustainable development seems to be a promising thing. In sustainable development, aspects of development not only lead to today’s society but also to society in the future. Ideally sustainable development can cover various aspects that exist in the community as well as rural communities. Based on Law no. 6 of 2014 concerning Villages Article 78 (1), village development, namely improving basic services, building and maintaining infrastructure and the environment, developing a productive-scale agricultural economy, developing and utilizing
appropriate technology, and improving the quality of order and peace in rural communities(Saputra, Sara, et al., 2019; Sara et al., 2020).

**Sustainable Development Goals**

Sustainable development in the village currently applies the principles of the Village SDGs (Sustainable Development Goals). SDGs Desa itself is a derivative program of the SDGs issued by the United Nations, which has 17 goals or goals. Therefore, development that implements the Village SDGs can help achieve sustainable national development in accordance with Presidential Regulation no. 59 of 2017 concerning the implementation of the achievement of sustainable development goals (Sachs, 2012). Sustainable Development Goals (SDGs) which is an agreement of 193 member countries of the United Nations which was stipulated in 2015 which is to improve the welfare of the global community, including Indonesia (Assembly, 2015). Village SDGs (Sustainable Development Goals abbreviated as SDGs) are an integrated effort to realize a village without poverty and hunger, an economic village that grows evenly, a village that cares about health, a village that cares about the environment, a village that cares about education, a women-friendly village, a networked village, and a culturally responsive village to accelerate achievement (Robert et al., 2005).

**Penta Helix Concept**

Welfare inequality, the high number of poor people, lack of access to information and poor infrastructure facilities in rural areas are the root causes of poverty. This problem is expected to be reduced through the issuance of Law No. 6 of 2014 which gives authority to villages to develop their existing potential. Villages are encouraged to be able to develop various innovations and synergize with academia, the private sector, government, and the media (penta helix)(Chamidah et al., 2020).The Pentahelix collaboration, which is a collaborative activity between lines/fields of Academic, Business, Community, Government, and Media is known to accelerate the development of potential in Wiita Village which is quite large (Halibas et al., 2017). This Pentahelix element was originally in the form of a Triple Helix with elements of Academics, Business Sector, Government, which was later added with an element of Civil Society (Communities), becoming a Quadruple Helix, to accommodate the community's perspective, in this case a "media and culture-based society" which has also become an integral part of innovation in the 21st Century today (Sudiana et al., 2020). Furthermore, the Communities element opens up opportunities for cross-disciplinary configuration and networking, and frees the concept of "innovation" from just economic considerations and goals. it also involves creativity as part of the knowledge production and innovation process. Because art-based research and innovation allows thinking or re-modelling of existing economic and market development models. This Quadruple Helix was then added one more element, namely Media, because in the context of developing the creative economy in Indonesia, Media (both conventional media and social media) plays a significant role, although it remains an independent element or is not directly affected by other elements. in carrying out its part or function (Upe et al., 2021).

**III. DISCUSSION**

**Village Development in Conceptual Framework Sustainable Development Goals (SDGs)**

Wise development for society is sustainable development. Sustainable development is development that aims to improve the quality of life of people around the world, both from present and future generations, without exploiting the use of natural resources that exceed the capacity and carrying capacity of the earth. This goal can be achieved through four elements of sustainable development goals: (1) Economic growth and equity; (2) Social development; (3) Conservation of natural resources (environmental protection); (4) Good governance. These four elements support each other, creating related and sustainable development goals(Chamidah et al., 2020; Saputra, Anggiriaowan, et al., 2019).

In the United Nations Conference (UN) held in Rio de Janeiro (Brazil) in June 2012, a sustainable development agenda called the Sustainable Development Goals (SDGs) was discussed(Hall, 2019; Li et al., 2018). The SDGs are a set of goals, targets, and indicators for sustainable development that are universal. The SDGs are a continuation and expansion of the Millennium Development Goals (MDGs) that have been carried out by countries since 2001 until the end of 2015(Alvino et al., 2021; Rasoolimanesh et al., 2020).

The eight MDGs are as follows:
1. Reduce poverty and hunger
2. Achieve universal education;
3. Improving gender equality and empowering women
4. Reduce child mortality
5. Improve maternal health
6. Eradicating HIV, malaria and other diseases
7. Ensuring environmental sustainability
8. Develop a global partnership for development.

Sustainable Development Goals explicitly aim to eradicate poverty and hunger, reduce inequality within and between countries, improve water and energy management, and take urgent steps to address climate change (Hall, 2019; Li et al., 2018). In contrast to the MDGs, the SDGs emphasize the importance of efforts to end poverty to be carried out together with strategic efforts to increase economic growth, implement social policy measures to meet various social needs (such as education, health, social protection, employment opportunities), and policy measures to address climate change and environmental protection (Butler, 1999; Kim & Todorovic, 2013).

The presence of the SDGs has become the center of attention for all countries in the world. This is because the existence of the SDGs has become a new hope for the world and at the same time an answer to the world's concerns about the sustainability of life in the future which includes issues in the social, economic, and environmental fields in the hope that the benefits can still be felt. The SDGs are a continuation of the MDGs agenda agreed upon by UN member countries at the Sustainable Development Summit meeting which has a number of missions for the sustainability of life in the world which had previously been carried out during the MDGs era (Hall, 2019; Rasoolimanesh et al., 2020).

The commitment of the international community to the issue of sustainable development is demonstrated by the agreement to immediately implement the SDGs in each of the UN member countries, including Indonesia (Hall, 2019). Indonesia's commitment to implementing the SDGs domestically is shown by the issuance of Presidential Decree No. 59 of 2017 concerning the implementation of the achievement of sustainable development goals (Li et al., 2018). The existence of this Presidential Regulation is a new milestone and a real manifestation of Indonesia in responding to the world's agenda to manage and maintain the sustainability of life.

The implementation of the SDGs in Indonesia in managing national development is expected to use an inclusive and participatory approach that is based on local wisdom and the principle of no one left behind (Alvino et al., 2021). The implementation of the SDGs in Indonesia refers to the goals and targets of the SDGs that have been agreed upon by all countries in the world with 17 goals and 168 targets that are implemented evenly in all provinces in Indonesia (Li et al., 2018).

As is well known, the geographical condition of Indonesia, which is an archipelago, is a challenge in itself in terms of implementing central government programs that require efforts to reach all regions spread across each island, including implementing the SDGs (Rasoolimanesh et al., 2020). Therefore, it is necessary for the participation of the regions, especially the village as the smallest and strategic entity that is directly in contact with the community to be given confidence in implementing the achievement of the SDGs nationally. With this belief, the village government and the community together implement a number of SDGs goals and targets nationally which are packaged in the Village SDGs (Li et al., 2018).

The implementation of the Village SDGs is the government's commitment to realizing national development goals through the national SDGs that use approaches that focus on the community, namely the development approach with the pattern of people centered development. The hope is that it can improve the welfare of the community and the quality of human life and manage the resources owned by the village as regulated in Article 78 (1) of Law no. 6 of 2014. The implementation of the National SDGs into Village SDGs cannot be separated from the existence of villages which are very important and strategic in achieving national development (Prasetyo & Putrini, 2021).

**Penta Helix An Ideal Concept in Building a Village**

Based on Law No. 6 of 2014 emphasizes that the government has delegated the authority to regulate and manage development directly to the village, it means that the village must also carry out the development of facilities and infrastructure in a participatory and independent manner in order to meet the needs of the community while still paying attention to aspects of potential-based empowerment, resources, and local wisdom (Chamidah et al., 2020). So in order to improve the welfare of the community, the government builds it from the lowest government or the linkage / synergy of development policies from the central government and village governments (Putra, 2019). So that there is a synchronization of policies from top to bottom to avoid confusion. This will run optimally if it involves all layers or elements that will also encourage development. The "Penta Helix" theory which emphasizes that the synergy between Civil Society, Government, Entrepreneur, Media and also the University in this case is a university in which there are academics with various scientific backgrounds. Of the five parties described in the pentahelix theory, attention is focused on the role of higher education institutions or universities to form those who have the ability with qualified knowledge (Sumarto et al., 2020).

This pentahelix contains the interrelationship of all elements or elements of society that help accelerate the development process (Widowati et al., 2019). The pentahelix collaboration, which is a penta and helix collaboration,
is a collaborative activity between lines or fields of academic, business, community, government and media. The Province of Bali seeks to synchronize tourism development cooperation with various parties including the Bali Province tourism associations, so that community participation in tourism development can grow and be more focused in accordance with government policies. Tourism development uses the Pentahelix Model, which involves elements: Academics, Business, Government, Community and Mass Media (Syafari, 2018). Then in policy implementation there are various actors involved. They can come from the government or the community, identified as coming from the bureaucracy, the legislature, the judiciary, pressure groups, and community organizations (Sukarno et al., 2020). Policy actors are policy subsystems that are in the policy network between the organization of the international system, the organization of the society and the organization of the state. Policy actors consist of: 1) elected officials, namely executive, legislative, and judicial, 2) appointed officials or political officials appointed by elected political officials to sit in the bureaucracy, 3) interest groups, 4) research organizations, 5) mass media. These actors interact with each other to give approval or disapproval of a policy. Policy actors consist of the government and a group of public who know and are interested in public affairs and who have leaders, opinions, and mass media that trigger the strength and weakness of the public pressure on the government so that a public affair (issue) becomes a policy output. The role of the mass media is very important in generating attention, provoking action, weakening opposition, showing the strength of commitment and support (Novianti, 2020).

**Penta Helix Collaboration in Sustainable Tourism**

Pentahelix is a strategy in the world of tourism that involves elements of the community and non-profit institutions to realize an innovation supported by existing tourism resources and potential. The Pentahelix collaboration, which is a collaborative activity between lines/fields of Academic, Business, Community, Government, and Media is known to accelerate the development of potential in Wiata Village which is quite large (Pradhipta&Nofiyanti, 2020). Academics on the Pentahelix model act as drafters. Such as identifying the potential and certification of products and human resource skills that support the improvement of the tourist village. Academics in this case are a source of knowledge with the latest concepts, theories and are relevant to the conditions of developing tourist villages (Chamidah et al., 2020).

The private sector in the Penta helix model plays a role in creating added value and maintaining sustainable growth. The private sector can play a role in providing technology and capital infrastructure. With the change to the digital era, it can help develop the potential of tourist villages to be more effective, efficient, and productive (Kim & Todorovic, 2013; Law et al., 2016). The community in the Penta helix model acts as an accelerator. In this case, the community is a group of productive and creative people who have the same interests and are relevant to the development of the tourist village to be developed. Act as an intermediary or a liaison between stakeholders to assist the community in the whole process and facilitate the adoption of the economic process (Gössling et al., 2020; Gray, 2010). In addition, the community also has a role to promote products or services owned by the village. The government must act as a regulator as well as act as a controller who has regulations and responsibilities in developing a business (Astawa et al., 2018; Wardana et al., 2021). In this case it involves all types of activities such as planning, implementation, monitoring, control, promotion, financial allocation, licensing, programs, legislation, development and knowledge, public innovation policy, support for innovation networks and public-private partnerships. The government also has a role in coordinating stakeholders who contribute to the development of village potential (Astawa et al., 2018; Dewi, 2014). Media plays a role in supporting publications, promotions and creating a brand image. implementation, monitoring, control, promotion, financial allocation, licensing, programs, legislation, development and knowledge, public innovation policy, support for innovation networks and public-private partnerships. The government also has a role in coordinating stakeholders who contribute to the development of village potential. Media plays a role in supporting publications, promotions and creating a brand image (Rauniar et al., 2014; Sah, 2016; Saputra, Anggiriawan, et al., 2019).

The collaboration of the elements of the penta helix will form a collaborative governance that is the process of a cross-sectoral multi-organizational network structure (government, private sector, civil society) that makes mutual agreements, joint decisions, reach consensus, through formal and informal interactions, create and develop norms in mutually beneficial interactions in achieving goals. Therefore, in an interdependent collaboration that appears egalitarian, that is, all actors have the same position (Arora-Jonsson & Larsson, 2021; Furqoni & Rosyadi, 2019; Harrison & Donnelly, 2011).
IV. CONCLUSION

Of the five elements of the penta helix, all elements collaborate and synergize with each other and have important roles in village development and sustainable tourism. Because all are synergic with each other to work together to combine ideas and ideas so that what you want to achieve in the village development process and tourist village is easy to get. For example, a concrete example is the utilization and maximization of village potential. There are at least five important things about community-based village development in accordance with the penta helix study, among others. First, encouraging initiatives, movements, and participation of village communities for the development of village potential and assets for mutual prosperity; Second, form a professional, efficient and effective, open, and responsible village government; Third, improve public services for Village residents in order to accelerate the realization of general welfare; Fourth, Improving the socio-cultural resilience of the village community in order to create a village community that is able to maintain social unity as part of national resilience; Fifth, strengthening the village community as the subject of development.

REFERENCE


