Sekala - niskala: A Local Cultural Approach in Developing Community-Based Ecotourism in Pemuteran, Bali (Commemorating I Gusti Agung Prana’s Initiative)

I Ketut Sardiana¹, I Gusti Ngurah Kade Mahardika², I Gusti Ayu Oka Suryawardani³, I Made Sarjana⁴, and Ni Luh Ramaswati Purnawan⁵

Abstract

The purpose of this study is to reconstruct Agung Prana's steps in organizing the and developing of community-based ecotourism in Pemuteran Village. It creates a Balinese social engineering prototype in CBE development, that can be used as standard operating procedures for community empowerment activities. This research is a qualitative research with data collection techniques through observation, in-depth interviews, and documentation. This research has been conducted with qualitative method in which SAP-LAP analysis is used to examine research findings and other supporting materials. The results showed that Agung Prana as Balinese local champion implemented local genius way on empowering Pemuteran Village on coral reefs sustainability and create image of the village as marine tourism icon in the north of Bali Islands. The way of Agung Prana to inspire local people building tourism knowledge and practices is called “sekala-niskala” approach. Pemuteran Villagers had good opinion and respect to Agung Prana as socioentrepreneur on helping themselves to find solution of the problem in the village. Therefore the recommendation could be suggested that sekala-niskala approach should be widespread on community-based ecotourism (CBE) development process.

Keywords: “Sekala-Niskala” Approach, Agung Prana, CBE Development Process, Pemuteran

1. Introduction

Environmental damage and social conflicts are negative impacts of tourism development that are not planned through a holistic and integrated approach. Mass tourism development is known as a partial and not well planned development approach. Evidently, mass tourism encourages excessive exploitation of natural and cultural resources, causing degradation of environmental quality and disharmony in the community. This condition has been experienced by Bali for more than three decades (Anom et.al, 2018; Arida, 2008; Cohen, 1987; Macnaught, 1982), high levels of pollution in the tourism area, water use conflicts, and tensions between tourism actors in competing for tourists as service buyers are increasingly open.

Overcoming these problems, community-based ecotourism (CBE) is expected to be a critical solution to overcoming various negative impacts by prioritizing community participation. Community Based Ecotourism is a "derivative" of Community Based Tourism which is known as the main approach in implementing sustainable tourism in various countries in the world (Murphy, 1983; Okazaki, 2008). CBT in Indonesia has been implemented in various provinces such as Candirejo Village, Central Java (Ahsani et al, 2018), Pentingsari Tourism Village, Yogyakarta (Herawati et.al, 2014; Lestari et al, 2016), Pemuteran Village, Bali Province (Bottema and Bush , 2012; Dewi et.al, 2018; Putra, 2014; Bachelor, 2016; Yahya, 2016). The development of environmentally based CBT in Pemuteran Village, hereinafter referred to as CBE, has shown the expansion of sustainable ecotourism. Ecotourism has grown at a rate of 10% -12% per year, which is 3 times faster than the tourism industry as a whole (IES, 2008). And more importantly, ecotourism has been embraced by many developing countries - which

¹ Center for Tourism Excellence, Udayana University, Bali, Indonesia, corresponding author, ketutsardiana@unud.ac.id

² Center for Tourism Excellence, Udayana University, Bali, Indonesia

³ Center for Tourism Excellence, Udayana University, Bali, Indonesia

⁴ Center for Tourism Excellence, Udayana University, Bali, Indonesia

⁵ Center for Tourism Excellence, Udayana University, Bali, Indonesia
are home to many of the world's rare and threatened species - hoping to boost their economies in an environmentally friendly way (Brooks et al., 2006).

The existence of CBE in Pemuteran Village was triggered by the poor condition of the residents, living in barren land, limited employment opportunities and business opportunities, as well as fishing with fish bombs which caused damage to coral reefs. Furthermore, it raises the idea of conserving coral reefs with the belief that preserved coral reefs can become fish habitat. In the coral restoration process, Pemuteran Village has become a pilot project for the application of biorocks technology. Coral reef restoration is carried out by the Karang Lestari Foundation, led by Agung Prana. When the coral reef restoration was successful, Pemuteran Village was visited by many tourists, so the CBE pattern developed. CBE development has an impact on changes in the livelihoods of local communities.

The success of Pemuteran Village in transforming from a poor village to a rich village through CBE can be a model for other locations. This study seeks to investigate and construct the activities of Agung Prana in organizing or empowering the Pemuteran community through the diffusion of biorocks technology. Other activities include analyzing the impact of CBE on the sustainability of the livelihoods of local communities and formulating social engineering prototypes of CBE development.

Research related to Pemuteran CBE has been carried out, including related to the potential for green / marine tourism (Dewi et al., 2018), the role of the private sector in conserving coral reefs (Bottema and Bush, 2012), the importance of community involvement in Community Based Ecotourism (Pitanatri, 2012) or a glimpse of the history of socio-economic changes in the Pemuteran society from fishing to conserving coral reefs (Putra, 2014; Sarjana, 2016). Behind the success story of transforming society as a "hero" of coral reef conservationists today, there is a hard struggle by social entrepreneur Agung Prana. In this context, Agung Prana is present as an agent of change or a community empowering figure, with innovations that provide major changes to the socio-economic structure of the Pemuteran community. This study aims to reconstruct Agung Prana's steps in organizing the Pemuteran Village community in developing CBE and creating Balinese social engineering prototypes in CBE development which can be used as standard operating procedures for community empowerment activities.

2. Research Methods

This research was conducted in Pemuteran Village, Gerokgak District, Buleleng Regency, Bali Province (Fig. 1), in April-October 2019.

![Figure 1. Location of study](image)

Data in this study were collected through: observation, in-depth interviews, questionnaires, literature study and documentation study. Key informants in this study are figures who are considered to know about the object of the research being carried out, including village heads, traditional leaders, businessmen, NGOs, the tourism industry, government and tourists visiting Pemuteran Village. Respondents were determined by purposive technique and snowballing sampling technique. Snowballing sampling is a technique of determining several informants at the research location by asking the informant being interviewed to show other informants to complete the data needed by the researcher (Bungin, 2012; Raco, 2010; Susila, 2015).
The data obtained were analysed using interpretive descriptive analysis techniques, which are carried out by the process of organizing, sorting, grouping, coding, categorizing, and interpreting data obtained during the study.

3. Results and Discussion

3.1. Community-based ecotourism provider in Pemuteran Village

It is hoped that the development of tourism in Pemuteran Village can advance the village and at the same time conserve coral reefs. It is hoped that tourism activities will increase the welfare of the community, as well as preserve the nature and socio-culture of the community. The implementation of this concept was initiated by Mr. I Gusti Agung Prana through the establishment of a foundation called "Yayasan Karang Lestari". This foundation is engaged in the conservation of coral reefs and biorocks in Pemuteran Village. Through this foundation, he strives to restore natural potential and raise awareness of local communities about the importance of saving coral reef ecosystems in order to save underwater biota ecosystems.

Coral reefs are one of the oldest ecosystems of economic and biological importance in the world. However, coral reefs face a number of serious threats, including pollution from land, the impacts of fishing, climate change and coral depletion, increasing ocean acidity, and a lack of public awareness. Coral reefs and all the life contained in them are at one great treasure. The benefits contained in the coral reef ecosystem are very large and varied, both direct and indirect benefits. Coral reefs have a role as a food source for marine biota habitats that have high economic value. Coral reefs have an aesthetic value that can be used as a tourism area and have a high handle on germplasm sources. Apart from that, it can also play a role in providing beach sand, and as a barrier against waves of coastal erosion.

Biorock technology is an electro-mineral deposit process that takes place in the sea, usually also called mineral accretion technology, developed by Wolf H. Hilbertz (1974) Biorock has a structure formed from low-voltage electrified iron, chemical mechanics occurs when electricity flows. This causes the electrolytic reaction which encourages the formation of natural minerals in seawater, such as calcium carbonate and magnesium hydroxyde which promote the growth of organisms around the structure. As a result, when coral seeds are attached to the iron structure, their growth will occur faster.

The pilot trail of coral reef restoration in Pemuteran Village was started in 1990 by the Karang Lestari Foundation. At that time, efforts to develop this tourism destination began with the restoration of coral reefs that had been damaged and destroyed by the community. Mr. I Gusti Agung Prana along with several environmental pioneers who are dedicated to saving the environment in Pemuteran Village.

Efforts to make coral reefs as they were before become the main goal to become an underwater tourist attraction. The first and most serious effort felt by environmental pioneers who are members of the Karang Lestari Foundation is to grow and transform the culture of the community from destroying the ecosystem to being the savior of the coral reef ecosystem. The approach used by the Karang Lestari Foundation in efforts to conserve coral reefs in Pemuteran Village is through traditional, cultural and religious approaches. Customary, cultural and religious approaches are very binding and are closely obeyed by the community. With the participation of local communities, they participate in protecting and maintaining the existence of coral reefs, which greatly guarantees the success of coral reef restoration and saving the marine ecosystem.

The initial efforts of the Karang Lestari Foundation in restoring coral reefs in Pemuteran Village began to show results, namely small fish began to move from the deep open seas to the center of artificial coral growth created by the Karang Lestari Foundation. In 1996, the natural growth of coral reefs was quite good, indicating that the efforts were quite successful. In fact, the coral reefs that grow are very diverse, so that some say it is one of the richest coral reef locations in the world. Stepping on 2001, a year since the introduction of biorock technology in Pemuteran Village, the Pemuteran bay area was reborn and turned into a marine park with rich coral reefs. The growth of coral reefs with biorock technology can actually accelerate the growth of coral reefs three to six times faster and produce coral reefs that are more resistant to the effects of weather changes and contamination of various water pollution, when compared to naturally growing coral reefs. Marine life returns to normal, inviting fish colonies to come and make coral reefs their home.

This condition is increasingly encouraging with the arrival of tourists. In general, tourists who come are special interest tourists with the aim of enjoying marine tourism, diving, snorkeling, spiritual tourism and ecotourism. With the increasing number of tourist visits

3.2. Approach of Sekala-Niskala

The Sekala-Niskala approach connotes a combination of material and spiritual approaches. This concept is actually the actualization of local wisdom in the form of values that are believed from generation to generation by the Balinese known as the tri hitha karana philosophy.
This concept was implemented by a figure named Agung Prana, a businessman who initiated the development of Pemuteran Village as a tourist destination. This initiation was conveyed in a forum of deliberations or village meetings of the Pemuteran Village community. The forum is an open forum for dialogue between community members in making decisions. The forum attended community leaders and members of society in general. Through such village consultations it was agreed to develop Pemuteran village as a tourist destination. In developing Pemuteran Village as a tourist destination village, it was also agreed that every tourist facility developer must adhere to the principle that 60% of the land is used for green open space and 40% for tourist facilities; every tourism developer in Pemuteran Village must prioritize local manpower in recruitment. every tourism developer contributes to the development of rural communities; and a forum for continuous dialogue between traditional village community leaders, village government, and tourism entrepreneurs at the end of each month.

The active participation of the Pemuteran Village community in the development of village tourism potential can be seen from the local community's initiative in developing and empowering Segara pecalang (sea supervisors). This organization is the result of community creativity in optimizing the functioning of the existing pecalang organizations under traditional villages. This is in line with the existence of a traditional village transformation process as stated by Pitana (1998). Members of this organization come from representatives of dadia or kinship groups based on the unity of the embryo/ancestor. The function of this organization has led Pemuteran Village to become a Model Village in tourism development that supports coral reef conservation by involving the active participation of the three pillars of society, namely civil society, economic community/businessmen and political society/government.

In the process of empowering local communities, they make use of various social spaces owned by the local community. The social space is an arena in the social construction process. The social spaces that are used as social arenas in constructing or empowering communities include paruman traditional villages or traditional village meetings, religious ceremonial activities, and meetings of community organizations in the village (youth groups, women’s organizations, Pecalang Segara, Yayasan Pemuteran Children). In addition, it also makes use of existing educational institutions in Pemuteran Village. Thus various institutional potentials constitute a strategic social space for the process of community development/empowerment both in relation to environmental preservation, especially coral reef conservation, social integration/harmonious relations between community members, strengthening economic life and developing sustainable tourism. The success of this process is largely determined by the role of Village government institutions and traditional Village institutions.

3.3 Pemuteran Village Community Empowerment

Referring to the meaning of empowerment as an effort to increase community capacity, Berger and Luckmann dialectics can be applied in studying the community empowerment process carried out by Agung Prana in Pemuteran Village. Agung Prana carried out an externalization process for himself and the Pemuteran community, where Agung Prana showed his commitment to saving the environment from worsening damage and preserving it for the benefit of the local community. The Pemuteran community is invited to pay more attention to the natural and cultural environment they have to fix things that are damaged for the survival of the local community’s livelihood.

This effort can be reflected in the persistence of Agung Prana in changing the mindset, attitude and behavior of the Pemuteran Village community. There are several simple steps but have a real impact to convince the community to listen, understand, and agree. These small steps include: First, approaching village community leaders, both formal and non-formal, to be invited to dialogue and ask them to become leaders of change in society. Second, take advantage of a cultural approach to the Pemuteran community with a touch of sekala (physical) and niskala (spiritual). The physical approach taken invites the community to clean up the environment, restore coral reefs, employ local workers at their place of business and act as the main funder for the repair of a number of temples and ceremonies. Spiritually, Agung Prana transmits the habit of working and praying in living life in various fields, especially in running a business. Praying or yadnya also includes binding a sacred promise for all Pemuteran residents to be ready to make changes for the better through the development of Pemuteran as a marine ecotourism attraction with coral reef conservation.

Another thing that Agung Prana does is the objectivation of society that can theoretically be identified through the development of institutions, roles and identity. Agung Prana encourages the improvement of the quality of Pemuteran human resources, both improving the community’s ability to cultivate artificial coral reefs and preparing qualified workers according to the needs of the tourism sector. To improve community skills in cultivating artificial coral reefs, Agung Prana through YKL trained the community to implement biorock technology and others that can accelerate the proliferation of marine corals.

Agung Prana also carries out various trainings, even helps the education costs of Pemuteran children dropping out of school by inviting them to live at his residence in Denpasar and other places. The activity of Agung Prana is in accordance with the analysis of Hadi (2009) which states that theoretically the key to successful...
community empowerment is determined by the following three things. (1) Awareness of local values; (2) an integrated and comprehensive approach; and (3) Human resource development.

In other words, Karsidi’s (2002) argument also strengthens the notion that Agung Prana’s steps in Pemuteran Village are part of community empowerment activities. Karsidi stated that community empowerment with a mentoring approach includes three main activities, namely: a) Learning from the community with the aim of being built on recognition and belief in the value and relevance of community traditional knowledge and the community's ability to solve their own problems. b) Assistants as Facilitators, Community as Actors with the understanding that community empowerment actors have a humble attitude and availability to learn from the community and place community members as the main source in understanding the situation of the community c) Mutual Learning, Sharing Experience where public knowledge and knowledge from outside or innovation, must be chosen wisely and / or complement one another.

The existence of the new pecalang Laut and YKL institutions is proof that the externalization process is successful in Pemuteran Village. In this case, community participation is increasingly high in supporting the improvement of the quality of the land and sea environment in Pemuteran Village. The most striking thing is the change in the role of the community members who were originally "protectors" for activities destroying nature, namely fishing with fish bombs. The residents who act as "protectors" are technically on guard on the land if there are patrols from various government agencies to monitor fish bombing activities, they provide information so that fishermen who are carrying out activities stay away or stop their activities. This kind of cooperation is suspected to have caused severe damage to coral reefs in the Pemuteran Sea. Agung Prana took a persuasive approach so that the residents who used to be the "protectors" of the fish bombers changed their mindset, attitude and behavior. Their knowledge and insight on the importance of saving coral reefs to support the livelihoods of Pemuteran residents are well developed. The attitude of Pemuteran residents is positive, that is, they start listening to Agung Prana’s advice or advice with local community leaders to maintain environmental cleanliness and save coral reefs. The community also rejected the coral reef bombing and agreed to form sea pecalang to stop the fish bombers from carrying out these environmental destructive activities around the Pemuteran sea.

This change in role also shows the new identity of the Pemuteran community, from a society that does not care about environmental sustainability to being a savior of the environment, especially coral reefs. This identity is recognized regionally, nationally and even internationally. This recognition was shown by the existence of 33 awards related to saving the environment from various institutions. The existence of these awards, which was mostly fought for by Agung Prana, is on display at the maritime museum in Pemuteran Village, which is currently being completed on Pemuteran Beach. The last process of community empowerment activities from dialectical review is internalization. Internalization occurs in Pemuteran community related to the growth and development of Pemuteran Village as a marine tourism attraction. The understanding related to tourism activities and their management that was introduced and implanted in the minds of Pemuteran residents through various activities is well understood. One thing that is adopted and absorbed is the importance of the uniqueness of one tourist attraction to another. Pemuteran Village also established a rule not to build 2-storey buildings, especially near the main road. The consideration is that Pemuteran Village must still be able to present a rural atmosphere. It is hoped that the characteristic of Pemuteran as a marine tourism village will be maintained. The emergence of awareness of maintaining environmental cleanliness, namely minimizing plastic waste, has become a form of internalizing the values of charm and awareness of tourism in Pemuteran society.

The internalization is an indication that the transformation of Pemuteran village from a poor fishing village to a marine tourism village. This can be traced to the livelihood of the local community. Suryawati (2005) describes the concept of sustainable livelihoods including: a. Natural assets: such as land and water, because most rural communities only control land that is insufficient for their livelihoods. b. Human assets: concerning the quality of human resources, which is relatively low compared to urban communities (level of education, knowledge, skills and level of health and mastery of technology). c. Physical assets: lack of access to public infrastructure and facilities such as road networks, electricity and communications in rural areas. d. Financial assets: in the form of savings (savings), as well as access to business capital. e. Social assets: in the form of networks, contacts and political influence, in this case the strength of the bargaining position in making political decisions.

The success of Agung Prana in transforming the behavior of the Pemuteran Village community experienced from a marginalized community towards an environmentally sustainable society. As a marginalized community that is attached to poverty, where their sources of income are limited and the level of education is low in looking for a source of livelihood, they tend to destroy nature, such as fishing with environmentally unfriendly technology and pay less attention to environmental hygiene. This condition changed after the presence of Agung Prana, who enlightened and assisted the local community in transformation.
3.4. Social Prototype of CBE Development Based on the Experience of Agung Prana

Based on the results of the above analysis, the prototype in the development of community-based ecotourism (CBE) is based on Agung Prana's experience as a social entrepreneur transforming Pemuteran society from traditional farmers to community actors of tourism as described in Figure 4.1 below.

![Figure 4.1 Prototype for CBE Development Based on the Experience of Agung Prana](image)

Based on the initial condition of Pemuteran Village, it is believed to have a "hidden" area that can be packaged as a tourist attraction. The potential is identified by applying the 4 A concept, namely attractions, accessibility, amenities and supporting facilities (ancillary). To work on the invisible potential of tourism, innovation is needed that is disseminated to the community. There are two innovations introduced in Pemuteran Village, namely social innovation, namely changing the mindset of the community about a clean lifestyle and caring for the environment, and a coral reef restoration technology called biorock. In an effort to facilitate the socialization of innovation, cooperation between stakeholders and regulations as needed is prepared. The stakeholders involved at the beginning of the innovation penetration were the government (village and district governments), community leaders, the younger generation, traditional villages, stakeholders (religious leaders), and artists. They have a special contribution in accordance with their authority and role. The regulation was made in the form of a prerequisite which contained: prohibiting fishing with bombs / fish poison, every Pemuteran resident has to maintain cleanliness and support the development of ecotourism in his village.

Stakeholders and regulations will not function in developing CBE in Pemuteran Village if there is no catalyst that can build together all components in the village. The presence of Agung Prana, who acts as a social entrepreneur, is a figure who is ready to take various risks to promote innovation in Pemuteran Village. Agung Prana's patience and diligence in assisting the Pemuteran community is reflected in the approach he applies to the community. As a Balinese community leader, Agung Prana understands that a cultural approach with Balinese nuances is applied.

The Sekala-Niskala approach is applied in convincing the public to adopt the innovations presented. A natural approach, Agung Prana associates to be part of the local community. As a newcomer with a higher level of education and economy, Agung Prana did not patronize the local community. They embrace local residents from all walks of life to work together to transform Pemuteran Village for the better or out of the predicate of a poor village. The niskala approach is a spiritual approach aimed at guiding people to act fairly, meaning that if they promise to do something, they must do it seriously. Lessons learned by saying a promise to build Pemuteran Village as a tourist attraction during prayers at the temple, people are invited to confirm their intention to carry out their promises that were conveyed before God. This scale-and-scale approach has proven effective, so that the transformation in Pemuteran Village runs smoothly, and now Pemuteran Village is known as an environmentally friendly marine tourism destination with awards reaching 33 awards.

4. Conclusion

Community empowerment through the transformation of the Pemuteran Village community into a community capable of acting as tourism actors requires a long, time-consuming process and involves many actors. This long process can be abstracted into three stages, namely externalization, objectivation and internalization. This activity has succeeded in maintaining the sustainability of the livelihoods of the local community despite a change in the focus of the development sector from agriculture to tourism, the people of Pemuteran Village are still able to adapt in utilizing their resources.
The presence of Agung Prana has become a catalyst for the acceleration of the social transformation process in Pemuteran Village communities. Pemuteran community empowerment activities can be simplified as a social engineering prototype, namely a community empowerment model with a scale approach in the development of a Balinese CBE. The prototype, which is compiled based on the experience of Agung Prana, leads to the appreciation of the community for the figure of Agung Prana who has been recognized as a savior for Pemuteran residents from their downturn.

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References


