

## **SUSTAINABLE TOURISM MANAGEMENT MODEL FOR TEGENUNGAN WATERFALL, GIANYAR**

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### **ABSTRACT**

In general, the aim of this research was to design a model for the management of Tegenungan waterfall tourist attraction located in Gianyar regency. The data were gathered through interviews, observation, questionnaire, and documentation. Data analysis was conducted using descriptive statistics, adopting a descriptive qualitative method. The findings of the study are expected to be useful for the management, local society, government, and Politeknik Negeri Bali. The results of the data analysis showed that the management model suitable to be applied to operate the Tegenungan Waterfall attraction pointed to the establishment of the Tegenungan Waterfall Attraction Management Board which should involve four stakeholders, namely community, businessmen, government, and universities.

Keywords: tourism, waterfall, tegenungan, model.

### **INTRODUCTION**

Bali as a world tourist destination is not only famous for its unique arts and culture, but also has a beautiful panorama. Tourism developed in Bali is a cultural tourism that is inspired by the teaching of Hinduism and the philosophy of Tri Hita Karana as the main potential whereby tourism can serve as a vehicle for its actualization, resulting in a dynamic interrelationship between tourism and culture that makes them develop synergistically, harmoniously and sustainably so as to provide prosperity to society, cultural and environmental sustainability (Perda Provinsi Bali, 2012). The combination of art, culture, customs and beautiful natural panorama has attracted many tourists to visit Bali. Compared with other sectors, tourism is the most rapid sector in terms its development; this is because Bali has many tourist attractions, such as nature tourism, historical tours and cultural tourism.

Tourism, as an activity that directly touches various aspects of life and involves the community, has an impact on society. Such impact, be it socio-cultural, socio-economic or environmental, as well as the increase of the Balinese population, due to the urbanization of the population from outside Bali, of the livelihoods of the people of

Bali and beyond Bali, have led to the fact that local tradition has tended to change, that the religious rituals become more lively due to the increase of income (Wijaya, 2015). To maintain the existence of Bali tourism in the future, tourism development should always prioritize sustainable tourism development. Sustainable tourism provides positive benefits for people's lives and environmental sustainability (Damanik, 2006; Butarbutar, 2012). Sustainable tourism development can cancel out the negative impacts to improve the quality of life of people and tourist destinations (Yazdi, 2012). Sustainable tourism is tourism that can meet the needs of the present and the future, does not damage the environment and local culture to be inherited to future generations. In principle, sustainable tourism is tourism whose activities still pay attention to the balance of nature, environment, culture (Ene, 2010) and economy so that tourism can continue. In other words, the management should be able to provide economic benefits for all stakeholders, be it government, private sector, and local communities. In sustainable tourism, tourists who come not only have fun, but also get more experience in order to gain insight and development of knowledge for themselves. The attitudes to be displayed by tourists when visiting a region to support sustainable tourism include: responsible, in the sense that it does not cause natural and cultural damage to the area they visit; respectful, in the sense that they respect the customs and culture of the inhabitants of the destination (Hasan, 2014).

Gianyar Regency has Tegenungan waterfall as a tourist attraction, located in Banjar Tegenungan, Kemenuh Village, Sukawati District, Gianyar Regency, Bali. In 2011 Desa Kemenuh was proclaimed as a cultural tourism village expected to maintain cleanliness and environmental sustainability. The location of Tegenungan waterfall is very strategic, which is close to Sukawati Art Market, Trekking Kalker Train Kaler Village Kemenuh, and on the same route to other tourist attraction in Gianyar supported by good transportation system. This tourist attraction has good potential and deserves to be developed as ecotourism in Gianyar, because it brings about positive contribution to society, i.e. increasing income and employment (Setiawan, 2010). Management of this attraction is currently run by the local community, and the average number of tourist visits to this object is 500 people per day.

This potential still needs to be developed because it has not been managed properly, which can be seen from the supporting facilities that have not been adequate. The absence of a life guard responsible for the safety of tourists who use waterfalls to bathe have led to the death of tourists. In addition, the excavation of rocks in the

upstream river around the object has caused the water to be murky leading to the damage of the environment. The management has no authority in regulating or prohibiting the existence of this excavation and the involvement of Gianyar Regency Government is undoubtedly required in arranging it.

The future challenge in managing this attraction is to realize sustainable tourism, which is able to utilize natural resources optimally so as not to cause environmental damage, and tourists respect the social culture of local communities so that sustainable economic benefits can be distributed fairly to all stakeholders around the tourist attraction. A management model is needed (Mowforth, 200), which can answer the sustainability of the waterfall tourist attraction. From the background of the problems described above, in general the purpose of this research is to formulate the Tourism Management Model of Tegenungan Waterfall Tourism in Gianyar Regency to realize sustainable tourism. To arrive at the model, the following were analyzed: (1) the perception of tourists to Tegenungan Waterfall in Gianyar regency; (2) community participation in managing Tegenungan Waterfall in Gianyar regency; (3) the management of the waterfall tourist attraction; (4) the constraints faced in managing Tegenungan Waterfall in Gianyar regency.

## LITERATURE REVIEW

Tourism management is fundamentally an activity to arrive at sustainable tourism. The three pillars of sustainability are sustainability in economy, socio-culture and environment (Pitana, 2009; Asker, 2010). Management means controlling, organizing, running or managing. Management includes aspects of tourism resource management, organizational crisis management, finance, marketing, human resources, production and operations, as well as management information systems. These aspects are interconnected and addressed by each different division to achieve a goal (Mowforth, 2000; Husein, 2005; Pitana, 2009). Management and policy were the most important two dimensions influencing the sustainable tourism development (Wang, 2016).

Community participation in developing sustainable tourism is very important, which can start from planning, implementation, monitoring and evaluating programs, and utilization (Yang, 2014; Budiasa, 2014). Local communities' participation in decision making, empowerment, and community knowledge about tourism do affect the sustainability of rural tourism development (Fong, 2015).

The elements that determine the success of a tourist destination are (a) attractions including natural and artificial attractions; (b) accessibility to location (access,) such as the availability of local transportation, whether land, sea or air, as well as supporting facilities and infrastructures; (c) Amenities such as accommodation quality, restaurant, financial services and security; (d) Support services provided by the government and the private sector (ancillary service) including regulations and legislation on tourism (Yoeti, 2008).

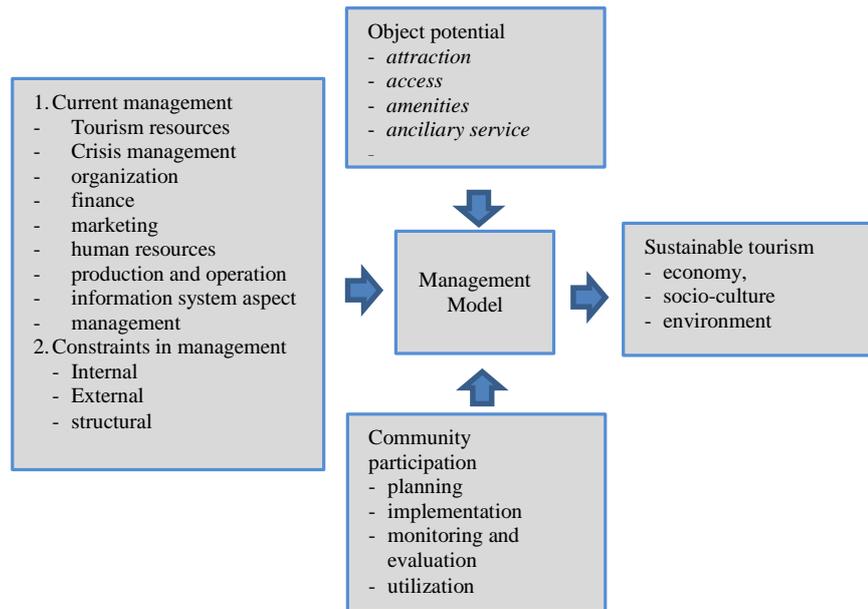


Figure 1  
Conceptual Framework

## METHOD

This research was conducted at Tegenungan Waterfall in Gianyar regency. The number of respondents who participated was 100 tourists, and 30 local people. The informants were managers/public figures who know the management of Tegenungan Waterfall. Requirment of the respondents was conducted using accidental methods, while the determination of informants was conducted using purposive sampling method.

The data were collected by interview, observation, questionnaire, and documentation, subsequently analyzed using (1) descriptive statistic technique (Yazdi, 2012), (2) qualitative descriptive analysis, i.e. describing phenomenon or relationship

between phenomena studied systematically, factually, and accurately (Kusmayadi, 2000).

## RESULT AND DISCUSSION

### Tourists' perception

Tourist attraction is everything that has uniqueness, such as natural beauty, social and cultural life which become the target or purpose of tourist visit. Broadly speaking, the factors that cause tourists to visit a tourist attraction can be grouped into four, namely (1) tourist attraction (attraction), (2) accessibility to access (access), comfort (amenities), and support services provided (ancillary service).

The average number of tourist visits per day was 500 people, and could even reach 800 people during holiday season. The majority of them were foreign tourists. The result showed that tourists' perception on Tegenungan Waterfall Tourism Attraction located in Gianyar Regency could be categorized as "Good", the average score being 2.63, as shown by Table 1 below.

Table1  
Tourists' Perception on Tegenungan Waterfall in Gianyar Regency

No.	Tourists' Perception	Average	Remark
1.	<i>Attraction</i>	2,80	Good
2.	<i>Accessibility</i>	2,77	Good
3.	<i>Amenities</i>	2,48	Fair
4.	<i>Ancillary Service</i>	2,49	Fair
Averages		2, 64	Fair

Source: Research 2017.

Tourists can enjoy the beauty of natural panorama (waterfall) and can also do other activities such as bathing or trekking. A total 100 tourists stated that this tourist attraction has a beautiful panorama, and can be caterized as "Interesting to visit", with the score being 2.80.

The result of analysis showed that accessibility to reach the location was in the "Good" category, with the score being of 2.78. Access to this location is very easy, can be reached by either two-wheeled vehicles or four-wheeled vehicles, or even tour buses because the road to the location is good. In addition, the location of this tourist attraction is in a very strategic route; from Denpasar to Gianyar we can take Ida Bagus Mantra highway, and is close to Sukawati art market and on the same route to other sights like Goa Gajah, Ubud, Kintamani. The only things not yet available are (1) public transportation passing through these attractions. Public transportation is very important

for individual tourists, since most of them organize their own journeys without the help of travel agents, relying heavily on public facilities; and (2) a location sign board that makes it easy for visitors to locate the tourist attraction.

The results of the study indicated that the facilities required by the tourists are not yet optimally available, for example there was no ATM machine, money changer, tour guide, certified life guard, WIFI, health facility for first aid to tourist (P3K). The amenities of this attraction were perceived by the participants as "Poor", with the average score being 2.48.

According to the tourists (participants of the study), the ancillary service available in Tegenungan Waterfall was "Poor", with an average score being 2.49. In the vicinity of the waterfall there are no other support services, such as travel agents, tourist information. Tourists feel that the manager has not provided optimal supporting services. For example, tourists who need information about hotel felt that no one served them.

### **Community Participation**

Community participation in developing sustainable tourism is very important, whereby the goal is to provide welfare for themselves while maintaining the quality of the environment, and protecting their social and cultural life, so that its implementation can support the achievement of the three pillars of sustainability, namely economic, socio-cultural and environmental sustainability. Community involvement can start from planning, implementation, monitoring and evaluating the program.

The analysis of the level of public involvement can be used to describe the extent to which the people of Tegenungan village participate in its management which can be illustrated by examining their authority and responsibility. Because the village acted as the manager, therefore all the people got involved fully from the planner, implementation, monitoring & evaluation of the program, and utilization of program results. Decisions were made through meetings among the village people, where everything was discussed and decision was made through deliberation. In every decision made, there must be pros and cons, which affected the social life of the village. For example, in planning to provide a CCTV for the security of visitors, managers had to conduct meetings and the decision could only be implemented after an approval from the village was obtained. It was also true of the participation in utilizing management results: groups such as Family Welfare Education, Youth Social

Organization, and traditional musical ensemble all got funding for every activity they conducted resulting in good socio-cultural life.

### **The Management of The Waterfall Attraction**

Tegenungan waterfall is located in Kemenuh village, Sukawati District, Gianyar Regency. Tegenungan village has of 1 (one) banjar, namely Tegenungan banjar, so that Tegenungan banjar is at the same time Tegenungan village. The result of interview with an informant, Mr. I Gusti Made Raka, the current manager, and some people from the village, showed that the existence of the waterfall as a tourist attraction was realized by the community in 1988 when Udayana University students carried out their community service in Kemenuh, Sukawati District, Gianyar Regency. At that time the students realized that the waterfall in Tegenungan had a very beautiful scenery and had the potential to become a tourist attraction. In 2002 in accordance with the results of a village meeting, the community is allowed to issue admission ticket for people who want to visit the waterfall. And the revenue was deposited to banjar to become cash for banjar. With the increase in tourist visit to the tourist attraction, from 2004 until 2014 in accordance with to the decision made in a village meeting, the waterfall management was agreed to be run by one of the village members. This was because village people felt that they did not have the ability to manage the attraction, and they only wanted to receive the net result for the village cash. This tourist attraction grew and became popular both nationally and internationally since then, where more and more tourists had been visiting the tourist attraction leading to increased fund coming into the village. Because it was considered to be growing, then from 2015 until now its management was taken over by the village, where village leaders acted as the head of the management.

On the basis of the results of observations and interviews with the manager, it can be concluded that this object has not been managed properly. This can be seen from the implementation of management by the management. All management is done by the managing chairman, but is does not yet have an organizational structure that governs the tasks and responsibilities in the management.

#### **1). Management of Tourism Resources**

Basically, the management of tourism resources is an activity to achieve the objectives of sustainable tourism, whether in terms of economy, socio-culture, and

environment. Managers are required to carry out effective resource management to ensure protection of ecosystems and degradation of environmental quality. The management has done some improvements, for example making a better stairs to facilitate the tourists who want to visit the location. In addition, for the security of tourists, railing has been placed on the stairs. Although the surrounding environment was still beautiful, the problem was the parking lot that was still not well organized. This was because the parking lot at this time was still owned by individual village members.

## 2). Marketing management

Marketing planning reflects the relationship between tourism products and its market. Tourism marketing strategy includes three elements: 1) market diversification; 2) quality improvement; and 3) season extension (tourist arrivals). Destination marketing is an effort to empower all the elements of the tourist attraction available and to design an event that can attract tourists on a regular and repetitive basis year after year. The results of interviews with the head of management of the waterfall showed that the manager does not have a specific strategy to market the waterfall. The manager had no cooperation with other parties (travel agents) to market the attraction; instead, they relied on mouth-to-mouth promotion by the visitors. This finding was consistent with the results of observation: the researchers have not found any brochure as one of the promotional tools in the research site.

## 3) Human Resources

Human resource management in the tourism industry is a series of activities undertaken to open new opportunities for people who want to join the world of tourism. Management of tourism resources in question concerns how organizational leaders develop their members to become a skilled manpower of tourism. The number of workforce was 49 people, all of whom were the residents of Tegenungan village, recruited with no consideration of education level, competency or age. So every member of the village who wanted to participate in the management will be accepted regardless of the competence they had. For example, the life guards who were very important to ensure the security of tourists were recruited from the village security force (pecalang) having no competence to become life guards. The employees could be grouped into 4 (four) groups, namely parking attendants, ticketing staff, cleaning staff,

and security officers. The management has not conducted any training to improve the employees' ability.

#### 4) Financial Management

Financial management is a very important issue to raise the trust of the village members to the management. Up to this time, the only thing that the management has done was directly depositing the money received every day to the Village Credit Institution (LPD). The amount was determined from the number of tickets sold. The admission ticket to enter the attraction is 15 thousand rupiah for foreign tourists, 10 thousand rupiah for domestic tourists, and 5 thousand rupiah for local tourists (Balinese). Financial reporting from the manager was done every month during a meeting.

#### 5) Organizational Management

Since the attraction was run by the village, any decision made should come out of a formal village meeting. Therefore, the management of the attraction was basically the same as the management of *banjar* in Bali.

#### 6) Crisis Management

Crisis management in tourism industry is a very essential component, used not only to identify crisis but also to limit its impact on the organization, tourist destination, and related industries. In relation to the management of the waterfall attraction, the problems that might have an impact on the sustainability of the attraction included the of pros and cons among the community members against the head banjar as the manager, the excavation in the upstream of Petanu river that made the water murky, the arrangement of buildings around the waterfall, and the competition between the village of Tegenungan and Blangsinga village to claim over the waterfall. The current management did not have any clear concept as a solution to solve the problems.

### **Management Constraints**

The results of interviews with managers indicated that there were various constraints evident in the operational activities of the waterfall. All of the constraints were grouped into 2 (two), namely internal and external issues. Internal problems were all problems that existed in the village that brought about some impact on the

management of the waterfall, such as human resource capabilities, pro and contra attitude within the community, the arrangement of parking lots. While external problems were problems that came from outside that had an impact on the management of the waterfall, such as the excavation, arrangement of the environment. The constraints can be explained as follows:

#### 1). Human Resource Capability

The community involved in the management did not have competence as required. In accordance with the results of the village meeting, all village members were welcome to participate in the management with no consideration of competence.

#### 2). Pros and Cons Attitude

This attitude was triggered by the distrust of some village members against the manager. Those in the contra position showed indifference to the existence of the waterfall. This distrust concerned liability of the money received from the sale of admission tickets. According to the manager, such pros and cons attitude had a negative impact on social life of the society.

#### 3). Arrangement of Parking Lot

Since currently the parking lots belonged to individual village members, consequently they were not well organized.

#### 4). Arrangement of the Environment

In the upstream of the Petanu river there was an excavation that could destroy the environment and the river water became murky, so the view of the waterfall became unattractive to visitors. In addition, the existence of buildings which belonged to individual village members might cause damage to the natural scenery around the waterfall. The management did not have the authority to regulate it, because it was the authority of the government to regulate it. If the solution to problems caused by the external factors were not sought, then it could bring about a negative impact on the sustainability of the waterfall as a tourist attraction.

## 5). Conflict Potential

There was a conflict potential with the neighboring village, Blangsinga village, concerning the naming of the tourist attraction, because the original name of the waterfall was Srogsrogan waterfall located between the Tegenungan village and Blangsinga village. Naming it Tegenungan waterfall is likely to indicate that this waterfall belongs to the Tegenungan village. This has the potential to create conflicts between the two villages in the future, because Blangsinga village wants the name of the waterfall to be returned to Srogsrogan waterfall. This problem has not been solved so as to ensure sustainable tourism at the waterfall tourist attraction.

## 6). Management Model

The constraints encountered in managing the Tegenungan waterfall tourist attraction will have an adverse impact on its sustainability as a tourist destination. To overcome the problems faced by Kemenuh Village in managing Tegenungan Waterfall, then the appropriate management model is by forming a Tegenungan Waterfall Management Board (TWMB) whereby a manager is appointed to run its operational activities. Preferably, the appointed manager should be recruited from Tegenungan village or from outside of the village provided that they have the credibility and competence required in performing their duties. The selected manager should be given the authority to run the management in a professional manner while the village keep monitoring and evaluating its operational activities. Employees recruited by the management should come from Tegenungan village with their competence being given due consideration. TWMB should form planning department, marketing department, HR, Finance with their respective job description, and TWMB also should establish cooperation with private sector and the government. The Tegenungan Waterfall Management Model located in Gianyar regency can be seen in Figure 2 below.

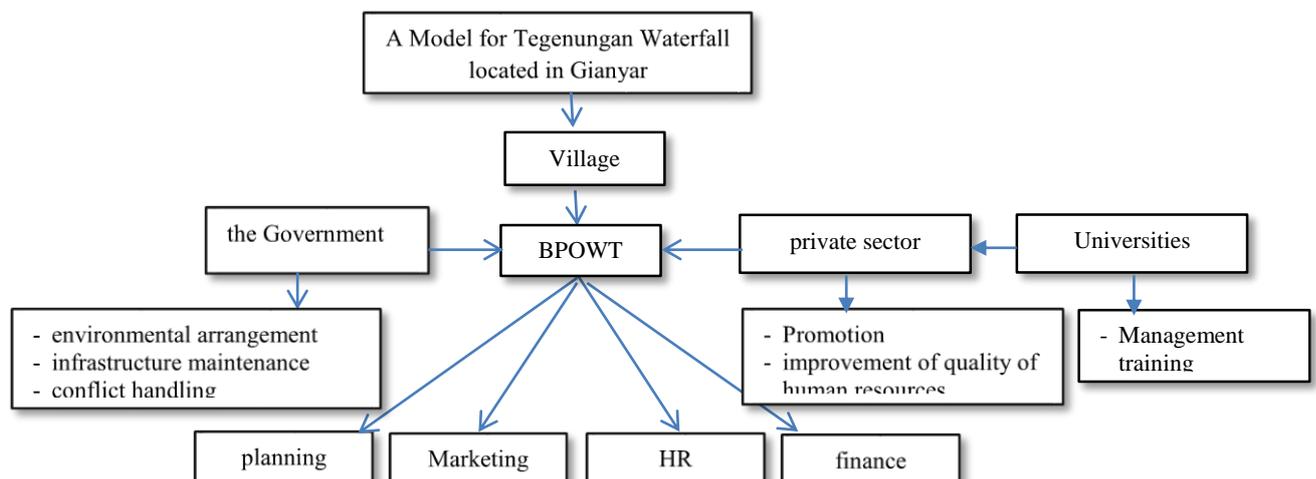


Figure 2  
A Model for Tegenungan Waterfall located in Gianyar

## CONCLUSION

From the results of analysis and discussion above, the following conclusion can be drawn: Tourists' perception of Tegenungan Waterfall can be categorized into the category "Good", the average score being 2.62. The level of community participation in managing Tegenungan Waterfall is very high, from planning, implementation, monitoring and evaluation, as well as utilizing management activities. Tegenungan Waterfall has not been managed properly due to the absence of implementation of standard management. The problems encountered in running the waterfall tourist attraction are of internal and external. Internal problems include low capability of the human resources, and the existence of pros and cons within the village. While the external problems concern environmental arrangement and conflict potential with the neighboring village. The appropriate management model to run Tegenungan Waterfall tourist attraction is by forming Tegenungan Waterfall Management Board (TWMB) involving four pillars (stakeholders), namely local community, businessmen, government, and universities.

The following suggestions could be given to improve the management of Tegenungan Waterfall:

For Tegenungan Village (management): improving operational management by forming Tegenungan Waterfall Management Board (TWMB) appointing an operational manager capable of managing the waterfall tourist attraction professionally. The new management should improve relevant supporting facilities required by visitors, such as money changer, ATM machine, better parking lots. Intensive promotion should be done to face the competition. Cooperation with other parties should be established: travel agent (increasing tourist visits)); also to be done is coordination with the government in regarding to the excavation in the tourism object and arrangement of buildings in the vicinity. Dialogue with the neighboring village should immediately be done to solve the current conflict.

The government should issue a policy in regard to the excavation surrounding Petanu river being the water source of Tegenungan waterfall.

In accordance with the third principle of the Three Principles of Higher Education, universities should conduct community service to provide the villagers with management training.

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