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Potential Development of Balinese Water-Control System (Subak) Based Agro-Tourism in the World Cultural Heritage Site of Catur Angga Batukaru

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Abstract

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One of the cultural world heritage sites in the cultural landscape in Bali province is the area of Catur Angga Batukaru. The aim of this research is to unearth the potentials which could be developed from the Balinese water-control systems (Subak) in the area of Catur Angga Batukaru. The results of the research show that, at present, there has been 20 water-control systems recorded in the area of Catur Angga Batukaru. The lines go through 19 water-control systems. The kind of tourism which could be developed included: (i) sightseeing tourism, where the tourist walk through the area and enjoy the sightseeing and views of the rice terraces together with some other plantation views in the area. (ii) Spiritual tourism, which located at Tamba Waras Temple, where people come to pray for an abundant of health or a recovery of those who are suffering some medical conditions, and at Muncaksari Temple, where people could come to pray for those who wish to be successful in business and trading. (iii) Trekking tourism, which deemed much suitable for adventurous tourists. The trekking paths would be through some rice field area, plantation, and some river crossing by. The attractions available would include some sightseeing of the local farmers busy in the field, planting red rice, taking care of the irrigation system, working on the soil, planting seeds, cleaning up the plant, and harvesting by using some traditional tools used in the associated culture called "ane-ane", and lastly, some view of traditional religious ceremony in the rice field area as well as around the water-control system (Subak). All things considered, these potential activities are considered needed to be developed

further by the community such as through the water-control system society and the village cultural authorities to be assisted by the local government training and consultation. Lately, the safari tour has been passing through the area as well. The spiritual tourism at the least has also been developing. However, these circumstances have not been well-organized both by the local authorities and the government in it.

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INTRODUCTION

One of the world cultural heritage sites in the landscape of Bali province is in the area of Catur Angga Batukaru which includes the temples, lakes, village (inhabitants), rice field water-control system (Subak), and the plantation. When it was accepted officially as the world cultural heritage site in 2012, there has been 14 water-control system (Subak) existed in the area of Catur Angga Batukaru (Windia, et al. 2014). In the development up until now, only the Jatiluwih water-control system (Subak) which has witnessed some rapid development due to the number of tourist visited the site. In 2012, the number of tourist visiting Jatiluwih is 97.909 people, while in 2013, the number increased by 101.560 people (Regional Tourism Office for Bali Province).

Based on the visiting trend, it is predicted that the level of the tourist numbers to jatiluwih will keep increasing in the upcoming years. At the same time, the 13 water-control systems (Subak) concerned have yet been developed. Additionally, it requires development strategies to improve not only the society wealth, but also the farmer as the member of the water-control systems (Subak) society. Furthermore, more researches and studies are expected to be conducted to unearth the potential of the water-control systems (Subak) area in Catur Angga Batukaru. Following the potential development foreseen, there would be some insight to be revealed which could be rewarding to the well-being of the farmer surrounding. Besides, with the development itself, it will practically satisfy the visitors and create a sustainable natural environment.

The agro-tourism itself, is considered part of the tourism which utilizes farming (agro) as the tourism object. Eco-tourism is a tourism concept which reflexes an acknowledge of the environment by following the balancing regulations and a sustainable environment (Liungkakoa, 2014). Agro-eco tourism is an collaboration between agro-tourism and eco-tourism, where the development of the agro-tourism will focus on the balancing regulations and a sustainable environment. With all things said, the aims of this research is to identify the potential development of the water-control systems (Subak) based agro-eco tourism in the area of world cultural heritage in Catur Angga Batukaru.

RESEARCH METHODS

In order to identify the potential development of the water-control systems (Subak) based agro-eco tourism in the area of world cultural heritage in Catur Angga Batukaru, some measurements are conducted accordingly such as the tracing of the locations conditions for the potential development through interview with the key person at the water-control systems (Subak) concerned. Furthermore, the potential is mapped either by its types or locations. The data collected in this research were primary data and secondary data. All of the primary data were collected by using survey, that is a data collection method which is done by meeting and interviewing the respondents directly using a set of questions which was prepared beforehand (Singarimbun and Effendi, 1085). Additionally, an in-depth interview with some informants is conducted (mantra, 2008). Through the in-depth interview, it is expected that there will be more detail information to be gained. By using this method, the writer expected to be able to analyze and create a comprehensive conclusion (Daniel, et al, 2005). Furthermore, a field study and tracing are conducted to gain a real illustration about the research location. While the secondary data were used to support the primary data, collected from the government offices, such as the Development Planning Agency at Sub-National Level, office of Public Works – Human Settlements and Spatial Planning, the Department of Tourism and Culture, the Central Bureau of Statistics, Income Office Region, the Cultural Service, Department of Agriculture, and other governmental offices which related to the significant of the research. Finally, the data were analyzed by using a descriptive qualitative method

RESULT AND DISCUSSION

The utilization of farmers as the tourism magnet in agro-eco tourism has aims to intergrate the local culture and technology, which are adopted by the farmers to protect and sustain the environment, as well as the farmers wealth (Dwiridotjahjono, et al, 2017). The development of the agro-eco tourism must suit to the potential of the area itself. For instance, the study of the potential development conducted in Kandangan Region, in Kediri district, found that this region possesses some potentialas in their agricultural comodity which are invaluable to the region, such as the the durians, cloves, coffee, snake fruits, mangosteens, bananas, oyster mushrooms, and dairy cows, which could sustain the development of the agro-eco tourism in the region (Sumarmi, et al, 2018). Other potentials of the agro-eco tourism are the tourism spots, the uniqueness of the farming culture, the facilities, public support, the development of the human resources, community and associations, the agro-tourism program, associations which support/organize the agro-tourism, services or the agro-tourism, government support and related organizations, also a potential colloboration with relatable parties in the business (Budiarti, et al, 2013).

To support the development of a tourism spots, the attractions are one of the four main components must exist (Cooper, 1998). Furthermore, Yoeti (2006) classified the attraction in general which could be enjoyed by tourists into four types, they are natural, build, cultural and social interaction. Aside from the comodities, potentials, and the tourism attractions, the tourist motivation would as well be paid into attention in order to be able to sustain the balance of the offer provided by the tourism spots with the demand of the tourist (Richardy, 2014). Additionally, resting

and relaxation are two dominant motivation for tourists to visit the tourism spots in the destination (Sahara, 2016).

The world cultural heritage in Catur Angga Batukaru, in Tabanan region is an area which has the most villages and water-control systems (Subak). Another reason is this area also has five temples where one of them is the sublime temple of Batukaru. The temple is included in the one of the 6 most important temples in Bali (Salamanca, et al, 2015). The water-control system in Bal, generally has a natural, cultural and social attraction properties, and these potentials could be developed into the agro-eco tourism to keep the water-control systems sustainability away from its origin. Some water-control systems (Subak) could also be developed for an outnound facilities, recreation spot, exercise spot, or simply an outing area in the naure (Diarta and Sarjana, 2018).

The research results implied that, in the world cultural heritage area of Catur Angga Batukaru, it has 3 potential attractions for the agro-eco tourism, they are:

- a. *Sight seeing*: where tourists will just passing by to enjoy the view of the rice terrace in cobination with the plantation around the area. The path will be ended at the sublime temple of Batukaru which as the object of attraction itself. In the parking area of the sublime temple of Batukaru, tourists can enjoy a local souvenir shopping activity and enjoy some local traditional dish which called “entil” as well as try the tea made from red rice unique to the local area. Some water-control systems (Subak) are crossed with trekking paths, such as the Mangesta systems, Piling system, Bedugul system, tengkudak system, pancoran Sari system, and Penatahan system (figure 1 and figure 2). Along these paths, there are available some rest area in order for tourists to enjoy the view of the rice terraces combined with the surrounding plantation as well as the little jungle next to it. Tourists could also stay for the night at the bungalow or home stay facilities owned by the local who live surrounding the area. This path has also develop a safari tourism “safari club” as the embrio to develop other tourism in general.

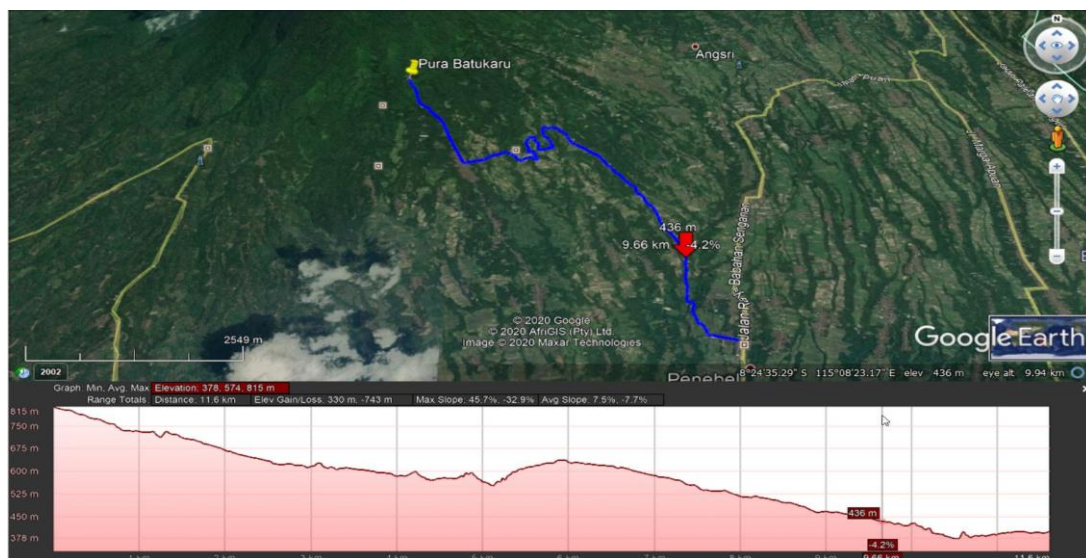


Figure 1. The sight seeing tourism paths, start at Mengesta village up to the finish line.

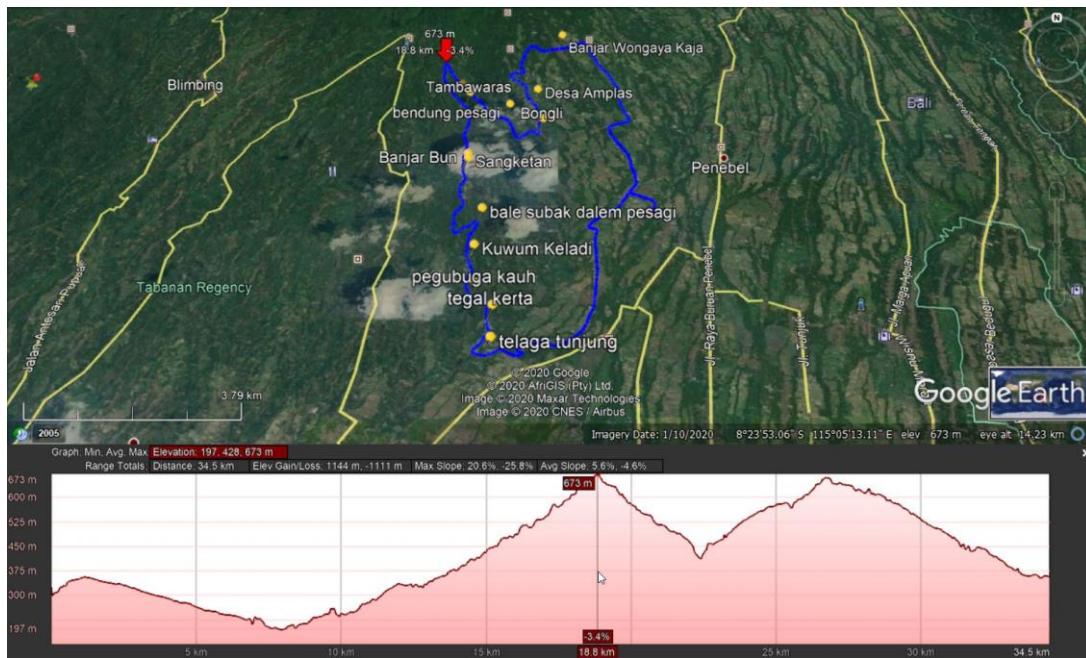


Figure 1. A combination of sight seeing, spiritual and trekking tour paths (the sight seeing tour path starts at Telaga Tunjung – through the right path and ends at Tembawaras temple. The trekking tour starts at Telaga Tunjung and passing the Tegal Kerta / the left path)

- b. Spiritual: the potential development of the agro-eco tourism where on the way to the spiritual tourism spot, tourists could enjoy the view of the rice terraces and the plantation (figure 2 and figure 3). There are two alternatives which could be used, where the first alternative is through Rejasa system (Subak), Umedalem system (Subak), and pesagi system (Subak). This path is much suitable for tourists who will dominantly enjoy plantation views and little jungle with some small rice terraces along the way to the destination. The second alternative, is through the Tegallinggah system, and Sangketan system. This path could end in two places, the Tamba Waras temple and the sublime temple of Muncaksari. The Tamba Waras temple is the spiritual tourism destination to pray an abundance of health and recovery of those who suffer from some form of illnesses. Muncaksari temple is the temple where people pray for success in businesses and trading. These two paths also have accomodation for overnight stay such as a bungalow and homestay owned by the local peple in the surrounding area. Furhtermore, in the Sangketan village there is even a stage which is in the process of building for the purpose of traditional dance performances based on the previous demands of the tourists visited the area. Wendri (2016) states that the spiritual tourism has a potential to be developed in Bali due to its cultural heritage such as the temples, cultural sites, ashram and the local springs existed in the area.



Figure 3. The spiritual tour starts at Tambawaras temple and ends at the sublime temple of Batukaru, and vice versa.

- c. Trekking: the development of the agro-eco tourism for tourists who are adventurous. The trekking path potentially be available within the water-control systems and even between systems crossing the rivers or water canals. Some alternative trekking paths such as Sangketan system with Keloncing or Piak system, and Tingkih kerep system or Penatahan system in figure 2. While the alternative trekking paths within the water-control system (Subak) are included: Tegallinggah system, pesagi system, Rejasa system, Wongaya Betan system, Umedalem system, and Srigumana system (Figure 4). The trekking path either within the water-control system or between system, could be crossing the rice terrace area, plantation, and a river crossing. Some evident attractions are the farmer rice planting activity (red rice field), including the work of the farmers such as the irrigation system cleaning, field plowing, seeds sowing, rice harvesting with the traditional tools called “ane-ane”, and possibly some religious ceremony in the rice terrace area and at the temple around the water-control system. Along the way, there are also available some resting are with the beautiful view of the rice fields. At the end of the trekking paths, there are some restaurant available serving the traditional local dish called “entil” and enjoy tea made from red tea leaves. There are also some accomodation available to stay for the night such as bungalows and home stays owned by the local people in the surrounding the area. According to the research results by Claudia (2018), who found that the trekking tour package such as the variety of the trekking paths, additional trekking paths, and the variety of the trekking time duration influenced the tourists satisfaction in the tour destination.

The agro-eco tourism potentials which have been described above, are urgently needed to be developed through the water-control system (Subak) communities and the traditional village officials which accompanied by some trainings and consultations from the government. While the development of the facilities such as restaurants and accomodations, should be designed to be organized by the water-control system (Subak) community, the traditional village officials or some investors from the local area or even the farmer from the water-control system community

members, so the results of the development will be directed towards the local people themselves.

CONCLUSION

Based on the results of the research as described previously, it can be concluded that the water-control systems (Subak) in the area of Catur Angga Batukaru are highly potential to be developed as agro-eco tourism spots with the type of tours such as sight seeing tour, spiritual tours, and trekking paths.

RECOMMENDATION

The development of agro-eco tourisms along with their supporting facilities such as restaurants and accomodations, should be best organized by the communities, traditional villages officials, or investors from within the local farmer as the water-control system community members, so the results will be directed towards the people themselves.

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