Developing Tourism in Sermo Reservoir Area: POTENCY, PROBLEM, AND SOCIOECONOMIC ISSUES

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ermo reservoir is the only artificial lake found in Yogyakarta. It is a multipurpose reservoir which control water supply for domestic use, fishery, and agriculture, beside tourism. Tourism in Sermo on one hand could be developed; on the other hand there is an uncertainty about its environmental impact. The purposes of this paper are to identify the potency and problem of developing Sermo reservoir as a tourism area, study the contribution of tourism to the local people, and analyze socio-economic impact of tourism in Sermo. Potency and contribution of tourism is assessed using questionnaire to local people and visitors. Key persons and government agencies were interviewed to get deep understanding and insight about Sermo tourism management. We also observed local people activities around the study area to evaluate some social issues related to tourism. Respondent see Sermo has a high potency to develop tourism -peaceful and natural atmosphere, beautiful scenery, and friendly people. But, lack of adequate facility such as sanitary and toilet, mosque, tour guide, souvenir shop, restaurant, and local culinary shop might become an obstacle. The need to educate local people and improve supporting facility like website and direction guide is also important to promote Sermo. Tourism development expands local people economic in certain rate. But, as a side effect, people concern about some negative impact such as an increasing number of immoral activities and disappearing of some custom. To develop Sermo reservoir precautionary principle must be employed to ensure the sustainability of the reservoir.

Keywords: Tourism, Sermo, Potency, Problem, Socioeconomic Issues

ABSTRAK

MEMBANGUN PARIWISATA DI WADUK SERMO: POTENSI, MASALAH, DAN ISU-ISU SOSIAL EKONOMI

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Waduk Sermo merupakan satu-satunya danau buatan yang ada di Yogyakarta. Waduk tersebut dibangun sebagai waduk serba guna yang mengontrol suplai air untuk keperluan domestik, perikanan, dan pertanian, selain sebagai lokasi wisata. Pariwisata di waduk sermo di satu sisi dapat dikembangkan namun disisi lain ada ketidakpastian mengenai dampaknya terhadap lingkungan. Tujuan paper ini adalah untuk mengidentifikasi potensi dan masalah yang ada dalam pengembangan waduk sermo sebagai lokasi wisata, mempelajari kontribusi pariwisata terhadap masyarakat lokal, dan menganalisis dampak sosial ekonomi yang ditimbulkan. Potensi dan kontribusi pariwisata diketahui melalui kuesioner kepada masyarakat lokal dan pengunjung. Informan kunci baik di masyarakat lokal maupun institusi pemerintahan juga diwawancarai untuk memperoleh wawasan yang cukup mengenai pengelolaan pariwisata di waduk sermo. Penelitian ini juga mengobservasi segala aktivitas yang dilakukan masyarakat di sekeliling waduk untuk mengevaluasi beberapa isu-isu sosial-ekonomi terkait pariwisata. Responden cenderung melihat waduk sermo memiliki potensi yang tinggi untuk mengembangkan pariwisata yaitu suasana yang asri dan tenang, pemandangan yang indah, dan masyarakat yang ramah. Tetapi, kurangnya fasilitas yang memadai seperti tempat sampah, toilet, rumah ibadah, tour guide, toko suvenir, restoran, dan kuliner lokal dapat menjadi penghambat. Kebutuhan untuk mengedukasi penduduk lokan dan memperbaiki fasilitas seperti website dan penunjuk arah juga merupakan bagian penting dalam mempromosikan Waduk Sermo. Pengembangan pariwisata menyebabkan perkembangan ekonomi lokal masyarakat pada tingkatan tertentu. Tetapi, sebagai efek samping, masyarakat mengkhawatirkan dampak buruk yang diakibatkan oleh penurunan tingkat perilaku dan meredupnya adat. Mengembangkan pariwisata di

Waduk Sermo memerlukan pendekatan kehati-hatian untuk menjaga keberlanjutan waduk.

Kata kunci: Pariwisata. Sermo, Potensi, Masalah, Isu-isu Sosial Ekonomi

Introduction

Sermo reservoir is the only artificial lake found in Yogyakarta. It is a multipurpose reservoir which control water supply for domestic use, fishery, agriculture, and recently tourism. Sermo reservoir is located in Kokap subdistrict (see Figure 1). Built in 1994 and began to operate in 1997, Sermo reservoir is established to increase agricultural productivity through extensive farmland, irrigation efficiency, and increase planting intensity.

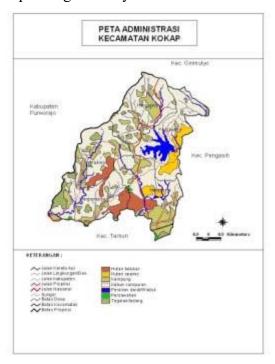


Figure 1. Sermo Reservoir Location

Tourism nowadays is a part of industry that could lift economic growth and create a multiplayer effect to the area. Beside that there are also intangible change in society. These changes are more difficult to see than what is mention before and abstract –socioeconomic aspect. Although their abstract and hard to see, we can not ignore or see them as unimportant. On the contrary, they could become an indicator to see whether the development is success or not (Jaya, 2007).

Hadi (2005) stated that social impact appear when there is an activity such as policy, program, or project which in an area. This "intervention" influence the balance of a system, in this case society, with potential positive, negative, or netral effect. The effect could influence some aspects, such as way of life, culture (values, norm, and belief), community (structure, estetics, social cohession and stability). Jaya (2007) added that social impact as an indirect result from change of environment.

Tourism mismanagement could cost negative impact to environment. In Sermo case, operation of floating restaurant as part of tourism program has impacted many aspect. In one hand, the economic impact from this program was enormous, but in another hand it harm the ecosystem. Ecosystem of the artificial lake turn into unbalance, red devil fish dominate the lake, yield of fisherman around the lake decrease significantly, and it also contaminate the lake's water. Red devil is believed enter the lake incidentally from juvenile mixed with *Oreochromis sp.*, fish that cultured by floating restaurant. The waste of this fish culture influence the water quality. Since the water is used by PDAM as raw water this became major problem.

Tourism in Sermo on one hand could be developed; on the other hand there is an uncertainty about its environmental impact. Developing tourism in many ways could change the environment both phisically and socially. Tourism activity in many studies has shown that it is important to get deep understanding of the system before we decide to develop it.

The purposes of this paper are to identify the potency and problem of developing Sermo reservoir as a tourism area, study the contribution of tourism to the local people, and analyze social impact of tourism in Sermo. This information is important to in the context of tourism planning and management. The potency and problem in developing tourism, and sosio-economic impact, will be presented and discussed in this paper.

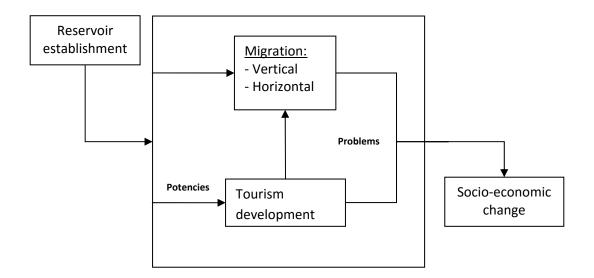


Figure 2. Conceptual Framework of Study

Figure 1 shows the conceptual framework of this study which began with "intervention" of government to build reservoir in the established settlement. The process next (potencies, problem, migration, and tourism development) is interesting and result to socio-economic change.

Data was obtained from direct observation, indepth interview, questionnaire, and secondary data. The population of this study was local people in Hargowilis, visitors of Sermo, and key persons in Sermo area and local government agencies. This study was using descriptive-qualitative approach. Local community's key persons and government agencies were interviewed to get deep understanding and insight about Sermo tourism management. They were selected purposively and asked a series of question using semi-structured interview technique. Data validation was using source triangulation method.

We also observed local people activities around the study area to evaluate some social issues related to tourism. Sample for local people and visitor consist of 30 person each who chosen randomly by accidental survey. Each respondent then answered the questionnaire with 26 questions in 6 categories –tourism object, facility, infrastructure, transportation, and amenity.

Discussion

Hargowilis is located in Kokap subdistrict, Kulon Progo, DI Yogyakarta. Its about 12 km from Wates, regency capital city, and 35 km from Yogyakarta. Landscape of Hargowilis is covered by mountain (about 1.453,8 ha) with elevation between 110-600 m over the sea level. Living here, in 2010, 6.445 person from 1767 family. More than 51% of population are adult with age >50 years old. About 75,6% of people graduated from elementary to senior high school, 20,6% not graduated from elementary school, and just 3,8% has degree from university.

Establishment of Sermo reservoir was done by drowning village and farmland. This project has stopped some rivers and retain its water for various use. Sermo reservoir change the landscape and create a new ecosystem. Along with the landscape change, people who live also are pushed to adapt to the whole different way of life.

Considering most of people impacted by project are a farmer, government recommend them to apply for transmigration program. More than 500 families have to moved because of Sermo project. Approximately 100 families was transmigrated to Bengkulu, some to Riau, and the others was choose to live in the area around the Sermo reservoir. After years, situation change some families in Bengkulu move back to Sermo.

Lake ecosystem shift the micro climate and hidrology around the area, provide large space for fish community, and create oportunities for human to make various kind of effort to optimize the potency. Moreover, with the increasing trend of tourist visits, Sermo developed into tourism destination area. Tourism in the Sermo reservoir, with its all potency and problems, could drives change in the local community. Establishment of the reservoir change the land use dramatically. Productive and fertile land decreased as various general civil facilities built.

Governor's SK No. 9/2009 stated that Sermo reservoir area is managed based on sustainability principle by consider social, environmental, cultural, technical, and economical aspect. The reservoir established to several allocation such as supply irigation water, raw water, learning infrastructure, flood control, tourism, and other economical activity respectively. Sermo has strict zonation: open, semi-closed, and closed area. Province has authority to closed and semi-closed zone, regency has

authority to open area. Local people can not establish any building in closed area. All building also have to facing on the lake. This regulation also give authority to Balai Besar Wilayah Sungai Serayu-Opak to give permission or recommendation in all kind of activity in the semi-closed area.

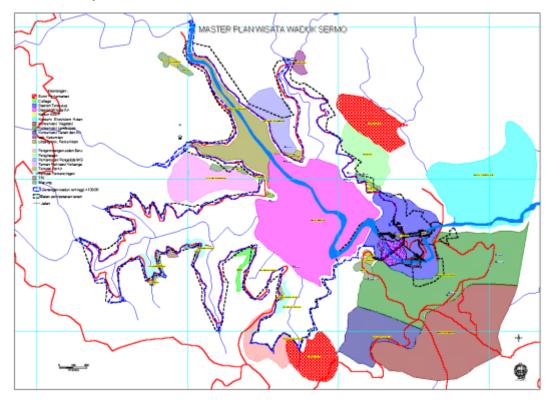


Figure 3. Masterplan of Tourism in Sermo Reservoir

Respondent see Sermo has a high potency to develop tourism –peaceful and natural atmosphere, beautiful scenery, and friendly people. Many people see Sermo as an alternative recreational place to enjoy the time with family or just spend some time moving around the reservoir by motorcycle or boat. Some local and non local anglers also frequently fishing here, but according to local fisherman organization their number decrease gradually because the fall of the yield since red devil fish colonize the lake.

People who sampled indicate that Sermo is suitable to be tourism object. Unfortunately, lack of facility limit this object to become established and consistent source of income. Attraction and children playground are some facility that could attract more tourist. Beside that, merchant structuring and cleanness also important part to make visitors enjoy the recreation.

From the retribution point of view, tourism in Sermo area showing a good progress, increasing number of retribution received by the government from ticket. This is a good sign, but it is not optimum yet. In contrast, the average retribution of Sermo in 2005-2012 is 1800% smaller than Glagah beach retribution. From the number of visitor and retribution, tourism in Kulon Progo increased significantly in the last 4 year (see Figure 2). It indicates that there are so much potency and oportunity to gain more revenue from tourism.

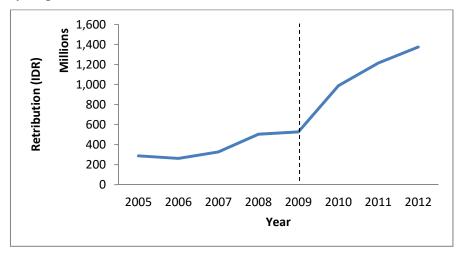


Figure 2. Kulon Progo's Total Annual Retribution Revenue from Tourism (Source: Tourism Board, processed)

Although its increasing significantly, beach area are the most contributor of the revenue. Table 1 shows that people are the top 3 contributors are in beach category. This confirm that visitors prefer to visits beach than other kind of place, perhaps with the relatively same facility.

Table 1. Contribution of Various Tourism Object in Kulon Progo (Source: Tourism Board of Kulon Progo, processed)

No.	Location	Average Retribution 2005-2012 (IDR)	Average Number of Visitor 2005-2009 (person)
1	Glagah Beach	495,642,744	194,834
2	Trisik Beach	50,358,185	32,653
3	Congot Beach	49,595,426	22,170
4	Sermo Reservoir	28,687,715	17,047
5	Suroloyo Summit	13,295,506	7,544
6	Kiskendo Cave	8,277,938	4,590

Hargowilis government officers and visitors agree that one of the major problem in developing tourism in Sermo is the lack of proper facility. Hotel, sanitary and toilet, mosque, tour guide, souvenir shop, restaurant, and local culinary shop might become an obstacle to make longer visiting time of tourist so they can spend more money and move the local economy. Some visitors see that Sermo was bored because the finite number of pleasing facility such as good hotel, restaurant, and other kind of interesting activity. Visitors not only want to come to enjoy Sermo's peacefull and natural atmosphere but also quality food, good hospitality, or unique experience. The need to educate local people and improve other supporting facility like website and direction guide is also important to promote Sermo.

Trash, limited access, and overlapping autorithy are the other problem need to be solved. Trash in Sermo consist of organic and inorganic waste. A lot of inorganic waste such as plastic bag, snack packaging, bottle, and other consumer-related trash are easily found in the most favorite tourism spot, about 1 km before and after the outlet. Better trash management should prepared to make this tourism spot more confortable for visitors.

To enter the Sermo area, visitors could use two routes which all restrict just for motorcycle, family car, or minibus. Large bus which usually carry large number of tourists in Yogyakarta could not enter Sermo by these route. In the one side, this is an opportunity for local people to evolve "ojek", tourist train, or other kind of transportation to accommodate visitor. In the other side, this is also obstruct the number of visitors to Sermo. However, large number of visitors will potentially create more complicated trash problem.

Overlapping authority is the other issues that should be solved together. PU, BKSDA, Fisheries Agency, PDAM, tourism board,

According to respondent respond, environmental impact of tourism in Sermo has moderate to small effect. Besides physical treat such as increasing waste, people concern about socioeconomic change which consist change of behavioral, believed values, job, status, and their adaptation strategies. Sermo reservoir has given some good economic effect to local people therefore almost all of the respondent agree that tourism have to manage carefully and sustainable.

There are four fundamental change in the Sermo society, lost of identity, job alteration, behavioral change, and better basic facilities. *First*, altered place name from Sremo to Sermo. PU and tourism board are two actors of this change. PU named the reservoir as Sermo instead of Sremo, its historical name then tourism board continued this missplacement by using name Sermo in their propaganda, promotion, and advertisement. Sermo has no meaning or historical background for the local people, in contrast with Sremo which are their ancestor name who build the first settlement, Ki Sremo Joyo. Interestingly, Sermo now is just the name of the reservoir; Sremo still used by the local people in their orchard name such as Sremo Lor and Sremo Tengah.

Second, job adaptation of the local people. People in sermo used to live from farm and nderes. After development of reservoir, fertile farmland is limited, and people gradually change their way of life. Some people began to learn fishing technique, some apply position as an employee or part-timer in office or project related to the reservoir, and some others opened small shop. Tourism creates more opportunity for local people, with more option of work's type and time. Rearing goat, poultry, and cow, along with plantation are long term work in Sermo area.

Third, behavioural change of society. Key person who interviewed stated that tourist bring their culture when come to Sermo, this create an oppurtunity of cultural trade-off; this actually happen, but can not easily proved. Unfortunately, the "bad" culture are more easier to imitate. Local people now feels that its common to going out with clothes that uncommon or even unpolite used in the past. The custom to respect the older man now has begin to faded. Platitude which common when meet someone in the way now has also faded.

Fourth, the positive impact, reservoir establishment has became the beginning of better facility such as road, electricity, and water access. Before the reservoir establishment water, electricity, and road was the main problem of people. Better facility means faster movement of people and various commodity or goods, so people get better living and economy.

Conclusion

Tourism development expands local people economic in certain rate. But, as a side effect, people concern about some negative impact such as culture and behaviour change. Beside that, reservoir establishment bring positive impact such job variation and better access to water, electricity, and road for people. Based on local government agency, tourism in Sermo is the fifth priority after raw water, irigation, agriculture, and flood control. To develop it precautionary principle must be employed to ensure the sustainability of the reservoir.

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