

Developing Eco-Edutourism at Yogyakarta

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Abstract

This article mainly discusses the possibility for Yogyakarta to develop ecotourism with additional environmental education materials for secondary and tertiary school students. There are three factors which support the concept, first is the potential of the environment. Second the large number of tourists, especially secondary and tertiary school students, visiting Yogyakarta every year, and the third the number and the competence of the scholars working at universities and institutes in Yogyakarta. If all these factors were managed properly it could produce not only a valuable educational experience about the environment for those students, but also a reasonable income for the communities and the local government.

Keywords: Ecotourism, environmental education, interpretation of the ecotourism object, Yogyakarta.

Background

Ecotourism has been growing very fast in the last decade. Many countries have developed ecotourism since the 1980's. The aims of ecotourism seem suitable with society's apprehension about the environment. Through ecotourism, people want to minimize the degradation of environmental quality.

As a popular tourist destination, Yogyakarta has some ecotourism objects. However, the programs created for those tourist objects are still limited to village tourism, which is not eco-tourisms in its full meaning. Generally speaking, Yogyakarta is famous for its cultural tourism, especially with its golden triangle cultural objects, such as Borobudur temple, Prambanan temple, and the Sultan's Palace.

The local tourist agency (*Badan Pariwisata Daerah* – BAPARDA) reported that in the year 2002 there are almost 900 thousands local tourists who visited Yogyakarta (BAPARDA 2002). Most of these local tourists are students of secondary and tertiary schools. Presumably, if one third or half of these numbers are students, there will be 300 up to 450 thousands students visiting Yogyakarta every year. This is a large number, and if this phenomenon is managed properly, it could produce not only a valuable educational experience for those students, but also a reasonable income for the communities and the local government.

Almost every school has, especially in Java, a program of visiting tourist destination cities. We usually call this program as a study tour program. This program is an extra-curricula activity which is arranged in the model of a tour, going to other cities or remote places to visit historical places, museums, recreational areas, industrial estates, or other tourist destinations. The study tour is conducted once in the 3 year study time of junior or senior high school (SMP or SMA). In order to gain an optimal outcome, those two phenomena, ecotourism and study tour, could be managed together.

Yogyakarta is also known as an education city or scholar city. Using this resource, it is possible for the city to develop ecotourism with additional environmental education materials for secondary and tertiary school students.

Ecotourism

In this section I will try to explain ecotourism in more detail, including its definition, principles for developing ecotourism, and some approaches taken by the Indonesian government in developing ecotourism objects.

In his paper *An Ecotourism Perspective*, Scace gives some definitions of ecotourism, namely:

- *Ecotourism is a subset of nature tourism in which **conservationist** and tourists' interests work together to preserve environmental quality while mutually protecting tourism.*
- *Ecotourism is purposefully focused on enhancing and maintaining natural systems through tourism. Ecotourism is a contemporary strategy vital to maintainance of healthy ecosystems.*

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- *Ecotourism narrowly defined is a nature-oriented tour program based on **nature and archeological resources**. In a broader sense it would include **indigenous or local culture** as natural resources.*
- *Ecotourism is a new tourism **strategy that balances development and economic gain**, is seen as a new force that can **benefit both the nature and developing destinations**....*

From the above definitions we can highlight some important concepts, that ecotourism is naturally conservation, that the object of ecotourism is related to nature, archeology or local culture, and that ecotourism is intended to produce benefits for the communities in the areas.

Scace also translates the above definitions into principles and characteristics of ecotourism:

- *It must be consistent with a positive **environmental ethic**, fostering preferred behavior.*
- *It does not denigrate the resource. There is no erosion of resource integrity.*
- *It is **biocentric** rather than homocentric in philosophy, in that an ecotourism accept nature largely on its terms, rather than significantly transforming the environment for personal convenience.*
- *Ecotourism **must benefit the resource**. The environment must experience a net benefit from activity although these are often spin-offs of social, economic, political or scientific benefits.*
- *It is a first hand experience with the natural environment.*
- *There is in ecotourism, an expectation of gratification measured in appreciation and education, not thrill-seeking or physical achievement.*
- *There are high (cognitive (informational) and effective (emotional) dimensions to the experience, requiring a high level of preparation from both leader and participants (Scace, 1991:65).*

The most important principle for fostering ecotourism development is **enculturation of a positive ethic toward the environment**. In this sense, ecotourism is not intended for an adventure activity but for creating appreciation and education on environmental values. Meanwhile, the policy and strategy of ecotourism development in Indonesia seems already in accordance with those Scace's principles.

There are two main approaches promoted by government, namely conservation toward nature and raising advantages for the local communities (Fandeli, 2003).

In Indonesia, ecotourism had been developed for about 10 or 15 years. Almost all popular tourist destinations, such as Bali, Yogyakarta, Sumatera, Lombok, and so on, have developed this kind of tourism. However, most of the packages they offered tend to be directed to foreign tourists. Their programs are focused on exploring mountains, forests, rivers, and more recently village tourism, especially in Yogyakarta. Based on the fact that Indonesia is rich in bio-diversity and natural resources, it is still possible to develop some better and more diverse ecotourism programs.

It is undeniable that conservation approaches in initiating an ecotourism object have compelled developers to seriously consider their negative impacts. Disturbance or hindrance to natural environments should be carefully monitored by the management and the field operators, including vandalism, erosion or degradation of the environmental quality, littering, or other pollutions.

Environmental Education

The term environmental education was used for the first time in the mid of 1960-ies, but some people were interested in this matter far before that date. In 1965 the term environmental education was used in England by Keele University in Staffordshire. In 1970, IUCN/ UNESCO held an International Working Meeting on Environmental Education in The School Curriculum. This meeting produced a clearer definition about environmental education:

Environmental education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among man, his culture, and his biophysical surroundings. Environmental education also entails practice in decision-making and self-formulation of a code of behavior about issues concerning environmental quality. (IUCN, 1970)

In accordance with the thinking on environmental education, the policy and strategy to its implementation, the aims and objectives of

an environmental education have also been developed. In his book *Environmental Education in 21th Century*, Palmer attaches the aims of environmental education which should be included in this curriculum.

- *To provide opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment.*
- *To encourage pupils to examine and interpret the environment from a variety of perspectives –physical, geographical, biological, sociological, economic, political, technological, historical, aesthetic, ethical and spiritual.*
- *To arouse pupils' awareness and curiosity about the environment and encourage active participation in resolving environmental problems (Palmer, 1998:20)*

While the development of eco-education in other countries is quite promising, in Indonesia it did not show a significant progress. In the new secondary school curriculum called Competence Based Curriculum (CBC) launched in the year 2000, one could see that there is not enough attention toward the environmental education. Meanwhile, the teaching of environmental subjects is usually included in other subjects such as geography and biology, but there is not a subject focusing on environmental matters. To cope with environmental degradation and the development of many problems in the environment, it is an imperative for the government to publish a direct policy about environmental education especially for the secondary and tertiary schools.

Developing Ecotourism with Environmental Education

As mentioned above, in Indonesia there is no fixed curriculum for environmental education for students in the secondary and tertiary levels. The above paragraphs described how little interest had been given by the government as well as the society toward this matter. While the environment's condition is getting worse, a special subject on environmental education is a must.

Considering the lack of interest in environmental education for the secondary and tertiary schools, Yogyakarta could take this as an opportunity to create a new kind of tourism, that is eco-edutourism, an ecotourism with additional materials for environmental education. Thereby eco-edutourism could become a new kind of tourism with its own categories and values.

In addition to the primadonna of Yogyakarta's tourism, recreational and cultural tourism, this new alternative will give additional economic opportunities for investors who prepare the supporting facilities, as well as for the local community involved in managing this new tourism product. Of course, the local government will also get another revenue from this product, such as tax income. In this section I will try to examine some tourist areas which could be used as a prototype of eco-edutourism objects.

- **Tanjung Village**

In Yogyakarta, village tourism was introduced for the first time in 2001. Now, there are many places around Yogyakarta which have been developed as village tourism, for example Sambu, Trumpon, Gamplong and Tanjung in Sleman Regency, and Kasongan and Tembi in Bantul Regency. Tanjung village can be considered as a successful example of village tourism. Visiting Tanjung, people could choose some programs. There are almost 25 programs offered to learn cultural activities such as dancing, making traditional textile, knowing more about Javanese architecture, or learning how to cultivate *sawah* (rice field). Those programs are suitable for secondary or tertiary school students, and surely these programs would attract them.



Students learning how to cultivate sawah or rice field

These programs are not only recreational in nature but also give them new knowledge and skills. Village tourism in Tanjung was managed by the village leaders and involves almost all people in the village to serve tourists who visit the area. Accommodations for tourists are distributed in the local houses. Food for the tourists is also catered by the local people and they serve local menus as well. They also take part as field operators by teaching dancing, batik, cultivation in the rice field and so on (Sinar Harapan, 6 November 2003). It is no doubt that there are still possibilities for Yogyakarta to open many village tourisms with a specific program which is in accordance with a village's own characteristics, such as cultivating plantation, farm or animal husbandry, learning about river's ecology and folk arts, and etc. However, there is a problem which should be thought about, that is the numbers of tourist that must be catered to. Usually the students do their study tour in a large group of 150 - 300 pupils. This numbers will rise a difficulty in giving them training, for example to dance, make batik etc. *Training will only be effective if the participation is small, not more than 40 people.*

- **Parangtritis Beach**

Located about 30 km at the south of Yogyakarta, Parangtritis has three specific locations that could be visited by tourists, such as Parang Wedang, Parang Kusumo, and Goa Langse. In creating new ecotourism, Parangtritis area could also promote the sand dunes phenomena. Sand dunes are the formation of sand-hills at the beach because of the wind. The sand dunes in this area are the only natural sand dunes found in Indonesia. No doubt that the interpretation toward these sand dunes should be accompanied with the description of creatures found at the area and its habitat. The location of Parangtritis beach is very easy to be reach. There is public transportation going directly from the city to the beach. There are also some tourist facilities offered, such as hotels, restaurants and camping grounds. Off course, it is not necessary to cut down other tourist objects which have already grown. All

of them need to be integrated into the new plan and design, to enhance the ecoedutourism.

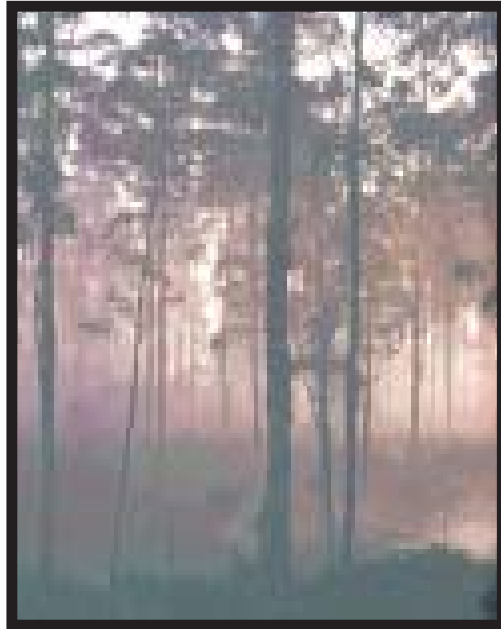


Parangtritis Beach seen from the hill

- ***Wanagama***

Wanagama is located at Gading village, Wonosari, the regency of Gunung Kidul, about 35 km from the city of Yogyakarta. Referring to the name of the area, Wanagama or Gamaforrest is a cultivated forest. It is intended for the sake of education, namely a model for forest cultivation and reforestation. The area of the forest is approximately 80 hectares, and managed by The Faculty of Forestry, Gadjah Mada University. Formerly this area was a limestone hill with barren soil, by use of a certain model of cultivation the area was turned into a fertile forest. As a result of this forestation, some spring waters have emerged around this area. Wanagama is located at Oya river bank, it has a natural landscape and peaceful milieu. This situation is suitable for fostering and raising affection toward nature and environmental sustainability. Although there is not any public transportation going to this area, the road to Wanagama is fairly good. Accommodation is also available there; the bungalows and camping grounds can accommodate about 200 people.

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Gama Forest at Gading Wonosari

- **Merapi Mountain**

For the time being, this area is used for mountain climbing and recreational place in its foot area. People can start their climbing from two different points. One point is from Kinahrejo village closed to Kaliurang, the other is from Selo village at Boyolali. The beauty of Merapi mountain and its hilly landscape can be enjoyed at Bebeng and Turi areas. Bebeng is about 2 km from Kaliurang to the south east, while Turi is about 5 km to the west.

Another interesting place is Pelawangan. It is one of Merapi observation post, where people can observe the mountain through a telescope. Down from Pelawangan there is Kaliurang recreational area. It has cool climate, beautiful scenery, and also has many recreational facilities such as swimming pool, play ground, sports area and recreational forest. For accommodation, people could easily find villas, bungalows, lodge or other kind of hotels.



Merapi Mountain at Kaliurang Sleman

The forest in the Merapi area has great potential to be made an ecotourism object, focusing on life in the forest. This forest tour can promote environmental education. To develop this area, we can benchmark to the Wildehausen forest management, in Germany. The programs developed in Wildehausen forest are directed toward both grown up people and children. The programs offered are to seek orientation in the forest, survival knowledges such as knowing edible wild plants, cooking with materials found in the forest, etc.

Besides, there are also programs designed for children, including learning about biology and ecology, food-chains and plants evolution, and observing directly how animals and plants live in their habitat. They also learn how all of the environmental components, including plants, animals and humans live interdependently. Learning from the activities, children would know what will happen if one of these components is broken, for example because of vandalism (Kedaulatan Rakyat, 20 September 2004). Examining programs offered by Wildehausen forest will open ideas to create programs suitable for the Merapi mountain area.

Many ecotourism objects delineated above are examples of how all those objects can be transformed into eco-edutourism areas. However, if we refer back to what Scace wrote that, there are high

cognitive (informational) and affective (emotional) dimensions to the experience, requiring a high level of preparation from both leader and participants. *This principle required a serious coordination effort on the object as well as in the materials, which will be conveyed to the tourist. This arrangement is usually called as "designing interpretation" of the ecotourism object.*

Interpretation is an effort to arrange the kind of communication which connects to all the natural resources which are found in a certain area, biological and non-biological, to the tourist who visits the place so that they could get a new knowledge and experience about the place. And also through this communication would raise their desire to know more, to realize and if possible would draw their interest to involve in caring, protecting and conserving the resources.

This interpretation could be conducted by the management of the project area, however in operation the travel agencies and especially the school could give some additional materials to suit the needs of the students. Yogyakarta, which is already famous as a student city, surely has enough resources to develop the interpretation. There are many universities, institutes, and research centers, and also reliable experts. All of these potencies can be mobilized to design the object and interpretation which will be presented to the tourists.

Training to the local people in the communities who will involve in managing the project is the next step. Referring to the experience of RTMB (Rinjani Trek Management Board) that the local people instead of only operating the area, also have a responsibility to conserve nature and maintain its sustainability. Management of the area could give exercise for these local people so that they can give services to tourists, preparing food and accommodation, and becoming a tour guide. The training should cover a knowledge about cleanliness, how to give a help, convenience and security to the tourists. Using all the knowledge and skills they already have the local people could be actively involved in managing the projects (Kompas, 24 June 2004).

Conclusion

Establishing an eco-education through ecotourism would be possible if many parties give their commitment and participation.

As I said in my article *The Positive Contribution of The Australian Ecodesign Community in Solving Environmental Problems*, the fact that environmental problems are complex, involve many conflicting interests and nobody has yet found an effective prescription to resolve them. What is now required is involving as many individuals or parties as possible to work out many parts of the problem, trying to get the core from many different angles (Suastiwi, 1998). Therefore, conclusions which can be drawn from this small paper are:

- Ecotourism would become a favorite tourism and it will grow vastly in the future.
- Yogyakarta has many opportunities and potencies to develop ecotourism with additional focus on eco-education for secondary school students.
- Creating the right interpretation for every ecotourism objects and fit with its audience could be achieved through the collaboration with universities, institutes, and research centers in Yogyakarta.
- Preparing the local communities, socially and psychologically, so that they could become an integral part of the team that manages the ecotourism object.

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