Say NO to Socio-Economic and Ecological Destructive Kitulgala Mini-Hydro Project*

K. Anupama Damunupola

Introduction

Adventure Tourism

Tourism is one of the fastest growing sectors in the world, and adventure tourism is one of the sub segments account for high growth rates worldwide, over the past years with tourists visiting destinations previously undiscovered. To date no definition of adventure tourism exists in UNWTO literature, however the Adventure Travel Trade Association (ATTA) defines adventure tourism as a trip that includes at least two of the following three elements: physical activity, natural environment, and cultural immersion. Generally, adventure tourists are passionate and risk-taking. There are two main

^{*} Please cite this article as: Damunupola, K.A. (2020), Say NO to Socio-Economic and Ecological Destructive Kitulgala Mini-Hydro Project" The Journal of Archaeology and Heritage Studies, Vol. 5 Issue I, Chief Editor: C.B. Ambanwala, Rajarata University of Sri Lanka, Mihintale. pp 73-82

categories of adventure activities as hard adventure and soft adventure. Based on different characteristics of the primary activity they are divided in to each category. However, both hard and soft adventures are highly lucrative segments of the adventure tourism sector.

At present increasingly, countries in all stages of economic development are prioritizing adventure tourism for market growth, as they have identified its ecological, socio-cultural, and economical value. The profile of the adventure tourists' reveals they are willing to pay a premium for exciting and authentic experiences. Therefore, adventure tour operates are also having good income levels. However, the trip costs are vary based on length, luxury and activity levels, destinations, and distance from a traveller's starting point to the trip destination.

It is must for adventure tourism practitioners, policymakers and other stakeholder groups to adhere to sustainable environmental practices. Because without pristine natural environments and meaningful cultural experiences, their destination would lose its competitiveness, and tourists would go somewhere else. Therefore, proper management of adventure travel and a sustainable, ethical tourism approaches must be implemented to get spin off benefits to the local communities. Moreover, multi-stakeholder partnerships are an important element of promoting tourism.

Kitulgala Hydro Power Plant impact on Rafting

Commercial adventure travel is a relatively new phenomenon, in which travellers hire a professional guide to provide a range of technical support and equipment, as well as culture and nature interpretation. Kitulgala is a world famous location for white-water rafting and also it became a popular destination with one of the most iconic movie "The Bridge on the River Kwai". Sri Lanka is considered as one of the 18 biodiversity hotspots in the world, meaning our country has very high biodiversity. According to the Adventure

Travel Trade Association (ATTA) classification water rafting activity is listed under the soft adventure category.

White-water rafting at 'Kithulgala' was started in 1995. And there were only a few operators in the business initially, but today that number has grown with the high demand form thrill-seekers. At the beginning 'Kithulgala' Rest House provide accommodation but now there are nearly 40 hotels in 'Kithulgala' serving local and foreign tourists. It is estimated that nearly 100,000 tourists visit 'Kithulgala' annually for white-water rafting. Further, more than 200 people are directly employed by about 10 rafting operators and the business provides another 400-odd indirect jobs for the 'Kithulgala' villagers.

Hydro Power is considered as a good source of renewable energy contributing to the national electricity supply of a country in a considerable percentage with relatively low cost. However, the average contribution of a mini-hydro project to the national grid is approximately 1 MW which is just 0.02% of total generation capacity which stands at 4,200 MW. Therefore, it is important to analyse the pros and cons of this project as it will impact on the country's socio-cultural, economic and environmental aspects.

The future of this remarkable tourist destination is under a severe threat due to the Ceylon Electricity Board (CEB) Broadland Hydropower Project (BHP) on the Kelani River. Under this project the Maskeli Oya and Kehelgamu Oya, the main tributaries providing water to the Kelani will be blocked. Further, project will dam water up to 5km of the main stretch of white-water rafting activity. The 18 rapids of this stretch which can be used for rafting will be destroyed 13 of the rapids. The villagers have voiced against this destructive project since 2010 while highlighting the negative sociocultural, economic and environmental impacts. Hence, the key objective of this study is to examine the environmental, socio-cultural and economic

impacts of Kitulgala Mini-Hydro Project, with special focus on adventure tourism industry in Sri Lanka.

Data Collection and Interpretation

Study adopted the qualitative approach particularly, interviews and focus group discussions with different stakeholders to collect data. Particularly, the adventure tour operators, residents of the area, business men/ women were selected as the population and based on snowball and convenient sampling techniques 30 were selected as the sample of the study. Based on the key objectives of the study 04 parent themes were developed as below. Socio-Cultural Impacts, Economical Impacts, Environmental Impacts and Local Perception towards Adventure Tourism Industry.

According to the collected data the existing situation of the Kitulgala adventure tourism site can be summarised as below. Decreasing of water levels, pollution of water, environmental pollution and noise disturbances noise from explosion of dynamites and decreasing of tourists to the area. According to the boat operators due to the loss of the smooth flow of the water their boats are getting stuck at some points and visitors cannot get the authentic rafting experience during their tour.

"Absolutely there is a huge decrease in the water level. There should be a smooth flow of water for rafting. But it is not, because of the construction work time to time water is blocked. When they drop the water levels, tourists can't get the authentic rafting experience..."

Further they mentioned the number of locals' visits to Kitulgala has increased today as to get this rare experience before it disappeared from Kitulagala.

"...since most people are aware about this power plant, they believe Kithulgala will be disappeared soon. Because of that belief, people who have never experienced rafting before are coming to Kithulgala, especially local guests..."

Analysing the socio-cultural impacts population displacement and ethical and cultural clashes, infrastructure development and related issues were mainly highlighted. Specially the Polpitiya area residents were victims of this new project and they had to move away from their places of birth even. According to them they have not received fair compensation.

"..Displacement of population was a critical problem with this power plant, particularly in Polpitiya area and suburbs. We were forced to displace from that area. But none of us were given a fair compensation..."

Moreover, since the tunnel is going under the houses residents say that their houses were cracked and earth slips are common today. Furthermore, they are mentioning, due to the power plant construction work the number of tourists to the area are decreasing, specially foreigners engage in such activities when chemicals and released and mixed in to the water. Also they mentioned community people do not welcome these Chinese workers as they bring lots of problems to the village. Specially stealing the goods of tourists and blocking the river time to time and unpleasant behavior of them are some of the major socio-cultural issues villages faced today.

"....On one hand area has polluted due to the lack of sanitation facilities for the Chinese workers and on the other hand their bad habits and behaviors. Actually, none of us welcome these people since because of their unacceptable behavioral patterns..."

"...Not only that these workers steal the tourists' belongings when they keep their belongings along the river area before their turn, still I remember 03 times we caught these Chinese construction workers when they are stealing belongings of the tourists. They are really a burden to this village..."

According to the study the environmental impacts were the mostly affected aspect. Water pollution, Visual pollution, Noise pollution and high potential of natural disasters are the main problems listed under this category Specially the huge noise when they do extractions; Soil Boring, Blasting, Drilling and Hammering, operation of metal quarry, Damping sites etc. Noise of explosions, using dynamites and digging holes are main sources of noise and environmental disturbances and pollutions. And according to them all birds in 'Bandarakale' forest area has flown away.

"...there is a huge noise when they do extraction, Soil Boring, Blasting, Drilling and Hammering, operation of metal quarry, Damping sites etc...Not only that to explode that rock plain they are now using dynamites continually... Due to these effects now the birds the for a and the fauna of the area has been damaged a lot....."

Further, they are mentioning due to the noxious chemicals and stuff today people are not using the water of this river for bathing or any other cleaning purposes. Also they highlighted there are some incidents that tourists have gone away without doing rafting due to the mixing of chemicals in to the water. Moreover they claim that due to the heavy explosions flooding, landslips and other natural disasters could be easily happen.

"...For dynamites they use ammonia and one other chemical. All chemicals flow along the river. Last time when we were looking at our employees' heels it was slotted due to the

chemicals. Since the day they started construction work this river is not so clean..."

"... Until today no flooding or landslips have been reported.

But with these explosions we cannot guarantee that..."

Many economic impacts also has been aroused from this project. Specially impact on tourism sector loss of Livelihoods and Income. During the disunions it was revealed now the main income source, the white water rafting tourists to the destination are decreasing and as a result of that they have lower income levels. Further they mentioned, during the past it was a good income source and they earn nearly SLR 400000 per month. Since now the natural beauty, activity thrill and excitement has destroyed tourists are no longer interest in 'Kitulagala' for rafting. Moreover, according to the respondents one third of the villagers are depending on tourism related business activities. Furthermore, there are about 200 people who are directly connected with this tourism industry and about 1500 people depending upon indirect income sources which are generated from this tourism industry in the area. In addition more than 30 adventure tour operators are engaged in this rafting business. Also they mentioned there is a big employee turnover as a result of this project. According to the respondents today many people have disconnected from tourism related business activities and they have join hands with the new construction project as it offers many financial and non-financial benefits such as fixed high salary, job security, less risk, fixed holidays, freedom and leisure time compared to the rafting business activities. As a result of this today the number of people engaged in tourism sector are going down and in near future this whole industry would be disappeared. Therefore, the villagers are requesting from the relevant responsible authorities to look after this pathetic situation and to bring practical solutions to protect the nature, culture, people and the tourism industry.

"...Actually, 1/3rd of the villagers are depending on tourism. More than 200 people are directly employed in about, 30 water rafting companies and more than 1500 people are indirectly get benefits through this industry. Indirectly, some villagers earn by selling something to tourists. Indeed, everything is closely linked with tourism. If we won't be able to continue this rafting activities then this chain will be collapsed. So there is a direct effect from that to the livelihood of the villagers..."

"...Today there is a high employee turnover due to the constructions of this power plant. Main reason is the salary that they receive from the power plant. We pay LKR 18500.00 as the basic and additional LKR 200.00 per turn. But the workers in the constructions project, receives fixed salary of LKR Rs.40000.00 per month with 10 days off. So that is far more beneficial compared to the salary we give to our employees. Therefore, they are tend to discontinue from this rafting job..."

Specially the adventure tour operators are totally disagree with the prevailing situation. And they are asking what the point of implanting this project as it only contributes to generate 35 MWs out of the required 360 MW to fulfil the entire country requirements. While adding more they mentioned, disappearance of this activity would create lots of negative socio-cultural, economical and environmental issues. Since the location itself is a perfect destination for rafting among any ages and with little or no fear destroying such rich attraction would be a loss for the entire nation.

Conclusion and Recommendations

Finally based on the findings of the study key recommendations and suggestions were included for the protection and development of the area. Further, these findings would be also beneficial for the policy makers and industry stakeholders. It is suggested to release water during the day time

(8.00am -5.00pm) enabling adventure tour operators to proceed with white water rafting activities. Further, the responsible authorities should stress more on environmental impact assessments and so on activities to protect this beautiful attraction with minimum impacts to people and environment. And the progression reports should be frequently evaluated with proper mechanisms. The Community should be involved in decision making process as they are the owners of this beautiful village and as they have more knowledge and experiences in certain areas.

In fact, rainforests, waterfalls, streams and rivers of Sri Lanka with immense aesthetic beauty are important to keep the natural balance of the environment and the long run of the tourism industry. Therefore, disruptive kind of construction work should not be allowed in the destinations as it create more negative socio-economic and environmental issues. Since Sri Lanka is best known for its rich bio-diversity these sensitive environments should be protected with the rules, regulations and policies while minimizing malpractices. Lack of proper supervision mechanism, less awareness of negative impacts are main reasons for carrying out such projects in sensitive eco systems.

Further, both public and private sector stakeholders should need to understand that adventure tourism is closely linked with human and nature capital. And it is important to identify that adventure tourism as a tool for sustainable and responsible economic growth that delivers benefits to every level of society while attracting high value customers, supporting local economies, and encouraging sustainable practices. Hence it is important to recognize the real value of the projects before implementing.

References

Adventure Tourism Development Index (2015)5th ed., Colorado, USA: Adventure Travel Trade Association.

- Adventure Tourism Market Study, (2013) USA: George Washington University.
- Agrawala, S., Reynolds, J., Raksakulthai, V., van Aalst, M., Larsen, P. and Smith, J. (2003). *Development and Climate Change in Nepal: Fcus on Water Resources and Hydropower*. Nepal: Organisation for Economic Co-operation and Development.
- Anderson, E., Pringle, C. and Roja, M. (2006). *Transforming Tropical Rivers:* an Environmental Perspective on Hydropower Development in Costa Rica. Wiley Inter Science, (16), pp.679-683.
- Annual Statistical Report. (2015). 47th ed. Sri Lanka Tourism Development Authority.
- Travel Association. 2017. Adventure Tourism Market Study 2013.
- B., D., Bowker, J. and English, K. (1996). *Economic impacts of Guided Whitewater Rafting: A study of five rivers*. 32nd ed. united states of America: American water resources association, pp.1322-1327
- Barcott, B. (2008). The last flight of the scarlet macaw: One woman's fight to save the world's most beautiful bird. *New York, NY*: Random House
- Beedie, P. & Hudson, S. (2003). Emergence of Mountain-Based Adventure Tourism. *Annals of Tourism Research*, 30(3), 625-643
- Buckley, R. (2000). NEAT trends: Current issues in nature, eco-and adventure tourism, *International Journal of Tourism Research*. 2(6), 437-444
- Buckley, R. (2010). Adventure Tourism Management. Great Britain: Elsevier
- Buckley, R., 2007. Adventure tourism products: Price, duration, size, skill, remoteness. *Tourism management*, 28(6), pp.1428-1433.
- Buckley, Ralf C. (1998). "Ecotourism Megatrends." Australian International Business Review, 1998 (December): 52-54.
- Buckley, Ralf C. (2004). "Skilled commercial adventure: the edge of tourism." In *New Horizons in Tourism*, edited by Tej V. Singh. CAB International, Oxford, pp. 37-48.