

Positioning University as Knowledge Ecotourism Destination: Key Success Factors

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Abstract: The roles of higher learning in providing a place for learning, talent innovation and research have long been acknowledged in tourism discipline. However, not much work has been done in exploring the roles of higher learning as a destination of knowledge ecotourism. With the aims to offering sites in learning and experiencing nature, socio-cultural and heritage of the university-owned research stations, this study attempts to identify the key success factor of higher learning as the repository to knowledge and expertise in knowledge ecotourism. This study is based on qualitative data derived from the discussion and brainstorming of the working committee for knowledge ecotourism and field visits to the university-owned research stations in March until July, 2011. The finding showed that the higher learning contributes to the development of knowledge ecotourism by serving as the leader and mediator between host community and guests, developing content and training module, producing multi-tasking talent workers and knowledge ecotourists and taking part in providing various site's orientation, job opportunity and platform for self-sustain economy to the university and local community. It is suggested further efforts must be done in developing the typology of the knowledge ecotourist and their special interests in ensuring the sustainability of knowledge ecotourism in the context of innovative knowledge economy.

Key words: Knowledge ecotourism, knowledge ecotourist, higher learning, knowledge economy, talent and leadership, Malaysia

INTRODUCTION

Universities or the higher learning institutions are well recognized in facilitating and propelling the knowledge economy in achieving various purposes including for the growth and spatial development, competitiveness and advantages as well as human capitals and innovations (Frank and Meyer, 2007; Busby and Huang, 2011; Boucher *et al.*, 2003; Thomas, 2011; Mayaka and Akama, 2007). Being a place of knowledge acquisition, trainings and knowledge transfer to the society, undoubtedly, the higher learning institution has many unexplored potentials that can be mould creatively to provide holistic learning tourism experiences and destination (Schianetz *et al.*, 2007, 2009).

In fact, the higher learning's contribution in tourism is not a new agenda, especially in the tertiary education, policy making innovation and research development (Khelghat-Doost *et al.*, 2011; Schianetz *et al.*, 2009; Mayaka and Akama, 2007; Fidgeon, 2010; Lashley and Barron, 2006; Law and Chon, 2007; Thomas, 2011). More

recently, universities in the leading tourism destinations and developed countries play dominant roles in creating educational tourism experiences not only in international events and convention but also undertake community-based development and partnerships with industries (Shaw and Williams, 2009; Busby and Huang, 2011). As a place of learning, a university is one of the outstanding living laboratories in culture, social and environment that needs to be positioned and promoted as the key sector of high knowledge economy especially in tourism. Nevertheless, not much work has been done in exploring the roles of higher learning as the destination of learning and tourism attraction in developing countries including Malaysia. In Malaysia, ecotourism has flourished for most than 3 decades, especially after 1990. Although, the national ecotourism plan was implemented since 1996, some of the potentials have not been managed and promoted wisely and more severe, the potential stakeholders, especially the experts were not actively involved in the enhancement of ecotourism. On a wider perspective, the changing trends of tourist behavior have

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called for a more knowledge driven product innovation. At this juncture, the roles of the higher learning institution in tourism are becoming vital, especially when demands from international students had not been fully tapped. Moreover, with the five of the existing universities in the country are recognized as Research University, showcasing their innovations in one of the high income generating economy, tourism is therefore crucial.

As one of the key areas in economic transformation plan that targets for 36 million tourist arrivals by 2020, tourism is in need of new product development and sustainable product management (Thitthongkam and Walsh, 2011). In 2010, the country was ranked at the 9th place as the world most visited destination and the Ministry of Tourism has called for more quality tourism products innovation to be developed. Studies on island, protected areas, parks and recreational areas nevertheless showed some of the negative faces of quality tourism products that must be seriously attempted, especially when the numbers of tourist arrivals exceed the carrying capacity of the destination, unmatched of facilities provided with promotional campaigns and more negative than positive impacts upon natural resources and inefficiency of tourist facilities (Chan, 2009; Yip *et al.*, 2006).

Realizing the importance of the university to get involved in the knowledge economy not only in learning, training and research but also involving directly into providing a learning tourism destination, therefore one of the initiatives embarked by the higher learning is to provide knowledge ecotourism as one of the niche tourism in the country. In particular, the Universiti Kebangsaan Malaysia (UKM) has initiated an introduction of knowledge ecotourism (k-ecotourism), a combination of ecotourism and education tourism whereby the university is seen as a living laboratory that can offer knowledge learning processes and guidance to the knowledge ecotourists (k-ecotourists) as well as service providers in this sector. Venturing into k-ecotourism will also allow the universities' scholars to distribute and share their knowledge of the local biodiversity and heritage with the public community. Based on the initiatives undertaken by the university, this study aims to delineate key success factors in positioning the university or higher learning as destination of k-ecotourism as this provides an empirical case of approach undertaken on how higher learning contributes significantly in ecotourism in developing countries.

Key elements for knowledge ecotourism: In comprehending k-ecotourism concept and approaches, it is worth exploring several concepts of ecotourism,

educational tourism and partnership of higher learning within the tourism industry. While many definitions on ecotourism exist, researchers define ecotourism as travel to relatively undisturbed natural area where the flora, fauna and cultural heritage as the primary attractions and seeking knowledge is greatly emphasized (Honey, 2008; Wurzinger and Johansson, 2006; Fennell, 2001; Luo and Deng, 2008; Weaver, 2005; Blamey, 2001). Normally, ecotourists are educated and passionate learner, demand quality experiences and knowledge-added values in addition, to leisure and adventures (Kerstetter *et al.*, 2004; Ballantine and Eagles, 1994).

Their concern on the travelling impacts upon environment, environmental conservation and nature preservation is recognised (Wallance, 1993; Horwich, 1993; Chan, 2009). As ecotourists are seekers of knowledge and quality experiences while on sites, the practice of k-ecotourism demands the mediators to provide authentic information, tolerant and respectful interaction between the host and guest and ethical to the social, cultural, economic and natural environment. Hence, the advent of k-ecotourism as novel tourism niche of a university is seen as an innovative way in providing truly experienced vacation.

While ecotourism put forward key points in refining eco-based activities, ecotourist and host-guest relationship, educational tourism or edutourism seems to re-emphasize the importance of knowledge and learning process (Gibson, 1998). Involving the collection of knowledge, edutourism demands the participants to travel with the primary purpose of engaging in a learning experience and channelled the benefits to the community by educating and enriching the individuals participating in these programs (Holdnak and Holland, 1996; Khelghat-Doost *et al.*, 2011).

The importance of partnership of the higher learning with tourism industry and learning destination had been stressed by many scholars. Based on a case study on the Regional Centre of Expertise (RCE), Khelghat-Doost *et al.* (2011) stress on the leadership, partnership and networking as key success factors for educational learning destination. They demonstrate on how research centre can work as partnership with the industry to inculcate sustainable development. Several researcher assert on the importance of holistic managerial approaches that can leverage these partnerships. Schianetz *et al.* (2007, 2009), utilised a learning organization approach to improve the sustainability of Learning Tourism Destination (LTD). They proposed 6 fundamental elements as key success factor in LTD comprising, shared vision and goals, information system, continuous learning and co-operative research, co-operation (informal collaboration), co-ordination (formal collaboration), participative planning and decision

making. Aside from the learning perspectives what mechanism determines the empowerment of the community residing in the ecotourism sites, especially in the biosphere reserve areas is also crucial. Although, some ecotourism developments suggest the rise of local community empowerments as they engaged directly in the tourism businesses or services. Some studies showed the vice versa; ecotourism lead to the encroachment of the outsiders in their locality, resulting a restriction to resources access and utilization, lacking of trainings in human capital and limiting the opportunities rendered in value-chain tourism businesses.

Based on the before literatures, knowledge ecotourism is anticipated to meet the demand of ecotourists who seek for knowledge-added values while vacationing at an eco-destination. The same principles of ecotourism can be applied to knowledge ecotourism but with education as the key element behind all the general principles.

Whilst education is given great emphasis in ecotourism knowledge ecotourism attempts to provide formal learning process in which the ecotourist will be able to gain knowledge directly from the experts on the site. Being a relatively new in ecotourism, there is little effort done to deliberate this principles and how it can fulfill the demand of k-ecotourist as well as its possible contributions to the economy of the local community and the environment of the k-eco destinations. Therefore, this study introduces key elements for comprehending the k-ecotourism concept and approach and through these principles, the functional roles of higher learning in knowledge ecotourism destination as shown in Fig. 1 can become visible.

Leadership in k-ecotourism: University plays important roles in teaching, learning, developing and transferring knowledge to the society (Frank and Meyer, 2007; Law and Chon, 2007). Therefore, one important requisite for the success of k-ecotourism is the commitment and enabling roles of the leadership of the university, especially from the top management of the university. The contribution of product mix of k-ecotourism can be materialized through her experts, research facilities, stations, support staffs and its campus as living laboratory.

Orientation of k-ecotourism sites and demand: Knowledge is anticipated to anchor the provision of k-ecotourism, especially in supply and demand as well as in planning, development and management of the sites. Hence, in providing specific destination, the orientation of knowledge in each site is seen as a must. Through, site

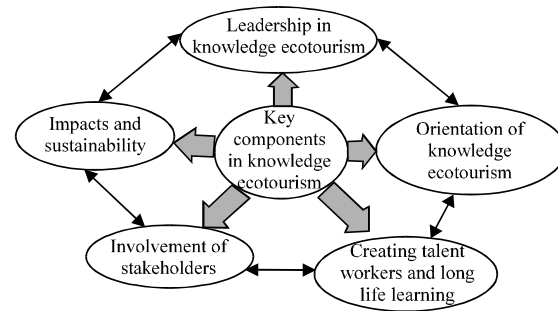


Fig. 1: Key elements in k-ecotourism

specific knowledge, vacation will therefore be experienced, gaze and appreciated in a special knowledge on such destination.

Involvement of community/stakeholders: The practice of ecotourism emphasizes on the needs to provide social, financial benefits and empowerment of the local community (Honey, 2008). Similarly, k-ecotourism practice also requires the involvement of higher learning as one of the stakeholders especially in assisting the process of knowledge transfer between the host and the guest. The involvement of stakeholders in k-ecotourism nevertheless stress on responsible business, economic benefit for the host country, local business and local communities and development not exceeding the social and environmental limits of acceptable change.

Provide lifelong learning for talent community: As a Research University, its community comprises the academia, managerial and support staffs. With various working specialization and responsibilities, the offering of k-ecotourism helps to train the support staffs with special skills related to hospitality and tourism. With a wide access to knowledge, continuous involvement of higher learning could contribute to the creation of multi-tasking, talent workers and lifelong learning among the stakeholders.

Impacts and sustainability: k-ecotourism destinations are characterized as protected and relatively undisturbed areas where natural beauties and biodiversity being the main attraction, human alteration and modern intervention are minimal and conservation is greatly emphasized. As a hub for knowledge, experts and scholars, the k-ecotourism site must also emphasizes on the needs to conservation, management and education of natural and protected areas. With the above principles of k-ecotourism, the roles of higher learning, the Universiti Kebangsaan Malaysia in particular will be enhanced. At this juncture, the findings of the study will help all the stakeholders involved to determine key success factors in k-ecotourism destination.

Table 1: Orientation of k-ecotourism sites

UKM research station	Eco-orientation	Unique contribution
Langkawi geopark, Kedah (Involve with global geopark network)	Island-based	The first geopark in Malaysia and South East Asia Diverse nature heritage including pristine rainforest, mangrove and limestone forest, karst formation and world-best marble Unique geological heritage such as 550 million years old rock unit and 1 billion years old dropstone Rare and unique flora and fauna found nowhere else and enrich with cultural heritage, myth and legends World-class tourists' facilities and events Research station as living lab offering various educational tour packages
Tasik Chini Research Centre, Pahang (Involve with MAB-UNESCO biosphere reserve network)	Fresh water lake-based and biosphere reserve	First UNESCO designated biosphere reserve in Malaysia Diverse nature heritage including unique aquatic flora and fauna and enrich with cultural heritage, myth and folklore of aboriginal Jakun tribe Pristine rainforest offering close encounter with wildlife Homestay program offering local life style experience Research station as living lab offering educational tours and research opportunities
Bukit Fraser, Pahang	Highland-based	Highland area with montane ecosystem and relatively low temperature all year round Colonia-style landscape and surrounded with pristine tropical rainforest Enrich with rare and endemic flora and fauna including orchid Research station as living lab offering various educational tour packages
Lata Jarum, Pahang	Freshwater-based	Pristine rainforest with unique flora and fauna including Rafflesia, world-biggest flower Homestay program offering country life style experience Small scale industries producing traditional food and crafts Research station as living lab offering various educational tour packages in addition to research opportunities
Mersing, Johor	Marine-based	Offer close encounter with diverse coastal and marine flora and fauna including dugong and sea cows Home to endangered <i>Sumatran rhinoceros</i> Gateway to premium diving site in Peninsular Malaysia Research station as living lab offering various educational tour packages in addition to research opportunities
UKM Bangi main campus, Selangor	A living laboratory	Central hub for the social integration between the locals and international communities Provide cultural and social education via cultural and thematic events as well as galleries and museums Offering MICE destination Main campus as living lab offering chances to experience the nature, history and culture of Malaysia Home to Fernarium garden, the world third biggest fern garden Lowland secondary forest houses unique, rare and diverse species of flora and fauna

Researcher's Fieldwork, 2011

MATERIALS AND METHODS

This study was undertaken in universiti Kebangsaan Malaysia (UKM) and its research stations located nationwide. Established in 1970, the University was ranked in the 265th place >500 world universities by QS world university ranking in 2010.

Awarded its research university status in 2007, an innovative way taken to ensure the application of the research was to establish university-owned research stations. Based on the descriptive of the research station and their functions as shown in Table 1, the university is seen to act not only in academic wise but also to leverage and transfer the knowledge explored to the local and international community.

Data collection: This study utilized secondary and primary sources of data which was done in two stages. The 1st stage employed the use of secondary data to assist in understanding the concept of k-ecotourism and

involvement of higher learning in the industry. The 2nd stage involved data gathered from the field trips, meeting of k-ecotourism committee and discussions with the experts of the research stations.

The study area was all 6 university-owned research stations: Langkawi Geopark, Bukit Fraser, Lata Jarum, Tasik Chini Research Centre, Mersing and UKM Bangi main campus.

RESULTS AND DISCUSSION

This study delineates the key success factors of the higher learning in k-ecotourism, especially in the leadership role, site's orientation, development of content and module training for knowledge tour guide, mediator between the host and guest as well as in the conservation of the natural area and in assisting the development of socio-economy of the local community at and around the stations.

Leadership in k-ecotourism: Being awarded with the status of Research University in 2007, UKM's roles in delivering and championing in research innovations and transfer of knowledge are widely recognized. As of 2011, this university has established eight niches of research areas and the overall achievement of these research stations as shown in Table 1 has significantly shown that UKM leadership in research is manifested for both national and international interest, especially in supporting research activities and knowledge transfer to the community and industry as evidenced by Langkawi Geopark and Tasik Chini biosphere reserve.

One important point of the leadership functions in knowledge is the commitment of every knowledge providers as evidenced by the launching of k-ecotourism in October, 2010 by the UKM top management and this initiative was supported by the Ministry of Tourism. Through the establishment of k-ecotour Sdn., Bhd, a business entity responsible in managing k-ecotourism all research stations were encouraged to recognize and formulate k-ecotourism more effectively. As of 2011, several research stations have been equipped with buildings comprising research facilities, managerial office and accommodations. In fact, the freshwater laboratories in Tasik Chini Research Center had received a developmental grant to accelerate the development of these laboratories.

Essentially, university's leadership realizes that as a living cultural laboratory, it can offer existing events as tourism products. Indeed think tourism' was materialized through the campus lifestyles and thematic events of the higher learning institution. Hence, the university is clearly being blessed with leadership in knowledge that envisions k-ecotourism as one of its brand, be it at the commitment in research, product development or knowledge transfer.

Orientation and provision of k-ecotourism site: Knowledge is anticipated to be the central element in the provision of the k-ecotourism in terms of supply, demand or management of the sites. This study showed that higher learning played roles in providing diverse orientation of k-ecotourism site as shown in Table 1. With diverse orientation of k-ecotourism site offered by the research stations, the k-ecotourists will be having various choices in opting for their k-ecotourism destination and the opportunity to learn about the various studies that have been conducted by the scholars in regards of the ecosystem and the local community. Hence, this would allow the k-ecotourists to gain multifaceted knowledge in the biodiversity of the k-ecosites as well as the heritage, culture and tradition of the local community.

As k-ecotourism strives for the knowledge-added value in activities conducted, knowledge tour guides are needed to serve as the cultural broker for interactive and experienced tour. However, in allowing the knowledge transfer, the guides must possess deep understanding in diverse fields including knowledge of the local biodiversity, heritage, community, language and culture of the area. Thus, considering their knowledge and expertise in the fields mentioned are paramount, UKM is grabbing the opportunity to offer the knowledge through the process of building a k-ecotourism module and generating her own knowledge tour guides. The module also portrays the uniqueness and specialty of each station thus, establishing the role of this university as the pioneer in k-ecotourism sector. One key determinant of the university in k-ecotourism success is availability of the k-ecotourist as the new generation tourist for the country. It is also in tandem with the country's aims to attract high-end tourists. Moreover, with an anticipated increase of international students in campus and in the country to approximately 200,000 students by 2020, k-ecotourist will become one of the active contributors in tourism spending. The tendency of them bringing families, friends and relative are vast, making the marketing of k-ecotourism more focused and feasible as shown in Table 2.

Stakeholders' involvement and mediator between host and guest: In addition to promoting the understanding, appreciation and conservation of the environment and biodiversity, this study found that k-ecotourism also seeks to raise awareness and producing a feeling of appreciation and respect for the local cultures and host community. As a central hub for knowledge and human talent, higher learning in k-ecotourism sector is seen to function as a mediator, allowing for an efficient knowledge transfer between the host and the guests.

Based on the existing research stations, this university acts as the mediators between host and guest which comprised several entities that contribute to the knowledge based interactive activities and experiences as shown in Table 3. Taking a look at the mechanism of mediating host-guest relationship from Tasik Chini Research Centre, the study found that creating opportunity and thrust between both university and local community is very important. Being aboriginals who lack of knowledge and education, the locals were trained and engaged in business of herbal medicinal and cottage industry in souvenirs' production. Added to that the research expeditions and students' fieldworks permit the communities to be in contact with their guests. Therefore with deep understanding of the local community, the

Table 2: Potentials of knowledge tourist

Potential market identified	Market characteristics
Undergraduate and graduate students	Involve both local and international students who seek for adventure and knowledge-added value in tour Can work as part-time professional tour guides once completing the tour guide training module Apply the knowledge gained in the classroom into real-life activity Share the knowledge with tourists and local community
Mobility student, inbound international students	Involve both local and international group International group as the ambassador of their home country by sharing their knowledge and culture with the local community Promoting Malaysia as tourism destination through their writing and reports submitted at the end of the mobility program Appreciating local culture and heritage through close engagement with the locals
Researchers	Local and international researchers Contribute to the conservation of the eco-site by enhancing the understanding of the area through research and studies Assist in the development of local economy through guidance, support and knowledge transfer
MICE tourist	Destination for meetings, incentives, conventions and exhibitions Size of the convention, facilities required, competitive pricing, natural attractions, safety and opportunities to shop are some of the factors for a MICE destination
Expatriates and high culture tourist	Involve both local and international high-end k-ecotourists Generally educated and demand learning process while vacationing Willing to spend extra money in exchange to knowledge and experiences of the local heritage More aware of their travelling impact upon the environment and more conscious of the conservation efforts Generally, choose professional guiding services and legitimate tour agencies particularly for safety reason

Table 3: Host and guest of UKM k-ecotourism

Categories	Entities	Contribution
Host	Local community	Transfer and share knowledge with the guests
	Aboriginal people (i.e., Jakun tribe of Tasik Chini)	Ensuring sustainability of the nature and cultural heritage through conservation effort
	Local authority	Identifying and meeting the tourists' demand
	Staff at the university-owned research station	Educate the guests on responsible travel behavior
	Tourism service provider of the research station	Supporting and guiding local community in tourism-related business such as craft business and catering Encourage participation of the locals through tour activities Establishing a start-up company in charge of the tour guides training and package offered as well as providing job opportunity to the community
Guest	SAVE tourist	Students and university staffs working as part-time professional tour guides, sharing their knowledge while earning extra money
	MICE tourist	Contributing to the sustainability of nature and cultural heritage through participation in conservation effort
	Ecotourist	Minimize negative impacts to the environment by leaving minimal ecological footprint
	Cultural tourist	Allow for the transfer of knowledge, especially when involving foreign culture
	Nature tourist	Increase the understanding of the area through research
	Local and international researchers, academicians and students	Assist in the development of the local economy by purchasing local crafts and other products

higher learning helps to create an equal respect and established positive relationship between host communities as well as promote appreciation of the local culture and heritage among the guests.

Creating multi-tasking talent and long life learning: As a place of social integration among citizenries and with a wide access to knowledge and expertise, higher learning contributes in the creation of multi-tasking talent workers among the campus communities. As evidenced through the knowledge-based programs conducted by the Tasik Chini Research Station such as Kembara Program, Man and Biosphere Reserve UNESCO public consultation and International Lake Ecosystem Committee (ILEC) seminar, the experts/researchers, support staffs and graduate

students on-site had an opportunity to become a multi-tasking talent worker and utilize their knowledge in handling international standard event, high-level of brainstorming program and high culture tourists (Fig. 2). Therefore, with the resources and experts available in the university and considering that some workers or students might already well-versed in the heritage of an eco-destination but lacking in the skills of tourist guiding, it is possible to educate staffs and students to work as a part-time but professional tourist guide.

Therefore, given an adequate training, those individuals would definitely make an efficient knowledge tourist guides who are capable of transferring their knowledge to the k-ecotourist as well as understanding and fulfilling their demands.

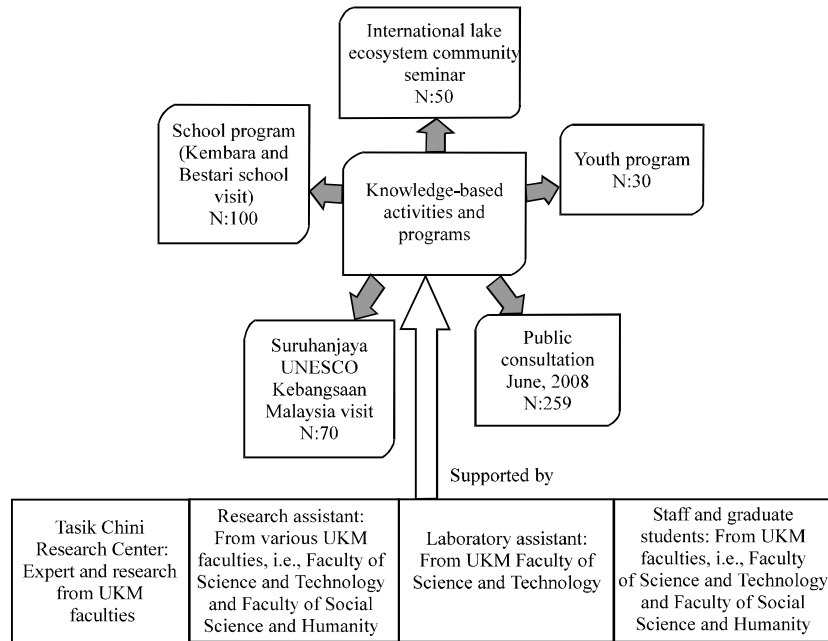


Fig. 2: Knowledge-based programs conducted in Tasik Chini biosphere reserve, Pusat Penyelidikan Tasik Chini, 2011

Provide self-sustain economy: Though still in its infancy, k-ecotourism site as learning tourism destination also provides opportunity for a self-sustain economy, especially to the university, research station and the local community residing around the research stations. By exploiting the existing resources, talent workers, amenities and infrastructures, it can avoid from having to pay for the 3rd party for example, an independent tourist guide. As of recent initiatives is the establishment of the start-up company, taking care in managing the k-ecotourism business. In maximizing the economic benefit to the local communities, programs held in the research stations that utilized the local services such as catering, cultural performance groups and rural handicrafts, help to improve their well-being by promoting the involvement of the local community.

Among the ways to do this are by encouraging and giving proper guidance for them to venture into tourism-related business as it will definitely help in the development of the socio-economy of the local community as the stakeholders of the area. As the real site's experts their knowledge and expertise can be utilized by training the host community to cater independent tourists as well as university-inbound tourists.

CONCLUSION

This study affirms the key success factor in positioning the higher learning as tourism destination.

Being an ecosystem of knowledge, university itself is an attraction for various segments of knowledge ecotourist, supported strongly with its internal factors and external factors of knowledge, facilities and human capital. Though, the changing paradigm of the higher learning in knowledge economy can become the major drivers for the realization of k-ecotourism, the internal factors leading by the commitment of the leadership of the university followed by its physical facilities, human capital innovation and the knowledge are the indeed the key drivers that determine the success of the university initiatives in offering k-ecotourism.

However, this study bears some limitations in terms of existing mindset of the university community and economic evaluation of this initiative. To date most of the members of the university community have not observed to think tourism in organizing events and activities as promotions are seen very lacking in few areas, especially in providing details of the event or activities on the website. The opening of the university facilities to the public on the other hand will also raise the issues of priority of its core business in providing knowledge. Based on this study, more efforts should be done in needs for improvement and innovation in product development and management to ensure its sustainable growth.

With the continuous increment in the number of ecotourists who are seeking for quality experiences and knowledge-added values, the tourism providers should

not overlook the increasing demands for k-ecotourism. As the repository to knowledge and expertise, higher learning should grab this opportunity to be one of the frontiers in k-ecotourism sector. Taking UKM as an example, all the widely available nature, cultural and biodiversity resources could work as potential products for k-ecotourism when the university opens the door to its research station to the public community.

As k-ecotourism is considered a niche tourism yet untapped by most of the developing countries including Malaysia, further discussion on establishing its principles and the typology of k-ecotourists may help its further development. As for now the conduct and practice of k-ecotourism is based on the principles of ecotourism due to the huge similarities between them. However in encouraging worldwide participation, it is important for k-ecotourism to be able to stand on its feet using its own principles of conduct and this requires more studies by the higher learning and discussions among the tourism scholars. Efforts must also be done in changing the mindset of its community to think tourism in ensuring the sustainable growth of k-ecotourism.

Therefore, the role of higher learning in k-ecotourism is not restricted only to conducting studies for the purpose of understanding the biodiversity, cultural heritage and host community but must also play roles in providing the platform for knowledge transfer, providing guidance in creating self-sustain economy, providing continuous job and learning opportunity for the local and university community as well as serve as a mediator in creating positive relationship that can benefit both host and guests.

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