USING A KNOWLEDGE MANAGEMENT MODEL AS A FRAMEWORK FOR ADVANCEMENT OF SMALL-SCALE ECOTOURISM ENTREPRENEURSHIP IN JAMAICA

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Abstract

The Caribbean island of Jamaica relies heavily upon tourism to support its economy. Despite the influx of significant tourism revenue, large numbers of Jamaica's indigenous people still face substantial economic hardships. This paper examines the potential for Jamaica to expand small-scale ecotourism entrepreneurship in order to improve the economic situation of larger numbers of its people. This analysis is conducted within a knowledge management framework, with particular emphasis placed upon the involvement of a wide array of stakeholders. The overall premise is that successful small-scale ecotourism entrepreneurship will rely on Jamaica's effective use of both its natural surroundings and its knowledge base as key assets.

Key words: *ecotourism, entrepreneurship, Jamaica, knowledge management.*

JEL classification: *L83, Q01, Q26, J24*

1. INTRODUCTION

Tourism plays a major role in the world economy today and for many countries, it proves to be a key source of employment and revenue (www.unwto.org, 2010). This is indeed true in the Island nation of Jamaica, a popular tourist destination located in the Caribbean. Despite the recent global economic downturn, the country experienced an impressive 3.6% increase in tourist arrivals last year over 2008, with nearly 1.8 million stopover visitors. In addition, preliminary figures for tourist arrivals to Jamaica for January 2010 put it on course to be the most successful January ever (www.eturbonews.com 2010).

To ensure continued success, Jamaica must capitalize on its momentum and employ sound strategies to remain competitive in the ever-evolving tourism industry. A sensible approach is for the country to grow emerging tourism segments. One such segment is ecotourism. Ecotourism, also known as green travel, responsible tourism, and soft tourism is becoming increasingly popular and is driven in part by groups' and individuals' concern for the negative impacts on natural resources and indigenous peoples created by "traditional", mass tourism (Parks, et al 2009). Many different conceptualization of ecotourism exist. However, the general agreement is that "ecotourism's primary appeal as a conservation and development tool is that it can, in theory, provide local economic benefits while also maintaining ecological integrity through low-impact, non-consumptive use of local resources" (Stem et al, 2003; Candrea and Stanciu, 2008). According to Parks, et al (2009), when properly implemented and controlled, ecotourism can lead to several positive outcomes, including: conservation of natural resources, economic empowerment for local people, and socially - and environmentally-conscious development (Kusler, 1990; Boo, 1990).

If Jamaica is to position itself to take full advantage of the projected growth of the ecotourism sector, it must capitalize on its existing assets while it develops and expands others. When one thinks of ecotourism, the most relevant asset that comes to mind is Jamaica's beautiful natural environment. While the availability of pleasing natural surroundings is vital to the success of any ecotourism endeavor; recent research suggests that *knowledge* is one of the most valuable assets in creating competitive advantage. According to Metaxiotis and Ergazakis (2008), this is not only true for business enterprises; the effective management of knowledge also has applications in other realms, including governments.

Given the Jamaican government's desire to grow its tourism sector, it is important that it incorporates the effective management of knowledge as a key asset in doing so. The foundation of knowledge management is developing strategies to disseminate the appropriate knowledge to the appropriate people at the appropriate time and in the appropriate format (Wiig, 1997; Ergazakis et al, 2005). The premise of this paper is that the success of small-scale ecotourism entrepreneurship development in Jamaica relies, at least in part upon the effective solicitation, collection, dissemination, management and application of various types of knowledge held by a variety of stakeholders, and that the Jamaican government plays a pivotal role in initiating and coordinating this process.

2. PURPOSE AND SIGNIFICANCE OF THE STUDY

The purpose of this study is to propose a knowledge management framework for advancing small-scale ecotourism entrepreneurship in Jamaica. As discussed in the literature review; a key component of the framework is participation of the appropriate stakeholders or knowledge agents. Therefore, this paper seeks to answer three important questions about the role of knowledge agents in advancing small ecotourism ventures in Jamaica:

- *Who* are the relevant stakeholders or knowledge agents?
- *What* forms of knowledge are required of these stakeholders? and
- *How* can knowledge agents become involved in the process of knowledge creation, dissemination and use?

The topic of this study is important for a number of reasons. As previously noted, tourism represents a major source of revenue and employment in Jamaica. The continued importance of this sector in the overall economy of Jamaica is evidenced by a 97-page report addressing strategies for tourism growth. This report is contained within the country's National Development Plan called Vision 2030 Jamaica, a 25-year plan which was created to help Jamaica reach developed status by the year 2030. In 2008, the Jamaican tourism sector posted $1.98 billion US in economic activity (www.vision2030.gov.jm, 2010), however the vast majority of the indigenous people are not reaping the benefits. In fact, widespread poverty still prevails, with Jamaica's annual per capita gross national income at $3,710 US in 2007 (www.unicef.org 2010). Clearly, an approach to tourism growth that could help create entrepreneurial opportunities for greater numbers of people is important in addressing the populations' economic challenges as it pursues developed nation status.

The topic is relevant as world-wide concern about the preservation of natural resources and wildlife is on the rise and people seek to engage in more environmentally friendly behaviors, including tourism. In fact, ecotourism, which falls under the broad category of nature-based tourism, has been noted as the single fastest growing segment of travel today (Parks, et al 2009). Tourist destinations such as Jamaica that host large numbers of visitors are particularly vulnerable to degradation of their water, land, coral reefs, wildlife, etc. and must seek ways to strike the optimal balance between capitalizing on its natural beauty with environmental sustainability. This paper examines how a knowledge management approach, with comprehensive stakeholder involvement might prove to be useful in pursuing this objective.

Finally, researchers, practitioners and international organizations such as the United Nations and the World Bank acknowledge the value of knowledge-based development with comprehensive stakeholder involvement (Ergazakis, et al, 2004). However, this approach to advancing the ecotourism segment in Jamaica has not been examined in the literature. In instances where stakeholder involvement in the tourism sector in Jamaica is discussed, it tends to be limited and does not fully explore who these stakeholders are, what role they will play, or how to systematically obtain the required knowledge from them. Most importantly, what has been written does not fully examine how the knowledge obtained will lead to empowerment of Jamaica's indigenous people through tourism entrepreneurship. This paper seeks to address these gaps in the literature.

3. LITERATURE OVERVIEW

3.1. Jamaica and Ecotourism

According to statistics quoted in the International Ecotourism Society's Ecotourism factsheet, since the 1990s, experiential tourism – which includes ecotourism, has been growing at 20-34% per year and is among the sectors expected to experience the most growth over the next two decades (International Ecotourism Society, www.academic.mintel.com/edu, 2005). Destinations that have the most desirable natural surroundings and opportunities for tourists to participate in nature-based activities such as hiking, rafting, and bird watching will be better positioned to take advantage of this anticipated trend than their competitors. According to Jamaica's National Development plan, the island has several competitive strengths within the ecotourism sector. These include the existence of protected area systems such as the John Crow Mountain National Park, sites such as the Blue Mountain Peaks, and areas of biodiversity such as Cockpit Country. In addition, Jamaica boasts nearly endless options for enjoying beautiful landscapes, seascapes, and bird and wildlife viewing. Finally, Jamaica's rivers and waterfalls have proven to be a popular tourist draw.

3.2. The Knowledge City Model as a Broad Framework for Small Ecotourism Ventures

According to the tourism sector plan of Vision 2030, the Jamaican government faces two challenges that are relevant to this study – developing a method to strengthen stakeholder involvement for the purpose of stimulating more equitable disbursement of tourism benefits, and effectively generating, disseminating, and managing knowledge. The latter includes inadequacies in the areas of management training, application of existing research, awareness of the need for ecological sustainability, and use of NGOs as

sources of information (www.vision2030.gov.jm). One might also argue that inadequate training of (future) entrepreneurs, benchmarking and collaboration/knowledge sharing within and across sectors could be added to Jamaica's knowledge-related deficiencies.

The preceding highlights the notion that within the realm of small-scale ecotourism development, Jamaica must address the questions of who should participate in the knowledge generation process, what knowledge should be created, and how can the knowledge management process be effectively implemented? The following section presents the Knowledge City model as advanced by Ergazakis, et al (2004) as a framework for addressing these questions. According to Ergazakis, et al (2004), Knowledge Cities are "cities in which both the private and the public sectors value knowledge, nurture knowledge, spend money on supporting knowledge dissemination and discovery and harness knowledge to create products and services that add value and create wealth" (Metaxiotis and Ergazakis, 2008, p.137). It should be noted here that this paper does not propose that the Jamaican government necessarily strive to formally develop Knowledge Cities; rather it asserts that many aspects of the knowledge city model could prove to be beneficial in helping Jamaica achieve one of its developmental goals, namely

expanding the tourism sector in a manner that is both sustainable and equitable. While the Knowledge City model is simply being used as a theoretical framework here, Ergazakis, et al (2006) identified a number of successful Knowledge Cities in practice, including Barcelona, Munich, Stockholm, and Montréal to name a few.

The following explores opportunities for Jamaica to capitalize on various elements of the Knowledge City model and in doing so, it also addresses the question of who should participate as stakeholders or knowledge agents (KAs) and what they will contribute (see Figure 1 and Annex 1). The relevant stakeholders were identified using both theory and practice. For example, academic research conducted by Sautter and Leisen (1999) and Simpson (2008) identified some relevant stakeholders (persons or groups impacted by tourism services) as: local businesses, residents, tourists, government agencies, employees, national business chains, and competitors. A number of these stakeholders were included in the current study. This paper also refers to Jamaica's tourism sector plan of Vision 2030 and a search of the Internet for additional guidance in identifying stakeholders. The latter was particularly applicable in the attempt to identify specific organizations and their potential role in the process.
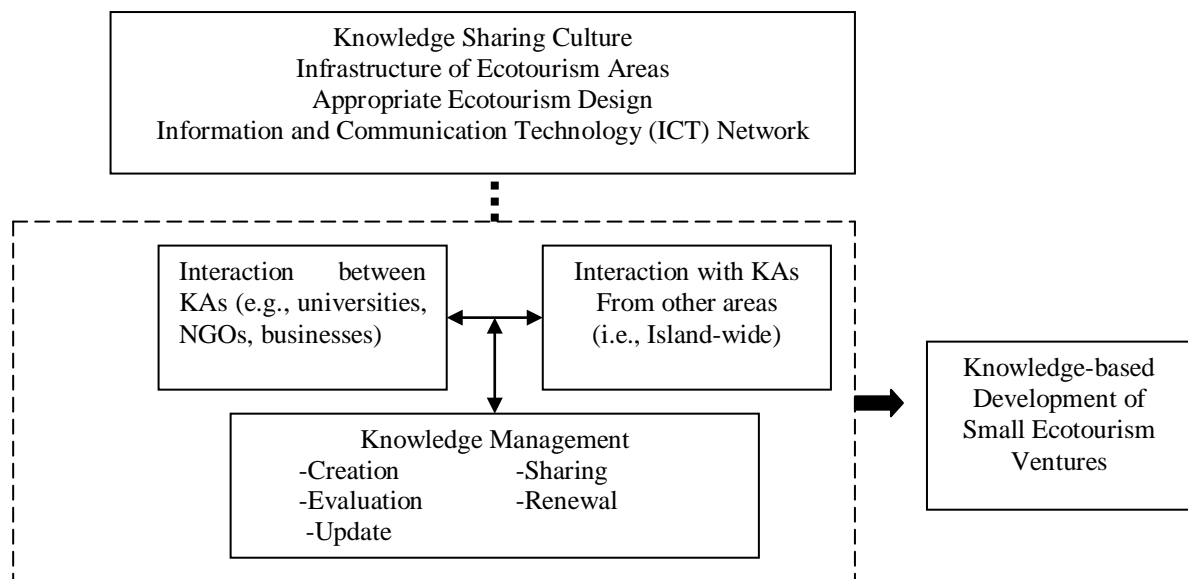
Figure 1 – The Knowledge City Concept *(Slightly adapted from Metaxiotis and Ergazakis, 2008)*

Knowledge sharing culture: The success of any business enterprise or other entity is dependent, at least in part on the sharing of a common culture. That is, a pattern of shared beliefs, behaviors, and interactions. If the Jamaican government is to take advantage of effective knowledge management, it must foster a knowledge sharing culture. While

knowledge sharing is often facilitated by the use of technology, some would argue that this is not the necessarily the most important factor. The development and maintenance of respect, reciprocity, sound relationships between individuals and groups and trust will likely prove to be vital in advancing a knowledge sharing culture in Jamaica. Some would

argue that developing trust represents the starting point in this process. A sensible approach in garnering trust that leads to knowledge sharing is for the Jamaican government to provide assurance to the people by conveying the rewards of knowledge sharing, explaining why their participation is valuable, and continually soliciting their feedback.

Infrastructure and Design of Ecotourism areas: Ecotourism design and infrastructure are particularly important, as growing the ecotourism segment means bringing more people to the Island. This has the potential to cause additional strain on the existing infrastructure and natural resources. The relevant stakeholders must assess the adequacy of existing ecotourism accommodations, as well as plan for the acquisition of sustainable materials, design, and building of additional lodging to suit the needs of its current and future customer base. In addition, maintenance of existing natural sites such as Duns River Falls and Coyaba Gardens and the development of new attractions are vital in drawing the eco-tourist to Jamaica.

While not perfect, Jamaica's infrastructure is substantial in many ways. This includes two major airports and the relatively recent completion of a major highway which stretches across most of the highly populated/visited areas of the island. In addition, Jamaica's government has recognized the need to rehabilitate water drainage and other infrastructures and will invest US$18 million to do so during the current fiscal year (www.bnamericas.com, 2010). Jamaica still faces challenges in terms of power, with sporadic electrical outages and over 95% of its power being generated by imported fuel oil, as it possess no natural fuel reserves (www.nationsencyclopedia.com, 2010). The latter could prove to be troubling to the environmentally-conscious traveler who is concerned about the island's overall carbon footprint. This type of tourist might seek travel experiences in destinations known for more widespread use of alternative, sustainable forms of energy. Clearly, this issue should be addressed.

Information Communication Technology (ICT) Networks: Now, more than ever, the sharing of knowledge and information is achieved via some type of ICT. This includes any product that allows the user(s) to collect, maintain, retrieve, manipulate, transmit and/or receive information electronically in a digital format (www.tutor2u.net, 2010). According to the Ministry of Education's web site, the Jamaican government acknowledges the vital role of technology in empowering citizens and other stakeholders to collaborate, access knowledge agents wherever they might be, engage in research, analyze data, and solve problems (www.moec.gov.jm/policies/ict.shtml). This provides a sound foundation for effective knowledge management.

Knowledge Management systems, which utilize technology, rely on systems that allow efficient categorization and dissemination of knowledge. The key is to implement the most efficient and effective way to allow stakeholders to collaborate and share the knowledge. One such method to promote internal knowledge sharing within the relevant ministries of the Jamaican government would be the use of an Intranet. Among other things, viable uses for an Intranet would be to reduce redundancies across ministries, share best practices in ecotourism development, provide progress updates, and solicit cross-functional input. The use of ICT networks is also important in knowledge sharing between the Jamaican government and other knowledge agents. The Jamaican government has included a discussion board on its 2030 Vision Development Plan web site, but it must also continually develop and implement the most effective ways to utilize additional technologies such as blogs, e-mail, video-sharing web sites, podcasts and wikis to facilitate knowledge management as it pursues its tourism sector goals.

Interaction between knowledge agents Island-wide: This aspect of the framework is fundamental, as knowledge only becomes useful when it is shared among the appropriate stakeholders. Annex 1 contains a (non-exhaustive) list of stakeholders or knowledge agents and the potential contributions they can make to small ecotourism ventures in Jamaica. Previous research suggests that local community members' participation in matters related to tourism is essential (e.g., Keogh 1990; Simmons 1994). These stakeholders are of particular importance, as they possess first-hand knowledge about the very communities which currently support ecotourism and will do so in the future. Further, bridging the gap between what occurs within the walls of universities (e.g., research) and how that knowledge is best applied in practice is a significant challenge. However, it is one that must be overcome through increased interaction and sincere desire on the part of all to ensure that meaningful collaboration and the desired outcomes are achieved. Finally, knowledge agents who collaborate on specific projects, as well as existing ecotourism entrepreneurs should freely interact and share knowledge of best practices with others on a nation-wide basis.

Knowledge Management

Creation: An essential aspect of knowledge management is generating the *right* knowledge. This requires identifying the appropriate knowledge agents and ensuring these knowledge agents generate the appropriate knowledge required to address specific issues/problems and to allow certain strategies to be pursued. The Jamaican government should assume a coordinating role in this effort and encourage knowledge agents to engage in "out-of-the-box" thinking if the nation is to establish competitive advantage in an emerging and potentially lucrative tourism sector.

Sharing: A key consideration in knowledge sharing is not only among whom the knowledge will

be shared, but also how the knowledge will be shared. As previously noted, the use of ICT networks can readily facilitate knowledge sharing. However, with national figures for Internet use at approximately 54% of the population in 2008 (www.internetworldstats.com, 2010), not all relevant stakeholders have access to technological tools that assist in knowledge sharing. Therefore, a concerted effort must be made to implement alternative ways to reach stakeholders. This includes not only mass meetings in central locations; it might also require traveling to remote locations to allow stakeholders to become involved (e.g., reaching the Maroon population, which primarily resides in mountainous regions of the Island).

Evaluation: An important aspect of engaging in knowledge management involves ascertaining whether the knowledge that has been created and shared will be beneficial in addressing a problem, accomplishing a project or achieving predetermined goals. There is always a risk that some knowledge generated is flawed. Typically, some sound ideas will emerge from participating stakeholders; while other ideas will have to be "discarded" after their viability has been evaluated. Key stakeholders should work together to establish an assessment process, with preset criteria for evaluating the knowledge created.

Renewal and update: After the knowledge creation, sharing, and evaluation process, the resulting knowledge is put to use. In this case, the knowledge generated on the part of various stakeholders would be used to facilitate the expansion of small-scale ecotourism entrepreneurship in Jamaica. Ultimately, the appropriate parties should evaluate the outcomes of the process. At this point, stakeholders would examine whether or not the knowledge generated was indeed helpful in achieving the objectives. It is also important to inform stakeholders how their knowledge impacted outcomes, determine what did or did not work in the process, and establish what new types of knowledge will be need to be created in the future.

4. CONCLUSIONS

Tourism has proven to be an integral part of the Jamaican economy over the years – a trend that is expected to continue into the future. As a result of Jamaica's dependence on tourism, substantial emphasis has been placed on training the indigenous people for employment in tourism and related sectors (e.g., hotel housekeepers, waiters, and cooks). While this approach appears to be reasonable, it must be emphasized that the majority of jobs in the travel and tourism industry tend to be very low-paying, which furthers the cycle of poverty.

One approach to addressing the issue of poverty in Jamaica is to promote entrepreneurship. Entrepreneurship plays a key role in driving and

supporting innovation and change as well as economic development (Lordkipanidze, et al 2005) and Jamaica could benefit from each. Tourism entrepreneurship not only presents an opportunity for greater numbers of Jamaicans to improve their standard of living, it is a natural fit with emerging trends in travel. Greater numbers of travels are looking for innovative experiences – intimate ones that differ from the typical vacation within the confines of large resorts (Tip, 2009). There is a growing segment of travelers who look for more meaningful experiences that allow them to interact with nature and that promote environmental sustainability. If properly approached, the small-scale ecotourism entrepreneur in Jamaica would be perfectly suited to meet the needs of this segment.

Effectively orchestrating a transition to a society that promotes and supports small-scale ecotourism is not a simple task. This paper placed this concept within a framework to illustrate that furthering small-scale ecotourism entrepreneurship in Jamaica would likely depend on the successful use of two broad types of assets – the attractiveness of its natural environment and its knowledge base. The Jamaican government has acknowledge the value of each in its 2030 Vision Jamaica Development Plan, however much is left to be discovered about *how* Jamaica will capitalize on these assets over the next two decades or so. The paper's discussion of stakeholder involvement and knowledge management, along with the integration of ICT networks and infrastructure/design for ecotourism provides some insight into how this might be undertaken.

Finally, this paper placed considerable emphasis on the business aspect of promoting ecotourism entrepreneurship. However, ecotourism by its very definition is rooted in the concept of conservation. It is also important to note that the benefits realized from expanding ecotourism in a particular area should not come at the expense of other communities such as creating additional road congestion, crowding, or unintended shortages of resources (Djurasevic and Nedelea 2007). Responsible expansion of ecotourism ventures in Jamaica will not only provide an additional environmentally-friendly offering for travelers, it reasons that resident entrepreneurs and the wider community will also engage in more sustainable practices because beautiful, well-preserved, and maintained natural resources become the foundation of their economic well-being. Now more than ever, conservation and management of our natural resources is of world-wide importance. This is evidenced, at least in part by the fact that the United Nations has developed a global plan of action for achieving specific environmental goals in Agenda 21 (www.un.org, 2010). Clearly, any endeavor, large or small that truly supports environmental sustainability is meaningful.

Annex 1 – Knowledge Agents and Relevant Types of Knowledge

Stakeholders/Knowledge Agents	Potential Contributions to Ecotourism Entrepreneurship
Jamaican Government • Cabinet Office • Various Ministries • Tourism Product Development Corp. • Parish councils (local government)	• Establish policy and oversee development, implementation, and control of programs to promote sustainable development (including ecotourism) • Ultimately responsible for ensuring effective stakeholder involvement at all levels to support Jamaica's 2030 Tourism Sector Plan
Local Community • Individual citizens & informal community groups • Students • Diaspora community (Jamaicans now residing in Europe, Canada, US, etc.)	• Generate ideas about how to maximize ecotourism opportunities and improve their own communities • Utilize intimate knowledge of their home communities to become small-scale ecotourism entrepreneurs • Ownership, and financial investment on the part of expatriates in ecotourism ventures
Educational Institutions, Academics & Professionals • University of the West Indies • University of Technology • HEART Institute • Team Jamaica • Community Colleges • Researchers, academicians & consultants • Scientists • Natural resource managers	• Research pertaining to the industry, target markets, marketing approaches • Business counseling • Educate and train (future) entrepreneurs in the areas of: hospitality management, customer service, culinary arts, marketing, financial management, supply chain management, conservation and recycling, etc. • Study environmental impacts, develop and help implement ways to best use & conserve natural resources
NGOs • Green Jamaica • Environmental Foundation of Jamaica • Jamaica Business Development Corp. • Sustainable Communities Foundation • Countrystyle Institute for Sustainable Tourism • Certification Agencies (e.g., Green Globe)	• Engage in advocacy, educate citizens on conservation • Provide funding to NGOs and partner with stakeholders • Promote the concept of sustainable community tourism • Market ecotourism operations • Certify accommodations and attractions as sustainable
Business Enterprises • Existing small ecotourism enterprises • Large tourism operators • Construction companies • Suppliers to tourism industry • Media professionals • Related services (e.g., airlines, restaurants)	• Ecotourism best practices • Partnering opportunities (e.g., day trips to ecotourism sites from large hotels) • Build eco-friendly accommodations and/or modify existing facilities • Best marketing approaches • Collaborative marketing opportunities
International Development Community • United Nations World Tourism Organization • United States Agency for International Development (USAID)	• Services to improve competitiveness of member states, seminars and workshops • Promote sustainable tourism tied to development through various projects • Collect and disseminate vital statistics & trends
Lending Institutions • The Development Bank of Jamaica – has relationships with commercial banks, merchant banks and other financial institutions	• Finance ecotourism projects and related support services
Tourists and potential tourists	• Information on their tastes and preferences • Opinions on key success indicators such as satisfaction with travel, repeat patronage, etc.

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