Date : **22nd November 2011**
Venue : **University Conference Hall, USM Penang**

PROCEEDINGS

2nd REGIONAL CONFERENCE ON TOURISM RESEARCH (RCTR 2011)

"Venturing Into New Tourism Research"

USM UNIVERSITI SAINS MALAYSIA

STRC

SocTrans

Research in Ecotourism Success: Unraveling the Complexity

Awangku Hassanal Bahar Pengiran Bagul[1] and Liu Hao[2]
[1] School of Business and Economics, Universiti Malaysia Sabah, Sabah, MALAYSIA
[2] School of Management, Universiti Sains Malaysia, Penang, MALAYSIA

Studies on ecotourism and its local community participation were a long discussed research topics and many academics agreed that there are many critical components for ecotourism success. It is also suggested that the success of ecotourism depends largely on the success of local community participation. Comprehensive insights into both of the development of indicators for success of local community participation and the success of ecotourism sites are still limited. The complexity of the stakeholders' characteristics with their own individual needs and motives usually resulted in various perceptions of success. The degree of complexity is highten when specific ecotourism sites and their involvement in ecotourism are factored-in while studying for more in-depth perception of success. This paper will outline the research that sets to interpret and develop the indicators for success of local community participation at ecotourism sites in Sabah where ecotourism concept has stated that local community participation is deemed a critical component in ecotourism operation, where the first research issue suggested a set indicators that were simplified and developed from the variety of stakeholders' perceptions and the ecotourism site's level of involvement. This has been done through qualitative approach using a combination of exploratory, plan and policies anlaysis and case studies as its methodologies that produced qualitative data and analysed through thematic clustering. The data were triangulated with respondents' validation and with multiple sources to established reliability and validity. The research concluded with outlining two sets of indicators and there are two issues discussed and proposed in this paper where further ecotourism research can unravel more complexity of ecotourism success issues that can benefit and may enhance the significance of this this study and able to take it to the next level. These are 1) measurement and applicability; and 2) cross culture differentiation in developing indicators.

Key words: ecotourism, success perception, research, complexity, indicators

Introduction

The ecotourism literature currently stresses that local business owners and local communities must be involved. In the general environment of the ecotourism industry, opportunities to involve rural communities in tourism have attracted

[1] Email: hbagul@ums.edu.my

attention, and raised many expectations (Epler Wood, 2002). Prior to the publication of the National Ecotourism Guidelines (Malaysia) in 1997, there were no guidelines available for local community participation in any ecotourism ventures or projects. In Malaysia, the local community participation concepts employed in the ecotourism industry are based on existing projects and programs in the agriculture and fisheries industries. The community participation process adopted various examples, practices and models, which includes precedence in other local industries or existing ones from other sites, national or/and international (National Ecotourism Plan, 1997). Nevertheless, many examples and practices do involve the local community to some extent. The Malaysian National Ecotourism Guidelines, as discussed in the plan and policy chapter, recognised that successful ecotourism required the creation and involvement of local stakeholders (individuals and communities), and emphasised on local investment and control in decision-making.

This research deals with complexity of developin the indicators for local community participation success. The complexity of developing the indicators are due to the data that derived from the data collected across five sites from four groups of stakeholders are presented. The five sites selected were Kampung Bavanggazo, Sukau, Batu Puteh, Kampung Rantai and Rafflesia Information Centre. The stakeholders selected belong to four groups, which are government and Non-Governmental Organisation (NGO), Business, Local Community and the tourists. The selection is based on the operational definition adapated from the World Conservation Union (1996).

> 'Ecotourism is environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features – both past and present) that promotes conservation, has low negative visitor impact, and provides for beneficially active socio-economic involvement of local populations'.

The findings are presented based on a thematic cluster. Each of the indicators is clustered to its group based on the themes that emerge from the data. This categorized the indicators into more specific indicators, therefore manageable for analysis. These indicators will be the basis for indicators analysis following after that i.e. indicators by stakeholders, indicators by site and a combination of both. The general indicators are explored in-depth and justified through the linkage with site scenarios and case studies. The indicators are analysed based on variations within and between the groups of stakeholders and sites. The indicators are first analysed by stakeholders and then by site. Discussion of the indicators analysis is presented and concluded towards the end of the chapter. The analysis uses the logical sequence of stakeholders and site in addressing the issue of distinguishing the importance of each indicator. Further explanation is explored in the next section.

Methodology

The principal purpose of the indicators that are developed from this research is to help stakeholders learn how to assess the success of an ecotourism site. Stakeholders may use these indicators to develop practical ways to measure success, ensure efforts are justifiably spent, and appropriate strategies and activities are carried out. The stakeholders may be interested in learning the output of the activities and the outcome to the outputs in the short and long term.

The methodological approach is qualitative and the indicators are developed through the perception of the all relevant stakeholers to provide holistic view of success. The selection of sites started from the list of identified ecotourism areas in the National Ecotourism Masterplan. From the list, the number of valid research areas was reduced to five sites through systematic selection using the operational definition.

All of the research sites share the same characteristics i.e. type of attractions and activities where all these sites are involved in nature and culture, have local involvement, use eco-practices, and are protected. However, there are differences in the ownership. The local community runs Kampung Bavanggazo and Kampung Bantai ecotourism operations while Batu Puteh's operation involves both the local community and NGOs. Sukau's ecotourism operation is mainly run by the private sector and a government department runs the Rafflesia Information Centre. While these differences in the ownership are found in the pool of the study sites, this will not affect the results of the research as these sites share common characteristics more. The differences only provided insights on the success factor, whether the government, private sector or locally owned operation have differences in the degree of success. This will add more justification in terms of reliability of the results.

The findings are derived from interviews with three groups of stakeholders and a survey of a fourth, the tourists. They were chosen, as they are the groups that are involved in the industry and have, to some extent, some kind of involvement in the local community participation process. All data are triangulated through secondary data and respondent's validation method.

Complexity of Researching Success in Ecotourism

Indicators are mainly used to measure information, which decision-makers may use to reduce the chances of unknowingly making poor decisions. Indicators should be able to reduce the wide range of potential information to a set of usable and meaningful measures of those factors important to the decision-maker. It is mentioned in the literature that indicators are not an end in themselves, but rather a vehicle for the better understanding of a phenomenon.

The research framework that stated that the indicators that are developed from this thesis are derived from the data collected across five research sites from four selected groups of stakeholders. The procedure is that each of the indicators derived from the interview and survey analysis is clustered in its group based on the themes that emerged from the data. These themes are the basis for indicator analysis and success analysis. The indicators will be further analysed based on its variations within and between the group of stakeholders and sites. Frameworks of analysis are presented in each result chapter.

Indicator identification raises the issue of the weight of the importance of each indicator. Depending on the data collection and the manner that the data were collected, the indicators' importance can be based on the variables sequence. This sequence is developed through the interpretation on qualitative data. The main reason for this process to be employed lies in the disparity of the data collection from all respondents. Three groups of respondents suggested the indicators through interview while one group suggested them through survey. The data from interviews are put in a matrix based on the emerging themes. The data from the survey are clustered together based on common themes and put into groups. These themes are then translated into indicators. At this point, there is no rank of importance established for the indicators. In order to put its rank of importance, the logical sequence of variables is used. These

logical sequences are used both in analysing the success indicators for local community participation and ecotourism in this chapter and the next chapter.

The indicators analysis needs to employ a logical sequence of variables to establish the rank of importance for each indicator. There are two important variables involved here. They are stakeholders and sites. The first variable, the stakeholders, are sequenced based on each stakeholder's involvement and how much they are affected in the local community participation process. The top of the sequence is the stakeholder that has the most involvement and is most affected by local community participation and ecotourism. The end of the sequence is the group that has the least involvement and is least affected by local community participation and ecotourism. The sequence of stakeholders (Figure 1) is as follows:

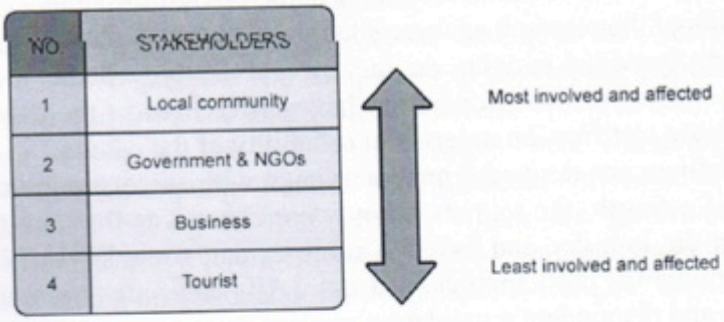

Figure 1. Stakeholder's Sequence
Source: Pengiran Bagul, 2009

The second variable, the sites, are sequenced based on the initiative of local community participation in ecotourism. The top of the sequence is where the local community owned and operated the site and ends with the site that the local community has the least involvement. The sequence for the sites (Table 1) is as follows:

Table 1. Site Sequence.

No.	Sites	Initiatives
1	Kampung Bavanggazo	Owned and managed by local community
2	Batu Puteh	Managed by local community with an international NGO and government with high stake for local community
3	Rantai	Managed by local community with local NGO
4	Sukau	Dominated by business with some local community involvement and initiatives
5	Rafflesia Information Centre	Run by the government with a handful of local community workers

Source: Pengiran Bagul (2009)

The sequences clarify issues that relate to indicators such as establishing the importance of indicators, the variations between stakeholders and sites and variations between the groups of stakeholders. The principal purpose of the indicators, which are developed from this research, is to help stakeholders learn how to view the outcomes of local community participation efforts. The entire process is anchored in this research that determined the ways in which stakeholders define success in the local community participation efforts. Stakeholders may use these indicators to develop

practical ways to measure progress. This is to ensure that their resources were justifiably spent and that appropriate activities were carried out.

Research Findings

As mentioned before, qualitative data analysis done at this stage is based on fieldwork data. Supplementary data were gathered from qualitative observations. Based on the data analysis, the results were then systematically interpreted and a thematic framework produced (Boyatzis, 1998). At the end of the chapter, the results are further elaborated by identifying the interrelationship among the results to address the research issues set out in the methodology section.

There are two important notes that must be taken into consideration concerning the results from the analysis process. They are:

1. Overlaps and similarities in the responses from the stakeholders in two questions:
   - What is your understanding of success of local community participation in ecotourism?
   - What are the success/failure factors for the local community participation in ecotourism?
2. Overlaps between indicators for the success of local community participation and indicators for the success of local ecotourism sites. These overlaps occurred because of these factors:
3. The question to respondents on success indicators and the question on factors for success are very similar. Many respondents repeated their answers for both questions.
4. Many respondents feel that some indicators for local community participation contributed to ecotourism site success.

This has affected the results of the data and there should be some grey areas where both indicators are overlapping. This can be explained, as local participation is a subset of ecotourism in this context. This issue has been identified as limitations in this research.

Based on the primary data collected from the field, the indicators can be divided into three groups. The first group is the indicators based on themes. These are indicators that have been identified from the data obtained from all stakeholders and all sites. They are clustered into emerging themes. These themes are developed first to assist in the next step of identifying specific indicators by stakeholder and site. The second group of indicators is based on stakeholders. These are indicators specifically mentioned by each stakeholder as indicating the success of local community participation in general. Some of the responses also include indicators that are referring to a specific site or sites. The summary of indicators by stakeholders is divided into four groups who are the major respondents of this research. The third group of indicators is the site-specific indicators. These are indicators that the respondents refer specifically to the five research sites. The analysis from the case studies is included to present what contributes to the development of success indicators.

The fieldwork has resulted in much useful primary data for interpreting the success of local community participation. It also provided first-hand information and impression of the actual local community participation process. Based on the fieldwork, there is strong evidence of local community participation in all research sites. However, the level of participation of the community differs from site to site and is mainly dependent on who is running the site.

Indicators by Themes

As a result of the analysis, there are 15 indicators that have been identified in the primary data (Table 1). At this stage, these indicators are general in nature and clustered into themes. These indicators are the basis for the other groups of indicators that are analysed later in this chapter. The indicators presented in this section have been clustered based on emerging themes. It does not follow any type of sequence system, as there is no rank of importance established for each indicator. This is also to avoid confusion and overlapping of the analysis process in later sections. This section is basically documenting the indicators that emerged from all sources.

Table 1. Key Indicators from Primary Data.

	Local Community Participation success Indicators
1	Visible community involvement and commitment
2	Benefits received
3	High number of tourists visiting
4	Higher level of participation
5	Improvement in standard of living/ more progressive
6	Increase in capital /finance/revenue
7	Improvement in local economy
8	Conservation and promotion of culture
9	Attractiveness of the site
10	Conservation of the environment
11	Development of infrastructure / site enhancement
12	Community development
13	Independent community
14	Happy and motivated community
15	Good understanding of ecotourism

Source (Pengiran Bagul, 2009)

Indicators by Stakeholders

The research revealed that out of 15 indicators, the local community suggested 10 of them. Both government and NGOs groups suggested nine indicators and the business group came up with the least indicators, only four. The tourists suggested seven indicators. These are illustrated in Figure 4.

The analysis revealed that the type of stakeholders determined the content and perspective of the indicators suggested. Each stakeholder group has both similar and different context of indicator content but they are not totally dissimilar. Therefore it is further justified to cluster them together. The latter part of the analysis revealed the perspective of each stakeholder on their motives and how they view the indicators by analysing what they do not include as success indicators. It also reinforced the fact that each stakeholder is an individual, while all of them have similar opinions on what constitutes success for local community participation.

THEMES AND RESPONDENTS	LOCAL COMMUNITY	GOVERNMENT AND NGOS	BUSINESS	TOURISTS
Visible community involment & commitment	☆	☆	☆	☆
Improvement in standard of living/ More progressive	☆	☆	☆	
Increase in capital/ Finance/ Revenue	☆	☆	☆	
Benefits received	☆	☆		☆
High number of tourists visiting	☆	☆		☆
Higher level of participation	☆	☆		☆
Conservation and promotion of culture	☆			☆
Improvement in local economy		☆		☆
Conservation of the environment	☆			
Development of infrastructure/ Site enhancement	☆			
Community development	☆			
Independent community		☆		
Happy and motivated community		☆		
Good understanding of ecotourism			☆	
Attractiveness of the site				☆

Figure 4. Indicators by Stakeholders
Source: Pengiran Bagul (2009)

Indicators by Site

Based on the analysis of indicators by sites, the rank of importance can be established as in Figure 5. The schedule shows an arrangement based on the logical sequence of the sites as proposed in the chapter on analytical framework. It gives rank of importance to each indicator based on the sequence and frequencies of responses given by stakeholders. The schedule suggests that there are two most important indicators, which are visible community involvement and commitment, and benefits received by the local community. It also suggested that the least important indicator is independent community. The indicators that are site specific are illustrated in Figure 5.

There are not many differences in the indicators by sites. The number of indicators suggested by each site ranges from five to nine, while the number of thematic clusters on the indicators from each site are evenly distributed. Little differences suggest that each site has similar experience in its local community participation process; therefore there are similar ideas on what success should be for local community participation.

THEMES AND SITES	KAMPUNG BAVANGGAZO	BATU PUTEH	KAMPUNG RANTAI	SUKAU	RAFFLESIA INFORMATION CENTRE
Visible community involment & commitment	☆	☆	☆	☆	☆
Benefits received	☆	☆	☆	☆	☆
Conservation of the environment	☆		☆	☆	☆
Conservation and promotion of culture	☆	☆	☆		
High number of tourists visiting	☆	☆		☆	
Improvement in standard of living/ More progressive	☆	☆			
Development of infrastructure/ Site enhancement	☆		☆		
Attractiveness of the site	☆				☆
Community development		☆		☆	
Higher level of participation	☆				
Independent community					☆

Figure 5. Indicators by Site

All the sites share two success indicators, which are visible community involvement and commitment, and benefits received. This shows that all sites suggested that these two indicators are important to their local community participation. A commonality like this suggested that these indicators are applicable to all sites, and own general traits that can easily be applicable to other sites. The idea of visible community involvement and commitment, and benefits received are the essentials for any local community participation project (Scheyvens, 2002). The most obvious involvement in all the sites is the employment of the local community. Indicators that is relevant to the community and their well being dominate all sites. This shows that the local community participation success is very much dependent on the focus to the locals and their well being that comes out with their participation.

Discussion

With further examination of the key indicators from the primary data, all of the indicators can be further subdivided into three sub-clusters based on the indicators' nature of characteristics. The first cluster is a group of indicators that are related to the community and its well being. The second cluster is a group of indicators that are related to the business aspects of ecotourism. The third cluster is a group of indicators that are related to the environmental aspects of ecotourism.

The first cluster, where the indicators are related to the community and its well being, includes visible community involvement and commitment, benefits received, higher level of participation, improvement in standard of living/more progressive, conservation and promotion of culture, community development, independent community, a happy and motivated community and good understanding of ecotourism. The second cluster, where the indicators are related to the business aspects of ecotourism, include high number of tourists visiting, increase in capital/finance/revenue and improvement to the local economy. The third cluster, where the indicators are related to the environmental aspects of ecotourism, include

attractiveness of the site, conservation of the environment and development of infrastructure/site enhancement.

The themes for local community participation success do not just cover the essential elements of ecotourism, i.e. conservation and well being of the local community, but extend to other aspects such as community development and business practices. This suggests that the practice of ecotourism and its perception of success are broader and go beyond the theoretical definition. However, from Figure 6.4, it is clear that the community and its well being issues are deemed more important by the respondents than business and environment based on the number of indicators. These sub-clusters are used in the analysis of the indicators.

Conclusion

A set of success indicators for local community participation is the outcome from this research. The data collected from the field has suggested 15 general indicators that are useful as a base data for further development of indicators. The analysis of the indicators by theme revealed that there are three clusters of indicators. The first group is related to the community and its well being. The second group is related to the business side of ecotourism. The third group is related to the environment side of ecotourism. The indicators that are related to the community and its well-being are visible community involvement and commitment, benefits received, higher level of participation, improvement in standard of living/more progressive, conservation and promotion of culture, community development, independent community, happy and motivated community, and good understanding of ecotourism. The indicators that are related to the business side of ecotourism are the high number of tourists visiting, increase in capital/finance/revenue, and improvement in local economy. Finally, the indicators that are related to the environment side of ecotourism are attractiveness of the site, conservation of the environment and development of infrastructure/site enhancement.

The most important success indicator determined by this research is the visibility of community involvement and their commitment towards local community participation efforts. This has been suggested through both analysis of indicators by stakeholder and site. Both rated this indicator as an indicator with the highest importance. This is also the only indicator that has been suggested by every stakeholder in every site! However, there are some indicators that are specific to certain stakeholders. This shows the relationship between what the stakeholders perceive as success based on their individual motives and the success of local community participation in general.

The analysis of indicators by stakeholder and site has come up with interesting results. Both have come up with their own rank of indicators that are based on the importance of each indicator. The indicator's importance is pre-determined using the logical sequence of stakeholders and sites based on prominent characteristics of both variables that contribute the most to local community participation. However, both ranks are not comparable to each other. This is where indicator importance can be seen through different perspectives. This research revealed that the size of the indicators contributed is based on how close the stakeholders are to the process of local community participation at the ecotourism site. Based on this analysis, the research revealed that, while all stakeholders are different and with different perspectives of the issues, the indicators contributed by them consist mainly of those

relevant to the community and its well being with 'visible community involvement and commitment' as the strongest indicator.

The analysis by stakeholders revealed that the local community participation's indicators content is determined by the stakeholders. This result is further consolidated in the further analysis of the stakeholders where the analysis suggested that each of the stakeholders is different and has a different perspective of success where each perspective can be very exclusive to its own group. The research also revealed that the shared success indicators are the strongest indicators as they reflect every group's perspective. In this part of the analysis, the stakeholders agreed that 'visible community involvement and commitment' is the strongest indicator.

The analysis of indicators by site suggested that Kampung Bavanggazo local participation process has its concentration in the community, where many of the indicators that are specific to Kampung Bavanggazo mainly belong to the 'community and its well being' cluster. In Batu Puteh it is divided almost equally to 'community and its well being' and 'business' cluster. For Kampung Rantai and Sukau, the indicators mainly belong to the 'community and its well being', while for Rafflesia Information Centre, the indicators are divided almost equally to 'community and its well being' and 'environment cluster. This research suggests that the success indicators that are specific to the sites are mainly concerned on the community and the well-being of that community.

In conclusion, this research suggests that the indicators developed are still within the perspective of ecotourism. Based on the indicators' analysis framework, it is found that, while all stakeholders are different and hold different perspectives of success, the shared success indicators are the strongest indicators as every group agrees to it. The analysis of success indicators by both stakeholders and sites suggested that the success indicators that are specific to the sites are mainly concerned on the community and the well-being of that community, as many of the indicators contributed by them consist mainly of those relevant to that issues. This shows that the result of this analysis is consistent with the literature review and when compared to every angle of the analysis.

References

Ashton, R. E. (1991). *Fundamentals of ecotourism. A workbook for nonprofit and travel programs.* Paper presented at the Ecotourism Management Workshop, June 18-22, 1991. Washington, D.C.

Boyatziz, R. E. (1998). *Transforming Qualitative Information – Thematic Analysis and Code Development.* Sage Publications, New York.

Carter, S., & Jones-Evans, D. (2000). *Enterprise and small business - Principles, practice and policy*. Edinburgh: Financial Times-Prentice Hall.

Cater, E. (1993). Ecotourism in the Third World: Problems for sustainable development. *Tourism Management, 14*(2).

Cater, E. (1994). Ecotourism in the Third World - Problems and prospects for sustainability. In E. Cater & G. Lowman (Eds.), *Ecotourism - A sustainable option?* (pp. 69-86). Chichester: John Wiley and Sons.

Cater, E. (1997). *Ecotourism: Dimensions of Sustainability.* Paper presented at the Ecotourism for Forest Conservation and Community Development, Bangkok, Thailand.

Cater, E., & Lowman, G. (1994). *Ecotourism a sustainable option?* London: John Wiley and Sons.

Epler Wood, M. (2002). *Ecotourism: Principles, practices and policies for sustainability.* Paris: United Nations Environment Programme, Division of Technology, Industry and Economics and the International Ecotourism Society.

Lindberg, K. and Hawking, D. (1993). *Ecotourism - A guide for planners and managers*. (1st ed.), (Vol. 1). Vermont: The Ecotourism Society.

Lindberg, K., Enriquez, J., & Sproule, K. W. (1996). Ecotourism questioned: case studies from Belize. *Annals of Tourism Research, 23* (3), 543-562.

Lindberg, K., & McKercher, B. (1997). Ecotourism: A critical overview. *Pacific Tourism Review, 1*, 65-79.

Mathieson, A., & Wall, G. (1982). *Tourism: Economic, physical and social impacts*. New York: Longman.

McKercher, B. (1998). *The business of nature-based tourism*. Hospitality Press, Victoria.

McKercher, B. (2001). Attitudes to a non-viable community-owned heritage tourist attraction. *Journal of Sustainable Tourism, 9*(1), 29-43.

National Ecotourism Plan (1997). Ministry of Arts, Culture and Tourism.

Pearce, D. G. (1989). *Tourist development* (2nd ed.). Essex: Longman.

Pearce, D. G. (1993). Comparative studies in tourism research. In D. G. Pearce & R. W. Butler (Eds.), *Tourism research - Critiques and challenges*. London: International Academy for the Study of Tourism.

Pearce, D. G. (2000). Tourism plan reviews: methodological considerations and issues from Samoa. *Tourism Management, 21* (2), 191-203.

Pearce, P., Moscardo, G., and Ross, G. (1996). *Tourism community relationships*. New York: Pergamon, Kent.

Pengiran Bagul, A. H. B. (1997). *The importance of ethnography information in ecotourism development.* Paper presented at the Bengkel Halatuju Penyelidikan Unit Etnografi & Pembangunan dan Unit Penyelidikan Psikologi & Kerja Sosial, Kota Kinabalu, Sabah, Malaysia. Universiti Malaysia Sabah.

Pengiran Bagul, A. H. B. (2000). *Ecotourism for rural development and biodiversity conservation.* Paper presented at the Ecotourism in the New Millennium: World Ecotour 2000 - World Congress and Exhibition on Ecotourism, Brazil. (s.l).

Pengiran Bagul, A. H. B. (2000). *Rural community-based ecotourism in Sabah: A Case Study of Bavanggazo Long House in Kudat.* Paper presented at the Tourism 2000: Time for Celebration? Sheffield, England.

Pengiran Bagul, A. H. B. (2003). Ecotourism and local community participation: A closer look at Sabah ecotourism industry. In Y. Harun (Ed.), *Malaysia-Papers on development, religion and politics* (pp. 35-52). Wellington: Chair of Malay Studies, Victoria University of Wellington.

Pengiran Bagul, A. H. B. (2004). Ecotourism and local community participation: A closer look at Sabah ecotourism industry. In Y. Harun (Ed.), *Malaysia - Papers on Development Religion, and Politics* (pp. 32-49). Wellington: Chair of Malay Studies, Victoria University of Wellington.

Pengiran Bagul, A. H. B. (2004). *Success indicators for ecotourism and local community participation.* Paper presented at the New Zealand Tourism and Hospitality Research Conference 2004 - Tourism Research: Advances and Applications, Wellington, New Zealand.

Pengiran Bagul, A. (2009). *Success of ecotourism sites and local community participation in sabah.* PhD Thesis. Victoria University of Wellington.

Pengiran Bagul, A. and Datu Eranza, D. R. (2010). *Success indicators for ecotourism site.* Proceedings for Regional Conference on Tourism Research (RCTR) 2010, 13-14 December 2010, Universiti Sains Malaysia, Penang, Malaysia.

Pengiran Bagul, A.and Ayub, M. S. (2011). *Developing ecotourism for rural development in Sabah.* Proceedings for International Conference for Rural Development and Entrepreneurship (ICORE) 2011, 27-30 May 2011 at Kuching, Malaysia. Universiti Utara Malaysia, International of Telecommunications Union UUM and Sarawak State Government, Malaysia.

Scheyvens, R. (1999). Ecotourism and the empowerment of local communities. *Tourism Management, 20* (2), 245-249.

Scheyvens, R. (2002). *Tourism for development - Empowering communities* (1st ed.), Essex: Pearson Education Limited.

Thomlinson, E., & Getz, D. (1996). The question of scale in ecotourism: Case study of two small operators in the Mundo Maya region of Central America. *Journal of Sustainable Tourism, 4*(4), 183-200.

Wearing, S. (1999). *Ecotourism - Impacts, potentials and possibilities*. Woburn: Butterworth-Heinemann.

Wight, P. A. (1994). Environmentally responsible marketing of tourism. In E. Cater & G. Lowman (Eds.), *Ecotourism - A Sustainable Option?* (pp. 39-55). Chichester: John Wiley and Sons.

Wight, P. A. (1997). Ecotourism accommodation spectrum: Does supply match the demand? *Tourism Management, 18*(4), 209-220.

Wight, P. A. (2002). *Theme A. ecotourism Policy and planning: The sustainability challenge.* Paper presented at the World Ecotourism Summit, Quebec, Canada.

World Conservation Union. (1996). *Tourism, ecotourism and protected areas*. Gland: IUCN - The World Conservation Union.