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Sustainability Criteria for the Malaysia Homestay Program

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ABSTRACT

This article is based on a study that was carried out to identify all the relevant sustainability criteria for the Malaysia Homestay Programs. The purpose of the study was to come up with the criteria which can be used by the operators to rate their services and to promote their homestays. Once the criteria are identified, they are ranked in order to discover the priority of each of the criteria. The ranking was calculated using two methods which are modified pairwise comparison method and rank order centroid method. 12 criteria were identified as the Malaysia Homestay Program sustainability criteria. The study established that the programs' "commitment," "organizational management" and "cooperative effect" are found to be ranked as the three most important criteria while "maintenance," "hospitality," and "networking" are ranked as the three least important criteria.

Keywords: Sustainable Development Initiative, Multi-criteria Approach, Rural Tourism
JEL Classifications: O2, Q3, R1

1. INTRODUCTION

The progress and development of the rural communities has always been prioritized by the Malaysian Government. This was spelt out in the Ninth Malaysia Plan (2006-2010) whereby one of the identified development agendas is the initiative to increase the income level and simultaneously to reduce the poverty level among rural communities, and one of the planned strategies to achieve this agenda is through the development of rural homestay programs (EPU, 2015). The Malaysian Homestay Program was introduced in the 1980s with the aim to reduce income imbalances between the rural and urban areas through the creation of a new economic activity, namely tourism. This program allows participation by the rural residents, enabling them to be involved in the tourism sector.

However, a conversation with an official from the Ministry of Tourism (Anonymous, personal communication, 10 November 2013) indicates an alarming issue whereby a big number of certified homestay operators have withdrawn from being operators as they find it difficult to sustain income from the operations due to the drop in the number of visitors. There is a dire need to investigate the underlying causes of the scenario and understanding the criteria that contribute to the homestay sustainability is an important prerequisite. To date, little is known about what underlies sustainable homestay operations although many quarters claim that the homestay programs in Malaysia have created numerous benefits. Establishing the criteria can assist homestay managers to focus on the criteria that will attract and satisfy homestay tourists thus allowing the programs to sustain.

This article is based on a study that was carried out to identify all the relevant sustainability criteria for the Malaysia Homestay programs. The purpose of the study was to come up with a ranked criteria which can be used by the operators to rate their services and to promote their homestays. Ratings on these criteria will allow them to improve their services in order for them to attract more visitors and generate more income.

2. LITERATURE REVIEW

2.1. Malaysia Homestay Programs and Sustainable Development

The Malaysia Homestay Program represents the Malaysian Government's approach to improve and develop the standard of

living of the rural community through their participation in tourism business. This approach supports one of the objectives in tourism development established by the Ministry of Culture and Tourism (MOTAC) which emphasizes on empowering rural communities through the rural tourism activities. Even before its promotion as a tourism product, the Malaysia Homestay Program was established as a community project aimed to instill unity among its members as through the program, rural communities share tourism benefits while offering tourists the opportunity to experience local culture and way of life. Currently, the Malaysia Homestay Programs are aggressively marketed as alternative tourism product to domestic and international travelers. Due to the many roles played by the homestay programs, several ministries, agencies, associations and industrial bodies are involved in its policy and development. The key players MOTAC, Ministry of Rural and Regional Development (KKLW), Ministry of Agriculture (MOA), Fishery Development Board (LKIM), Malaysian Homestay Association (MHA), regional economic corridors (e.g., Northern Corridor Economic Region, Eastern Corridor Economic Region, Sabah Development Corridor), regional development authorities such as Central Terengganu Development Board (KETENGAH), Kedah Regional Development Board (KEDA) and Federal Land Development Authority (FELDA), tour guide associations such as MTGC and BUMITRA, Homestay Entrepreneurs Association of Malaysia.

As an alternative tourism product, the Malaysia Homestay Program has evolved since it was first initiated about 20 years ago. The program was mainly used as strategic training locations for Malaysian youth groups before it became a destination choice for schools in the Developed Countries, especially Japan, in providing experiential form of rural tourism as to fulfill their education curriculums. Currently, Malaysia Homestay Program has progressed into a tourism product favored by the Free Independent Travelers who prefer affordable accommodation while visiting ecotourism attractions in the country. Although traditionally homestay guests are to live together with the hosts in the same dwelling, several variants of the traditional "live in" homestays have emerged in the form of *kampong* stay (stand-alone accommodation), annex type homestay and farm stays, etc. New market segments that are being attracted to the homestay experience prefer the privacy of an annex type homestay or *kampong* stay while being immersed in the *kampung* way of life.

Furthermore, the Malaysia Homestay Program can be considered as a community-based tourism (CBT) initiative as it presents an opportunity to empower local communities to develop a more apt "grass-roots" form of sustainable tourism than mass tourism and to contribute to local economic development and poverty reduction. Accordingly, competitiveness and sustainability form the basis for a CBT successful performance. Competitiveness is indicated by the CBT's ability to attract and retain customers through appropriate marketing and providing quality services and experiences. Sustainability, on the other hand, is the ability for the CBT to ensure that its resources are conserved through demand management, resource management and equitable development. Both competitiveness and sustainability reflect the successfulness of homestay entrepreneurial initiative.

There are different models of CBTs: They can be in the forms of commercial partnerships, joint ventures, or small-scale community-run operations (Armstrong, 2012). The Malaysian Homestay Programs fit in the description of the third model. A Homestay Program is formed by a group of certified homestay operators in a rural community. Certifications as homestay operators are awarded to members of that community who applies and fulfills the requirements established by the Ministry of Tourism. As in other CBT initiative, the Malaysian Homestay Program particularly require the participation by the whole community in the opportunities and benefits offered by it as the Homestay Programs give them a stake in tourism as well as some responsibility and management of the tourism itself. Their participation may be in the form of operators who are certified to host visitors in their homes, cooks and helpers who prepare food during the many fiestas arranged for the groups of visitors, tour leaders, or in the form of community members who are involved in putting together activities which are designed for the groups.

Just as there is an uncertainty about the actual benefits brought by CBTs, the Homestay Programs' actual performance that can qualify them as tools for sustainable development are still vague due to lack of research. Armstrong (2012) suggests that the principal conditions for CBT success include engagement with the private sector; a strong and cohesive host community; genuine community participation, ownership and control; planning for commercial viability; sound market research and demand-driven product development; attractive, quality products based on community assets; transparent financial management; appropriate stakeholder support and effective monitoring and evaluation. In addition, different authors posit other important criteria for the homestay program, namely organizational management and commitment (Yusnita et al., 2012), leadership (Pusiran and Xiao, 2013), local community ability and capacity (Manyara and Jones, 2009), conservation of community resources (Goodwin and Santilli, 2009), marketing (Kayat, 2011), and maintenance (Adrianna et al., 2007). In addition, requirements stated in the Ministry guidelines for the establishment of the homestay such as safety and attractive packages can be included as important sustainable criteria for the homestay program. All of the abovementioned criteria are used in the formation of the sustainable homestay index this study.

2.2. Multi-criteria Decision-making (MCDM) Techniques

MCDM is a sub-discipline of operations research that explicitly considers multiple criteria in decision making environments. It refers to making decisions in the presence of multiple, usually conflicting criteria or factors. There are two categories of MCDM problems, which are: Multiple attribute decision making (MADM), and multiple objective decision making (MODM) (Saaty, 1988). In MODM, several objective functions should be satisfied in the optimization problem, but in MADM, all the problems in which the set of decision alternatives have been predetermined. In other words, MADM involves making preference decisions (evaluation, prioritization, selection) over the available alternatives that are characterized by multiple, usually conflicting attributes. It is widely used for real world problems (Xu and Yager, 2006).

There are several methods that are often practice at this time namely the weighted sum model, analytical hierarchy process (AHP), revised AHP, weighted product model, and the technique for Order of preference by similarity to ideal solution.

3. METHODOLOGY AND RESULTS

The study consisted of three phases; preliminary study, main study and factor ranking. In the preliminary study, all the related criteria and sub-criteria were identified from previous study, homestay operators and also from the expert's opinion. Using these identified criteria as a basis, a questionnaire was developed and a face to face interview was conducted using the structured questionnaire to collect data from the registered Malaysia Homestay Program operators in the Penang, Kedah and Perlis. The list of homestay programs issued by the Ministry was used as the sampling frame for the probabilistic selection of the sample (Table 1).

The questionnaires which consisted of 67 items were distributed to the 586 operators for rating purposes in terms of relevancy of those criteria towards sustainability of homestay. A total of 246 completed questionnaires were successfully collected. Next, factor analysis was carried out on the collected data to identify the most significant sub criteria that can be categorized in the main criteria and eliminate all the non-significant sub criteria. The validity of the study was carried out, and the result shows that the Cronbach's alpha values are between 0.605 and 0.897 indicating that all identified criteria are reliable.

Table 1: Registered homestay programs in Perlis, Kedah and Penang

Number	State	Homestay
1	Perlis	Homestay Kg Ujong Bukit
2		Homestay Kg Paya Guring
3		Homestay Felda Mata Ayer
4	Kedah	Homestay Kg Jeruju
5		Homestay Kg Relau
6		Homestay Kg Raga, Yan
7		Homestay Kg KEDA Ulu Legong Homestay
8		Kg Sungai Badak Homestay D'Belimbing
9		Homestay Kg KEDA Lahar Tunjung
10		Homestay Pulau Pisang
11		Homestay Kg Sungai Itau
12		Homestay Kg Pantai Jamai
13		Homestay Kg Wang Tok Rendong
14		Homestay Padang Lalang
15		Homestay Selat Bagan Nyior Homestay
16		Pulau Tuba
17		Homestay Kg Bukit Tangga
19	Penang	Homestay Teluk Bahang
20		Homestay Sungai Semilang Homestay Jalan
21		Baru
22		Homestay Pulau Betong
23		Homestay Sg Chenaam
24		Homestay Sg Setar
25		Homestay Sg Duri
26		Homestay Mengkuang Titi
27		Homestay Pulau Aman

During the main phase of the study, two additional sets of questionnaires were developed. In the first set of questionnaire, four respondents who were considered to be the experts in community-based rural tourism were approached and asked to give ratings to each criterion, using the rating judgment scale of 1-9 for the relative importance of the criteria being considered. The rating judgment scale used was adapted from preference scale of AHP technique. The judgments of the rating are as given in the Table 2.

In the other set of questionnaire, the same four respondents were asked to give rankings of criteria of 1-12, where 1 means the most important criterion, while 12 is the least important criterion. The ranking of 1-12 was used the ranking was done on 12 identified criteria.

During the third phase of the study, the data was analyzed for weight formulation to find the criteria of sustainable homestay program using modified pairwise comparison (Bakar and Kasim, 2011) for the first set of data collected by using the first set of questionnaire, while rank order centroid (ROC) (Barron and Barrett, 1996) technique was used to analyze data collected by the second set of questionnaire.

3.1. Analysis of 12 Sustainability Criteria using Modified Pairwise Comparison Method

The 4 evaluations of scale 1-9 were combined as 1 matrix using geometric mean method and the resulted matrix is given as in the following Figure 1.

Then, the weighted sum vector was calculated by computing each element of the comparison matrix using its column total and the

Figure 1: A geometric mean matrix of 4 matrices resulted from modified pairwise comparison matrix

Criteria	1	2	3	4	5	6
1	1	7/8	11/5	1	24/5	14/5
2	11/7	1	11/2	12/7	31/8	2
3	5/6	2/3	1	3/5	24/9	8/9
4	1	7/9	12/3	1	28/9	13/4
5	1/3	1/3	2/5	1/3	1	3/8
6	5/9	1/2	11/8	4/7	22/3	1
7	13/4	2	23/5	21/6	55/8	35/7
8	41/6	48/9	53/8	41/3	75/9	56/7
9	3	2	23/5	21/5	35/8	23/4
10	1	1	12/5	1	41/8	12/5
11	1/2	5/9	1/9	3/5	32/3	1
12	7/9	1/2	3/5	1/2	2	2/3
	161/6	152/9	205/9	152/3	411/2	231/4

Factor	7	8	9	10	11	12	Weight
1	4/7	1/4	1/3	1	16/7	12/7	0.0663
2	1/2	2/9	1/2	1	15/6	2	0.0759
3	2/5	1/5	2/5	5/7	1	12/3	0.0509
4	1/2	1/4	4/9	1	15/8	16/7	0.0697
5	1/6	1/8	2/7	1/4	2/7	1/2	0.0227
6	1/4	1/6	3/8	5/7	1	11/2	0.0468
7	1	1/2	1	12/7	25/9	23/5	0.1297
8	2	1	11/2	15/6	31/2	35/6	0.2294
9	1	2/3	1	11/3	21/2	21/8	0.1303
10	7/9	5/9	3/4	1	1	16/7	0.0805
11	2/5	2/7	2/5	1	1	11/4	0.0544
12	3/8	1/4	1/2	1/2	4/5	1	0.0434
	8	41/2	71/3	115/9	182/3	211/2	

priority vector was ascertained by finding the row averages. The results are shown in the following Figure 2.

Next, the consistency vector (CV) was calculated resulting in the following results (Figure 3):

The average of this value was then calculated to obtain the maximum Eigen vector:

Eigen vector;

$$\lambda_{\max} = \frac{CV_1 + CV_2 + \ldots + CV_n}{n}$$

$$= \frac{12.2617 + 12.1971 + \ldots + 12.4151 + 12.2893}{12} = 12.2740$$

The consistency index was calculated:

$$CI = \frac{\lambda_{\max} - n}{n-1} = \frac{12.274 - 12}{12-1} = 0.02491$$

Lastly, the test of consistency was done:

$$CR = \frac{CI}{RI} = \frac{0.12491}{1.48} = \frac{0.12491}{1.48}$$

Since the CR is 0.01683 <0.1, it can be concluded that the inconsistency is acceptable as proposed by Saaty (1980) that if the value of consistency ratio is ≤0.1 (10%), the inconsistency is acceptable. The weight for each criteria is listed in the following Table 3.

Based on Table 3, "commitment" criterion is ranked first using the modified pairwise method by the 4 experts, followed by "responsible participation," "cooperation effect," "publicity," and "stakeholder integration." The bottom three criteria in decreasing order are "maintenance," "hospitality" and "marketing and promotion."

Table 2: Preference scale for pairwise comparisons

Preference level	Numeric value
Equally preferred	1
Equally to moderately preferred	2
Moderately preferred	3
Moderately to strongly preferred	4
Strongly preferred	5
Strongly to very strongly preferred	6
Very strongly preferred	7
Very strongly to extremely preferred	8
Extremely preferred	9

Source: Saaty (1980)

3.2 Analysis of 12 Sustainability Criteria using ROC Method

The ROC was used to allocate weights to the selection criteria. The respondents were asked to give ranking of importance of the criteria from 1 to 12, where 1 means that the criterion is the most importance once, while 12 means the least important. Scale of 1-12 was used since there are 12 sustainability criteria. The weights of the criteria were determined based on the rank given by the respondents. The weights (w_j) were calculated using the following formula.

$$w_i = \frac{1}{12}\sum_{k=i}^{12}\frac{1}{k}; i = 1, 2 \ldots 12$$

Where

i. i is the i^{th} rank order,
ii. 12= total number of criteria
iii. w_i= weight of criteria ranked at i^{th} position
iv. $w_1 \geq w_2 \geq \ldots \geq w_n \geq 0$
v. $\sum_{i=1}^{12} w_i = 1$

For example, if the first respondent ranked C1 = 7, C2 = 8, C3 = 9, C4 = 10, C5 = 1, C6=5, C7 = 6, C8 = 11, C9 = 12, C10 = 2, C11 = 3 and C12 = 4, then the weight of

C1 is , $0.1753\left[\frac{1}{12}\left(\frac{1}{7}+\frac{1}{8}+\frac{1}{9}+\ldots+\frac{1}{12}\right)\right]$

C2 is , $0.2586\left[\frac{1}{12}\left(\frac{1}{8}+\frac{1}{9}+\ldots+\frac{1}{12}\right)\right]$

C3 is , $0.1336\left[\frac{1}{12}\left(\frac{1}{9}+\frac{1}{10}+\frac{1}{11}+\frac{1}{12}\right)\right]$

C4 is , $0.1058\left[\frac{1}{12}\left(\frac{1}{10}+\frac{1}{11}+\frac{1}{12}\right)\right]$

C5 is $0.544\left[\frac{1}{12}\left(1+\frac{1}{2}+\frac{1}{3}+\frac{1}{4}+\ldots+\frac{1}{12}\right)\right]$ and so on. By using this approach, the weight given by the four respondents for each

Figure 2: A matrix of weighted sum vectors

Criteria	1	2	3	…	…	11	12		Weight		Sum vector
1	1	7/8	11/5	…	…	16/7	12/7		0.0663		4/5
2	11/7	1	11/2	…	…	15/6	2		0.0759		1
3	5/6	2/3	1	…	…	1	12/3		0.0509		5/8
4	1	7/9	12/3	…	…	15/8	16/7	×	0.0697	=	6/7
5	1/3	1/3	2/5	….	…	2/7	1/2		0.0227		2/7
6	5/9	1/2	11/8	…	…	1	11/2		0.0468		4/7
7	13/4	2	23/5	….	…	25/9	23/5		0.1297		1 4/7
8	41/6	4 8/9	53/8	….	…	31/2	35/6		0.2294		2 6/7
9	3	2	23/5	….	…	21/2	21/8		0.1303		1 3/5
10	1	1	12/5	….	…	1	16/7		0.0805		1
11	1/2	5/9	11/9	….	…	1	11/4		0.0544		2/3
12	7/9	1/2	3/5	….	…	4/5	1		0.0434		1/2
	161/6	152/9	205/9	….	…	182/3	211/2				

Figure 3: The consistency vector matrix

Sum vector		Weight		CV
4/5		0.0663		12.2617
1		0.0759		12.1971
5/8		0.0509		12.1529
6/7	/	0.0697	=	12.1607
2/7		0.0227		12.3078
4/7		0.0468		12.2656
14/7		0.1297		12.1360
26/7		0.2294		12.4578
13/5		0.1303		12.3212
1		0.0805		12.3234
2/3		0.0544		12.4151
1/2		0.0434		12.2893

criterion and the resulted ranks of the criteria are shown in Tables 4 and 5 respectively.

Based on Table 5, the upmost ranked criterion is "organizational management and leadership" with weight value of 0.1555 or 15% of the importance to the sustainability of the homestay. This is followed by criterion "stakeholder integration" at second rank with weight value 0.1367, indicating that there must be a good integration among all the stakeholders to ensure that the homestay can sustain. "Marketing and promotion" criteria placed at the third rank with weight value is 0.1055 which is almost 11% contribution to the sustainability of homestay.

The fourth rank is the "conservation of community resources" criteria with weight value is 0.0891, followed closely by "cooperative effect" which is placed at fifth rank with weight value 0.0866 and next is "commitment" criterion with weight 0.0811. The lowest six criteria are "responsible participation" with weight value 0.0778, "maintenance" 0.0644, "ensuring security" 0.0642, "hospitality" 0.0570, "publicity" 0.0435, and lastly is "networking" 0.0386. These criteria are least important to the sustainability of homestay in Malaysia.

Since both methods produced different results, the arithmetic average of both weights for each criterion was calculated. The results are displayed in Table 6.

3.3. Analysis of 12 Sustainability Criteria using Arithmetic Average of Both Methods

Based on Table 6, criterion "commitment" came out to be the most important criterion with weight value of 0.1553 or 16% of the importance to the sustainability of the homestay program. This is followed by "organizational management and leadership" with weight value of 0.1109. "Cooperative effect" came out as the third most important criterion with weight value of 0.1082. In the fourth rank is the "stakeholder integration" criterion with weight value is 0.1063, followed by "responsible participation" which is placed at fifth rank with weight value 0.1041. Next is "conservation of community resources" criterion with weight 0.0794. The lowest six criteria are "marketing and promotion" with weight value 0.0641, "publicity" 0.0620, "ensuring security" 0.0576, "maintenance" 0.0556, "hospitality" 0.0502, and lastly is "networking" 0.0465.

Table 3: Modified pairwise comparison weights of sustainability criteria

Criteria	Description	Weight	Rank
1	Organizational management and leadership	0.0663	7
2	Stakeholder integration	0.0759	5
3	Ensuring security	0.0509	9
4	Conservation of community resources	0.0697	6
5	Marketing and promotion	0.0227	12
6	Maintenance	0.0468	10
7	Cooperative effect	0.1297	3
8	Commitment	0.2294	1
9	Responsible participation	0.1303	2
10	Publicity	0.0805	4
11	Networking	0.0544	8
12	Hospitality	0.0434	11

Table 4: ROC weight of sustainability criteria

Criteria	Respondents			
	R1	R2	R3	R4
1	0.1753	0.0544	0.1336	0.2586
2	0.2586	0.0069	0.2586	0.0229
3	0.1336	0.0229	0.0683	0.0321
4	0.1058	0.0683	0.1753	0.0069
5	0.0544	0.2586	0.0544	0.0544
6	0.0069	0.1753	0.0069	0.0683
7	0.0229	0.1336	0.0145	0.1753
8	0.0425	0.1058	0.0425	0.1336
9	0.0145	0.0850	0.1058	0.1058
10	0.0850	0.0425	0.0321	0.0145
11	0.0321	0.0145	0.0229	0.0850
12	0.0683	0.0321	0.0850	0.0425

ROC: Rank order centroid

Table 5: ROC ranks of sustainability criteria

Criteria	Description	Weight	Rank
1	Organizational management and leadership	0.1555	1
2	Stakeholder integration	0.1367	2
3	Ensuring security	0.0642	9
4	Conservation of community resources	0.0891	4
5	Marketing and promotion	0.1055	3
6	Maintenance	0.0644	8
7	Cooperative effect	0.0866	5
8	Commitment	0.0811	6
9	Responsible participation	0.0778	7
10	Publicity	0.0435	11
11	Networking	0.0386	12
12	Hospitality	0.0570	10

ROC: Rank order centroid

3.4. Analysis of Ranking of 12 Sustainability Criteria using the Three Methods

Table 7 shows the ranking of the criteria using three methods. It can be observed that results from the three methods differ considerably. Since the rating judgment scale by four experts was used in the average weights methods, the authors adopt results from the third method whereby "commitment," "organizational management and leadership," and "cooperative effect" are the three most important

Table 6: Average weights and corresponding ranks

Criteria	Description	Weight	Rank
1	Organizational management and leadership	0.1109	2
2	Stakeholder integration	0.1063	4
3	Ensuring security	0.0576	9
4	Conservation of community resources	0.0794	6
5	Marketing and promotion	0.0641	7
6	Maintenance	0.0556	10
7	Cooperative effect	0.1082	3
8	Commitment	0.1553	1
9	Responsible participation	0.1041	5
10	Publicity	0.0620	8
11	Networking	0.0465	12
12	Hospitality	0.0502	11

Table 7: Rankings of sustainability criteria based on 3 methods

Criteria	Rank by modified pairwise	Rank by ROC	Rank based on average weights
1	7	1	2
2	5	2	4
3	9	9	9
4	6	4	6
5	12	3	7
6	10	8	10
7	3	5	3
8	1	6	1
9	2	7	5
10	4	11	8
11	8	12	12
12	11	10	11

ROC: Rank order centroid

criteria while "maintenance," "hospitality" and "networking" are the three least important criteria.

4. CONCLUSION

The study had successfully identified and ranked 12 relevant sustainability criteria for the Malaysia Homestay Programs. Once the criteria are identified, they were ranked in order to discover the priority for each of the criteria. The ranking were calculated using three methods which are modified pairwise comparison method, ROC method and average weight method. Among the 12 criteria identified in this study, the programs' "commitment," "organizational management" and "cooperative effect" are found to be ranked as the three most important criteria while "maintenance," "hospitality," and "networking" are ranked as the three least important criteria. The establishment of the ranked criteria will allow the Malaysia Homestay Program operators, managers and policy-makers to improve their services in order for them to attract more visitors and generate more income, and eventually sustain the initiative.

REFERENCES

Adrianna, A., Cindy, J., Nor'ain, O. (2007), Study of tourists' expectation and perception towards products and services offered by Walai Tokou Homestay Kundasang Sabah. In: Othman, N., Jamaludin, M., editors. The 3rd Tourism Outlook Conference & Global Events Congress II, Heritage & Tourism: Alliance & Network Relationship, Event management & Event Tourism, Shah Alam: UiTM, (UPENA).

Armstrong, R. (2012), An analysis of the conditions for success of community based tourism enterprises, International Centre for Responsible Tourism (ICRT) Occasional Paper No. 21. Available from: http://www.thetravelfoundation.org.uk/images/media/Successful_Community_Based_Tourism.pdf. [Last accessed on 2016 Feb 15].

Bakar, E.M.N., Kasim, M.M. (2011), Modified pairwise comparison to reduce inconsistency in analytic hierarchy process. World Academy of Science, Engineering and Technology, (60), 1125-1227.

Barron, F.H., Barrett, B.E. (1996), Decision quality using ranked attribute weights. Management Science, 42(11), 1515-1523.

Economic Planning Unit. (2015), Elevating B40 Households towards A Middle Class Society. Strategy Paper, 2. Putrajaya: Economic Planning Unit, Prime Minister's Department.

Goodwin, H., Santilli, R. (2009), Community-based tourism : A success ? ICRT Occasional Paper, 11, 1-37.

Kayat, K. (2011), Homestay Program as a Tourism Product in Malaysia. Sintok: UUM Press.

Manyara, G., Jones, E. (2007), Community-based tourism enterprises development in Kenya: An exploration of their potential as avenues of poverty reduction. Journal of Sustainable Tourism, 15(6), 628-644.

Pusiran, A.K., Xiao, H. (2013), Challenges and community development: A case study of Homestay in Malaysia. Asian Social Science, 9(5), 1-17.

Saaty, T.L. (1980), The Analytic Hierarchy Process. New York, NY: McGraw-Hill International.

Xu, Z.X., Yager, R.R. (2006), Some geometric aggregation operators based on intuitionistic fuzzy sets. International Journal of General Systems, 35, 417-433.

Yusnita, Y., Amin, A., Muda, S. (2012), The influences of transformational leadership in homestay program. The International Journal of Social Sciences, 1, 1-7.