

Significance of Community in Malaysian Higher Educational Institutions Sustainability

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ABSTRACT

Since the beginning of environmental movement, academicians and policy makers have been focusing on the institutions of higher learning. The first document on campus sustainability, the Talloires Declaration, which was ratified by 413 universities, including University Malaya, addressed the concept of community aspect of Higher Educational Institutions (HEI) sustainability. This article is a position paper with the objective to highlight the importance of community in the sustainability of Malaysian Higher Learning Institutions (MHLE). In carrying out this study, the archival and document analysis method was employed, whereby different scholars' articles, dissertations, and tools were reviewed. Further validation of the findings was accomplished by employing the questionnaire survey method. Various documents were analysed thoroughly to figure out how the issue of community and the effects on campus sustainability were addressed. Besides a literature review, observation and interview were also utilized to figure out the challenges faced by Malaysian Higher Educational Institutions. The results indicated that community and campus sustainability have a linear relationship. In the context of MHEI, ethnical polarization, poor command of English and imbalance distribution of gender are the challenges. Likewise, the community is one of the most important aspects and is given high priority. Thus, the findings of this study could serve as a reference for researchers, institutions, and universities that are working on topics related to sustainability in higher education.

Keywords: Sustainability, higher education, community

INTRODUCTION

Sustainability is a topic that has been proposed in many conferences and agendas and has gained the attention of many scholars, academicians, policy makers, and business runners (Prugh, Constansa *et al.*, 2000). However, the progress particularly in Higher Educational Institutions (HEI) is not only unsatisfactory (Lozano Garcia *et al.*, 2006) but also, according to Jenks-Jay (2000), has been extremely slow and frustrating. Shriberg (2002) declared that

despite the activist call for sustainability in HEI, the result remained not satisfactory. Based on the most popular definition of sustainability suggested by Brundtland (1987) in the Common Future's report, sustainable development is a development that meets the needs of the present and future generation simultaneously. Following the definition, this subject addresses the needs of the people. In addition, the concept encompasses three dimensions of needs, namely; environmental, social, and economic (Swart and

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Raskin *et al.*, 2004). The first official statement on campus sustainability is the Talloires Declaration, produced in 1990 (ULSF-a, 1990). This declaration, which comprises a ten-point action plan incorporating sustainability and environmental literacy among universities, was signed at an international conference in city of Talloires, France. It was signed by the presidents, rectors, and vice chancellors of the universities from all the regions of the world (*ibid*). The Talloires Declaration depicts the scientists' concerns over issues such as the unprecedented scale and speed of environmental degradation, as well as the depletion of natural resources and the significance of universities in combating those unsatisfactory situations (*ibid*).

On the other hand, Sustainable Higher Education (SHE) is defined by Velazquez *et al.* (2006) as a university or college which promotes minimization of negative effects of fulfilling the university responsibilities as a whole or as a part. According to Saadatian *et al.* (2009), Malaysia Higher Education Institutions (MHEI) have already recognized the concept of SHE and embarked into actions by taking different initiatives in different rubrics, such as (1) sustainability in policy, planning and administration, (2) courses and curricula, (3) research and scholarship, (4) university's operations, and (5) outreaches and services. Thus, the point of departure of this study is its objective which is to play up the gravity of community in sustaining MHEI.

SUSTAINABLE HIGHER EDUCATION (SHE)

The first campus sustainability assessment began with an audit performed at the University of California, Los Angeles (UCLA) in 1988 (Creighton, 1988). However, at the international level, the assessment started from the Talloires Declaration in France, with more than 265 universities as its signatories in 1990 and proceeded to Johannesburg Summit in 2002. Consequently, the importance of education in aiding worldwide societies to move towards sustainability was emphasized. Thus, to support

this agenda, the United Nation Educational, Scientific and Cultural Organization (UNESCO) took the first initiative on a worldwide basis to foster this trend. A framework entitled, "Decade of Education for Sustainable Development" was launched in January 2005, which was expected to be completed by December 2014 (Lozano *et al.*, 2006). Many popular books like *Ecodemia* (Keniry, 1995), *Earth in Mind: On Education, Environment and the Human Prospect* (Orr, 1994), *Greening the Ivory Tower* (Creighton, 1998) and *Sustainability on Campus: Stories and Strategies for Change* (Barlett *et al.*, 2004) have addressed the importance of this topic.

ROLE OF COMMUNITY IN SHE

Community has been defined as a group of individuals who gather in a place and is organized around common values and possesses social cohesion (Keniry, 1995). Community is one of the most important aspects of SHE (Cole, 2003). Besides, the communities of universities are influential in planning, building, and modifying universities actions to promote sustainable living (Orr, 1994). Among other, university communities can bear responsibilities for the knowledge and awareness enhancement of their own community members while boosting the current technologies and tools towards sustainability. The university communities can have influential roles in other surrounding communities through partnerships and working for more sustainable life (Barnes and Phillips, 2000). Campuses have a direct relationship with their neighbourhood community and their own community has an essential role in its sustainability rating, whereby in the first document of campus sustainability in the Talloires Declaration (1990), the importance of community was considered in the sixth statement of the document. A review of the literature has shown that the existence of social challenges in the communities of the Malaysian Higher Educational Institutions (MHEI), such as the ethnic-based polarization, seem to be a strong barrier to SHE trend in the country (Saadatian *et al.*, 2009). The subject of community is even

more important for MHEI than the other parts of the world since Malaysia is a country which has different ethnic groups and different religions. These include Malays, Chinese, Indian and indigenous people who are interacting in the MHEI with the different mindsets, various values and diverse goals which are not very easy to converge in the single aim of having SHE. Furthermore, Malaysia has experienced the rapidity of development which causes the increase in Malaysians' incomes at every level and thus further which lead to rapid economic growth, industrial development, urbanization process, increasing population, and a changing lifestyle (Haron *et al.*, 2005). This lifestyle change will directly affect the community and alter the traditional values. The community in MHEI is very significant since they are one of the most influential agents of change in reaching the goal of the 1 Malaysia programme, which is aimed at enhancing solidarity and unity among all ethnic groups.

METHODOLOGY

Archival method and document analysis were selected as the methodology for this study. The archival research method was chosen because it includes a broad range of activities applied to facilitate the investigation of documents and textual materials produced by and about organizations (Dane, 2010). Those textual materials are SHE approaches. Archival research has been cited in the most classic sense as an appropriate tool for the study of historical documents in a limited period of time (ibid). This study also aimed at investigating the SHE trend and its relevancy to community from Talloirs declaration as a starting point of SHE approach up to the present. Besides, archival method has its own merit in non-historical investigations of documents and texts produced by and about contemporary subject, often as tools to supplement other research strategies, such as document analyses (ibid). Likewise, archival method has been introduced as a suitable method for analysis of digital texts including electronic databases (ibid). Many of

those SHE assessment tools have been derived from electronic database. Finally, the theoretical topics and substantive areas of investigation to which this archival method applied is even broader than the domain of organization science itself which is suitable for exploratory studies such as this study (ibid).

On the other hand, document analysis involves a systematic examination of instructional documents such as tools and frameworks (Lazar and Hochheiser, 2010) which are referred to as approaches in this study. Document analyses have been prescribed for the research which investigates tools and instructions (ibid). Moreover, if the focus of the analysis is on critical examination, rather than a mere description of the documents, it has been highly recommended for exploratory studies (ibid). Thus, document analysis is a suitable technique when the purpose is to gain insights into an instructional approach (ibid). Besides, a document analysis is a low cost technique which suits the financial constrains of this study.

In this regard, several important and popular approaches of SHE were identified and their relationships with the community was also explored. On the other hand, in the realm of SHE and to validate the findings, a questionnaire survey (using the Likert scale) was conducted among Malaysian professionals who attended the 3rd International Conference on Sustainability in Higher Education, which took place in USM, Penang, Malaysia on 20 – 22 November 2009.

Moreover, to explore specific challenges of Malaysian HEI and to investigate their relevancy to different rubrics of SHE, namely; community, wealth, governance, health, knowledge, etc., a literature review, observation, and interview were conducted.

Validation

The analysis of data using the SPSS software revealed the same results, which had already been presented by archival research. Likewise, in the aspect of Malaysian HEI, literature review, observation, and interview techniques function as a triangulation strategy to validate the finding.

Questionnaire survey

The study employed another validation method to capture the opinions of Malaysian experts who are working in the realm of MHEI across the country. The 3rd International Conference on Sustainability in Higher Education, which took place in USM, Penang, Malaysia, on 20 – 22 November 2009, was selected as the venue to conduct the questionnaire survey.



Fig. 1: The 3rd International Conference on Sustainability in Higher Education, 2009

Altogether, 59 papers were submitted and 112 experts attended the conference. A random sample method was used, whereby population = 114, percentage = 50, confidence interval = 12.54 and the confidence level was 95%, and thus, $N = 40$. Hence, 43 sets of questionnaire were distributed, out of which 40 were returned. The objective of the questionnaire was to grasp the perceptions of the experts on the importance of different aspects of sustainable campus.

Determine Sample Size	
Confidence Level:	<input checked="" type="radio"/> 95% <input type="radio"/> 99%
Confidence Interval:	<input type="text" value="12.54"/>
Population:	<input type="text" value="114"/>
<input type="button" value="Calculate"/> <input type="button" value="Clear"/>	
Sample size needed:	<input type="text" value="40"/>

Fig. 2: Sampling calculation

Sample characteristics

The majority (72.5%) of the respondents were Malay, with 48 percent males and 52 percent females (*see* Table 1). The sample's average age was 39 with a standard deviation of 7.23 years. A large percentage of the samples research interest was social sustainability (43%), followed by economic sustainability (20%), and environmental sustainability (37%). The majority of the respondents (56%) possessed a doctorate degree and 27% were with a Masters degree; only 17% were bachelor holders. A high percentage of the PhD holders, as compared with lower education level participants, reflects the high quality of conference which embedded more high quality academicians rather than students.

Observation

The study employed the observation technique for a strong validity whereby Trochim (2001) has enumerated this technique as the best available approximation to the truth of conclusion. "Unobtrusive Observation" has been selected in order to not affect the behavioural of individual in Malaysian universities. In order to increase the external validity, four universities known as UM, UPM, UKM, and USM were observed in the time span of 36 months, starting from December 2006 to December 2009. The type of "Unobtrusive Observation" has been "Behaviour Trace studies." The type of recording followed the "Descriptive Variable Analyses" which is to observe a phenomenon and to write it down.

Interview for Validation of Malaysia HEI Challenges

The purpose of this interview was to validate the findings on Malaysia's specific challenges and its effects on SHE. A face-to-face, open-ended interview was conducted from 10 high authorities and very experienced lectures of UM, USM, UKM, UPM. In this regard, an interview protocol was made to avoid the wrong interpretation and bias in the procedure of research. Thus, the interview followed the

TABLE 1
Sample characteristics

Variables	n = 40	(Frequency (%))
Ethnicity		
Indian	1	2.5%
Chinese	10	25%
Malay	29	72.5%
Gender		
Male	19	48%
Female	21	52%
Research interest		
Sustainable environment	15	37%
Sustainable economic	8	20%
Social sustainability	17	43%
Educational level		
Bachelor	7	17%
Master	11	27%
PhD	22	56%
Respondents' age	38.67 (mean)	(7.23 standard deviation)

guideline of Kvale (2007) in seven steps, as follows:

- Step 1: "Thematization the interview", i.e. formulating the purpose of interview.
- Step 2: Designing the interview questions and the type of questions,
- Step 3: Conducting the interview (inclusive of getting permission, tape recording, or writing)
- Step 4: Transcript of recording verbatim
- Step 5: Analyses, whereby the "interview analyses focusing on meaning" as the style of interpreting and the "Meaning Condensation" as the mode of interpretation which is "very prevalent and valid technique in analyzing the interview" (Kvale, 2007, p. 108) were utilized.
- Step 6: Verifying, i.e. checking the reliability of the analyses. In this regard, the research has verified the analyses of interview by resending the interpretation to interviewees via email or calling.

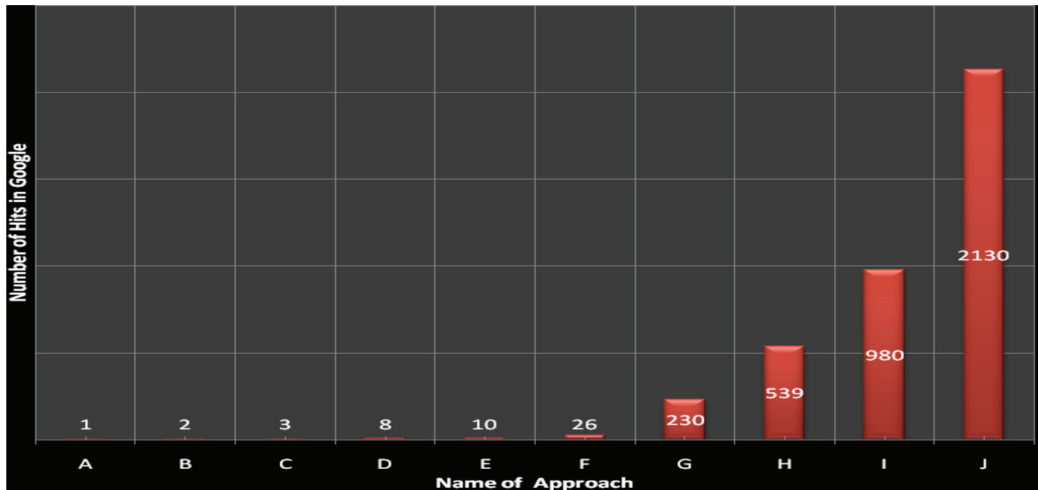
Step 7: Reporting, i.e. the final stage of the interview.

Sampling in interview

The saturation point theory was utilized in sampling the interview. The fact that the interview and observation are forms of the qualitative research, the issue of sampling is therefore not very significant, and thus, it is better to employ saturation method (Kumar, 2005). This means that in a qualitative research, it is not necessary to determine the extent of the diversity, while the qualitative aspect only supports the archival research. Therefore, the interview was kept on conducting upon the time no new knowledge was gained.

RESULTS AND DISCUSSION

Ten different approaches have been found to be popular in SHE, especially in North America and Canada. Their popularity is based on Google hits for a span of six months (four times



- A A Simple Audit at University of California, Los Angeles (UCLA) in 1988
- B MacLean’s Magazine Annual Guide to Canadian Universities
- C Canadian Centre for Policy Alternative Missing Pieces Reports I, II and III in 1999
- D National Wildlife Federation of the State of Campus Environment
- E Good Company’s Sustainable Pathways Toolkit
- F Campus Sustainability Assessment Review Project
- G Penn State Indicators Report
- H Association for the Advancement of Sustainability in Higher Education Sustainability Tracking, Assessment and Rating System “STARS”
- I University Leaders for a Sustainable Future Sustainability Assessment Questionnaire “(SAQ)”
- J Campus Sustainability Assessment Framework, “CSAF”

Fig. 3: The mean number of hits in the Google search for each approach for a period of 6 months, i.e. between Jan 2008 - July 2009 (four times every month)

every month), as shown in the following figure. Among the ten approaches, the four most popular approaches are discussed and analyzed in this section.

Association for the Advancement of Sustainability in Higher Education Approach (AASHE)

This new approach has gained the interest of many higher educational institutions. AASHE is an association which was founded in 2006 with a mission to promote sustainability in future campuses (STARS, 2008). This institute proposes a rating system, known as Sustainability Tracking Assessment and Rating Systems STAR (ibid).

University Leaders for Sustainable Future Approach (ULSF)

The Association of University Leaders for a Sustainable Future is an institute, which attempts to support sustainability at colleges and universities worldwide via publications, research and assessment (ULSF-b, 1992). It functions as the secretariat for the signatories of the Talloires Declaration. More than 350 university rectors in more than 40 countries had signed this declaration (Ibid), including University Malaya (UM).

Campus Sustainability Assessment Framework Approach (CSAF)

Campus Sustainability Assessment Framework was created by the Sierra Youth Coalition and Lindsay Cole (2003) in Royal Roads University. CSAF is a systematic formula used in analyzing the “sustainability” of Canadian campuses.

Penn State Indicator Reports Approach

Penn State Green Destiny Council in USA first performed this approach in 1998 and completed it in 2000. A team of 30 undergraduates, graduate students, several faculty members, and professionals had conducted this approach.

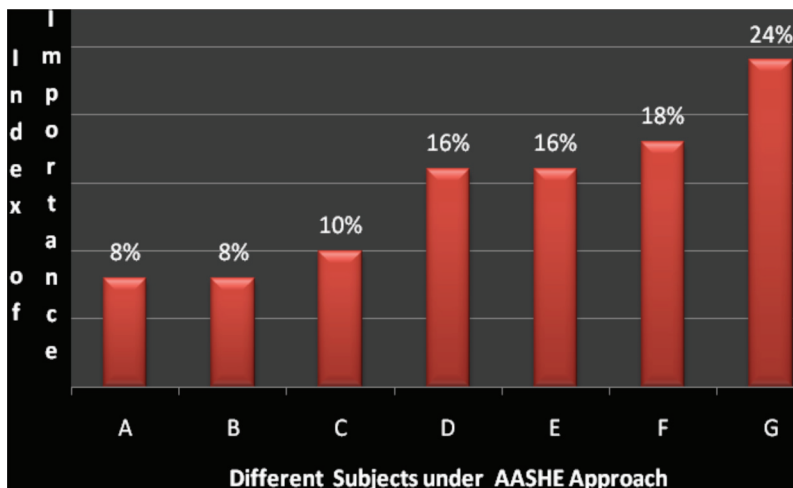
RESULTS AND DISCUSSION ON THE ROLE OF COMMUNITY ON SHE

AASHE has grouped different subjects pertaining to sustainability into three categories. These are: (1) Education and Research, (2) Operation, and

(3) Administration and Finance. On the other hand, Community Relationship and Partnership, which has been suggested in the Administration and Finance part, is a topic with a direct effect on SHE. Those five items are; (1) Community Service Infrastructure (AF Credit13), (2) Student Participation in Community Service (AF Credit14), (3) Student Hours Contributed in Community Service (AF Credit 15), (4) Financial Incentive for Public Service Careers (AF Credit 16), and (5) Outreach and Partnerships Carnegie Designation (AF Credit 17).

Based on the points given by AASHE, it was observed that the most important issue in Administration and Finance is community. To calculate the importance of different issues, the following formula was used: $I=P/(TP)$ where I = importance of issue, P = possible points of any issue, and TP = total points of the factors in the same category.

University Leaders for Sustainable Future (ULSF) provide a set of questionnaire for



- A: Planning
- B: Trademark Licensing
- C: Sustainability Infrastructure
- D: Investment
- E: Diversity Access and Affordability
- F: Human Resources
- G: Community

Fig. 4: The importance of different subjects on campus sustainability based on AASHE’s (STARS Ver 5) points in the Administration and Finance category

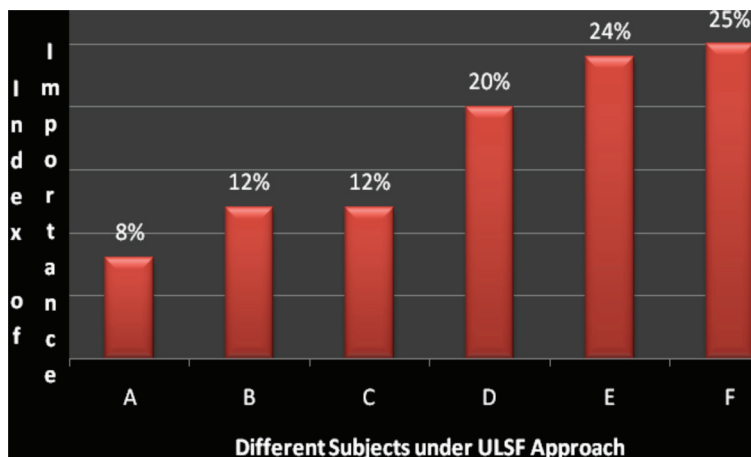
evaluating the level of SHE. It divides the factors into seven categories, namely: (1) Curriculum, (2) Research and Scholarship, (3) Operations, (4) Faculty and Staff Development and Rewards, (5) Outreaches and Services, (6) Student Opportunities, and (7) Institutional Mission and Structure. Among these categories, two groups directly address community related issues. The Outreach and Services category focuses on the relationship between community sustainability and higher educational supports in its local and surrounding region. On the other hand, the category of Student Opportunities focuses on the opportunities provided for the student groups as a small community. Meanwhile, in the Faculty and Staff Development and Rewards category, two out of three questions address the issues affecting the regional community (ULFS-a, 1999).

If we assume the number of questions as the indicator for the importance of that issue, and Outreaches and Services and Student Opportunities as the community indicator,

the significance of community can be made obvious. Based on the formula; $I = NQ / TNQ$, where I = importance of issue, NQ = number of questions in that field, TNQ = total number of questions, the result illustrates the significance of community (see Fig. 5).

Lindsay Cole (2003) from the Royal Roads University in Canada proposed the Campus Sustainability Assessment Framework (CSAF), which was constituted based on several different indicators; these are the people and ecosystem. The ecosystem indicator includes; (1) air, (2) water, (3) land, (4) materials, and (5) energy, whereas the people indicator comprises of; (1) knowledge, (2) community, (3) governance, (4) health, and (5) wealth and economy.

Addressing the term community in a separate category is an index for showing its importance. As the topic is more important, it therefore attracts more people's attention (Ann, 2003). Hence, the number of indicators is assumed as the index for the importance of this issue, the result will indicate that Community



- A: Research and Scholarship
- B: Faculty and Staff Development and Rewards
- C: Institutional Mission, Structure and Planning
- D: Operation
- E: Curricular
- F: Community (Outreaches and Services, Student Opportunities)

Fig. 5: The importance of different subjects in campus sustainability based on the sustainable assessment questionnaire of ULSF

Sustainability is the most important issue for achieving sustainability in the CSAF. This formula was used, “ $I_p = N_{pi} / T_{npi}$ ”, where; I_p = importance of an issue in the people category, N_{pi} = total number of indicators in the people category (see Fig. 6).

The results indicated that even in the CSAF, community activities played a very important role in the assessment process. Penn State Indicator Report started the community issue by using this slogan: “All stakeholders in the university – students, faculties, staff, administrators, trustees, parents, and the public have the right to expect that the university will strive to be a civil community of learning; all have an obligation to make it happen”. Hence, the following formula was used, “ $I_p = N_{pi} / T_{npi}$ ”, where I_p = importance of the people category, N_{pi} = total number of indicators in the people category (see Fig. 8).

Fig. 8 shows how important the community issue is in comparison to other factors in this approach. Penn State has declared that it emphasizes more on the community since it believes that this factor is one of the important efforts which should be concentrated constantly. It also states that maintaining a sustainable campus requires maintaining a healthy

community. Moreover, it emphasized the role of education in producing successful and responsible students who are parts of the society.

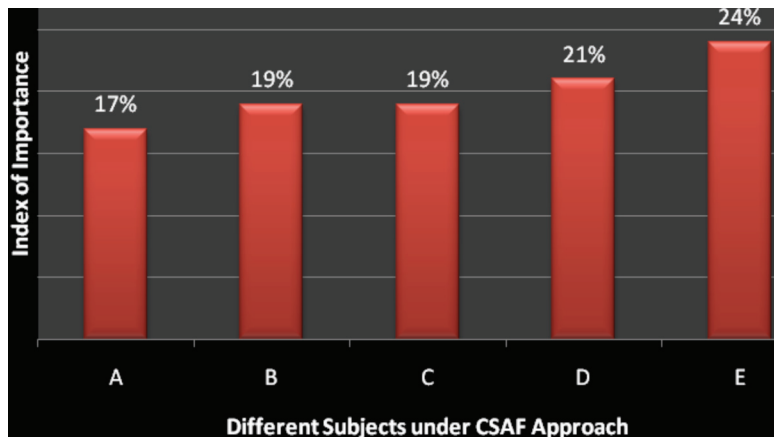
Descriptive Analysis of the Questionnaire Results

A descriptive analysis was utilized in the analysis of this study. Nonetheless, multiple regressions were also used to analyze the factors influencing respondents’ answers about the factors of SHE in MHEI.

The variation in the respondents’ answers towards the importance of community in MHEI (ICMHEI) could be hypostatized by an array of independent predictor variables. The equation for the empirical model is as follows: $f(ICMHEI) = f \{ ethnicity, gender, research interest, educational level, age)$.

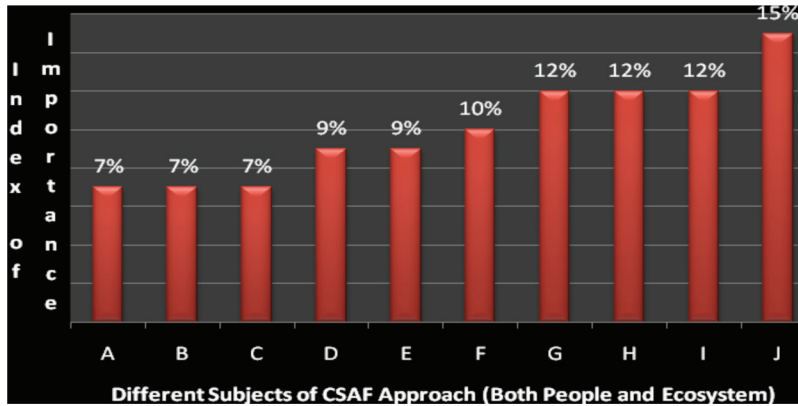
Reliability Test of Results

Cronbach’s alpha coefficient was used to determine the internal consistency reliability of the answer of this study (see Table 2). The respondents’ perception on People and Ecosystem formed the dependent group. The remainder of the above variables is our independent variable.



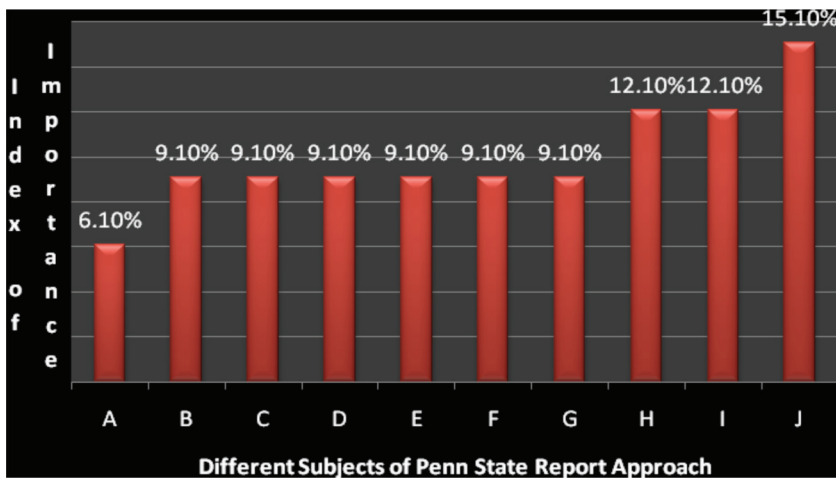
A: Wealth and Economy B: Governance C: Health D: Knowledge E: Community

Fig. 6: The importance of different subjects in the CSAF, based on the ratio of specific category indicators to all people category indicators



F: Wealth and Economy G: Governance H: Health I: Knowledge J: Community
 A: Water B: Energy C: Land D: Air E: Materials

Fig. 7: The importance of the different subjects in CSAF based on the ratio of specific category indicators to all the ecosystem and people category indicators



A: Decision Making B: Built and Environment C: Energy D: Food E: Material
 F: Transport G: Water H: Land I: Research and Scholarship
 J: Community

Fig. 8: The importance of different subjects in campus sustainability based on Penn State Indicator Report

T-test and ANNOVA Test

In order to test whether the other nominal variables, such as gender, ethnicity, research interest, educational level and age, have significant differences, a T-test for gender and four ANNOVA tests for ethnicity, research interest, educational level and age were conducted. For the variables with less than 5% significant difference, a table of description has been provided.

It shows that there is only significant difference ($p = .001$) between the males and females, with regard to “water is necessary”, whereby the mean value for males (mean = 1.68, $sd = -1.86$) was found to be significantly higher than that of the females (mean = 1.85, $sd = -2.41$).

ANNOVA TEST

As for the effects of ethnicity, research interest, educational level and age on respondents, four ANNOVA tests were performed, whereby none of the results had a significant difference or with the P value lower than 5%. An example of the tests is shown in Table 5.

Experts' Perceptions Diagrams

This section discusses the analysis of the experts' opinions in the realm of SHE who ratified the importance of the community aspect by voting 97.5% as “strongly agree”. It also showed that the experts were aware of the structure and challenges of MHEI and the role of the campus community in contributing to sustainability of higher education.

Discussion on Malaysian HEI Challenges

A review of the literature indicates that the Educational System in Malaysia varies from other parts of the world due to different socio-political background. Hence, it is essential to look at it in details. Education is an important portfolio in the Malaysian government structure, as reflected by the fact that all Prime Ministers,

excluding the first Prime Minister, were once the Education Minister. Malaysia has its own particular challenges in its HEI, such as racial polarization, gender issues, and poor command of English as the major medium of international communication.

Racial Polarization

Malaysia has many different ethnic groups. Hence, racial polarization is a reality and it is very prevalent in the Malaysian HEI, whereby students tend to group together according to their ethnic background (Malaysia National News Agency, 2008). Malaysian universities have taken many initiatives to bring about integration of all its ethnic groups together such as organizing cultural shows, sport carnivals, student orientations, competitions, and supporting “One Malaysia programme” which is aimed at enhancing solidarity and unity among all its ethnic groups. For example, various ethnic students of Universiti Putra Malaysia gathered on 17th January 2010 to commemorate the Indian festival called Ponggal. The observation ratified this subject, too.

Gender issues

Based on a report by Dr. Richard Leets for UNDP (2004), Malaysia's ranking in the UNDP gender index is not as high as it should be. The ratio between the females to males in Malaysian universities, except for Polytechnic, is 2:1. Generally, there are more females than males in the campuses. This gender imbalance does not satisfy the world's standards. This imbalance proportion does not only endanger the future job market of the country, but it will also create some problems in terms of campus management. This can be observed even in the simplest subjects in the campuses, such as possessing the same number of toilets or hostels for the males and females, of which the former is being underutilized and the latter is over utilized. The observation also ratified this particular subject.

TABLE 2
Descriptive statistics

	N statistics	Range statistics	Minimum statistics	Maximum statistics	Mean statistics	Std. errors	Std. deviation statistics	Variance statistics
Knowledge will be very necessary	40	2.00	1.00	3.00	1.8750	.0639	.40430	.163
Community will be very necessary	40	1.00	1.00	2.00	1.0250	.0250	.15811	.025
Governance will be very necessary	40	2.00	1.00	3.00	1.7750	.0758	.47972	.230
Economy and wealth will be very necessary	40	2.00	1.00	3.00	1.8750	.0639	.40430	.163
Well-being of health will be very necessary	40	2.00	1.00	3.00	1.8250	.0706	.44650	.199
Air will be very necessary	40	2.00	1.00	3.00	1.8750	.0639	.40430	.163
Water will be very necessary	40	2.00	1.00	3.00	1.9250	.0553	.34991	.122
Land will be very necessary	40	2.00	1.00	3.00	1.9250	.0553	.34991	.122
Materials will be very necessary	40	2.00	1.00	3.00	1.9000	.0599	.37893	.144
Energy will be very necessary	40	2.00	1.00	3.00	1.2500	.0780	.49355	.244

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TABLE 3
Cronbach's alpha coefficient of the answers

Scales	No. of items	Alpha value
People group	5	0.69
Ecosystem group	5	.59

TABLE 4
T-test

Ecosystem group	Gender	Mean	Std.dev	T value	Significant
Water is necessary	Female	1.6842	+1.7895	-2.4797	.001
	Male	1.8571	+2.0476	-2.407	.001

TABLE 5
ANNOVA test between different ethnic backgrounds

		Sum of squares	df	Mean square	F	Sig.
Knowledge is necessary	Between groups	.237	2	.119	.715	.496
	Within groups	6.138	37	.166		
	Total	6.375	39			

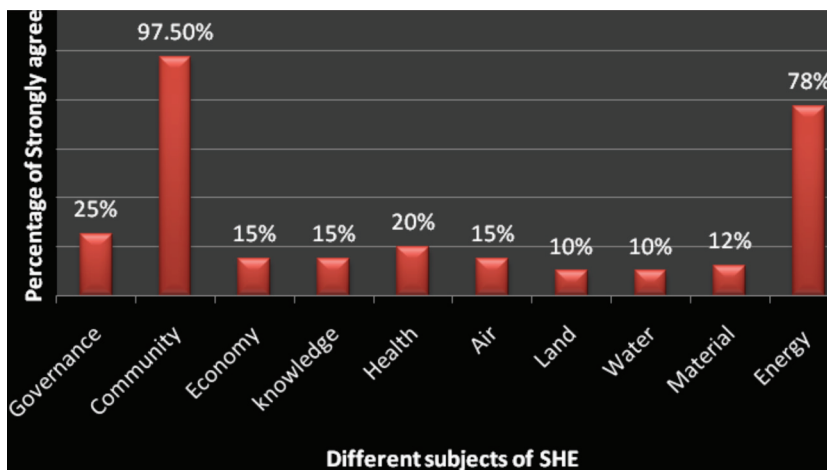


Fig. 9: The percentage of the respondents who strongly agreed on different subjects

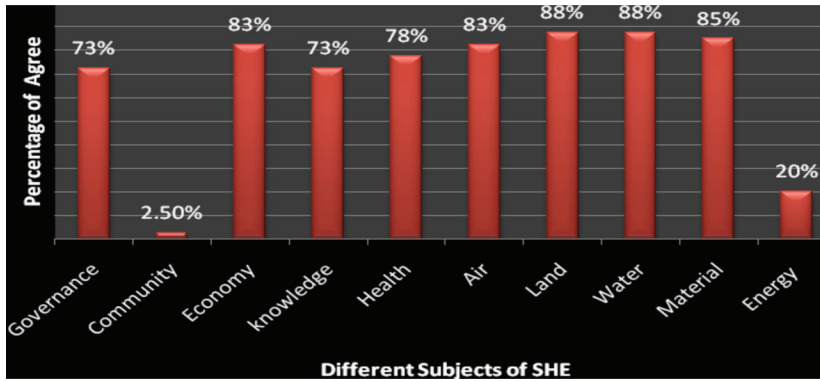


Fig. 10: The percentage of the respondents who agreed on different subjects

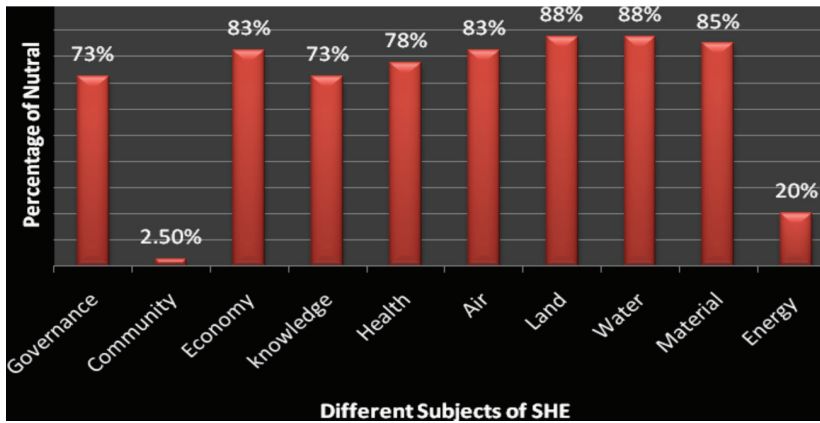


Fig. 11: The percentage of those who were neutral on different subjects

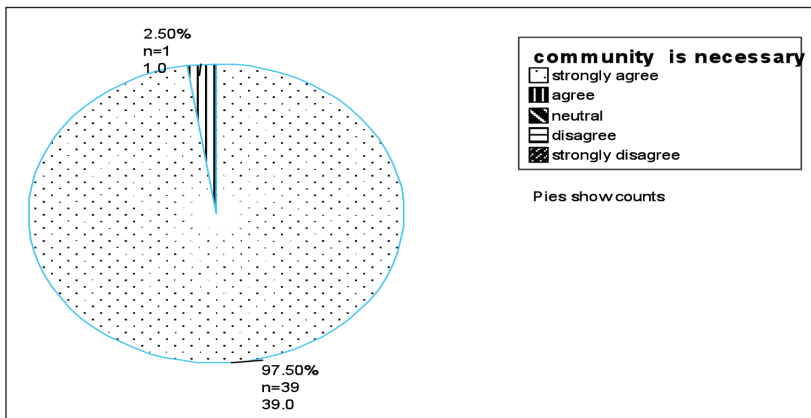


Fig. 12: The percentage of the respondents who agreed or strongly agreed on the importance of community



Fig. 13: Malaysian universities' depolarization efforts via social events



(Source: UPM website, 2010)

Fig. 14: UPM students of different races attended "Ponggal" (Indian celebration)

Poor command of the English Language

Another challenge in Malaysia's HEI is the poor command of English as an international medium used to connect everyone together, apart from their ethnic groups and own mother tongue (Crismore *et al.*, 1996). The poor command of the English language is very prevalent not only among the international students but also among the local students, and even university staff (*ibid*). The observation also ratified this particular subject as well.

Discussion on the Malaysian HEI Challenges Based on the Interview

The interview included many probing as well as the main questions. The answers were analysed and transcribed in 98 pages. The summary of the analyses were done based on the three categories, namely; (1) existence and effects of Imbalance Gender Distributing (IGD), (2) existence and effects of Ethnical Polarization (EP), and (3) existence and effects of Poor Command of English.

TABLE 6
Results from the interview on gender

No	Affiliation	Have a clear perception of SD and SHE	IGD exist in Malaysia HEI	IGD is a challenge	IGD affects the SHE
1	UKM LESTARI	Yes	Yes	Yes	Yes
2	UM, Chancellery	Yes	Yes	Yes	Yes
3	UPM Chancellery	Yes	Yes	Yes (But has period of 30 years to revert)	Yes
4	Ministry of Higher Education	Yes	Yes	Neutral	Some how
5	USM, Chancellery	Yes	Yes	Yes	No
6	UPM, Faculty of Human Ecology	Yes	Yes	Yes	Yes
7	USM Faculty of Humanity	Yes	Yes	Yes	Yes
8	UPM, Faculty of Food Science	Not very well			
9	UM Development Dept.	Not very well			
10	USM Chancellery	Yes	Yes	Yes	Yes

The results from the interview indicate that all the interviewees believe that the IGD exists in Malaysian HEI and majority (except one who was neutral) took it as a threat to SHE.

The result from the analyses of the interview indicate that all the interviewees believe that ethnical polarization exists in Malaysian HEI, and all (except for one) interviewees considered it as a challenge. Besides, all the interviewees also believe that EP is a threat to SHE (*see* Table 7).

The results from the interview analyses indicate that all of interviewees believe that poor command of English exists in Malaysian HEI, except for one interviewee who was neutral, whereas the rest considered it as a challenge. Besides, except for one interviewee who was neutral, the rest considered PCI as a threat to SHE (*see* Table 8).

DISCUSSION AND ANALYSES

As sustainability concerns with issues of social, economic and environmental, all of them should be addressed sufficiently and fairly. However, these concerns differ from one country to another in the world. In this regard, the most important documents which can identify the most important subjects at the national and international levels have to be reviewed. Hence, employing the archival analysis as the methodology for this study would lead to an acceptable result. In addition, by conducting a comparative analysis on the frequency of different approaches using the Google search engine, as an indicator, had also enabled this study to find out which approach has been widely used. It has been argued that the comparative statistical analysis of the four most popular sustainable campus approaches could give the evidence of the importance of community-related topics in campus sustainability. In this comparison, the

TABLE 7
Result from the interview on polarization

No	Affiliation	Have a clear perception of SD and SHE	EP exist in Malaysia universities	EP is a challenge	EP affect the SHE
1	UKM, LESTARI	Yes	Yes	Yes	Yes (but not sure about all universities)
2	UM, Deputy Vice Chancellor	Yes	Yes	Yes	Yes
3	UPM, Chancellery	Yes	Yes	Yes	Yes
4	Ministry of Higher Education,	Yes	Yes	Neutral	Yes
5	USM, Chancellery	Yes	Yes	Yes	Yes
6	UPM, Faculty of Human Ecology	Yes	Yes	Yes	Yes
7	USM, Faculty of Humanity	Yes	Yes	Yes	Yes
8	UPM, Faculty of Food Science	No			
19	UM Director of Development	No			
10	USM Chancellery	Yes	Yes	Yes	Yes

community's important values in accordance with the approaches are as follows: ULSF (25%), CSAF (24%), Pen State Report (15.10%), and STARS (24%), which were the first highest important values as compared to the second highest important values, which were 24%, 21%, 12.10% and 18%, respectively (see *Fig. 8*).

Apparently, the Malaysian professionals' opinions imparted that community is the most important issue in sustaining MHEI, whereby 97.5% of the respondents declared their strong support of addressing the subject of community in research and initiatives. Likewise, the literature review, interviews, and observations have also indicated that Malaysian HEI encounters three challenges, namely; ethnical polarization, imbalance distribution, and poor command of English which apparently are affecting the community aspect of SHE. All these reflect that Malaysian higher learning

institutions need to become more sustainable particularly in issues concerning its community.

CONCLUSIONS

In higher educational institutions, community emerges as an effective factor, implying an important role in the total sustainability of campuses. It has been concluded in order to work or fulfil research on SHE, particularly in Malaysia, emphasizing the community issues is a logical decision. Malaysian experts believe that the community aspect is the most important issue which should be addressed promptly. Thus, through community services, volunteerism, engagement and partnership, universities and colleges will not only enhance their own sustainability level but also empower their students' leadership skills.

TABLE 8
The result from the interview on the command of English

No	Affiliation	Have a clear perception of SD and SHE	PCE exist in Malaysia Universities	PCE is a challenge	PCE affects SHE
1	UKM LESTARI	Yes	Yes	Yes	Yes
2	UM, Chancellery	Yes	Yes	Yes	Yes
3	UPM Chancellery	Yes	Yes	Yes	Yes
4	Ministry of Higher Education,	Yes	Yes	Neutral	Yes
5	USM, Chancellery	Yes	Yes	Yes	Neutral
6	UPM, Faculty of Human Ecology	Yes	Yes	Yes	Yes
7	USM Faculty of Humanity	Yes	Yes	Yes	Yes
8	UPM, Faculty of Food Science	No			
9	UM	No			
10	USM Chancellery	Yes	Yes	Yes	Yes

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