

CHAPTER 6

ANALYSIS AND RESEARCH FINDINGS FOR STAGE THREE

6.1 Introduction

The final outcome of this thesis is the third stage of draft proposal for the monitoring strategies and key indicators based on the field studies presented in Chapter 4 and Chapter 5. In this stage, the proposed framework is brought into the next level by a validation process, which is the subject of Chapter 6. This chapter aims to address the following research objective; to develop the monitoring strategies and key indicators for sustaining heritage values of cultural properties in Malaysia.

This chapter critically analysed the opinions of the experts on the monitoring strategies and key indicators. The validation process of the third stage involved a group of experts in the conservation management of WH both locally and internationally.

Finally, the specific conclusion is addressed by bringing together both findings. From these findings, the monitoring strategies and key indicators for urban form, urban fabric and heritage building is developed and examined by the Delphi technique.

6.2 Questionnaire Survey and Data Analysis

Data was collected via questionnaire survey using an electronic mail (e-mail). According to Babbie (1995:257), survey research is “probably the best method available to social scientist interested in collecting original data for describing a population too large to be observed directly”, and “it is especially appropriate for making descriptive studies of large population”. Salant and Dillman (1994 : 260) suggested that survey design collected

measures from at least two groups of people at one point of time and compared the extent to which the groups differ on the dependent variable (de Vaus, 2002). Questionnaire survey was conducted involving eleven (11) selected experts referring to their background and involvement in the conservation area.

6.3 The Delphi Technique

The final questionnaire form of the four parts: (1) respondent's background; (2) monitoring strategies for urban form and urban fabric and heritage buildings; (3) indicators for urban form and urban fabric; and (4) indicators for heritage buildings, with the second and third parts are the core of the survey items. Sackman (1975:11)

Thus, the Delphi method can serve as an excellent tool for projecting and forecasting future trends. In the context of this research, the Delphi method was used to confirm the practicality of the pre-tested monitoring strategies and key indicators framework being established from the qualitative based method and case study approach in other WH sites. Furthermore, Delphi results can serve as a guide for the design of the monitoring strategies and key indicators framework for the acquisition of World Heritage Sites of Malacca and George Town, as well as the predicted best practice to other heritage towns in Malaysia. In this context, Delbecq, Van de Ven and Gusafan (1975:84) mentioned that:

When properly executed, employing Delphi methods can produce summary results that are more current and relevant than investigations using other methods of research. Delphi can provide a more updated exchange of scientific or technique information than a literature search by drawing upon the current knowledge of experts. Van de Ven and Gusafan (1975:84)

The selection of experts for this research is based on the following criteria:

- i) The experts must possess relatively vast knowledge and experiences in the related field of the studies or are active in the conservation management research i.e. in cultural property of WH Sites, heritage conservation, legal aspects in regards to heritage, researchers in conservation of heritage researches, professionals in conservation of heritage (architects, planners and conservationists), related NGOs, as well as those who are officially appointed to represent stakeholders. Thus, 29 experts are identified internationally and locally to participate in the research that are chosen from UNESCO, ICCROM, ICOMOS and local authorities (MBMB and MPPP) (refer Appendix C: List of Expert).

- ii) The experts are required to involve in 2 or 3 rounds of structured surveys (via electronic medium) as their pre-agreeable and commitment to this requirement is a prerequisite and very important.

The key to successful Delphi study lies in the selection of experts or panels (Gordon, 1994). According to Huss (1990), the two critical steps in a Delphi study are the design of the questionnaire and the selection of experts. Most studies used panels of 15 to 35 people and should anticipate an acceptance rate between 35 and 55% (Gordon, 1994, Brooks, 1979, Dalkey et al. 1972). As the number of panel is usually small, Delphi method is not intended to produce statistically significant results. In other words, the results provided by any panel does not predict the response of a large population. The data can be displayed in mode, median or interquartile range (Gordon, 1994), which are 3=agree, 2=not sure, and 1= disagree. Delphi structure interviews took place after the completion of Stage Two (respondents from local context) and small quantitative survey (descriptive) analyses because the design of the Delphi's interview questions is based on

the results above, the first round of interview commenced from the second week of September 2011, and finally the completed analysis of both rounds (Round I and Round II of Delphi) at the end of February 2012.

According to Kidder & Judd (1999), the perceptions of an individual towards something (e.g. politics, conservatives and others) can be investigated using Likert scale. This research applied three-point Likert scale in QI and five-point Likert scale for Q. Three-point Likert scale was chosen for QI (e.g. 3=agree, 1=disagree and 2=not sure) in consideration of the majority of the respondents are people that involved in the administration of conservation works.

The final questionnaire form consisted of four parts: (1) background; (2) monitoring strategies for urban form and urban fabric and heritage buildings; (3) indicators for urban form and urban fabric; and (4) indicators for heritage buildings, with the third and fourth parts are considered as the core survey items. These items were performance indicators, grouped under 11 strategies and 58 indicators which were rated using three-point Likert-type scale.

6.4 Analysis and Discussion of Delphi's Findings

6.4.1 Round # 1 Experts' Verification

Eleven "monitoring strategies" for sustaining the heritage values for Malacca and George Town suggested are agreeable by the experts as the monitoring strategies. The monitoring strategies for urban form and urban fabric includes and heritage buildings are presented in Table 6.1.

Table 6.1: Monitoring strategies and key indicators for sustaining the heritage values of Malacca and George Town

Item	Monitoring Strategies
Urban form and urban fabric	
A1	New developments (infill)
A2	Restoration works
A3	Landscape
A4	Infrastructure works (services)/facilities
A5	Visual link and cognition (images)
A6	Traffic and pedestrian circulation
Heritage buildings	
B7	Building condition
B8	Building under disaster/damage
B9	Buildings use
B10	Intervention and repair
B11	Signage

This is to insure that monitoring efforts are viewed not only from the point of view of the conservation practitioners, but also to include a representative portion of the users' community and community at large. Affendy (2012) mentioned that practitioners get hung up on fabric at the cost of community involvement and their more pragmatic sensitivities.

6.4.2 Indicators for Urban Form and Urban Fabric

There are thirty two (32) indicators and six (6) monitoring strategies of urban form and urban fabric.

A1 Indicators for New Development.

Specifically, when asked on the indicators for monitoring new development, there are six indicators that were posted. The results showed the indicators for monitoring strategies on the new development agreed, which are:

A1.1. Number of approved and completed projects yearly within core and buffer zones (w/+ve HIA);

A1.2. Number of proposals/projects rejected (technically due to negative HIA reports);

A1.3. Number of on-going/completed projects that deemed to threaten the integrity and general settings (high profile projects);

A1.4. Number of new developments completed yearly that did not comply with the present guidelines (high profile projects);

A1.5. Number of completed projects that deemed to threaten the integrity and overall heritage values due to the early approval before site is being listed; and

A1.6. Number of stopped works.

Eleven (11) experts agreed with the six (6) proposed indicators for strategy A1 (New development).

These are suggestions by one of the experts to include the indicators such as:

- i. Number of applications based on the Heritage Management Plan / Master Plan for the particular site (i.e. understanding the heritage significance of the place and how to conserve/enhance it before commencing to decide on the change/design);
- ii. Percentage of significant fabric replaced in each case; and
- iii. Percentage of significant spatial/townscape qualities sacrificed in each case.

A2 Indicators for Restoration Works

The results for the indicators of “restoration works” in monitoring strategies at Malacca and George Town include seven indicators, which are:

A2.7. Number of application made yearly;

A2.8. Number of approved restoration work (with amendment) yearly;

A2.9. Number of application rejected;

A2.10. Number of project approved to the current guidelines;

A2.11. Number of project completed according to current guidelines;

A2.12. Number of stopped works (identified as threats/inappropriate); and

A2.13. Number of illegal renovation works detected yearly.

In particular, seven indicators for restoration works have been agreed by the experts.

There are also suggestions about indicators that can be included, which are:

- i. Number of applications that used traditional trades and materials;
- ii. Number of applications that sought advice from an expert in conserving heritage fabric; and
- iii. Percentage of significant fabric replaced in each case.

A3 Indicators for Landscape Works

It is evident from the survey that the experts considered the indicators are appropriate.

Only ten experts responded to the proposal. The indicators are:

A3.14. Number of new works approved annually;

A3.15. Number of completed projects that enhanced the OUV; and

A3.16. Number of completed projects that deemed to threaten the integrity and overall of the heritage characteristic.

The suggested indicators are:

- i. Number of applications that used traditional trades and materials;
- ii. Number of applications that sought advice from an expert in conserving heritage fabric; and
- iii. Percentage of significant fabric replaced in each case.

This indicators are similar to Restoration works. Thus, Affandy (2011) suggested that any related works for landscape must be appropriate and in harmony as defined in the inscription document. It can get a little “Disneyland” if owners/communities are too proscribed.

A4 Indicators for Infrastructure works

When discussing on infrastructure work, there are seven indicators that are posted to the experts. The result revealed that one indicator is less significant. The indicators are:

- A4.17. Number of new works approved annually;
- A4.18. Number of completed projects that enhanced the OUV;
- A4.19. Number of completed projects that deemed to threaten the integrity and overall heritage characters;
- A4.20. Number of the maintenance works yearly;
- A4.21. Number of new facilities being integrated into buildings; and
- A4.22. Number of reports on inappropriate equipment placed on the buildings (air conditioning blower, TV aerial, ASTRO dish and others).

Suggestions for indicators include:

- i. Archaeological issues addressed;
- ii. Care taken not to impact on the heritage values (input from heritage consultant); and
- iii. Numbers of consultations with owners/users of heritage buildings with lists of concerns and problems faced, how to solve, expenses involved and the fund for the buildings.

A5 Indicators for Visual Link and Cognition

The results from the experts' opinion on the indicators for building height is less significant as this is due to the existing regulation that restricted the maximum height for buildings in conservation and buffer zones. The remaining indicators are:

A5.23 Number of new elements (eye catching) that are being introduced in the heritage setting (physical environment) (obtained approval from authority) that gives negative impact to the heritage value;

A5.24. Number of buildings (new/extension) of different heights (skyline and the roofscape) that gives negative impact to the heritage value;

A5.25. Number of reclaimed area approved along the edge/waterfront yearly;

A5.26. Number of completed reclaimed area within core and buffer zones that enhanced the OUV; and

A5.27. Number of reclaimed area within core and buffer zones that deemed to threaten the OUV.

A6 Indicators for Traffic and Pedestrian Circulation

When seeking the experts' opinion on traffic and pedestrian circulation, the results revealed three indicators are less significant, which are indicators A6.20, A6.34 and A6.33. However, the rest of the indicators are agreed by the experts. They are:

- A6.28.Survey of the traffic volume yearly;
- A6.29. Number of the road maintenance yearly;
- A6.30.Statistic of accidents reported yearly;
- A6.31.Number of approved road works yearly;
- A6.32.Number of approved pedestrian way yearly;
- A6.33.Number of rejected proposal for traffic circulation yearly;
- A6.34.Number of rejected proposal for pedestrian way yearly;
- A6.35.Number of works that enhanced the heritage value; and
- A6.36.Number of completed works that deemed to weaken the OUV.

There are also indicators suggested for the strategy to get the involvement of heritage consultants in the projects within WH sites. There are numbers of consultations with owners/users of heritage buildings with lists of concerns and problems being faced. This is what being said by Tun Ahmad Sarji in Chapter One.

6.4.3 Indicators for Heritage Buildings

Twenty indicators are proposed for five (5) monitoring strategies of heritage buildings.

B7 Indicators for Building Condition

When specifically asked on indicators for building condition, the results revealed three indicators are proposed that are vital for monitoring strategy.

B7.37. Number and percentage of buildings that are in good, fair, poor and ruined conditions;

B7.38. Number of buildings that are structurally dangerous and not safe; and

B7.39. Number of common defects reported by homeowner/stakeholders/users.

B8 Indicators for Building Under Disaster

It is evident that all indicators are agreeable by the experts. In early 2011, there was a tsunami in Japan that destroyed all the significant places including tangible culture. Both natural and man-made disasters are vital and very significant for the buildings. The indicators are:

B8.40. Number of buildings involved in natural disaster (flood, earthquake, storm, tsunami and others); and

B8.41. Number of buildings involved in man-made disaster (fire).

B9 Buildings Use

When asked on the indicators for buildings use, the results revealed that the indicators proposed for buildings use are relevant as the experts agreed with the proposal. The indicators are:

B9.42. Records of buildings use when inscribed (2008);

B9.43. Records of buildings use annually;

B9.44. Number of licensed buildings;

B9.45. Number of unlicensed buildings (illegal use such as bird nests);

B9.46. Number of compound to buildings owners; and

B9.47. Number of court cases recorded.

B10 Indicators for Building Intervention and Repair

All the proposed indicators are significant to the monitoring strategies for building intervention. They are:

B10.48. Record of intervention yearly;

- B10.49. Number of projects that won local, national and international awards;
- B10.50. Number of projects funded by government or other agencies;
- B10.51. Number of projects (minor repair) carried out by the homeowner;
- B10.52. Number of completed projects that deemed to threaten the integrity and overall heritage values; and
- B10.53. Number of project need to be re-instated (to regain the authenticity of the heritage buildings).

Affandy (2011) brought up the issues that for any intervention and repair, they should be looking into how the project are being funded. Any consultants involved in heritage buildings should be knowledgeable and show respect towards the existing condition of the property.

B11 Indicators for Building Signage

Seeing on building signage, it is evident that the indicators are significant to the monitoring strategy on building signage.

- B11.54. Number of buildings with signage compliance to new guidelines;
- B11.55. Number of new application for signage yearly;
- B11.56. Number of rejected application that deemed to threaten the heritage value;
- B11.57. Number of licensed signage that give positive impact on the building, as well as the overall character of the building; and
- B11.58. Number of signage that refused to be removed and gives negative impact to the building and its heritage value.

Affandy (2012) expressed her opinion that there are many owners who received revenue from advertisers and that this revenue allows them to up keep their buildings.

Signage rules should be made with major advertisers so that the advertisers see their role in the heritage presentation. This would assure that signage is in line with both advertiser's needs and good conservation practice. In Indonesia, the revenues are dependent on revenues from the advertisers. Perhaps a good indicator would include how much buildings owners get from the advertisers, which would allow the city government to choose to replace that revenue to the owners.

To ensure building signage is sensitively placed and not covering details of the front facade, Medina (2011) strongly emphasised on the building facades that refer to many of them are being covered or screened by advertisement boards that disguise the unique feature of the heritage building facades.

6.4.4 Delphi's Findings for Round #1

Overall results of A1, A2, A3, A4, A5, A6, B7, B8, B9, B10 and B11 revealed that both rounds achieved an agreement to the proposed strategies. This means that the experts are optimistic that the monitoring strategies framework being developed from the exploratory methodologies could be implemented in due manner subject to minor amendment and existing guidelines and regulations. The results are consistent in both rounds. The results are also consistent with the literature analyses as revealed in Chapter Three.

With regards to key indicators for urban form and building heritage, the experts are consistent with the answers. However, the results revealed that some indicators are less important but they are still valid for the framework for key indicators in monitoring the strategies at Malacca and George Town World Heritage sites.

There are comments and suggestions received from Round #1 of Delphi findings as listed below:

- Amount of works being carried out without approval;
- Number of projects using expert heritage advice;
- Access to traditional building trades and materials;
- Authenticity of fabric, spaces and streetscapes;
- Diversity of remaining traditional building uses;
- Diversity of remaining traditional trades/crafts/shop uses;
- Remaining street vendors;
- Other street uses remained (markets, play, food, festivals);
- Diversity of traditional transport (rickshaws);
- Cross-section of population inhabiting areas (balance of low to medium income earners) (balance of different religions, cultural practices);
- Items for sale produced locally (including food);
- Archaeological issues addressed;
- Interpretive strategies integrated into project;
- Projects with early consultation with heritage bodies;
- Percentage of tourism related uses; and
- Retention of domestic commercial uses (e.g. chemist, baker, hairdresser, doctor and others) in WH area (not all relocated to shopping malls).

The above suggestions are posted as additional questions for Round #2 of Delphi method. The result is in Table 6.2

6.4.5 Round # 2 Experts' Verification and Findings

Table 6.2 shows that the experts basically agreed to the additional items to be considered for the monitoring strategies and indicators for WH sites.

Table 6.2 : Monitoring strategies and indicators to be considered for monitoring WH sites (Round #2)

		Mon. Strategies	Indicators	Agree	Not agree	Not Sure	% Agreed
1	Amount of works being carried out without approval		√	Discussed in Strategy #1			
2	Number of projects using expert heritage advice		√	11	-	-	100
3	Access to traditional building trades and materials	√		Discussed in strategy #7			
4	Authenticity of fabric, spaces and streetscapes	√		11			100
5	Diversity of remaining traditional building uses		√	11			100
6	Diversity of remaining traditional trades/crafts/shop uses		√	10	1	1	
7	Remaining street vendors		√	8		3	
8	Other street uses remained (markets, play, food, festivals)		√	11	-	-	100
9	Diversity of traditional transport (rickshaws)		√	11	-	-	100
10	Cross-section of population inhabiting areas (balance of low to medium income		√	10	-	1	
11	earners) (balance of different religions, cultural practices)	Intangible					
12	Items for sale produced locally (including food)		√	8	-	3	
13	Archaeological issues addressed	√ Non-OUV - site not listed for its archaeological site					
14	Interpretive strategies integrated into project	√		5	2	4	
15	Projects with early consultation with heritage bodies		√	Discussed in strategy #1			
16	Percentage of tourism related uses	Management issues		11	-	-	100
17	Retention of domestic commercial uses (e.g. chemist, baker, hairdresser, doctor and others) in WH area (not all relocated to shopping malls)		√	11	-	-	100

Seventeen suggestions were posted for Round Two of Delphi technique. Only 14 are relevant to the tangible culture. From this 14 recommendations, 3 were new strategies and 11 were new monitoring indicators. Table 6.3 shows the tabulation of the findings from the experts' survey.

Table 6.3: Summary of monitoring strategies and key indicators for Malacca and George Town WH Cities

OUTCOMES			
	No. Strategy (s)	No. Key Indicator (s)	Table
Draft from Group 1	10	36	
Draft from Group 2	11	58	
Experts Round 1	11 (+3)	58 (+11)	17 recommendations -3 strategies -11 indicators -4 not relevant
Experts Round 2	14	69	
FINAL	11/14	58/69	

Table 6.4: Validation of monitoring strategies and key indicators from local and international experts

Monitoring Strategies			I	L	I	E
A. Urban Form and Urban Fabrics	1	New development	6	√	2	√
	2	Renovation works	7	√	3	√
	3	Landscape	3	√	2	√
	4	Infrastructure works/facilities	6	√	2	√
	5	Visual link and cognitive	5	√		√
	6	Traffic and pedestrian circulation	9	√	2	√
	7	Authenticity of fabric, space and streets	-	-	-	√
	8	Interpretive strategies integrated into projects	-	-	-	√

Table 6.4 Continued

B. Heritage Buildings	9	Building condition	3	√	-	√
	10	Building under disaster	2	√	-	√
	11	Buildings use	6	√	-	√
	12	Intervention and repairs	6	√	-	√
	13	Signage	5	√	-	
	14	Access to traditional building trades and materials	-	-		√
TOTAL			58		11	

Notes: L= Local input, E= Expert input and I= indicator (s)

There are eleven new indicators suggested for the survey as shows in Table 6.4

A1.New development

Number of applications based on the Heritage Management Plan/Master Plan for the particular site (i.e. understanding the heritage significance of the place and how to conserve/enhance it before commencing to decide on the change/design).

- Percentage of significant fabric replaced in each case; and
- Percentage of significant spatial/townscape qualities sacrificed in each case.

To ensure that monitoring efforts are viewed not only from the point of view of conservation practitioners but also to include a representative portion of the users' community and community at large. The practitioners get hung up on fabric at the cost of community involvement and their more pragmatic sensitivities.

A2. Renovation works

- Number of applications that use traditional trades and materials;
- Number of applications that sought advice from an expert in conserving heritage fabric; and
- Percentage of significant fabric replaced in each case.

A3. Landscape

- Number of applications that used traditional trades and materials; and
- Number of applications that sought advice from an expert in conserving heritage fabric.

“Appropriate”, “harmony” and “enhanced” are defined in the inscription document. It can get a little “Disneyland” if the owners/communities are too proscribed.

A4. Infrastructure works

- Care taken not to impact on the heritage values (input from heritage consultant);
- Numbers of consultations with owners/users of heritage buildings with lists of concerns and problems faced.

A6. Traffic and pedestrian circulation

- Involvement of heritage consultant in project; and
- Numbers of consultations with owners/users of heritage buildings with lists of concerns and problems faced, how to solve, expenses involved and the fund for the buildings.

6.5 Summary

This chapter has provided the qualitative survey, which is administrated questionnaire for the monitoring strategies and key indicators from local and international experts. The survey result validated the proposed monitoring strategies and key indicators, the findings discovered some suggestion to improve the strategies to sustain the heritage values of Melaka and George Town WH cities.

The result of the findings, which are summarized for the monitoring strategies, are shown in Table 6.3 and Table 6.4. Meanwhile, Sections 6.4.2 and 6.4.3 described the list of key indicators for the monitoring strategies.