

## **4 METHODOLOGY**

### **4.1 Introduction**

Methodology is a set of methods used for study or actions in a particular subject by using an ordered system. It needs proper planning and arrangements for a perfect system to work.

### **4.2 Study Design**

The study design is a design to obtain potential sampling for a study. In this study, the potential sampling is the experimental group of visitors. Since the study requires the respondents' valuation on certain things, which can be obtained directly through their experience from visiting the park, the bias result is inevitable if the respondents are asked before their visit. So, the selected respondents' will be asked about the park after their visit. Since the park has only one exit, respondents are approached at the exit gate. This study does not involve the control group of visitors in which they have never visited the MAP but have some experience from other park which have similar concept with MAP.

### **4.3 Access To Taman Pertanian Malaysia And Respondents For Data Collection**

Before the subject of study was chosen, an informal survey was needed. Several discussions with the MAP were held in order to get an overall view about the park and its viability to conduct the study. After receiving the authorization from the officer of MAP, an official letter from University Malaya was submitted to MAP.

ven though this park is under the Ministry of Agriculture; the authority to do the study is given by the officer in MAP.

he same procedure is applied when the data are collected from the respondents. The management of MAP would notify visitors about the study to make it easier for the enumerators to approach respondents. Permission from respondents is also needed before asking for their cooperation to answer the questions.

#### **4.4 Sample Size and Method of Data Collection**

The sample size for this study is 200 respondents, which is approximately 0.16 percent of the number of visitors in the year 2000. For the source of data part, two types of data were used: primary and secondary data. The primary data refers to the raw data collected from respondents while MAP provides the secondary data.

Students from Politeknik Shah Alam<sup>14</sup> were hired as enumerators to collect the data from respondents by using a set of questionnaires. Prior to the actual study, a briefing session was held for the enumerators on the questionnaire prepared for the study.

Two sets of questionnaires in two different languages was used, English and Bahasa Melayu<sup>15</sup>. The questionnaire was divided into two different parts which are visitor's behaviour and socio-economic characteristics.

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<sup>14</sup> Shah Alam Polytechnic

<sup>15</sup> Malay Language

#### **4.5 Data Collection**

Due to small number of visitors on weekdays, the data were collected on weekends only. Because of some constraints, collection had to be done three times during the weekends in order to cover 200 respondents. A random sampling method was applied for this purpose. The data obtained was processed in the computer. At the same time, certain kind of tests were also performed on the data on several aspects such as the consistency test.

#### **4.6 Hypothesis Test**

The main objective of this study is to look at consumer surplus from the user value of the site, the first agro-forestry park in the world. In addition to this, the optimal pricing policy can be obtained by using the value of consumer surplus as an indicator. Besides that, three (3) hypothesis (as stated below) will be tested based on the previous research findings.

##### **4.6.1 Hypothesis Questions**

- a) McConnell and Strand's endogenous opportunity cost, " $k$ ", is higher than the Caserio exogenous opportunity cost.
- b) A model, which ignores the opportunity cost, is normally associated to understated consumer surplus.
- c) A model, which is not taking alternative sites costs, will lead to biased results.