

# Public Perception on Existing Building and Facilities at Public Market in Northern Region of Malaysia

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## **Abstract**

*Public market have been known for many centuries. They have been an important place and source of daily needs, commence and social part for over 6000 years ago. From community to another community public markets expands to become more function effectively as they exist because they serve the needs, while some public markets has changed in meaning over time and still different from place to place. Malaysia is one of the developing country, as it should not be ignored to plan a good building construction as well as the facilities management at public markets. The planning of building and facilities management must be maintain to ensure that the surrounding of the buildings is always in a good quality, safe and healthy to all occupants or visitors of the buildings. To ensure that the facilities and the existing building at public markets operated smoothly, all the party involved must be aware and play the important role to sustain the characteristics of the facilities. Hence, this research believes that, with the improvement of facilities can be completely transformed into viable and social interactive places.*

## **Keywords**

*facilities, public market, building infrastructure, faulty design, daily needs*

## **1. Introduction**

Public markets are expected to continue to serve as one of the major sources of fresh food provisions and goods for the general public in the years to come and it is should be kept clean and hygienic to provide a decent and comfortable shopping environment accessible to patrons which is it may not be necessary for public markets to be upgraded to unduly upmarket shopping venues (Weng, 2013). According to Morales (2011) marketplaces is a location where vendors gather periodically to sell merchandise, indoors or out, have been central to historical political, economic and social prospects for people and places across the nation. It was traditionally functioned as the major nodes of urban commerce and played an important role in the urban food system. People nowadays are acting on the concern by purposely seeking fresh, high quality and environment-friendly food, especially food that is grown locally (Tong, 2012). Market places are not just a setting for commercial activities, but it also play an important role in food systems, place making and community economic development. A city without a market place might function, but it lacks the platform where layers of the community could gather and socialize where tangible and intangible culture could be felt in its sense of place (Qamaruz-Zaman, 2014). From day to day public market is getting develop from many aspects, for example in term of structure design itself and also increasing of the facilities provided. Increasing in the industry sector and also increase in the number of population has cause to the new phase of residential area and factory, as well as Malaysia is one of the developing countries. Hem Sommerstad (2013) stated that, at Kviberg's market the sections was divided into two, left and right and both of them were surrounding with corridor and stalls. An organized planning of the layout gave an ease

experience for the user at the public market. So in the hasty stream of building construction, the facilities management planning should not be ignored. The planning of building and facilities management before, during and after a building construct must be parallel to maintain the initial condition of the building and to make sure the surrounding of the building is always in good quality, safe and healthy to all occupants or visitors of the building.

### *1.1 Problem Statement*

An organized layout and the building structures itself is the aspects for a good physical planning of public market. A disorganized layout would become a difficulty for the local society to walk through the retail space while getting their daily needs. These happen because of there is not enough space for the sellers to put their items and one easy way is to put their belongings on the floor nearby. Some of the public market structures is built up from wooden. Year by year it will become deteriorate. This condition is very risky to the local society at the public market. The maintainability aspect at the design stage is often ignored and this has contributed to future problems when implementing maintenance work. This happens when the aesthetics value has become more important in the design of asset, besides the design factor, site selection, apparatus, tools or facilities to maintain the asset are hard to obtain or very costly (Femi, 2014). There was also listed that traffic congestion is a displeasure problem felt by residents of largest urban areas as traffic issue is also a problem at the public market, as there was no enough space for the seller to deliver their goods. All the delivering process is in action beside the road way and at the end of that it will affect the traffic. On top of that, some space of the roadway is also being used for some activities like garage sale. These activity is affected the traffic flow at the public market area (Davis et al., 2010).

Parking is essential component of the transportation system. Parking issue affects the ease of reaching destinations and the overall accessibility (Ibrahim, 2011). So, if the parking problem at the public market is in a long term, this will make the situation worst. This issue need to be overcome so that the local society can park their car in upon to get their daily needs. According to Ibrahim (2011), the problem of long term parking would make the situation worst. In an attempt to reduce or remove the number of parking or implement a new parking program or policy, municipality should be willing to offer stakeholders a variety of options such as the introduction of short, medium and long term planning such as regular parking price hikes or introducing new transit services. Ekomadyo and Hidayatsyah (2012) stated that the accessibility and the external circulation system at the public market must be clear, efficient and not giving a congestion at the surrounding at all. The parking area should be able to accommodate the vehicles of the people at the market. He said that the parking area must be near to the main entrance to give a comfort for the public people enter the market.

### *1.2 Objectives*

The objectives of this research are listed below:

- 1) To determine the characteristics of facilities at the public market;
- 2) To determine the priority of characteristics of the facilities at the public market;
- 3) To suggest the improvements of public market facilities to the local authorities.

## **2. Methodology**

This study focused on people perception towards the characteristics of facilities at public market. The surveying was conducted at the public market in the northern region of Malaysia which is Penang Island, Kedah and Perak. The number of respondents of each location is different according to the population in each state of northern region of Malaysia. The surveying was done by distributing questionnaire for the public people at public market. 380 respondents were targeted for this study. For

Penang Island, the location is at Bayan Baru and Sri Penanti with 44 and 81 respondents while in Kedah the location is at Sungai Petani and Kulim with 79 and 64 respondents respectively, the rest is in Perak state with 39 respondents at Parit Buntar and 73 respondents at Kamunting.

### 3. Result

The analysis of data were conducted using Statistical Packages for the Social Sciences (SPSS) (V20). A few analyses were done such as statistical analysis which includes descriptive statistics, independent samples t-test and one-way analysis of variance (ANOVA) test. For this study, 380 sets of questionnaire consists of two section which is:

- i. Demographics data;
- ii. Perception on facilities characteristics at public market.

In this research, the pilot study were conducted to determine the suitability of the questionnaire and the validity and reliability of the variables will be known. According to Leon (2010), pilot study was conducted to examine the feasibility of an approach to be used in a large scale study. A total of 30 respondents were chosen randomly at Parit Buntar Public Market which is one of the most crowd market in northern region. Table 1 shows the consistency of Cronbach's Alpha. It was found that the questionnaire is highly reliable since the value of Cronbach's Alpha is 0.89 which is indicate a good level of internal consistency, considered as low-stakes testing internal consistency. Thus it is considered acceptable (Sekaran, 2010).

**Table 1. Consistency of Cronbach's Alpha**

Cronbach's Alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent (High-Stakes testing)
$0.7 \leq \alpha \leq 0.9$	Good (Low-Stakes testing)
$0.6 \leq \alpha \leq 0.7$	Acceptable
$0.5 \leq \alpha \leq 0.6$	Poor
$\alpha < 0.5$	Unacceptable

#### 3.1 Frequency Analysis Result of Demographic Data

The first section of questionnaire is demographic data. This section provide the general information about the respondents regarding to gender, age, race, religious, resident status, live period at the resident area, occupation, household income and frequency to the public market. Frequency statistics for the gender, age category and household income was analyzed. Figure 1 shows the gender composition was predominantly females with 52% and males with 48% from 380 respondents. Respondents whose age below 29 years old is the majority that came to the public market with 46%, followed by respondents between 30-49 years old with 39% and the last one is above 50 years old with 15% as shown in Figure 2 while Figure 3 mention about the household income for 380 respondents. Figure 4 shows the household income of the respondents below RM 2,000 is 37%, between RM 2,000 to RM 3,999 is 51%, and lastly above RM 4,000 which is 12%.

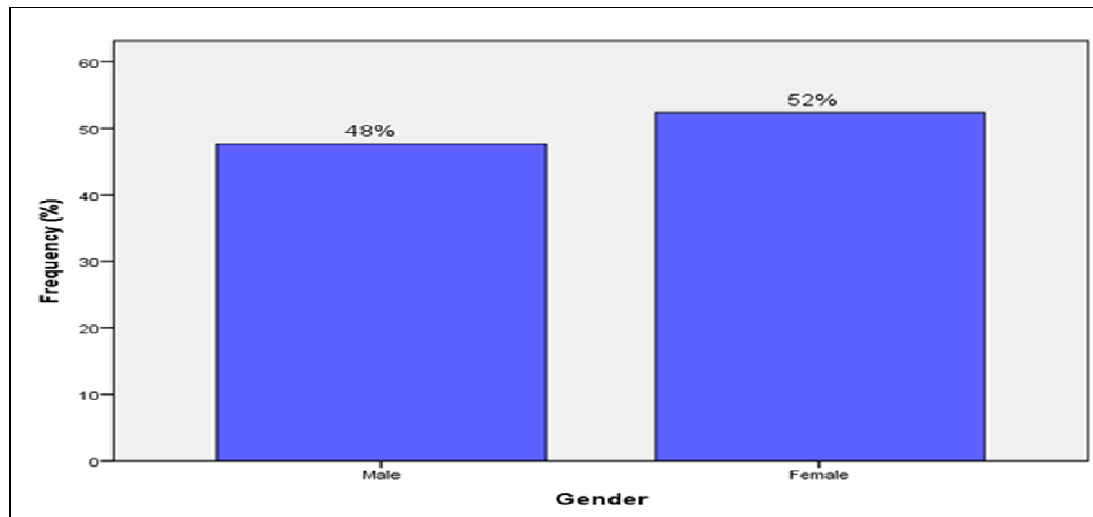


Figure 1. Frequency of Gender

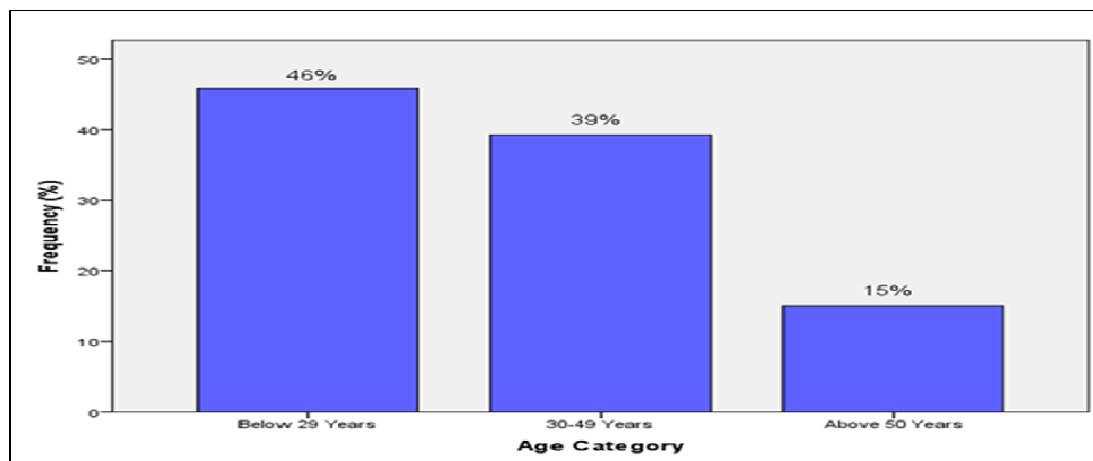


Figure 2. Frequency of Age Category

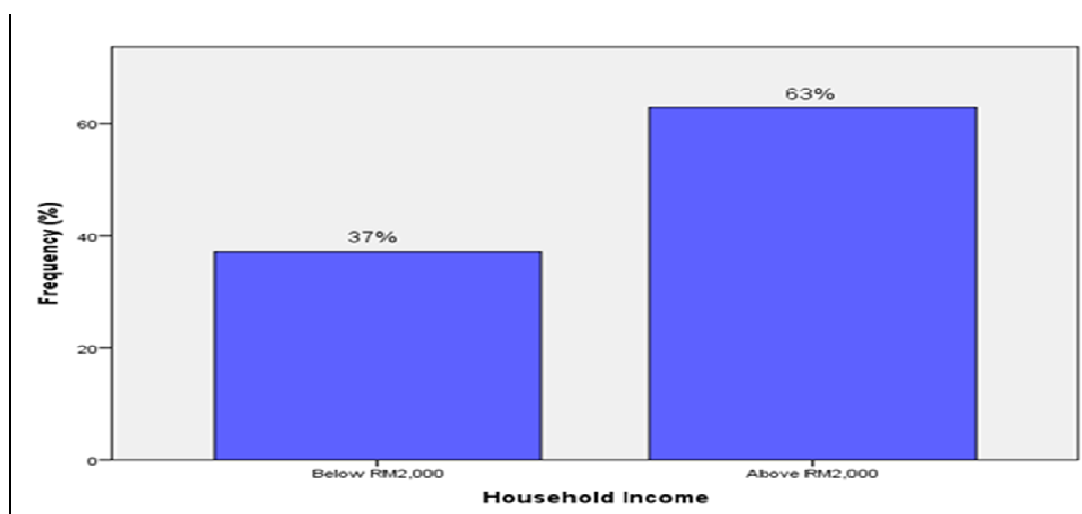


Figure 3. Frequency of Household Income

### 3.2 Comparison among Six Location

There are four parts in this questionnaire which are:

- Current View at Parking Area,
- Current View in Public Market,
- Facilities Needed at the Public Market,
- Action and Awareness.

The mean of each variables among six locations on public market in northern region of Malaysia which were Parit Buntar, Kamunting, Bayan Baru, Sri Penanti, Sungai Petani and Kulim were analyzed by using SPSS. Respondents at Kulim Public Market most concern on current view at parking area and somewhat concern on current view in public market itself among the six locations with mean 3.65, 3.70 and 4.05 respectively. While respondents at Sri Penanti Public Market most concern on action and awareness issue with mean 3.43. Another respondents from another locations also show the same perceptions towards the variables as the mean value seen slightly same for all variables. These similarity were due to the common current situation at each public market.

### 3.3 Analytical Results Using Ranking Analysis

The analysis classified into four parts in Section B in the questionnaire as below:

#### Part 1: Current View at Parking Area

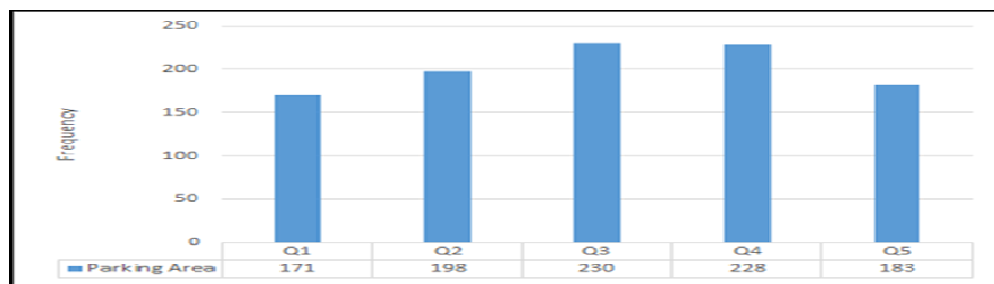


Figure 4. Frequency Value of Parking Area

Table 2. Ranking of Current View at Parking Area

Code	Item's Variable	Frequencies	Rank
Q3	Traffic congestion happened because of vehicles parked at the side road	230	1
Q4	A congestion happened at a peak time only	228	2
Q2	A long period needed to park vehicles	198	3
Q5	A long period needed when move out from the parking area	183	4
Q1	A suitability of parking space	171	5

Figure 4 shows the results of descriptive analysis of the item from questionnaire. The results was achieved after running the data analysis in SPSS by comparing frequency value of each items in the variables. Parking area is one of the importance issues at the public market that must be taken into account in order to ease the users at public market. According to Table 4, the aspects that have been study is about the suitability parking space at the public market which is to ease the users. In addition, the time taken when moving in or out also being study which was may affect the time for the user. Also, the situation of vehicles parked at the side road may contribute to the traffic congestion which was lead to the congestion at a peak time.

## Part 2: Current View in Public Market Area

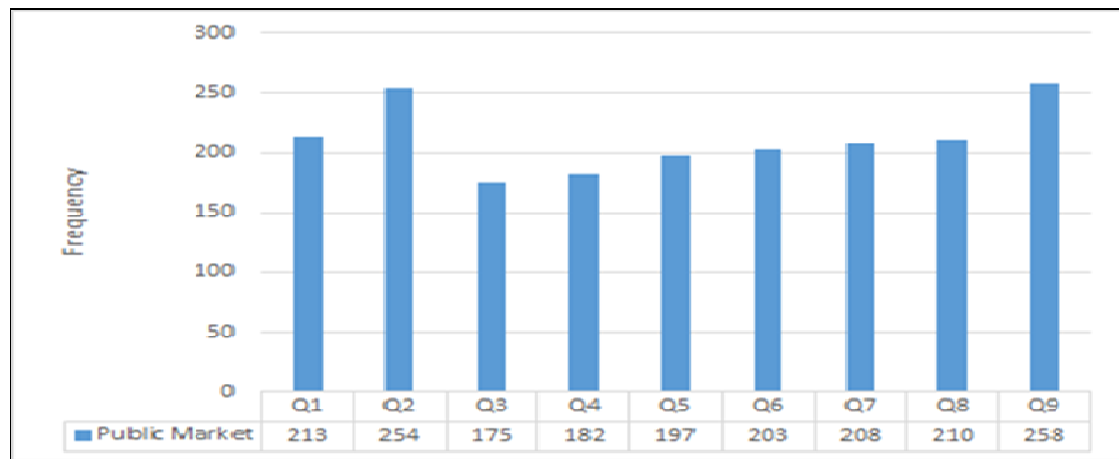


Figure 5. Frequency Value of Public Market Area

Table 3. Ranking of Current View in Public Market Area

Code	Item's Variable	Frequencies	Rank
Q9	Priority is given to the disable person when using the toilet	258	1
Q2	Wet and dry zone location has been separated	254	2
Q1	A suitability location of a wet and dry goods	213	3
Q8	Market's flooring safe for user	210	4
Q7	Step's floor safe for user	208	5
Q6	A separate water flow for wastage from wet zone to main drainage	203	6
Q5	A suitability of floor's slope will be easier for user to move	197	7
Q4	A suitability of non-halal location	182	8
Q3	Water source is placed only at wet goods	175	9

Figure 5 shows the current view in public market area was analyzed by starts with a concern for suitability and separating location for wet and dry goods. Next, water source placed only at a wet zone is considered followed by a suitability of non-halal products since the respondents were came in difference religious. The question was also asked about preparing a separate water flow for wastage which came from the wet zone. Then, considering about the markets and step's flooring in term of safety for the users. The last question is about the priority for the disable person when using the toilet.

Figure 5 shows the result on current view at public market area and their ranking as well. Based on Figure 5, respondents were strongly agree concern about the priority given to the disable person when using toilet at the public market with frequency value of 258, meaning that it was the first ranking compared to another item. It was followed by concerned on a separated and the suitability zone for wet and dry location, with frequency value of 254 and 213 respectively. The forth and fifth ranking that urges the respondent's perception is about safety for the users in term of the steps and flooring market with frequency value of 210 and 208 respectively. Frequency value of 203 is the sixth ranking which was concerned about separating the water flow for wastage from wet zone to main drainage. It was followed by concerned on a suitability of floor's slope will be easier for user to move, a suitability of non-halal location and suitability of water source placed only at wet goods with frequency value of 197, 182 and 175 respectively.

### Part 3: Facilities Needed at Public Market

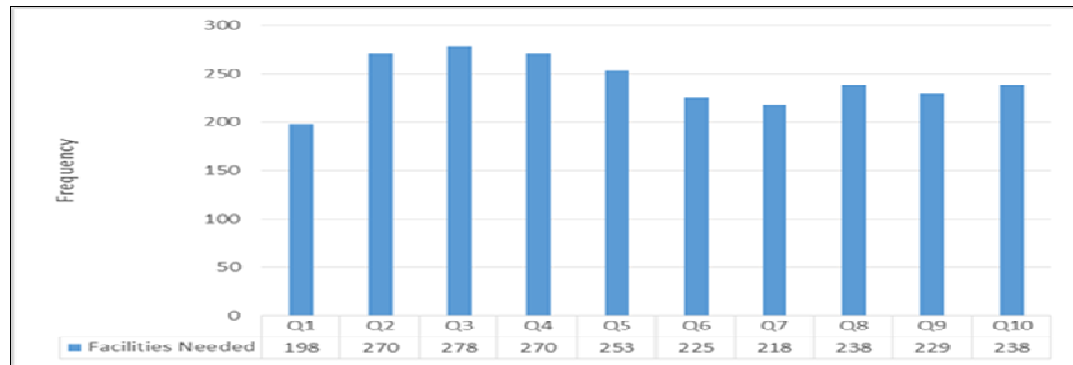


Figure 6. Frequency Value of Facilities Needed

Table 4. Ranking of Facilities Needed at Public Market

Code	Item's Variable	Frequencies	Rank
Q3	Hand basins supplied with water	278	1
Q4	Soap, moist towelettes and garbage receptacles provided	270	2
Q2	Provide a resting area	270	3
Q5	Provide minimum one covered litter container at each of wet and dry zone	253	4
Q8	Lighting adequate natural light in the market	238	5
Q10	Landscaping at parking lot provided with vegetation, benches and garbage can	238	6
Q9	Altering road pattern in the parking area as a one way system	229	7
Q6	Fresh vegetables is ready packed make the market in a good condition	225	8
Q7	Prepared a glove for the users while shopping	218	9
Q1	Provide a prayer room	198	10

This part describe about the analysis of the facilities needed to be prepared at the public market in the future. Providing a prayer room and a resting area was considered to give a comfort for the users while at the public market. Next, the question also asked about the preparing a hand basins supplied with water which came with soap, moist novelettes and garbage receptacles. Then, the analysis on providing a minimum one covered litter container at each of wet and dry zones. The analysis also concern for the lighting adequate natural light in the market. Other than that, landscaping at parking lot with vegetation, benches and garbage can were considered. The last one is about altering the road pattern in the parking area as a one-way system. Based on Figure 6, respondents strongly agreed with the cleanliness factor, which is concern about the supplied hand basins with water followed by providing soap, moist towelettes and garbage receptacles at the hand basins with frequency value of 278 and 270. The third ranking also with frequency value of 270 is respond on providing a resting area.

The forth and fifth ranking that urges the respondent's perception is about lighting adequate natural light in the market and landscaping at parking lot with vegetation, benches and garbage can with both frequency value of 238 and 238 respectively. Frequency value of 229 is the sixth ranking which was concerned about altering road pattern in the parking area as a one-way system. It was followed by

concerned on a fresh vegetables ready packed make the market in a good condition, prepared a glove for the users while shopping with frequency value of 225 and 218 respectively. While provide a prayer room is at the last ranking with frequency value of 198 as mention by respondents the prayer room is not necessary to be provided because of the public market only operate until noon.

#### Part 4: Action and Awareness

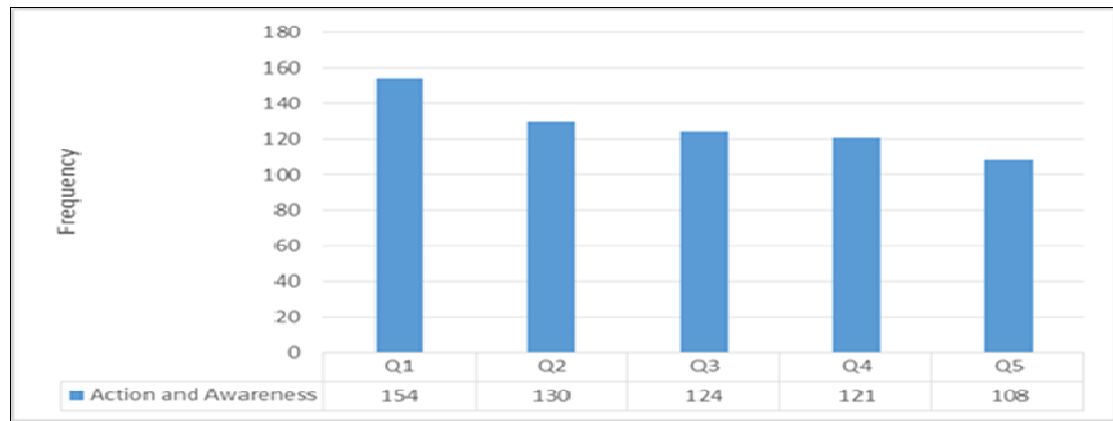


Figure 7. Frequency Value of Action and Awareness

Table 5. Action and Awareness

Code	Item's Variable	Frequencies	Rank
Q1	There is many kind of facilities for people at public market	154	1
Q2	The facilities is well maintained from time to time	130	2
Q3	Actions taken by local authorities to upgrade the facilities	124	3
Q4	Effort from authorities upgrading the facilities	121	4
Q5	Awareness towards convenience for user	108	5

This part describes the analysis of the action and awareness issue. The first question was about the awareness of the facilities at the public market. Next, awareness of the facilities well-maintained from time to time. The analysis also concern about the action and effort taken by local authorities to upgrade the facilities. Lastly, the question asked about the awareness towards convenience for user.

Figure 4 shows the first ranking with frequency value of 154 is concern about respondents awareness to the facilities at the public market. It was followed by the concern about the facilities is well maintained from time to time with frequency value of 130. The third ranking is about the action taken by local authorities to upgrade the facilities with frequency value of 124. While for the effort from authorities upgrading the facilities is 121 and the last one is awareness towards convenience for the user with frequency value of 108.

#### 3.4 Conclusions

From the findings, the study can concludes that the feedback from the respondents from six location agreed that out of the total 13 facilities needed at the public market identified, the top 10 most severe needed at the public markets are:

1. Provide a hand basins supplied with water;
2. Soap, moist towellettes and garbage receptacles provided at hand wash basins;
3. Provide a resting area;



4. Provide a minimum one covered litter container at dry and wet zone;
5. Lighting adequate natural lights in the public markets;
6. Landscaping at parking lots provided;
7. Altering road pattern in the parking area as a one-way system (certain location);
8. Fresh vegetables are ready packed to ensure the public markets in a good condition;
9. Prepared a glove for the users while shopping;
10. Provide a prayer room.

#### 4. Discussion

A development of public markets is a very important factor in improving the competitiveness of public markets. The results obtained shows that the public markets condition physically need to be improve as well as public market is one of the center for people to gather buying goods and meet people. A good facilities can give an ease for the people as well as the characteristics of the facilities need to be improve. There are many characteristics for the facilities, but for this research only related to the common situation and top ten characteristics to be improved were discussed. By upgrading facilities characteristics for example parking's landscaping, provide a resting area and provide a hand basins with water supplied can be drastically changed people's perception towards the characteristics of facilities at the public market. This research believes that, with the improvement of facilities can be completely transformed into viable and social interactive places.

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