A Geographic Study on Level of Markets in Meiktila

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Abstract

The study area, Meiktila is situated in the southwestern part of Mandalay Region. Meiktila has good transport system with various regions of Myanmar. There are 9 markets in Meiktila. The main aim is to study the markets which serve as tertiary system in the study area. Normally the tertiary functions are consumer oriented and they need a certain number of consumers or the threshold population for their existence. They, therefore, used to locate in population centers or in areas with high accessibility. In this paper, the distribution of market is determined by using GIS based buffer analysis. As a result, distribution of these markets is a great difference with respect to their tributary area, size of their functions, transportation facilities, accessibility and location of market place. Therefore, it is needed to build better transport system to develop for levels of markets in the study area.

Key words: tertiary system, threshold population, tributary area

Introduction

Markets are the places where commodities are sold and purchased by the sellers and consumers. They are the places where both retailing and wholesaling activities are performed. As the large numbers of consumers are required for the markets to thrive and develop their functions, they are usually located in the central places which have the greatest accessibility to the people (Walter Christaller's Central Place Theory). Therefore, the existence of markets due to the concentration of retail and wholesale functions at a certain place is seemed as a step in urbanization process.

As Meiktila is a part of Mandalay Region, the commercial and transportation center of Upper Myanmar, the markets are found in the town and they are distributed in important places where they can gain easy access to the consumers. There are totally 9 markets in Meiktila and they have been developed according to their tributaries and their functions. That is why, types of market, threshold population, tributary area and number of shops are considered as criteria.

This paper analyzes the spatial distribution of markets in Meiktila how they operate their functions, and serve their consumers, which types of goods are sold and what their tributary areas are to make some probable predictions in relation with the urban and economic development of Meiktila. A classification is made depending on the types of goods, the functions of the markets and the tributaries of these markets.

Aim and Objectives

The major aim is to study the markets which serve as tertiary system in the study area.

The objectives which fulfill the main aim of the study are-

- To study the spatial distribution of markets in Meiktila.
- To analyze threshold population and tributary area that support markets in Meiktila.

Data and Methodology

Primary data were entirely collected from structured interview record. Secondary data were collected from Meiktila Township Administration Office and Meiktila Township Development Committee. In this paper work, data analyses are made on field observation. To analyse the distribution of markets in Meiktila, buffer analysis is used.

Geographic Bases of Meiktila

Meiktila is situated in the middle of the Central Basin of Myanmar and in the southwestern part of Mandalay Region. It is about 338 miles to Yangon and about 96 miles to Mandalay. It is located between North latitudes $20^{\circ} 50' 37.87''$ and $20^{\circ} 55' 5.23''$, East longitudes $95^{\circ} 49'6.25''$ and $95^{\circ} 54' 11.62''$. The tributary area for tertiary system of this town (including lake area) is (11.86) square miles or (7,590.4) acres which is accounted for (2.55) percent of the total area of Meiktila township. It is composed of 14 wards.

Meiktila is bounded on the north by Shawphyugan and Kyaukphyugon village tracts, on the east by Zaungchangon and Htamongan village tracts, on the south by Khinlue, Shwepandaing and Kywetalin village tracts and on the west by Galongon village tract. According to the transportation point of view, it can be said that the location of Meiktila is well transported with various regions of Myanmar. Fig (1).

According to the topography, Meiktila lies at an average elevation of about 750 feet above sea level. The highest region is in the southeastern part, the

northwestern part and reaching to 900 feet above sea level. The lowest part is the eastern part of the town lying below 750 feet.

Normally, the tertiary functions are consumer oriented and they need a certain number of consumers or the threshold population to their existence. They, therefore, used to locate in population centers or in areas with high accessibility. In 1983 census report, the number of people in Meiktila was (96,496) persons. In 2019, the total urban population of Meiktila became (123,104)) persons.

According to the 2019 population data, the largest population distribution occurred in Aungzeyar, Aungsan, Wunzin and Yanmyoaung wards. Myoma and Chizet wards are the least populated wards.

The highest population density occurred in Myoma, Ashepyin, Yanmyoaung and Yadanamanaung wards. This is due to their nearness to CBD, Highway Bus terminal, better transport system and personal activities. Paukchaung and Chizet wards have the least density. These wards are the outskirt wards and locating far away from CBD and poorly paved roads.

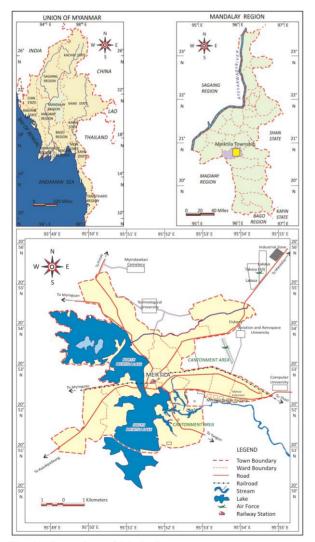


Fig (1) Location of Meiktila Source: UTM Map No. 2095-13

Market Distribution in Meiktila Markets of Meiktila

The term market refers to a place where goods are displayed for sale. It is also referred to the people concerned with buying and selling a particular commodity. Markets are part of a tertiary system in which inputs and outputs are operating the system function. The inputs include costs for buying goods, for labour, for transportation charges, for interest and for other facilities such as water or electricity power while the outputs are the commodities and the cash for these commodities. Normally the tertiary functions are consumer oriented and they need a certain number of consumers or the threshold population for their existence. The nature of the consumers, thus, influences upon the distribution of the markets and the size of the markets.

In brief, there are two types of consumers: (1) Who buy their daily consumed goods frequently, convenience goods and (2) those who buy goods in infrequent need the comparison goods. In Meiktila, both types of goods are sold in the markets. Therefore the consumers can buy their required goods in the neighbouring market with ease. However, as Meiktila is a trade center of Upper Myanmar, the markets in Meiktila have consumers in other townships around Meiktila.

At present there are (9) markets in this town. They are as follows:

- 1. Meiktila Market (Zaygyi)
- 2. Central Market (Baho Zay)
- 3. Padaukmying Market
- 4. Myothit Market
- 5. Paukchaung Market
- 6. Pa Le Market (Butahaung Zay)
- 7. Yanmyoaung Market (Kwetthit Zay)
- 8. Pyithaya Market
- 9. Wunzin Market (Sigongyi Zay)

All these markets are administrated by Meiktila Township Development Committee and they serve the daily demand of the people in Meiktila and other townships around Meiktila. (Table 1)

1. Meiktila Market

This market is situated on the east of Yangon-Mandalay Road in Ashepyin ward and near Highway Bus terminal. Therefore, the market also trades various goods with other regions mainly Thazi, Wundwin, Mahlaing, Pyawbwe, Yamethin and Kyaukpadaung townships. The market, therefore, includes not only the retail shops but it also includes wholesale houses. It had been well developed since it started was founded in 1905. Its authorized municipal areas covers (400) feet from the east to the west and (700) feet from the south to the north. However, the market area has become enlarged and bounded by different shopping rooms at the opposite buildings on either side of the street around the market on the east, south and west. There has (59) shopping arcade with (1,009) shops in this market. At present in Meiktila Market, there has (86) shopping arcade with (1,443)shops has an area of (7.328) acres.

The shops in this shopping mall include crop wholesale houses, various machineries, vehicle spare parts, clothing, slippers, gold smiths, groceries, plastic wears. Electronic equipments, meat, fish, eggs, fruits, flowers, vegetables, tailors, rice-sellers, stationeries, hardware, personal goods and repair shops.

Regarded as the wholesaling in the Meiktila Market, there has been the number of brokers' sales centres that have received the agricultural products from the Southern Shan State such as dry tea leaves, prickled tea leaves, tomatoes and garlic, etc. and supply them to the residential consumers and the village tracts. The chillies and onions product of the Meiktila Township and its neighbouring regions are transport to the Southern Shan State and the Lower Myanmar; the fish paste, dried fish and dried prawns produced in the Bago Region and the Ayeyarwaddy Delta are transported to the mentioned State and various different locations. The vegetables and flowers are mainly imported from Pyin-Oo-Lwin, Taunggyi and villages neighbouring Meiktila. In this market, convenience goods, especially variety of flowers and vegetables are distributed to various markets of Meiktila.

In general, the goods are bought and consumed by the people living in Meiktila and other townships neighbouring Meiktila.

 Table (1) Location and Other Basic Criteria

 for the Market in Meiktila

No.	Name of Market	Location	No. of Shops/Malls	Selling Items	Types of Market	Threshold Population	Range
1	Meiktila Market	Ashepyin Ward	1,443	C1 C2	W	H L	L S
2	Central Market	Ashepyin Ward	464	C1 C2	w	H L	L S
3	Padaukmyi ng Market	Ashepyin Ward	354	C1 C2	w	H L	L S
4	Myothit Market	Aungsan Ward	144	C1 C2	W M	H L	L S
5	Paukchaun g Market	Paukchaun g Ward	2	C1 C2	W M	H L	L S
6	Pale Market	Aungzeyar Ward	3	C1 C2	W M	H L	L S
7	Yanmyoau ng Market	Yanmyoau ng Ward	2	C1 C2	W M	H L	L S
8	Pyithaya Market	Pyithaya Ward	7	C1 C2	W M	H L	L S
9	Wunzin Market	Wunzin Ward	3	C1 C2	W M	H L	L S

C1 = Comparison goods: Clothing, Food wear, Chemist, Electronic, Others

C2 = Convenience goods: Groceries, Green groceries,

Flowers, Fish and Meet W= Whole day, M = Morning H = High, L –Low L = Large, S =Small Source: Field Observation (2018)

2. Central Market (Baho Zay)

This market is situated on the east of Yangon-Mandalay Road in Ashepyin ward and it is composed of (44) shopping arcade and (464) shops and has area of about 4.870 acres. In central market, there are various types of goods-groceries, fruits, flower, clothing, tailors, personal goods, household goods, food shops, gold smiths, repair shops, slipper shops, stationeries shops and vegetable shops.

Normally, the residents from Meiktila used to buy in this market including those living in Thazi, Wundwin, Mahlaing, Pyawbwe, Yamethin and Kyaukpadaung townships. Therefore, the tributary area or the area of consumption of Central Market is also large as Meiktila Market.

3. Padaukmying Market

Padaukmying market is located continuing with Meiktila market and Central market. This market has an area of about 1.00 acre and has (15) shopping arcade and (354) shops.

The eastern portion of this market is personal shops, groceries shops, vegetables shops and meat, fish and eggs shops. The vegetables are sold by the sellers in neighbouring villages. In general, these goods are bought and consumed by the neghbouring wards and villages around Meiktila.

4. Myothit Market

Myothit Market is located between 50 feet road and 50 feet road (Seinpan road) on the south of Meiktila-Kyaukpadaung Road in Aungsan ward. This market is composed of 144 shops where household goods, clothing, slippers, groceries, vegetables, fruits, flowers, fish, meat, eggs and personal goods are sold. There are also restaurants, tea shops, café, stores, snack bars and drug stores around this market.

Myothit Market is the major market for the residents of Myothit, the western portion of Aungsan ward and villages surrounding this market. As its tributary is restricted, the sellers can sell their goods mainly in the morning. Only groceries and comparison goods shops are open the whole day.

5. Paukchaung Market

Paukchaung market is located near the football stadium in Paukchaung ward. The market is composed of 2 shopping arcade. The commodities sold in this market are clothing, personal goods, plastic wares, food shops and green groceries. The vegetables, fruits, flowers, meat, fish and eggs and foods are also sold by displaying on the ground. Majority of the sellers come and sell from Nandawgon ward, Thirimingala ward, Kyaukphu quarter, Chanaye quarter, Inngon quarter, Thedawlay village, Kyarinn village, Tebingon village, Ywathit village and Luekhingyi village.

Paukchaung market is the major market for the residents of Paukchaung ward, Meiktila University, Education College, Hospital, Offices, Aungsan ward, Nandawgon ward, Luekhingyi village and villages around Meiktila. The sellers can sell their goods mainly in the morning and only groceries and comparison goods shops are open the whole day.

6. Pa Le Market (Butahaung Zay)

This market is located between Nemyay (8) and Nemyay (9) in Aungzeyar ward. Pa Le market is composed of 3 shopping arcade. The commodities sold in this market are clothing, personal goods, plastic wares, gold shops, food, groceries, vegetables, fruits, flowers, meat, fish and eggs. There are also tea shops, stores, hair dressing and beauty parlour, bamboo and thatch shops, charcoal shops and betel quid shops near this market. Moreover, Aungnandaw restaurant is also located adjacent Pa Le market. These shops are open the whole day.

The sellers are from Pyithaya, Thirimingala, Tawma village, Nyaungdo village, Segyi village, Nyaunggaing village and Khinlue village. The tributary area or the area of consumption of Pa Le market is Aungzeyar, Chizet, Pyithaya (South), Armies around Aungzeyar, Textile and Weaving Factory and Thedawlay village. As the number of consumers in these areas is low, the sellers used to sell their commodities mainly in the morning.

7. Yanmyoaung Market (Kwetthit Zay)

This market is located on the west of Yanmyoaung Road in Yanmyoaung ward. Yanmyoaung market is composed of 2 shopping arcade. The commodities sold in this market are groceries, plastic wears, clothing, foods, vegetables, meat, fish, fruits and eggs.

Yanmyoaung market is the major market for the residents of Aungchantha, Mingalazeyon, Oatkyin, Aungsabegon quarters in Yanmyoaung ward, northern portion of Aungzevar ward. Waset quarter. Kyidawgon ward, Mingalaoo quarter in Wunzin ward and villages surrounding this ward. The sellers are Nyaungyan village, Kyetmauk village, from Shwehlannyaungai village, Shante model village, Shawphyukan village, Magyichauk village and Yanmyoaung ward, although the commodities mainly come from Meiktila market. As the number of consumers in these areas is low, the sellers used to sell their commodities mainly in the morning.

8. Pyithaya Market

This market is located between No. 3 Road and No. 4 Road in Pyithaya (North) and composed of 7 shopping arcade. In this market are various types of goods-groceries, clothing, tailors, personal goods, slippers, charcoal, vegetables, fruits, meat, fish and eggs shops.

Majority of the sellers come and sell from Shante model village, Shwehlannyaungai village, Magyisu Magyichauk village, Kanni village, village, Shawphyukan village, Zaungchangon village, Gwavdaukkon village, Pyithaya (North) and Pyithaya (South) wards. This market serves the daily desires of the consumers from the Pyithaya (North), Pyithaya (South) wards and nearby villages of Meiktila township. As its tributary are is low, the sellers can sell their goods mainly in the morning. Only groceries and comparison goods shops are opened in the whole day.

9. Wunzin Market (Sigongyi Zay)

Wunzin market is located between Ottra Road and Zawana Road and between Nemyay (8) and Nemyay (9) in Wunzin ward. This market is composed of 3 shopping arcade. This market sells clothing, plastic wears, groceries, foods, vegetables, fruits, meat, fish, eggs and other daily use commodities. The sellers are mainly from Wunzin ward, Yanmyoaung ward and Chanaye quarter in Aungsan ward.

In general, the goods are bought and consumed by the people living in Wunzin ward.

Classification of Markets in Meiktila

According to their tributary area, size of their functions and types of goods, the markets of Meiktila can be grouped into classes as follows.

1. High Class. The markets in high class are mainly concerned with wholesale function and service function. These markets are Meiktila market. Central market and Padaukmying market which are located in and near the CBD of Meiktila. Therefore, their functions are mainly related with wholesale functions. It is especially true for Meiktila market and Central market where commodities are purchased and redistributed in various markets of Meiktila and other townships. The convenience goods come from Taunggyi and neighbouring townships. In addition, comparisons are imported from Yangon and Mandalay; they are distributed to various parts of neighbouring townships from these markets. Therefore, it can be defined as the highest level market in Meiktila.

2. Medium Class. The markets in medium class are Paukchaung market and Myothit market. They have both convenience and comparison goods shops to a large number and their tributary areas also include the customers from neighbouring villages.

Paukchaung market is the major market for the residents of Paukchaung ward and office staffs living in Aungsan, Paukchaung and Nandawgon wards. The sellers are also from these areas, although the commodities mainly come from Meiktila market and Central market.

Myothit market is located on the south of Meiktila-Kyaukpadaung Road in Aungsan ward. In this market, the customers include from some villages along Meiktila-Kyaukpadaung Road. Both convenience and comparison goods are sold in this market.

3. Low Class. The markets in low class are Yanmyoaung market, Wunzin market Pa Le market and Pyithaya market which sell daily consumed food stuffs in general. In fact, Yanmyoaung and Wunzin markets are open for the convenience of the people and they sell only convenience goods for the consumer in neighbouring area. Moreover, as most of the sellers are market gardeners, the sellers can sell their commodities at lower price than the other markets. The sellers are from the villages of Thazi Township and neighbouring wards.

Pa Le market and Pyithaya market are mainly composed of convenience goods shops and a small number of comparison goods shops. Majority of the sellers come and sell from the villages in Meiktila and Thazi townships. The consumers are the people mainly from neighbouring wards. As its tributary is restricted, the sellers can sell their goods mainly in the morning. Only groceries and comparison goods shops are open the whole day.

Distribution by Buffer Analysis

The spatial distribution of market in any geographic phenomenon is analysed by GIS based buffer analysis. In the first buffer zone 1 km from CBD (Central Business District), there are 3 high class markets. In the second buffer zone between 1 and 2 km, there are 3 markets, one is medium class market and two others are low class markets. In third buffer zone between 2 and 3 km, there is only one low class market. There is no market in the fourth buffer zone between 3 and 4 km. In the fifth buffer zone between 4 and 5 km, there are 2 markets, one is medium class market and another is low class market. In analyzing of spatial distribution, markets are concentrated around the CBD. (Fig 2)

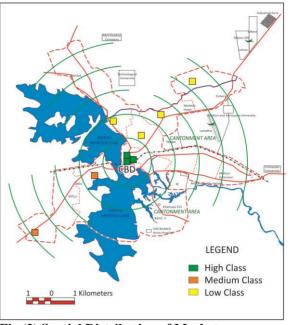


Fig (2) Spatial Distribution of Markets by Class in Meiktila Based on Table (1)

Findings and Result

On studying their tributary area, their functions and types of goods, the markets of Meiktila can be found three classes. According to the development of market functions in Meiktila, it can be assumed that their tributary area and their functions, types of goods are closely related.

In analyzing of spatial distribution, it can be found that markets are concentrated around CBD. Low class markets are concentrated in north from CBD and medium class markets are concentrated in south from CBD.

The development of market in tertiary system mainly depends on functions of service sector as transportation facilities, accessibility and location of market place. Some of markets in study area are easy to access to go shopping or consume the goods by means of both private and public transportation network. As Meiktila market, Central market and Padaukmyaing market are situated at or near the public bus routes and Highway Bus terminal, customers can easily purchase their commodities from these markets. Moreover, apart from Paukchaung market and Myothit market, the remaining markets in Meiktila have less development in tertiary system of market because of their fairly accessibility. Therefore, it is necessary to build better transport system to develop for tertiary markets.

Conclusion

Meiktila is situated in the middle of the Central Basin of Myanmar and in the southwestern part of Mandalay Region. The tributary area for tertiary system of this town (including lake area) is (11.86) square miles or (7,590.4) acres which is accounted for (2.55) percent of the total area of Meiktila township. It is composed of 14 wards. At present, total population of Meiktila is 123,104. However, as Meiktila and other towns are connected by motorway and railways. With regard to motorway, five motorways radiate from Meiktila town, leading to Mandalay on the northeast, Taunggyi on the east, Yangon on the southeast, Kyaukpadaung on the west and Myingyan on the northwest, commercial activities are found in a high number in this town. As a result 9 markets are located in Meiktila.

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