

# **A Geographical Analysis on the Distribution Pattern of Tea Shops in Thakayta Township**

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## **Abstract**

Most of the life style of urban dwellers changes with time. They preferred to use ready-made foods for ready to have. There are many types of fast food shops among them. Tea shop is focus in this study. Most of the urban residents are getting into the habit of taking tea and coffee at least twice a day. This study tries to depict the spatial distribution pattern and functions of the tea shop in the Thakayta Township. The main objectives are to study the nature, types and numbers of tea shops, to know the main functions of tea shops and to know the preparedness for survival in future. This research work is based on interview number of 35 tea shops. The primary data is obtained from interview and observation. The secondary data is obtained from General Administration Department. Mean Center and Buffer Method from Arc GIS 10.1 are used to show the distribution pattern of tea shops. For the whole township, most of the tea shop are distributed mainly along the main roads, junction of streets and concentrated near the large markets. People who open tea shops in this area can have wider social network by sitting there and chattering for quiet a longtime. For success in future, tea shops should be measured cooking master, car parking places, good accessibility and hygienic foods.

Key words: GIS, Mean Centre, Buffer Method

## **1. Introduction**

Ancient Myanmar traditional culture had treated for visiting guests serving with plain tea. Some Myanmar people spend with their free time in the tea shop. Moreover residents are getting into the habit of taking tea and coffee at least twice a day. These tea shops are significant places among the human society. Some are used here for their business work, some teenagers used these tea shops here for listening popular music or watching sport/movies and some adult men want to meet and talk with their colleagues. Thus, tea shops can be called as a social contact place or as a business information center or as a recreational center. Geographic analysis methods are used upon the geographic information system (GIS) (Arc GIS 10.1). This research

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focus on the distribution of tea shops in Thakayta Township from geographical point of view.

### **Aims**

- To study the best location for new tea shops.
- To study the distribution of tea shops in Thakayta Township.

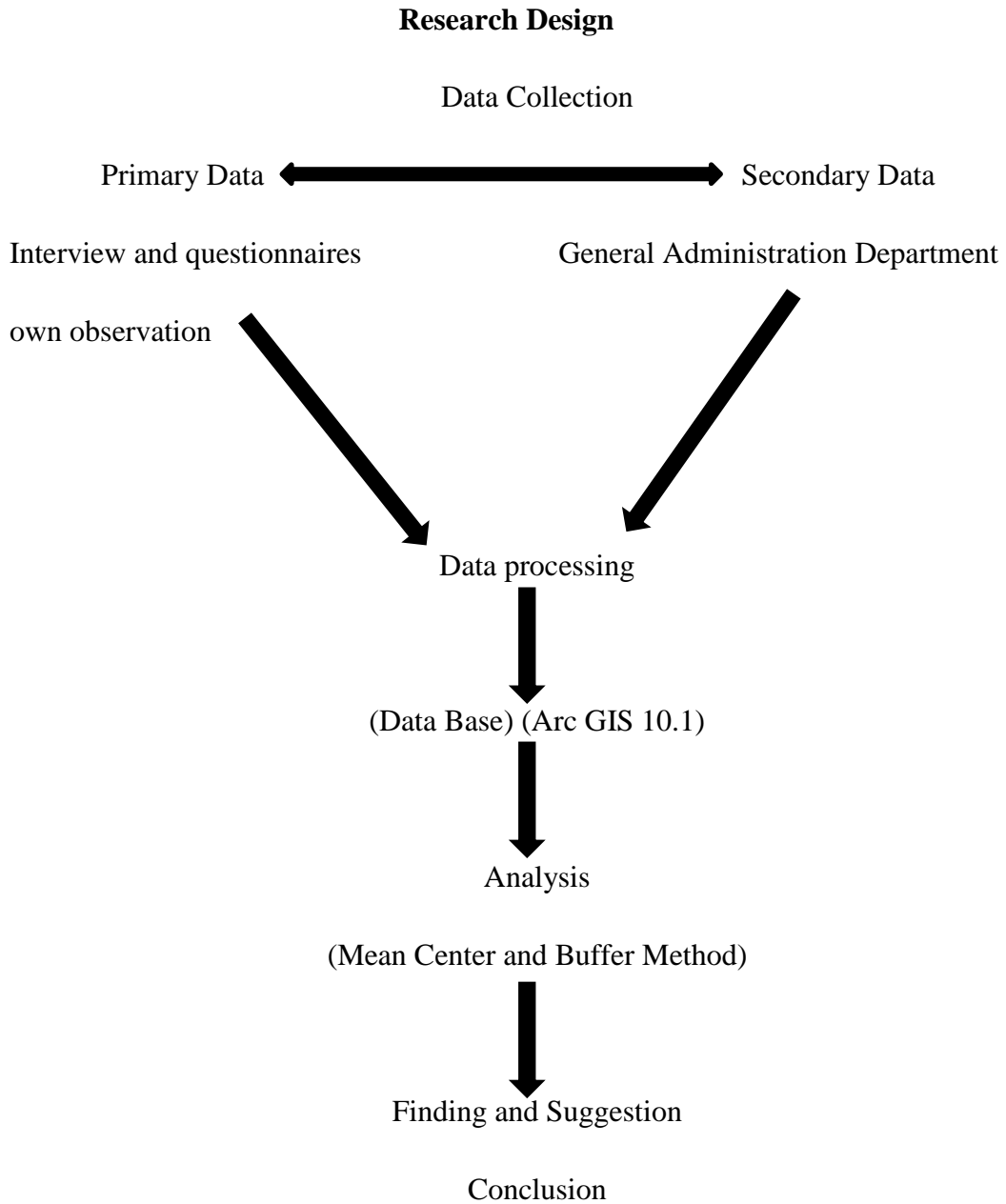
### **1.1 Objectives**

The objectives of the study is as follow-

1. To study the nature, types and numbers of tea shops within Thakayta Township.
2. To know the main functions of tea shops.
3. To know the preparedness for survival in future.

### **1.2 Data and Methodology**

Thakayta Township is located near the central business district of Yangon City. It includes in Yangon Eastern District. Population data of 2016 is got from General Administration Department of Thakayta Township. Total number and spatial distribution of tea shops are collected from own observation. In 2015, interviews are conducted to the owners of 35 tea shops with 35 questions to support for the functions and supplement with preparedness ideas for future survival of tea shops. Numbers of tea shops on the base map are counted. To know the spatial distribution of tea shops, Mean Center and Buffer Method are calculated by using Arc GIS 10.1. Descriptive Method is used to verify the functions of tea shops.

**Figure 1. Research Design**

Sources: Survey Data, General Administration Department of Thakayta Township

## **2. Geographical Background of Thakayta Township**

### **2.1 Location, Size, Shape and Boundaries**

Thakayta Township is one of the 45 townships of Yangon Region and located in east Yangon District. It lies between north latitudes 16° 45' 50" and 16° 49' and between east longitudes 96° 11' 30" and 96° 14' 30". It is located about 5 miles to the

northeast of the down town of Yangon City and occupies the area between Pazundaung Creek and Bago River.

The area of the township is 4.99 square miles (12.79 sq- km), which represent 0.019 percent of the Yangon City (262.08 sq miles). The township has 19 Wards. Shukhintha Ward is the largest and Ward No. (6/East) and Ward No. (2/South) are the smallest in size.

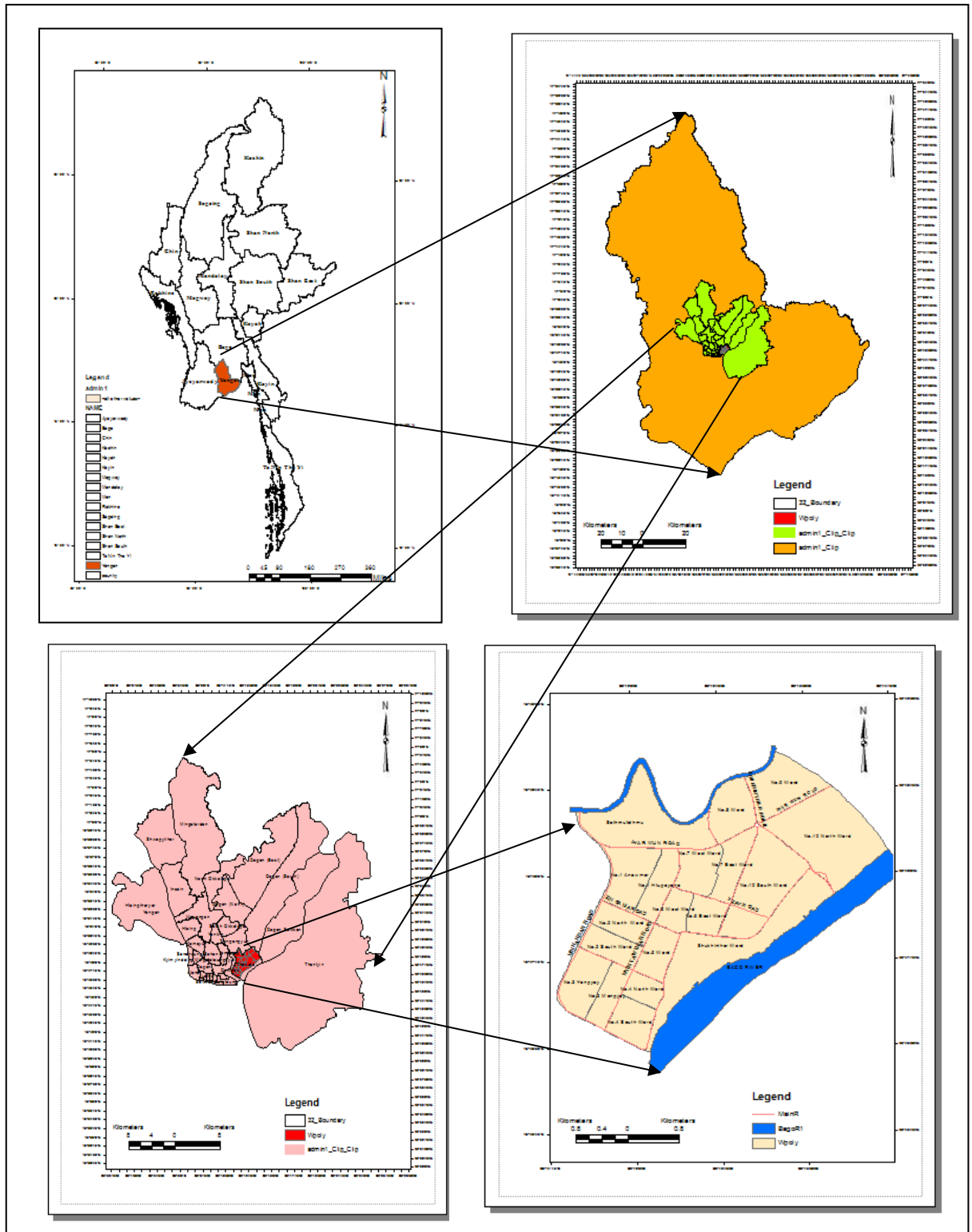
Because the extreme length from northwest to northeast is 2.5 miles and the extreme width from northwest to southwest is 2.7 miles, the township has a fairly compact shape. It is bounded by Thingangyun Township on north, Dagon Myothit (South) and Dagon Myothit (Seikkan) Township on the northeast, the Bago River on the east, the confluence of the Yangon and Bago River on the south, Dawbon Township on the southwest and Pazundaung Creek on the northwest. Figure ( 1.1 )

## **2.2 Relief and Drainage**

The whole area is flat and low with no distinct relief. It is low lying plain built by the Pazundaung Creek and Bago River. The entire area is less than 20 feet above sea level.

The Bago River in the southeast and Pazundaung Creek in the northwest are flowing southwest into the Yangon River. These are tidal streams and thus the low lying areas are subjected to the tidal inundation. These streams separate the area from other parts of Yangon City, though they are useful for navigation.

**Figure 2. Location of Thakayta Township**



Source: General Administration Department of Thakayta Township

## **2.3 Climate**

The study area experiences Tropical Monsoon Climate. Due to lack of climate station in study area, climatic conditions of Thakayta Township are referred to Kabaraye meteorological station. According to the data, the mean monthly temperature is highest in April with 30.65°C and lowest in January with 24.95°C. The average annual temperature is 27.35° C. The total annual rainfall is 2898 mm received mostly during the period from May to October.

## **2.4 Soils and Natural Vegetation**

The meadow soils derived from alluvial are the most dominant. The area frequented by tidal water has saline alluvial soils. Generally, the clay content is high. Thus, these soils become sticky when wet and hard and crack when dry. These soils are liable to inundation in the rainy season and cause temporary flooding after heavy rain.

The area was once thickly colonized by kaing, reed, raw grasses and tidal forest. Few patches of mangroves species are found along the bank of Bago River. Much of the original vegetation has been removed for agriculture and settlement.

## **3. Social Background of Thakayta Township**

### **3.1 Population Growth**

The growth of population in a given place depends on the natural increase and net migration. The Township population data was recorded systematically in 1973. According to the 1973 census, not only the number of population but also the figures for different races, religion and education condition were also taken. In 1999, the total population of Thakayta Township was 199,567 persons and it increased to 210,231 persons in 2007. During the period, main roads and streets extension, five star jetty project, the establishment of national races village and Thakayta industrial zone project were implemented by the initiation of the government and private development. The total population of Thakayta Township was 206,045 persons in 2012 and 220,074 persons in 2016. During the 2007-2016 period, the population increases to 9,843 persons. This increased may be due to new house owners moving and constructing the contract building. Table (1)

**Table (1) Population Growth of Thakayta Township**

No.	Year	Area(square miles)	Total Population
1	1999	4.99	199567
2	2007	4.99	210231
3	2008	4.99	214,633
4	2009	4.99	213,410
5	2010	4.99	205,963
6	2011	4.99	206,009
7	2012	4.99	206,045
8	2016	4.99	220,074

Source: General Administration Department (2016)

### 3.2 Population Distribution

As in other areas, the population distribution is uneven and it is changing with time. In 2012, the number of population was highest in Ward No. 10 (North) with 41,491 persons, followed by Ward No. 10 (South) with 32938 persons and No. 3 (Yanpyay) Ward with 21,506 persons. In 2016, Ward No. 10 (South) has the highest with 38,085 persons, followed by No.1 (Anawmar) Ward with 17,747 persons and No.3 (Yanpyay) Ward with 14241 persons. The highest concentration of population is Ward No.10 (South) because of lower price of the land than other ward and being the area settle by the earliest residents. Figure (3)

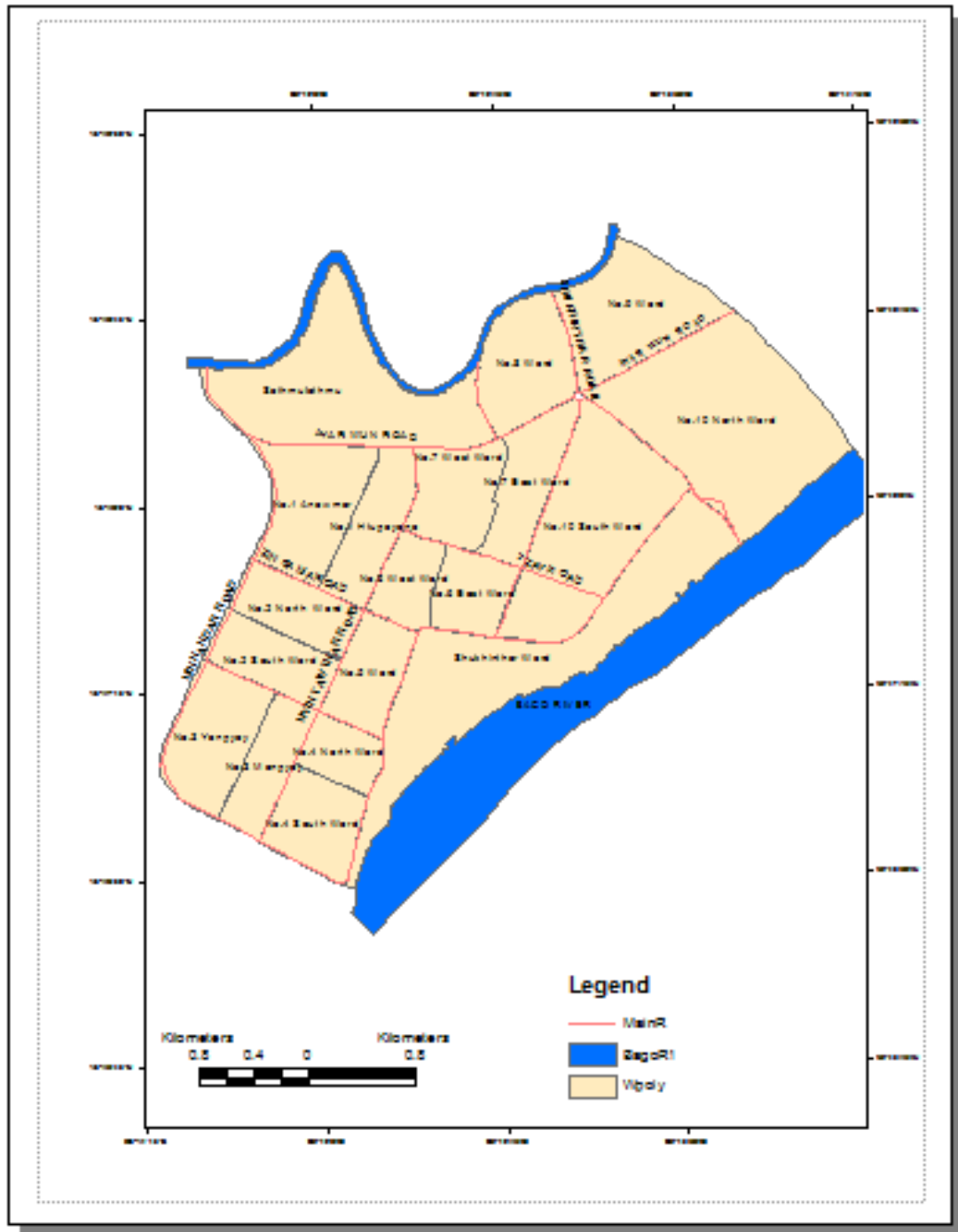
### 3.3 Population Density

The total population of Thakayta Township is 220,074 persons in 2016. The study area is located in flat land area and many transport line is accessible to every places within Yangon City and other Township. The population number and density of each ward is show in table (2).

The population density for the whole township is 44,103 persons per square miles. The highest population density can be seen in No.9 Ward with 84,466 persons per square miles and followed by Ward No.2 (North) with 83,543 persons per square miles. The lowest population density can be seen in Sethmulethmu Ward with 11,118 persons per square miles.

$$\text{Population Density} = \frac{\text{Total Population}}{\text{Area}}$$

Figure 3. Area of Wards within Thakayta Township



Source: General Administration Department of Thakayta Township



**Table (2) The Population Density of Wards in Thakayta Township**

No.	Ward name	Area square miles	Population	Population Density sq-miles
1	Sethmulethmu	0.43	4,781	11,118
2	1.Anawmar	0.26	17,747	68,257
3	1.Htupayone	0.19	13,292	69,957
4	2.South	0.11	7,979	72,536
5	2.North	0.16	13,367	83,543
6	3.Yanpyay	0.19	14,241	74,952
7	3.Manpyay	0.18	10,266	57,033
8	4.South	0.12	8,066	67,216
9	4.North	0.13	6,396	49,200
10	5.Ward	0.15	7,198	47,986
11	6.East	0.11	8,052	73,200
12	6.West	0.15	9,830	65,533
13	7.East	0.24	13,097	54,570
14	7.West	0.35	6,596	18,845
15	8.Ward	0.26	13,618	52,376
16	9.Ward	0.12	10,136	84,466
17	10.South	0.56	38,085	68,008
18	10.North	0.7	10,215	14,592
19	Shukhinthar	0.58	7,112	12,262
Total		4.99	220,074	44,103

Source: General Administration Department (2016)

#### **4. Distribution Pattern of Tea Shops**

##### **4.1 General Distribution Pattern of Tea Shops**

In urban area, tea shops are significant places for human society. Tea shops can serve not only food but also business, recreation and social contact place. In Thakayta Township, totally tea shops are distributed within wards. Tea shops are located along main roads and some streets within every ward. There are 19 wards including with 260 tea shops. Among the total number of tea shops, some are opening from 5:00 a.m to 9:30 p.m. Some open from 5:00 a.m to 5:30 p.m, such as

Thabyayyeik and Shweyathar tea shops. Some are opening till night watching with international sports as a special serving.

#### 4.2 Distribution of Tea Shops by Ward

The numbers of the tea shops are varied within wards. Some wards have large number of tea shops and some have few. This situation is related with social and economic status of the dwellers and land use type ratio of each ward.

The most number of tea shops in Thakayta Township can be found in Ward No.10 (South) with 28 tea shops which are 10.76 percent of the total tea shops. The second most concentrated ward of tea shops is in Ward No.1 (Anawmar) and No.8 Ward with 20 tea shops (7.69 %). The third most concentrated ward of tea shops is Ward No.1 (Htupayone) and Ward No.7 (East) with 18 tea shops (6.9%). The least number of tea shops, two and five of the tea shops can be found in Sethmulethmu Ward and Ward No.10 (North). Sethmulethmu Ward and Ward No.10 (North) are spacious. But it is found that the tea shops are less because of monasteries, police office, Gas factory, Electric power station, cemetery and school. Table (3)

**Table (3) Distribution of Tea Shops by Ward**

No.	Ward	Number of Tea Shops
1	Sethmulethmu	2
2	1.Anawmar	20
3	1.Hetpayone	18
4	2.South	9
5	2.North	17
6	3.Yanpyay	16
7	3.Manpyay	15
8	4.South	12
9	4.North	9
10	5.Ward	14
11	6.East	14
12	6.West	11
13	8.Ward	20

14	9.Ward	15
15	10.South	28
16	10.North	5
17	Shukhintha	9
18	7.East	18
19	7.West	8
Total		260

Source: General Administration Department (2016)

#### 4.3 Distribution of Tea Shops by Street

There are eight main roads such as Minnanda Road, Ayerwun Road, Shukhintha Road, Yamonnar Road, Myintawtha Road, 7-Zay Road, Thumana Road and Zingama Road. These roads are defined as the public transport roads. The largest number of tea shops are distributed on Ayerwun Road with nineteen tea shops because of 10-Zay, No.35 and No.34 bus gate, police office and Basic Education Middle School No.3 are located on this road. Myintawthar road is the second most distribution of the tea shops with thirteen tea shops.

7-Zay Road and Thumana Road have ten tea shops each, Zingama Road has nineteen tea shops, Shukhintha Myopat Road has six tea shops and Minnanda Road and Shukhintha have three tea shops respectively. Any tea shop is not found in Yamonna Road because floral shops and other shops are located along this road.

#### 4.4 Density of Tea Shops by Ward

In Thakayta Township, there are nineteen wards and more than one type of tea shops are distributed in all ward. Among these wards, Ward No.10 (South) has the maximum number of tea shops and 10.71 percent of the township total number of tea shops. Ward No.10 (North) and Sethmulethmu Ward have the minimum number of tea shops and 0.77 percent of the township total number of tea shops.

Within Thakayta Township, Ward No.6 (East) has the highest shops density with 127 shops per square miles. The least shops density is found in Sethmulethmu Ward with five shops per square miles.

#### 4.5 Distribution of Tea Shops by Type

The types of tea shops are defined as A, B, and C based on interview number of thirty five. Six criteria are used for defining the types of tea shops. They are number of tables, decoration, spacious, labour, types of food and number of customers.

According to these criteria, tea shops (17.14%) of interview shops are fall into A type, (54.24%) B type and (28.57%) C type. Tabyayyeik, Shweyathar and Seiktaikya are included in A type. These shops are located along Ayarwun Road and Shukhintha Road. Type B tea shops can be found almost all the wards of Thakayta township. There is a few number of type C tea shops within study area. Table(4)

**Table(4) Criteria and Range for defining Type A, B and C**

No.	Name	Type		
		A	B	C
1	number of tables	>20	10-20	<10
2	decoration	Very Good	Good	Fair
3	spacious	>2400	1000-2000	<1000 sq-ft
4	labour	>15	>10	<5+family member
5	foods	>3 types	2 types	1 type
6	customers	150-300	100-150	<100

Source: Surveyed Data





## **5. Analysis on Distribution of Tea Shops**

### **5.1 Mean Center Analysis and Buffer Method**

The distribution of tea shops within Thakayta Township used computer programmed like Arc GIS 10.1 to measure mean center. At first, tea shops distribution was depicted on the map of Thakayta Township by using Arc GIS 10.1. After that, Arc GIS 10.1 was run for mean center of all the tea shops by counting points in a computer programmed. Mean center can be found within Ward No.6 (West).

In accordance with the Buffer Method, there are 30 tea shops within 500 meters from the mean center and the large number of tea shops can be found within 1000 meters. Generally, Ward No.1 (Anawmar), Ward No.1 (Htupayone), Ward No.7 (East and West) and Ward No.6 (East and West) and Ward No.5 are within 1000 meters. Tea shops are large number within this area because of crowded people, market, cinema, near the town center.

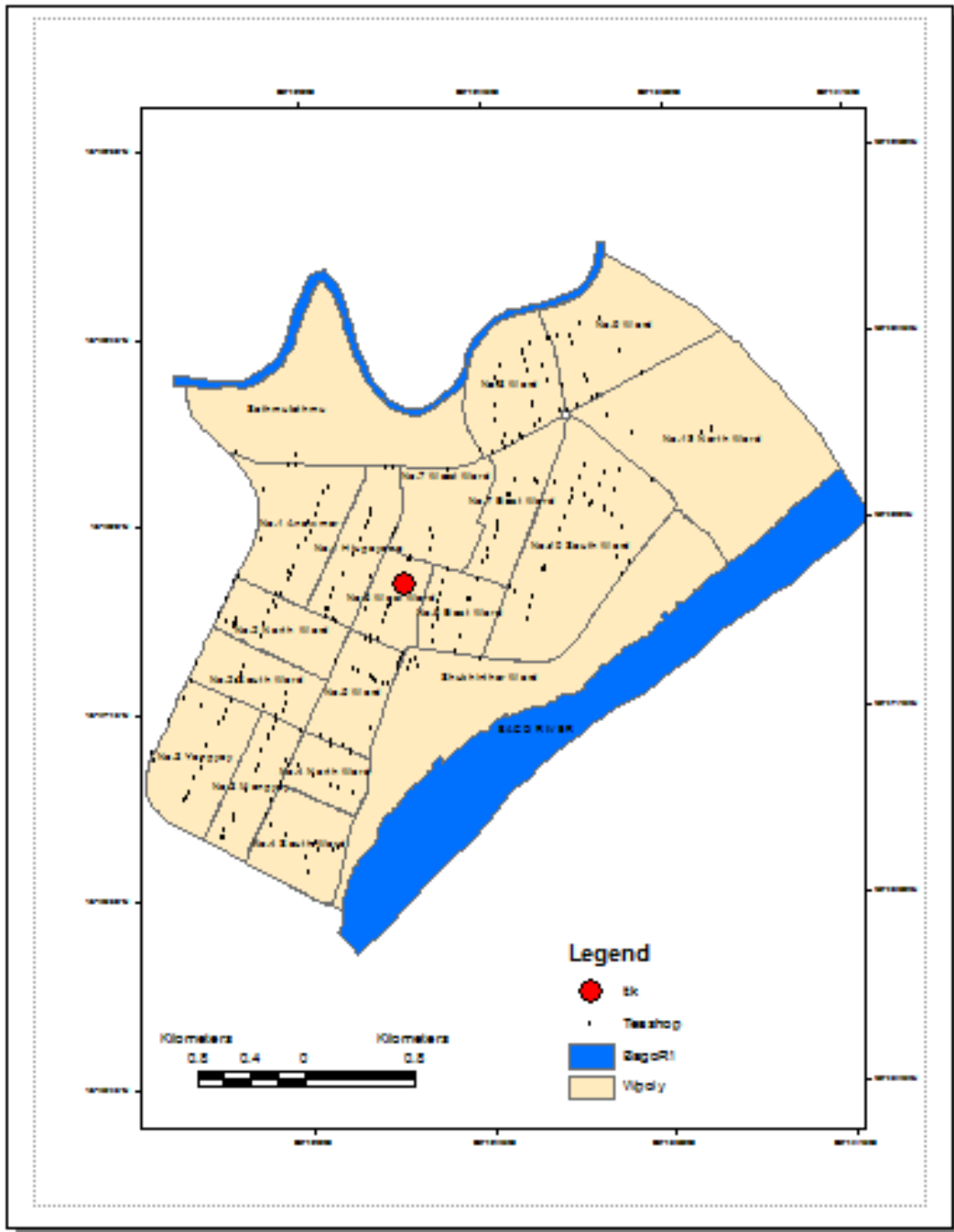
Along the main roads, it can be also measured by using Buffer Method. It is noticed that more tea shops can be found within 500 meters from main roads. Figure (4, 5 and 6)

### **5.2 Functions of Tea Shops**

#### **5.2.1 Decoration**

There are classified into three mainly type of tea shop. There are Type A, Type B and Type C of tea shop. In generally, tea shops decoration, labour, types of food, customers, raw material and capital investment are focus for presenting the functions of each type of tea shops. Two out of thirty five tea shops open 24 hours, two tea shops open from 5:00 a.m to 5:30 p.m and 31 tea shops open from 5:00 a.m to 9:30 p.m. The area of space range from 400 sq ft to 4800 sq ft. Fifteen out of 35 tea shops, the space area is from 1000 sq ft to 2000 sq ft, fifteen is less than 1000 sq ft and five is more than 2400 sq ft. Tabyayyeik and Shweyathar tea shops only are special arrangement for car parking. Most of Type A and Type B is tenant. Only nine shops are run in their own property. The proportion of tenant is 26 shops. Table (5)

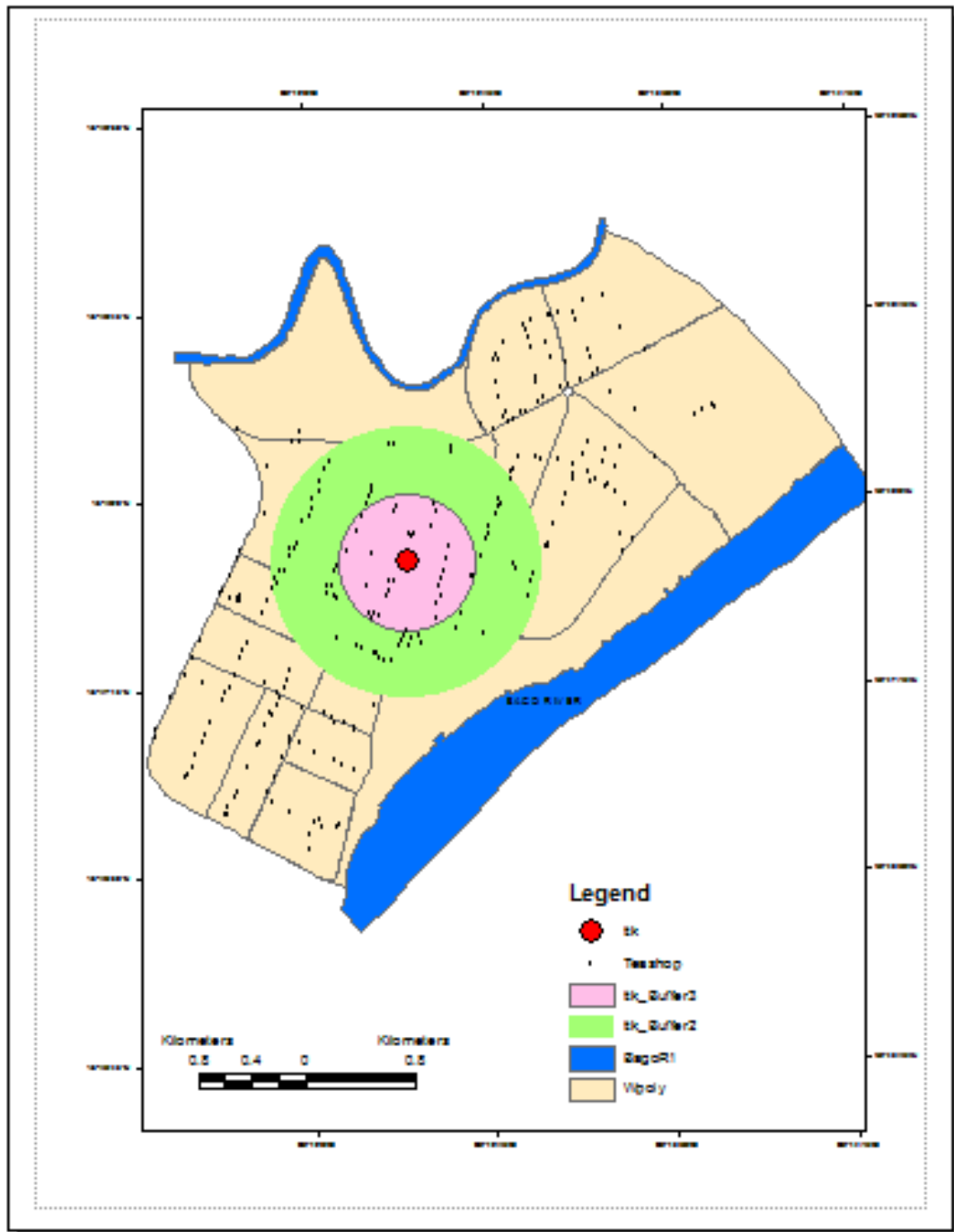
Figure: 4 Tea Shops Mean Center within Thakayta Township



Source: General Administration Department of Thakayta Township

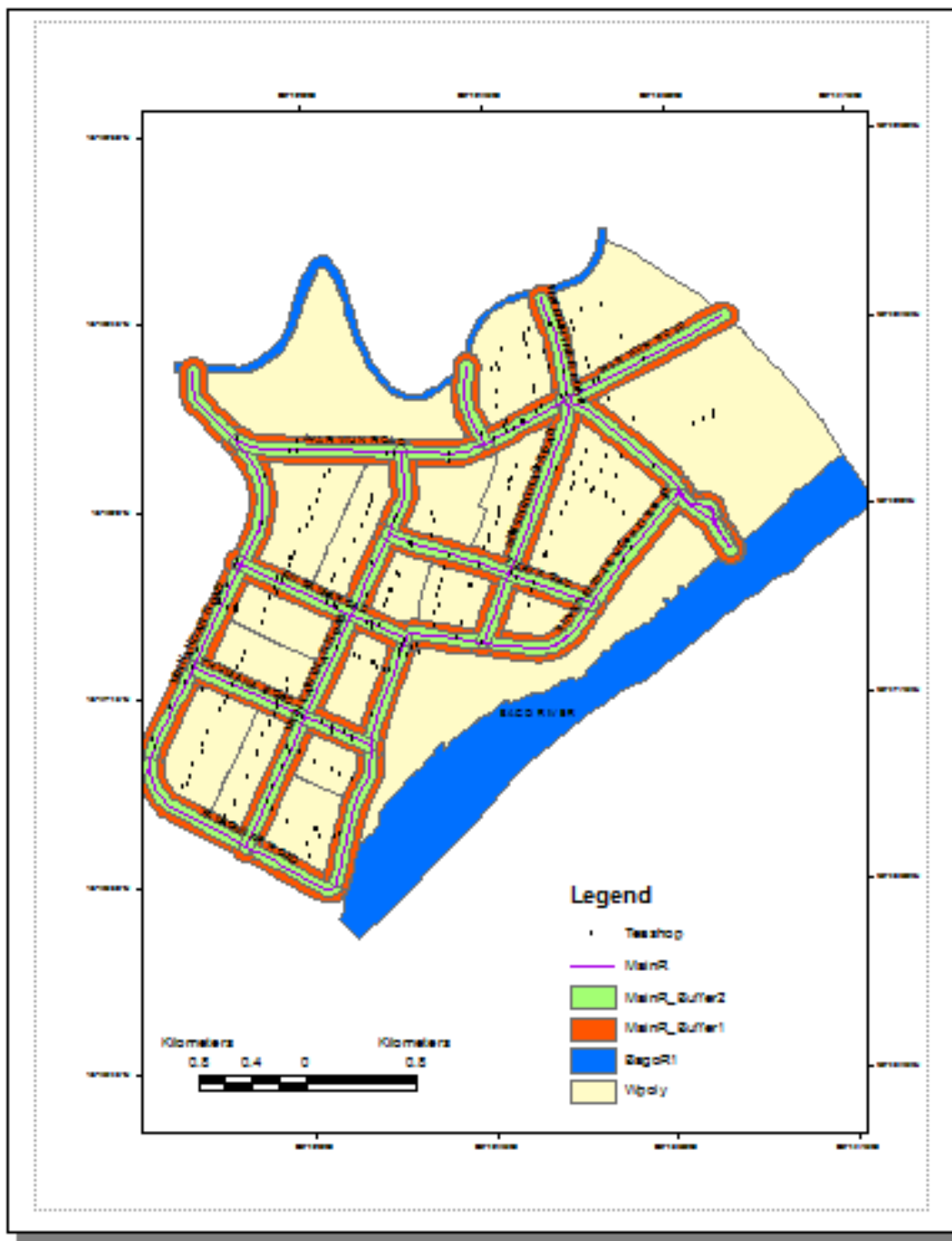


**Figure: 5 Distribution of Tea shops within Thakayta Township by using Buffer Method**



Source: General Administration Department of Thakayta Township

**Figure 6 Distribution of Tea shops within Thakayta Township by using Buffer Method**



Source: General Administration Department of Thakayta Township

### 5.2.2 Labour Conditions

In every economic activity, the owners can be faced shortage of skilled and experience labours. Some shops run with family members. Most of the skilled labours are male workers. It can be categorized as tea master, cooking master and so on. The owners does not limit on level of education and age of their workers. The acceptance

level is that workers who can read and write are suitable. All tea shops are used permanent workers. Most of the workers are from Yangon region, Magway region and Ayeyarwady region.

In all tea shops of Type A, workers must dressed uniforms during service hour. Five tea shops are managed by managers for the whole tasks, while 30 tea shops are directly managed by owners. The salary of skilled labour is around one lakh and waiters get around fifty thousand kyats per worker. These are free charge for every worker. In Type B and C of tea shops, the salary of skilled labour is around seventy thousand kyats and that of waiters is around forty thousand kyats respectively. Table(5)

### **5.2.3 Types of Food**

Kinds of food selling in each tea shops are varied from one tea shop to another. In Type A of tea shops, they are selling Myanmar foods (Steamed sticky rice, fry rice, fried cake, mokhinga, coconut noodle etc), Chinese foods (fried noodle, oily noodle etc), Indian foods (pury, tory, pan cake) and Shan foods (shan noodle). Among all Type A, Tabyayyeik is the most distinct shop than others. It is located in Ayarwun road. This shop is distinct because of getting the popular tory and having the car parking.

In B Type of tea shops, types of food are less than Type A of tea shops. There are tea plus Myanmar foods and Shan foods mostly. Aungbayathar tea shop is the most distinct in Type B. It is situated in Shukhinthar road. They run with eight workers and family members. They are ten tea shops in this Type C within Thakayta Township. In Type C of tea shops cannot get many of foods. It can get tea and foods which are made with wheat flour. Table (5)

### **5.2.4 Customer Conditions**

According to the interview result, types of customers can be categorized as single, two, family, friends or colleagues. Ten percent is single, ten percent is two persons, ten percent is family and seventy percent is friends of colleagues in Type A. Ten percent is single, twenty percent is two persons, five percent is family and sixteenth five percent is group in Type B. And twenty percent is single, twenty percent is two persons, forty percent is family and forty percent is group in Type C

respectively. The range of customers more than 100 is 100 percent in Type A. 12.37 percent is under 100 of customers and 87.63 percent is 100 to 200 persons in Type B. The range of customers under 100 is 100 percent in Type C. All type of tea shops are depended on nearby customer, commuters followed by second. Table (5)

### **5.2.5 Raw Material and Capital Investment**

In every business firm, raw material is the most important factor. Thus, entrepreneurs need to buy raw material from market or other places. In the firm of tea shop, owners and tea shop managers purchase meat and vegetables from market (Zay) such as Nyaungpinlay Zay, Thiri Minglar Zay, No.1 Zay (Thakayta) and so on. Soft drinks, milk and dry tea leaf are delivered from companies.

Concerning with the current capital investment, 66.67 percent of shops run their work with individual investment and 33.33 percent with share in Type A of tea shops. In Type B and Type C, all of the tea shops run their work with individual. This is traditional idea of investment culture of running the work. They do not want to borrow from other because they are afraid of interest and unwilling to invite share.

## **6. Conclusion**

This paper is analyzed on the distribution pattern of tea shops in Thakayta Township. Thakayta Township has a lot of tea shops and various types of tea shops. The most number of tea shops can be found in Ward No.10 (South). The types of tea shops are defined as Type A, B and C depending on their space, numbers of table, decoration, labour, foods and customers. Type A tea shops can be found along the main roads. It is managed by managers for the whole tasks. Type B and C tea shops can be found all of the wards. In accordance with the Buffer Method, most of the tea shops are distributed mainly along the main road, junction of the streets and concentrated near the markets in Thakayta Township. Most of the tea shops should be verify of foods depending on time and upgraded their shops to high class and opened the whole day. The existence of these tea shops show that the Thakayta Township has better urban environmental conditions for the locational choice of economic activities.

## **6.1 Findings**

In accordance with the result of the interview, the two main advantages of tea shops are that they can make people who open tea shops in this area earn the regular income and due to these tea shops, people can have wider social network by sitting there and chattering for quite a longtime.

As the weakness, every economic activity can face difficulties. Some difficulties can be solved by themselves. Some are linked with others. Some difficulties facing in this types of economy are shortage of labour. The individual solving methods gave more salary to skilled labour than other shops. In some tea shops within wards, most of the customers come with the bicycle. It causes to disturb the pedestrian due to the standing their bikes in front of the tea shop. So, it should have parking place for bicycle.

## **6.2 Suggestions**

If tea shop owners want to achieve, they must know needs for shop. The basic needs are creativity, hospitality, clearness, trained labour, cooking master, appetizing, hygienic foods, car parking places, reasonable price of food, good accessibility which create comfortable and more relaxable place. So, tea shops should be measured with these factors for success in future.

## **Acknowledgements**

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## **References**

- 1.Kyaw Yin Spatial Distribution Pattern of Tea Shop Within Sanchaung Township, Unpublished Master's Project Paper Submitted to the Department of Geography, University of Yangon (2010)

- 2.Thein Aung                    Geographical study on Distribution Pattern of Retail Shops in Hlaingtharyar Town, Unpublished Master's Project Paper Submitted to the Department of Geography, University of Yangon
- 3.Nay Zaw Aung                Distribution and Functions of Tea Shops within Hlaing Township, Unpublished Master's Project Paper Submitted to the Department of Geography, University of Yangon

Table(3.3) Fuction of Tea Shops by Types

Sr.No	Name	Year	Spacious	Clean	Tables	Workers	Foods	Customers	Types	Ward
1	Tabyayyeik	2008	4800	VG	40	28	>3	300	A	Sethmulethmu
2	Shweyathar	2014	4800	VG	25	18	>3	200	A	Shukhinthar
3	Shwekantkaw	2013	2400	VG	35	20	>3	250	A	2-North
4	Nannetkhinn	2010	1200	VG	25	25	>3	Around 300	A	G-East
5	Shwekaungkywe	2010	2400	VG	20	20	>3	200	A	4-North
6	Seiktaikya	2012	2400	VG	20	15	>3	200	A	10-North
7	Onestar	2006	1200	G	15	10	>2	Around 100	B	6-West
8	Santhit	2009	1200	G	10	7	>2	>100	B	6-East
9	Inpayar	2007	1200	G	13	10	>2	80	B	5-Ward
10	Myint Naing	2005	1200	G	10	8	>2	Around 100	B	5-Ward
11	Nilar Htun	2008	800	G	12	6	>2	Around 100	B	Shukhinthar
12	Pansawetaw	2010	800	G	10	7	>2	Around 100	B	Shukhinthar
13	Kyawgyi	2003	1600	G	10	9	>2	100	B	8-Ward
14	Onesamoe	2010	1200	G	15	10	>2	100	B	8-Ward
15	Point	2009	1200	G	12	8	>2	150	B	8-Ward
16	Aung Phyo	2011	1200	G	13	6	>2	>100	B	9-Ward
17	Aungbayathar(1)	2010	1200	G	12	8	>2	>100	B	9-Ward
18	Arrman	2012	1200	G	15	8	>2	80	B	7-East
19	Aungbayathar(2)	2002	1200	G	12	8	>2	Around 150	B	7-East
20	Shweyaungoo	2009	1200	G	10	6	>2	Around 100	B	1.Htupayone
21	Shweminthar	2010	1200	G	10	8	>2	Around 100	B	1.Anawmar
22	Seinthonelone	2011	1200	G	13	7	>2	100	B	2.South
23	Pataukwar	2011	800	G	10	7	>2	80	B	2.North
24	Aungmyaita	2010	800	G	10	6	>2	Around 100	B	4.South
25	Naungyoo	2007	900	G	11	8	>2	Around 100	B	3.Yanpyay
26	21 Century	2008	800	Fair	8	4	1	80	C	1.Htuparyone
27	Layeik	2012	600	Fair	7	5	1	80	C	3.Manpyay
28	Tazin	2010	400	Fair	7	6	1	100	C	9-Ward
29	Mg Han	2002	400	Fair	5	4	1	80	C	6-East
30	Tanta	2006	800	Fair	8	6	1	80	C	7-West
31	Sein Htay Hlaing	2012	600	Fair	7	5	1	Around 80	C	10-South
32	Hlaing Hlaing Moe	2005	600	Fair	8	6	1	100	C	3.Yanpyay
33	Minseesein	2007	600	Fair	6	4	1	80	C	3.Manpyay
34	Tawwun	2009	800	Fair	8	4	1	80	C	1.Anawmar
35	Aung Thu	2006	600	Fair	6	4	1	80	C	4-South

Source: Based on Questionnaires Interview

