

Effective Urban Landuse Pattern as a Key Factor for Potential Development of Socio-economic Activities: A Case Study of Anauk Myodwin Ward, in Dawei Twon , Tanintharyi Region

Hla Yin Nu¹, Myint Myint Than², Khin Sander Moe²

Abstract

This paper describes “Effective Urban Landuse Pattern as a key factor for potential development of socio-economic activities: A Case Study of Anauk Myodwin Ward, in Dawei Twon , Tanintharyi Region”. The study emphasized of Socio-Economic activities effect on the urban landuse investigated in Anauk Myodwin Ward. Most of the people in this ward are Buddhists. They carried out different types of landuse patterns, the number of houses, social and economic factors, commercial land, building material, typical house type and plan. As a whole ward, the distribution of landuse patterns may be multiple distributions. The utilization of landuse pattern that the future generations will be benefited from them. The socio-economic activities are achieved on the urban landuse pattern, the fishing and merchants, sellers and businessmen, government employees, infrastructures facilities and miscellaneous on the urban landuse pattern for their living, that which the socio-economic development activities may occur toward the extension on both the urban land. In the recent period, some people migrate to neighboring for their economic activities on the locational advantages. The findings of the research are based on survey account the urban ward. It is found that there will be good at socio-economic potential development on the urban landuse pattern for the Anauk Myodwin Ward, Dawei Town, Tanintharyi Region.

Key words: effective urban landuse, business factors, socio-economic factors, potential development factors

Introduction

The purpose of the practical survey is to know the geographical urban landuse and socio-economic activities systematically. This paper provides an analysis of socio-economic activities on urban landuse pattern in the Anauk Myodwin Ward. The following its designation as in the Anauk Myodwin Ward. The former is divided into two settlement areas such as Anauk Ward and Myodwin Ward. This is located in south-western part of Dawei Township as an ancient town. It was rebounded in the Myanmar year 1116, the waxing (13) of Taboung Month(1755 A.D) by Myosa U Ne Hla, Min Ne Hla who constructed strongly the town with the brick walls. The original settlement was established at Thagara(Myo-houng Village in Launglone Township) in Myanmar year 113. The original name of the town was cled “Tharyawadyand A.D ”. In 1824, after British had occupied. Dawei and A.D Maingay’s report, the first Tanintharyi Division Commissioner expressed thastwards and population had been declared under the town’s Action data of Dawei from the period 1824-26 up to 1842-43. Anauk Myodwin Ward had established within Dawei Town 1824 data, the population and since 1824. According to the dada record, in Anauk Ward were 773 persons and 114 houses and in Myodwin Ward were 422 persons and 59 houses.

Fifteen Wards have been declared under the town’s Act in 1972. Anauk Myodwin Ward was combined with Anauk and Myodwin Wards. This paper provides the information concerned

¹ Dr., Associate professor, Department of Geography, Pyay University

² Lecturers, Department of Geography, Pyay University

with the improvement of transportation in the urban area, very good future prospect for social and economic development. This development prospect has materialized with the construction of border trade of economic development recently. These socio- economic development on the urban landuse pattern are related to each other. Since, the government designated to introduce the systems of export product of fishing economy, private fishing economic activities, formal and informal water way transportation services, other businesses, and some social infrastructures were also developed. Especially, formal and informal water way transportation services, economic and communication developments are distinguished on the urban area as a socio-economic development in Anauk Myodwin Ward. It is chosen to make a research from the geographical point of view. The sources of all the socio-economic activities in this research paper were mainly based mainly on available primary data, formal & informal interviews, expert interviews and field observations. Since the study area is not widespread, wide socio-economic variables and data for 2017 could be obtained for them. Some of the maps are used from Land Records Department, Dawei Township. Primary data (variable of socio-economic data) was used to illustrate the socio-economic activities on the urban landuse and the results are illustrated as numerical values with tables, figures, plates, maps and diagrams.

Research Background and Design

In developing countries, socio-economic factors and ecosystems are generally created by its physical environment and cultural background. Socio-economic and ecosystem conditions are also very important for sustainable rural and urban development. Thus, this paper analyzes socio-economic activities and behavior on the types of urban landuse pattern. Concepts of socio-economic activities played on urban landuse pattern that general research frame mentioned in the study area is used as guidelines based on some scholars. They are; Jeffrey C. Bridger and A.E. Luloff. (1999): Toward an international approach to sustainable community development from the socio- economic view .Osuala, E.C (199), Introducton to Research Methodology. Africana Publishers Ltd, Ibadan. This general research framework is as follow;

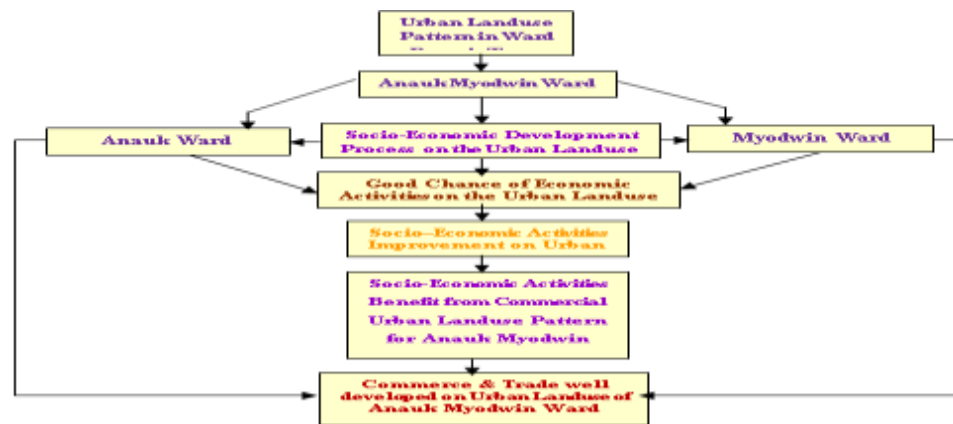


Figure (1) General Research Framework in Study Area

Study Area

Dawei Town is situated in the northern part of Tanintharyi Region. It is composed of fifteen Myoma Wards. It has an area of 10.03 square miles (6421 acres). The study area of Anauk Myodwin Ward is one of the fifteen Myoma Wards of Dawei Town. It is located in the central part of Dawei Town. Anauk Myodwin ward is located between 14° 4' 16 "and 14 °4' 28 "North Latitudes and 98 °11' 34" and 98 °11' 50" East Longitudes. The total area of Anauk

Myodwin ward is 0.007 square miles (42.2 acres). Its area is 0.697% of total town area. It is rectangular shape. It is bounded on the north by Ouloke Ward, on the east by Peinetaw Ward, on the south by Zayit ward and the west by Talainhtein Ward.

Aims and Objectives

- To know about more the socio-economic conditions of Anauk Myodwin
- To examine the social and economic pattern of living of the native people.
- To analyze the effective urban land use of a particular area
- To assess the physical, social and economic factors effective on the residential land use patterns for human survival in the area

The future prospect of the socio-economic effects on the urban land use that toward the development of Anauk Myodwin Ward in Dawei Township.

Source of Data and Methodology

Data Collection To identify them, detailed primary data such as locational choice factors data are collected through the intensive field surveys and structured & expert interviews conducted in April 2017. Secondary data such as Base map & Secondary data collected from the relative office and drawing maps, diagrams, reference books and literature reviews, graphs and taking photograph are used for explanation. Primary data collected such as socio-economic activities on the urban land use pattern by field survey. Which were conducted for verification of the acquired facts. In addition, topographic maps (one inch) and field survey are used as hardware, and then Arc GIS 10.1 are used as software to cartographic maps.

In this research paper, Factors controlling the causes of socio-economic activities on the urban land use through semi-structured interview method, qualitative and quantitative methods, and GIS technique are used. Social and economic variables are based on the urban land use. To identify that to find out the processes that generate on the land use pattern of Anauk Myodwin Ward based on the available information through the visual field observations. Then semi-structured interviews were conducted by systematic sampling method. That in terms of socio-economic activities effects on the land use pattern of Anauk Myodwin Ward to income generating activities on the settlement areas. Those were identified for detailed fieldwork. Because the spatial spread of the urban area was not wide, variations in socio-economic activities on the urban land use could be counted in more detail, which provides details of the urban land utilization pattern of the nature in given environment.

Results and Findings

Physical Factors of Anauk Myodwin Ward

Dawei Town is situated in the northern part of Tanintharyi Region. It is composed of fifteen Myoma Wards. It has an area of 10.03 square miles (6421 acres). The study area of Anauk Myodwin Ward is one of the fifteen Myoma Wards of Dawei Town. The total area of Anauk Myodwin ward is 0.007 square miles (42.2 acres). It's area is 0.697% of total town area. The shape of the study area is rectangular shape in figure (1.a, 1.b, 1.c, 1.d). It is situated on the eastern bank of Dawei River and the whole town is undulation feature. But its landscape is low and flat. The general elevation of this area is 50 feet above sea level. Dawei River flows from north to south and enters into the Andaman Sea. It is about one hundred miles long. There are some creeks within Dawei Town. They are tidal creeks. Climate is an important factor which influence on economic activities and human settlement. Dawei Town receives the type of the

Tropical Monsoon Climate (Am). The types of natural vegetation depend on the climate, soil and topographic features. Mangrove forest types are commonly seen along the eastern bank of Dawei River. The lower mixed deciduous types are found on the northern part of Dawei Town. The bed rock is mostly grey soil. Alluvium soil is found in the bank of Dawei River and its tributaries. Mountain late rite soils and lateritic soils are found at higher elevations in the region (1.e).



Figure (1.a.) Location of Tanintharyi Region in Myanmar

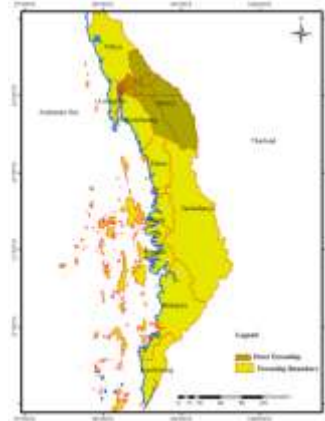


Figure (1.b.) Location of Dawei Town in Tanintharyi Region



Figure (1.c & d) Location of Anauk Myodwin Ward, Figure (1.e) Relief Map of Dawei Town

Source: STRM DEM 90m and UTM Map, 2004

Socio - Economic Factors of Anauk Myodwin Ward

Dawei was an ancient town. It was rebounded in the Myanmar year 1116, the waxing (13) of Taboung Month(1755 A.D) by Myosa U Ne Hla, Min Ne Hla was constructed strongly the town with the brick walls. The original settlement was established at Thagara(Myo-houng Village in Launglone Township) in Myanmar year 113. The original name of the town was called "Tharyawadyand A.D ". In 1824, British occupied. Dawei and A.D. Maingay's report, the first Tanintharyi Division Commissioner had expressed wards and population been declared as know under the town's Action data of Dawei Town from 1824-26 up to 1842-43. Anauk Myodwin Ward had established within Dawei Town 1824 data, the population and town since the year of 1824. According to the houses of Anauk Ward were 773 persons and 114 houses and Myodwin

Ward were 422 persons and 59 houses. Fifteen Wards have been declared as know under the town's Act in 1972. Anauk Myodwin Ward was combined with Anauk and Myodwin Wards.

Population growth is an important factor in socio-economic activities, the number of residents increased from 2002 to 2011 and but the population is little decreased in 2017. Anauk Myodwin ward is a moderately population size ward in Dawei Twonship. It can note that the population has changed. The population growth is mainly due to migration increase from rural to urban area. In 2000, total population of Myodwin ward was 2089 persons. In 2002, total population was decreased 1687 persons and the total population has increased to 2241 in 2011. In 2017, the total population is 2237 persons. The population was little decreased in 2017. In the ward, total number of female is 1244 persons and the male is 993 persons. There were about 409 houses and 441 households are in the ward. Although, some year the population has decreased, the population of Anauk Myodwin ward has always been increased year by year. Most of the inhabitants are Bamar(Dawei indigenous). The other indigenous races are Kayins, Mons Rakhines and others. Foreigners, Indians and Chinese can also be found in this ward. There are four Chinese Temples, one Christian Church, one Islamic Mosque, one Damaryone and one Buddhism Association. The population growth is good sign for future economic development of the ward.

The government is implementing education promotion programmes. In Anauk Myodwin Ward, there are two Basic Education Primary Schools. They are one Basic Education Primary School in Anauk Ward, It was opened in 1950 and another one Basic Education Primary School was in Myodwin Ward, it was opened in 1928. It is suitable condition for effecting of basic education status in Anauk Myodwin ward. Majorities of the people in this ward are merchants, sellers and businessmen. Some engages government employees, miscellaneous workers and farm labours. There have one Regional Health Care Department and four Private Clinics in Anauk Myodwin ward. There have no pipe -line system. But there have sufficient for water supply in the study area, because of almost every houses have one surface well or artesian well in this ward. The deep water of artesian wells is about 50-60 feet deep. In the residents within the town area, every household has nearly one well each, and can utilize the well freely. Accordingly, fresh water supply from this well becomes available throughout the year and electricity for the residents supply from local and regional own private generator in the Anauk Myodwin ward.



Plates (1, 2, 3, 4,5,6): Field Work on Socio - Economic Activities in Anauk Myodwin Ward

Source: Actual Field Observation in April, 2017

Socio-Economic Activities Effect on Urban Landuse Pattern of Anauk Myodwin Ward, Dawei Town

Types of Landuse

The general urban landuse pattern of Anauk Myodwin ward, Dawei Town can be classified into eight categories as follows: (1)Residential Landuse , (2)Commercial Landuse, (3)Industrial Landuse, (4) Landused for services, Institutional Landuse (Landuse for Public and Government Department), (6)Recreational Landuse,(7)Transportational Landuse, (8) Unclassified Landuse and Land under Water Bodies.

1. Residential Landuse

Among the urban Landuse types, residential landuse is the most important and determinant factor of the urban development of the town. The Anauk Myodwin ward is (42.2acres).The number of land plots allotted for residential use is (402) plots. At present, the ward has only 409 houses with 441 household. Building can be found mixed with other landuse. Most of the people living in this area use their residences and commercial purposes. There are 2237 people in this ward in 2017. Most of the buildings within this ward good condition and some are fairly moderate condition. Good conditions of houses are found on the Arzarni Road, Bogyoke Road, Neik Ban Road, Dawei-Ye Road, U Kyaw Yin Street, Myodwin Street and Duwon Street. Types of houses high buildings are one, two, three and four storey with made of brick and corrugated iron-roof. Some are poured concrete. These houses are more modernized than the other wards. In which roads, most of the buildings are used for upper floor is residential and ground floor for commercial landuse(retail and wholesale business and services). Fairly moderate conditions houses are found behind the houses on the motor roads and one-two storey with made of brick and wood and corrugated iron roof. This reflects the high socio-economic status of the inhabitants. Residential landuse is about (47.07) percent of the total landuse type in Anauk Myodwin Ward. Therefore, many houses are large double storied houses. Since 1988, the houses, their overall versions, house types, designs, structures and economic activities had changed together with the town's urban development trends, especially in the south-west central part of urban area of Dawei Town. It can be said that, “the residents in there are more chanced than other urban area for not only freely use selling and buying activities but also without time consuming and there is the chance of combined use for residential and commercial landuse area”. Therefore, there is equally effected for the residents with potential development of socio-economic activities on the urban landuse in Anauk Myodwin Ward.

2. Commercial Landuse

Commercial activities and their associated locational sites cannot be carely separated in the nearby residential facilities .The commercial Landuse and serviceable (including banks, professional, recreational services) etc, are found among the residential areas. The commercial landuse of the study area include all the economic activities (retail and wholesale business, . general stores, retail shop, textile and clothing, lottery, fancy shop and foodstall, Cold and snack bars, and restaurants, tea shops, cold drink shops, betal shops, dried fish and prawn collecting and distributing centres , warehouse and their controlling office are clustered and services are located along the main road such as near the Mingalar market, along the Arzarni Road, Bogyoke

Road, Neik Ban Road and Dawei –Ye Road, along U Kyaw Yin Street and Myodwin Streets .Hotels, motor cycle repairing services, bicycle workshop and beauty parlors , trading services and tourism services, clinics, and banks ,these services can be found along the main roads. along the Arzarni Road, Bogyoke Road, Neik Ban Road and Dawei –Ye Road, along U Kyaw Yin Street and Myodwin Streets are mostly found. Indigenous medicine, tailoring services and other services are found in these ward.Small shops are scattered everywhere within the ward. The most shop is attached to house in this area. Commercial landuse is about (17.74%) percent of the total Landuse type.

From the above facts, “there is the chance of combined use for residential and commercial landuse area. There is more created for activities of economic development and income level improvement from the multipurpose economic functions in there. Hence, they can develop these economic activities within a short time”. Therefore, there is potential for development of economic activities in near future on the urban landuse for the residents.

3. Industrial Landuse

There are the smallest one in the whole area. There are three confectionaries and two presses. Three Confectionaries are found on the Arzarni Road, Anauk Ward and Bogyoke Road. One press on the Myodwin Street and another press are found on the Bahosi Street. There are small scale industries landuse is about (0.82%) percent of the total landuse type. The rest of small scale industrial works scatter all over the residential areas of the town wherever favorable conditions occur. It can be said that, “small scale industrial landuse type can be found in there. But, if the residents are high level income from potential development urban landuse, which may be build and create the largest mill and factory from informal site with formal way toward economic development prevent from the government site for industrial landuse area in there”.

4. Landused for Services

Landused for services include financial institutions(banking, medicine services and indigenous, hotels, insurance, pawn-shops), professional services(western and indigenous medicine services by legal professionals, training schools, courses, tuitions) , skilled services (beauty parlour, beauty salon, photo studio, tailoring services, dhobi, dry –cleaning), repairs (work-shops, bicycle repairs, watch repairs), shops catering for lending services (books, household furniture and crockery) , recreational services (sport stadiums, cinema, theatre, offices for services, lodgings and day nurseries).KBZ Bank, Mya Seine Hall, Za Byuris Wedding Hall, ALC Computer Training and Language Centre, Aungmingalar Cinema , Golden Guest Hotel and Garden Guest-house , Personal business and professional services are found mainly along Arzarni Road, Bogyoke Road, Myodwin Street, Dawei-Ye Road, U Lunn Baw Street, U Kyaw Yin Street and Anauk Street. Most of the services are attached to house in this area. Landuse for services is about (7.91%) percent of the total landuse type. From the above facts, “these services can be found along the main roads. There will be development potential for knowledge awareness from regarding service functions to the residents and low amount expenditure that will be targets for the residents” in there. “These conditions will also be improved to enjoy the benefits of using both economic and social activities collectively then the economic rates will change, and subsequently will be effected by economic multiplier and warehouse functions will take place” within area.

5. Institutional Landuse (Landused for Public and Government Departments)

In Anauk Myodwin Ward include School, Hospital, Government Office, Police Compound, Religious Building and Recreation Area. Public and Government Departments involve such as Head of Education office(Tanintharyi Region) and Schools, Municipal Office, Department of Information and Public Relationship, Police Staff Avenue, Myanmar Maternal and Child elfare Association Office, Fire Fighting association of Ward, Women's affair Office, Dhammaryone, Islamaic Mosque and Catholic Church.And then two Basic Education Primary Schools. Basic Education Primary Schools is situated on Anauk Street, in the Anauk Ward and another one is located on U Kyaw Yin Street in the Myodwin Ward. Head of Education office (Tanintharyi Region), Municipal Office, Buddha Tharthana Nodegaha Association are found along the Dawei- Ye Road. Department of Information and Public Relationship and Police Staff Avenue are located on the Arzarni Road. Myanmar Maternal and Child Welfare Association Office, Fire Fighting Association of Ward and Women's Affair Office are situated on the U Lunn Baw Street. And then, Ward Administrative Office is found Anauk Street.

The various religious buildings are found significantly within in the study area. There are four Chinese Temple. Of these, three Temples are located on the Neik Ban Road and the rest is found on the Myodwin Street. One Dhammaryone is located on the Anauk Street. One Islamic Mosque is found on the corner of Neik Ban Road and U Kyaw Yin Street. Catholic Church Compoundis found on the U Kyaw Yin Street. Landuse for Public and Government Department is about (10.19%) percent of the total landuse type. These are clustered on the main road and secondary road. There is more accessible than other urban landuse area. It can be said that "the residents can be used easily on social factors with the economic development and social infrastructure of ward also improved", that are also supported by the government. "This development process (social infrastructures) is greatly helped for the development potential of economic activities to the most of the residents is living in there". Which are more accessible or can exploit the numerous social infrastructures than another urban area? It can be check that, if it need for trace with the future study. But these social infrastructures can be used by another urban resident to a smaller extent. "It will benefit both social and economic activities within the ward from institutional urban landuse, there is need to maintain and urban sustainability".

6. Recreational Landuse

Recreational Landuse include Cinema, Video Halls, Parks, Play-Ground and Theatre. There are one cinema (Aungmingalar Cinema) is located on Bogyoke Road . One park is located at the corner of Arzarni Road and Dawei-Ye Road in this ward. This landuse type is about (1.54%) percent of the total landuse type. From the above result, the settlement can develop with these social and economic activities within a short time, these conditions will also be improved to recreations patterns. Hence, settlement in this area could enjoy the benefits of using both economic and social activities collectively then recreation functions will take place from social factors.

If the recreation patterns can be created from different sources and different places of socio- economic activities, in the Anauk Myodwin Ward, it will become good more conditions of recreational urban landuse pattern in the near future. The economic and social activities include a wide range of processes, which are linked to the recreation that take places. These help to produce wealth for people and maintain for them a quality of life. Its activities are the most important for people because they provide social and economic conditions and lead to and

opportunities and sustainability in each activity for their living. As a result, quality of life will be improved with the recreational landuse.

7. Transportational Landuse

The major transportation system of Anauk Myodwin Ward is road. There are five main roads and nine streets. The Arzarni Road, Bogyoke Road, Neik Ban Road, Dawei-Ye Road and U Kyaw Yin Street is the important main roads. There are Anauk Street, Myodwin Street, Bahosi Street, Duwon Street, A lei Street, U Lun Baw Street, Ye- Kyaw Street, Zawgyi Street and U Zoe Street. This landuse type is about (14.73%) percent of the total landuse type. Since after 1988, the transportation is good with the socio economic development can be found in Dawei Town.

The possession of transportation facilities are varied in the study area. Some of these not only use as a transporter but also as income generators. The use different types of transportation facilities are for different purposes. Bicycles, Toke Toke car, trucks motorcycles and motorboats (ferry and private) are major transportation facilities for the study area. However, motorcycles and motorboats are used as their major transport facilities. Some people can now buy motorcycles and motorboats because of their good income. In addition, nearly all residents from settlement area own one motorcycle and some residents own more than one. Thus, although it is impossible the relative wealth of residents in Anauk Myodwin Ward is clear than other urban areas. From the above facts, “the residents in there are more accessibility for transportational landuse from the chance of high level income in socio-economic activities. There is the residents are used better off on transformational landuse than the residents in another urban ward” as a result within the study area.

8. Unclassified Landuse and Land Under Water Bodies

Unclassified Landuse and Land under Water Bodies is not seen in this area. Unused landuse consists of the land without buildings. Unused landuse is about (0%) percent of the total landuse type. In recent period, as regards unclassified land, there is vocational land that is no use for arable landuse, but there is potentially used for residential area or industrial area or cultivated area or commercial area and others in there. This is mean “for residential area if increasing amount of population within the study area or Dawei Township? How can solve in there? for the (0%) percent of the total unclassified land use from the geographical point of view to the study area, It can be need to check and to trace for the future plan from the government”.

Codes for Mapping Urban Landuse

The urban land use of Anauk Myodwin Ward is classified as follow to table.

Table (1) Plots of Land use for Anauk Myodwin Ward (2017)

No	Land use Type	plots	Mini(sq-m)	Max(sq-m)	Average	Total (sq-m)
1	Residential Landuse	402	36.1	1010.5	201.04	80818.4
2	Commercial Land use	128	29.6	5184.5	253.76	30451.7
3	Transportation Land use	64	-	-	-	-
4	Land use for Public and Government Department	12	125.7	6560.6	1457.67	17492
5	Land use for services	64	35.2	922.4	212.31	13588
6	Recreational Landuse	3	487.8	1317.6	884.03	2625.1
7	Industrial Land use	7	100.1	387.1	200.07	1400.5
8	Unclassified Landuse	0	0	0	0	0
Total						171688.5

Source: Field Survey in April, (2017)

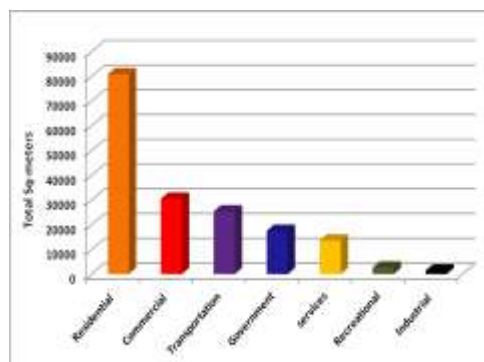


Figure (2) Urban Landuse Type in 2017

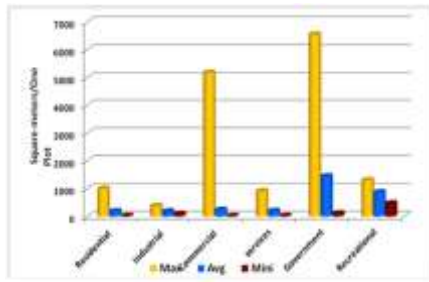


Figure (3) Urban Landuse Area in 2017)
Source Based On Table (1)

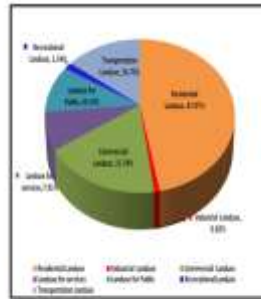


Figure (4) Percentage of Landuse for Anauk Myodwin Ward (2017)

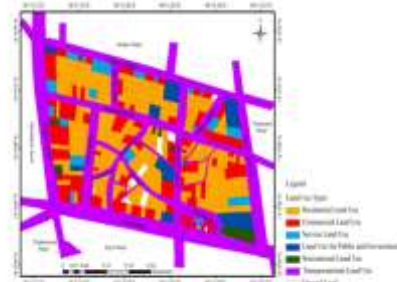


Figure (5) Land Use Types of Anauk Myodwin Ward, Total Area=42.4acres (171688.5 Sq-m)

Source: Draw based on Field Survey and Township Administration Department, Dawei Township

Findings and Discussions

Dawei Town is situated in the northern part of Tanintharyi Region. It is composed of fifteen Myoma Wards. It has an area of 10.03 square miles (6421 acres). It is located in the central part of Dawei Town. The total area of Anauk Myodwin ward is 0.007 square miles (42.2 acres). There are four main roads and ten streets. In the study area, also comprises part of Mingalar Market area. So, it is always crowded with not only people but also the shops. Almost all of these shops are attached to resident house. Some house shops begin as business activities are on the ground floors of the apartment flat. Where there were 249 opened various types of retail shops. Especially, Ar zarni road, Neik ban road, Bogyoke road and U Kyaw Yin road, shops differ with type and size. It is centre of the town and value is highest in the town. Bogyoke Road is on the main road and it is located western part that joins the whole main roads. Ar Zarni road is running along the southern part and Neik Ban road which is located at the northern part of the study area. Dispersed location and large number of services are the result of the services that generally needs urban population (many are large investment). Retail shops based on the different amount of investment and could be divided into static and dynamic natures.

Most of the grocery and food and drinking shops are distributed Ar Zarno road, Neik Ban road, Bogyoke road and U kyaw Yin road. Majority of the personal goods andn fabric shops are concentrated in the Ar Zarni road, Neik Ban road, Bogyoke road, Dawei –Ye road and U Kyaw Yin road. They are main roads of Dawei Town and within CBD area. Distribution of fabric shops are found in linear pattern along Neik Ban road. From the nature of shop, the sellers of fabric shops have to attract customer with attractive shops decoration. So the shops are opened in beautiful layout and concentrating along the main road where the ward is situated on the crossing point of main roads.

Personal goods shops are concentrated Ar Zarni road and in the surrounding areas of Municipal Market and selling specialized goods like medicine, electronic goods, gold , jewelry and etc. Building materials shops have Neik Ban road and Bogyoke road. In Ward, the building materials shops selling building materials, like corrugated iron sheets, cements, etc. Distribution pattern services and other shops can be found around the Ar Zarni road, Neik Ban road, Bogyoke road and U Kyaw Yin road. The ward was built on a well laid out-plan and thus, it bears an appearance of modern urban landscape with parallel roads and street and rectangular blocks.

Generally, economic activities in this award mostly base on the commercial. As a result, land utilization for residence is largely used and secondly is for commercial activities. In the study areas, commerce and trade have been well developed. Compared with spatial distribution pattern landuse in the study area, commercial landuse is increased that is show in figure (3.2). From that time to early period of 21th century, and the town gradually emerged from subsistent to commercial level together with its urban and residential growth.

According to field study and observation, there are 8 categories of urban landuse in Dawei Town. The largest landuse area is the residential landuse(47.07%). There are many different types of houses are found (eg. thatch/ wacut roof and bamboo wall, corrugated iron roof and timber wall/ brick wall types, etc.). Accordance with the development of economy of the town, the former conservation style, old designed houses, which are located at the centre of the town, are replaced by new modernized concrete roof and concrete or brick wall double storied or triple storied houses. The commercial landuse area is (17.74%), it is second largest landuse type in study area and but industrial landuse area is (0.81%). In the case, although industrial landuse area is the smallest one and the commercial landuse area is the second largest one area in the whole area. It can be said that with the gradual developing economy status for Anauk Myodwin Ward in Dawei Town, it will get further progresses and prospects of the socio-economic activities in the giving environment for near future.

Since at the beginning of the study area, the Dawei Town had experienced economic growth and development but social infrastructures are little fully developed. The standard of living of this area was quite high since earlier times. The major economic activities are fishing, retail and wholesale business and pepper & rubber cultivated and transportation services had increased on natural environment. In addition, most of the residents living in the urban area have developed farming fishing (small scale) and retail and wholesale business. This leads to greater opportunities for employment which may lead to reduction of unemployment problem of the Anauk Myodwin Ward.

In according to the study area are moderate in economy in due to business owners, supermarkets and sale centre, other business and water way transportation to Dawei Township. Hence, the major economy of fishing and transport services such as water way transport and road transportation are able to provide for many people. In addition the better, income generated activities can provide sufficiently for their families in giving landuse pattern and environment. There is few a problems in this area. This problem is for discarding the garbage. Only U Kyaw Yin Street, Municipal Department is discarded the garbage for the residents. It is essential to keep garbage system. Thus, if that problem can be solved, the environmental pollution can be decreased and then beauty and cleanness can be got as a clean environment within the study area.

The findings from the research work clearly show that variation of socio-economic activities effect on Anauk Myodwin Ward is rather sharp as the income distribution is highly varied. The residents are better well-off than those of the urban area. They possess better houses, better maintenance of their environment, good chance of economic activities and owned a host of modern and expensive facilities. On the other hand, the recreational facilities supports from socio-economic activities in study area are highly favorable for the residents. Another finding shows that there is a sharp spatial variation of social infrastructures in Anauk Myodwin Ward; infrastructures are used as a highly varied. There are civil land uses (Institutional land use): Administrative Office, Health Care Center, Basic Middle School, Kindergarten and Pre-School, Digital Communication Station, Market and Training School, etc. Facilities for the residents of

people while is highly used social infrastructure. But there are some social facilities (clean monastery and pagoda are not seen in there.

The study also shows the difference of jobs occupations of the the study areas. They have to work at two or three jobs and to earn enough for the family. While wealthy families in of the study area are more than one job. Land occupied by people is larger than that of other urban area. With the increase in population, there is an emergence of multi-jobs occupation and different income generating operation work that plays an important role for further progress and prosperity of the Anauk Myodwin ward. On the other hand, if the recreational area can be created or achieved in each area, then it will benefit from areas to maintain urban sustainability.

Originally, Dawei River serves as a fishing ground, transportation route, and commodity flow. People of Anauk Myodwin Ward gained much from those social and economic activities in the given natural environment. Since all residents have to depend on it as the sole water transportation route. With the economic development, social infrastructure of the urban area also improved. Social infrastructure improvements are also supported by the government. This development process (social infrastructures) is greatly helped by the Ministry for Progress of Border Area and National Races and Development Affairs. Most of the residents are living in the urban area which are more accessible or can exploit the numerous social infrastructures and economic activities for the urban area. But these social infrastructures can be used by other urban area's residents to a smaller extent.

The economic activities in the study areas are mainly dependent on the exploitation of natural resources. In addition to it, most of the people living in the urban area earned their living by fishing, retail and wholesale economic activities, transportation services and as waged earners .Through this study it has become clear that since the urban residents depend solely on their fishing ground and retailing and wholesales businesses that can be carried out during the three periods of duration. It is possible for the residents to take advantage of the three seasons (summer, monsoon and cool seasons) and suitable for each (business) earning regular income.

Furthermore, it can be said that there are spatial variation of socio-economic activities effect on urban landuse pattern in Anauk Myodwin ward, Dawei Twon. The residents in Anauk Myodwin ward have established the highest levels of residential and economic activities. On the other hand, the residents can use most of the social infrastructures. There are also effected on the urban landuse.

From the above facts, it can be concluded that " there are landuse variations of socio-economic activities effects depending on their sequences of favorable urban landuse pattern and its favourable utilization on landuse pattern. It can improve socio-economic activities on the urban landuse. If the social infrastructures can be enjoyed in the another urban as in the Anauk Myodwin ward then all urban areas will equally benefit from them.

Based on the urban landuse pattern variation effects to social and economic activities, and the benefits of urban economic activities, the benefits on urban sustainability will be considered. Firstly, if the urban settlements have equal opportunity for social infrastructures, how will it be of benefits to the economic and social conditions of the all urban areas? Moreover, most uses of fishing activities are as control and maintain for growth of animals can maintain their ecosystem or effect the environment. As a result, urban economy and social conditions will improve within a short time. They could enjoy equal benefits both economically and socially. As a result, people in the urban area can direct effect on urban landuse pattern, utilizing the social infrastructure

facilities and economic infrastructure available (e. g. transportation and local primary economy). Fresh Fish, Prawn, dried fish and prawn products can also be exported directly. Health Care Services, communication facilities and electric supply, etc will be equally available.

Hence, they can develop these economic activities within a short time. Moreover, if fishing and transportation activities can be carried on in the three seasons, their economic condition will also be improved within a short period. That is collectively then the economic and employment rates will change, and subsequently will be effected by economic multiplier and warehouse functions will take place in the urban area from different sources and different places, that will become from an urban area as mega city if border trade improvement in the near future.

The economic and social activities effects on the urban landuse include a wide range of processes, which are linked to the production and consumption of resources that take places. These help to produce wealth for people and maintain for them a quality of living. Its activities are the most important for people because they provide social and economic conditions and lead to sustainability in each activity. Economic and social conditions are usually due to the processes beyond the control or influence of individual people and lies with the political, social and economic organization, government supported infrastructures and economic opportunities for their living. Hence, the major economy of fishing and retail and wholesale economic activities are able to provide for many people in the Dawei Township. In addition the better, income generated activities can provide sufficiently for their families.

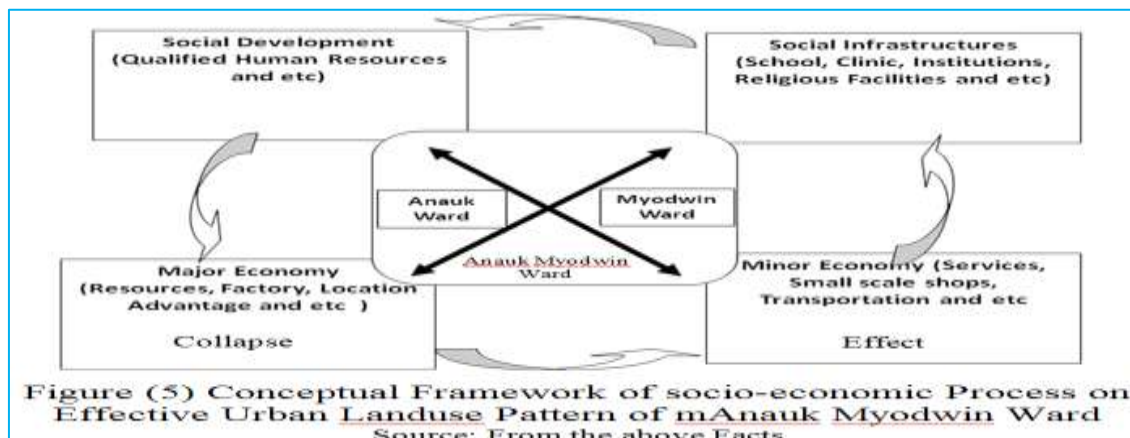
Thus, purchasing power of the residents will be increased. To fulfill this requirement, opportunities are opened for many economic activities. Furthermore, residents invested their surplus income on social facilities like motorcycles, bicycles and modern facilities, motor boat and other requirement facilities. They also improved their living standard by improved water supply, electric supply and education, as well as health care and etc. As a result, consolidated social development occurs. These social developments, on the other hand, benefit the economic development. In this development stage, if the urban people are sustained (or) increase in total development then sustainable urban development can be achieved in the Dawei Township. Moreover, if the social and economic conditions continue to be as the author supposed them to be, then the economy will improve and can provide for all the residents, then the development will be high, and urban people of in Dawei T/S will benefit greatly from the improvement of urban landuse in the near future.

Based on above study, Government supported infrastructures (school, clinic, institutions and etc) and economic opportunities for their living).Agriculture could not support all residents, Fishing , retail & whole sale business related trades were created by allowing favourable urban landuse and fishing activities factory .This major economy was able to feed many people and absorbed further population.

In the development stage, the residents effectively used the infrastructure of urban landuse. In addition, income generated from major economy sufficiently supply for their family. Thus, purchasing power of the residents increased. To fulfill this requirement, other economy like resttaurents, tea shops nad services were developed. Furthermore, residents invested their surplus income on the social facilities like construction of Dhamayon, Monastery, and NGOs (Pa Ya Hi Ta) holding of religious ceremonies and Health care services. They also improved their living standard by improving water supply, electricity, sanitation, education and communication facilities, etc. As a result, consolidated social developments occur. These social developments,

on the other hand, that benefits the economic development. In this development stage, therefore, the population is sustained or increased due to total development on the urban landuse Pattern.

After a second step, Major economy effects to the minor economy and to certain extent social development. Although the social conditions of the Anauk myodwin Ward were still relatively high at present, it will more improve in the near future if there is proper major and minor economy to feed the majority of the residents.



Conclusion

The study area of Anauk Myodwin ward is located not only in the central part of Dawei Town but also in the northern part of Tanintharyi Region. It is composed of fifteen Myoma Wards. It has an area of 10.03 square miles (6421 acres). It is located in the central part of Dawei Town. It is located between 14° 4' 16 "and 14 °4' 28 "North Latitudes and 98 °11' 34" and 98 °11' 50" East Longitudes. The total area of Anauk Myodwin ward is 0.007 square miles (42.2 acres). Its area is 0.697% of the total town area. The shape of the study area is rectangular shape. It is bounded on the north by Ouloke Ward, in the east by Peinetaw Ward, in the south by Zayit ward and in the west by Talainhtein Ward. Dawei Town has Tropical Monsoon Climate (Am) and so, it has fairly good climate. Generally, its soil is fertile and productive. In 2017, the total population is 2237, 1244 females and 993 males. The native ethnic groups of Bamar(Dawei indigenous) , Kayins, Mons, Rakhines and other minorities have their own distinct migration backgrounds.

From that time to early period of 21th century, the town was gradually emerged from subsistent to commercial level together with its urban and residential growth. There was more than settlement in large population aggregates as a factor in emergence of economic activities. Urbanization is the process of increasing population together with the growth of high order urban functions. It may also mean the increased in population pressure in its largest urban centre. Urbanization is a revolutionary process and involves more than settlement in large population aggregates. It involves large population organized in urban way of life. From the above facts, there are eight categories of urban landuse in Dawei Town. The largest landuse area is the residential landuse(47.07%), different types of houses are found (e.g. thatch/ bamboo cut roof and bamboo wall, corrugated iron roof and timber wall/ brick wall types, etc.) with the development of economy of the town, the former conservation style of old designed houses, located at the centre of the town, are replaced by new modernized concrete roof and concrete or brick wall double storied or triple storied houses. The commercial landuse area is (17.74%), it is

second largest landuse type in the study area .However the industrial landuse area is just (0.81%), the smallest one in Anauk Myodwin Ward. Although there is the smallest one, the commercial landuse area is the second largest one in the whole area. It can be said that with the gradual improvement of economic status for Anauk Myodwin Ward, it will get further progresses and prospects of the socio-economic activities in the near future. In Dawei, urbanization process had grown out like other parts of the wards, but there were differences in period of history and characteristics.(1)To collect the document and analyze the current trends in urban landuse development of Anauk Myodwin Ward.(2)To analyze the problems encountered with the urban development of Dawei and the feasible solution to them. (3) To render the constructive advice on how to improve the present urban landuse development from geographical point of view.

Anauk Myodwin ward is between the commercial and residential area. The Central Business Area (CBD) is around the Municipal Zaygyi. In fact, it is the largest and business area. The Municipal Zaygyi and its adjacent areas can be included in the centre or core area. As a result, socio-economic activities highly effect in the urban landuse pattern for the residents. And then, it is largely used for the second level commercial landuse activities for settlements in Anauk Myodwin Ward, Dawei Town. As a result, the improvement of quality of living will be improved with benefits from opportunity of socio-economic activities effective on the urban landuse within a given natural environment , starting from the lowest local level to regional and national levels can be given as a good example.

ACKNOWLEDGEMENT

We are special greatly indebted to the Principal Dr. Myint Swe, Taunggoke Degree College for his permission and guidance to do this research. We would like to thank to professor and Head Dr. Thida Aye, Department of Geography, Taunggoke Degree College for her valuable advice. We are also grateful to General Administration Department of Anuk Myodwin ward for their support in Dawei. We also give our thanks to all the chairmen of the wards that we surveyed for their kind help. And then the people who helped me provide the necessary and relevant information.

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