

Images and Perception of Local People on Human Environment Case Study: Taunggyi Township

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Abstract

A human environment is the area that a human lives in. They are varied from there, even more so by humans' ability to adapt the environment to us and us to the environment. Images and perception of local people on human environment in Taunggyi Township have been analyzed by means of various measurements. Taunggyi Township consists of (17) Village Tracts, Shwenyang Town, Taunggyi Town (capital of Southern Shan State) and Ayethayar New Town. In order to study images and perception of local people on human environment in Taunggyi Township, two sample areas from the towns and two sample village tracts out of (17) village tracts were selected based on population density groups by using random sampling method. The sample town areas and village tracts are Taunggyi Town, Shwenyaung Town, Namsi Village Tract, and Thande' Village Tract. The main objective of choosing these sample towns and village tracts is to represent the urban and rural areas by applying stratified random sampling procedure. From the study area 1,095 samples were selected and collected by means of questionnaires and field interviews. This research paper mainly focuses on the field research related to environmental planning and management. Images and perception of local people on human environment in Taunggyi Township are assessed by analyzing field survey results. The important image of socio-economic environment of respondents is the reasons of buying including purchasing for family, for cooking, for necessity and for re-selling. The respondents from each sample group revealed three buying sources for fuel are markets, retail shops and vendors. Among these sources, the highest percentages are found for markets. The second most important source is vendor and retail shop is the third important source buying fuel such as charcoal and wood. This fact reflects the depletion of forest for using firewood as fuels. The image on electricity use is also related to the supply sources. In the images of urban and rural respondents in Taunggyi Township, the major electricity source is government supply. There are other three sources of electricity supply such as private supply, batteries, and solar panel. The increased use of these sources could help to reduce the use of firewood as home consumption. One of the important factors in the working environment is noise. For all sample urban areas and villages, images on environmental impact of working places or working environment are also observed. These facts show that the economic development of the study area still impacts on the quality of the environment. There is no problem of drinking water except Taunggyi Town proper. However, there are sometimes shortage problems from water supply systems. Therefore, more tube wells should be dug. As a consequence, near the slopes of the mountains, landslide may occur and awareness should be raised on this kind of disaster.

Key words: Images, Human Environment, Local People

Introduction

Perception is the process of registering sensory stimuli as meaningful experience. The differences between sensation and perception have varied according to how the terms are defined. A common distinction is that sensations are simple sensory experiences, while percepts are complex constructions of simple elements joined through association. Another is that perception is more subjected to the influence of learning. Though hearing, smell, touches and taste perceptions have all been explored, vision has received the most attention. Perceptions may be influenced by expectations, needs, unconscious ideas, values and conflicts. In daily life, many of our experiences and much of the information directed at us related to the poor state of the environment and the inadequate attempts of humankind to deal with it. Yet little attention is given to environmental hazards and environmental perception at the level of

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the individual household. It is increasingly evident that the quality of our environment is being degraded. This study concentrates on the spheres of environmental perception, knowledge and images of local people in Taunggyi Township. Images and perception on human environment include **market, fuel, power supply and economic activities.**

The Study Area

The study area covers 17 village tracts such as Kyauk Ni, Kunlone, Lwai Taw, Nam Haung, Mongthaw (West), Mongthaw (East), Mingalar, Namhu, Hpetkun, Thandè, Taunggyi, Bankway, Pantin, Naunglè, Taunglaylone, Hpamon, Htiphaung and Namsi. Kunlone, the largest village tract and Taunggyi Town, Ayethayar New Town and Shwe Nyaung Town. Taunggyi Town located on the top of the Shan Plateau is the capital of Southern Shan State.

Aim and Objectives

The main aim of this research paper is to understand the interrelationship among images and perception of local people on environmental issues and management.

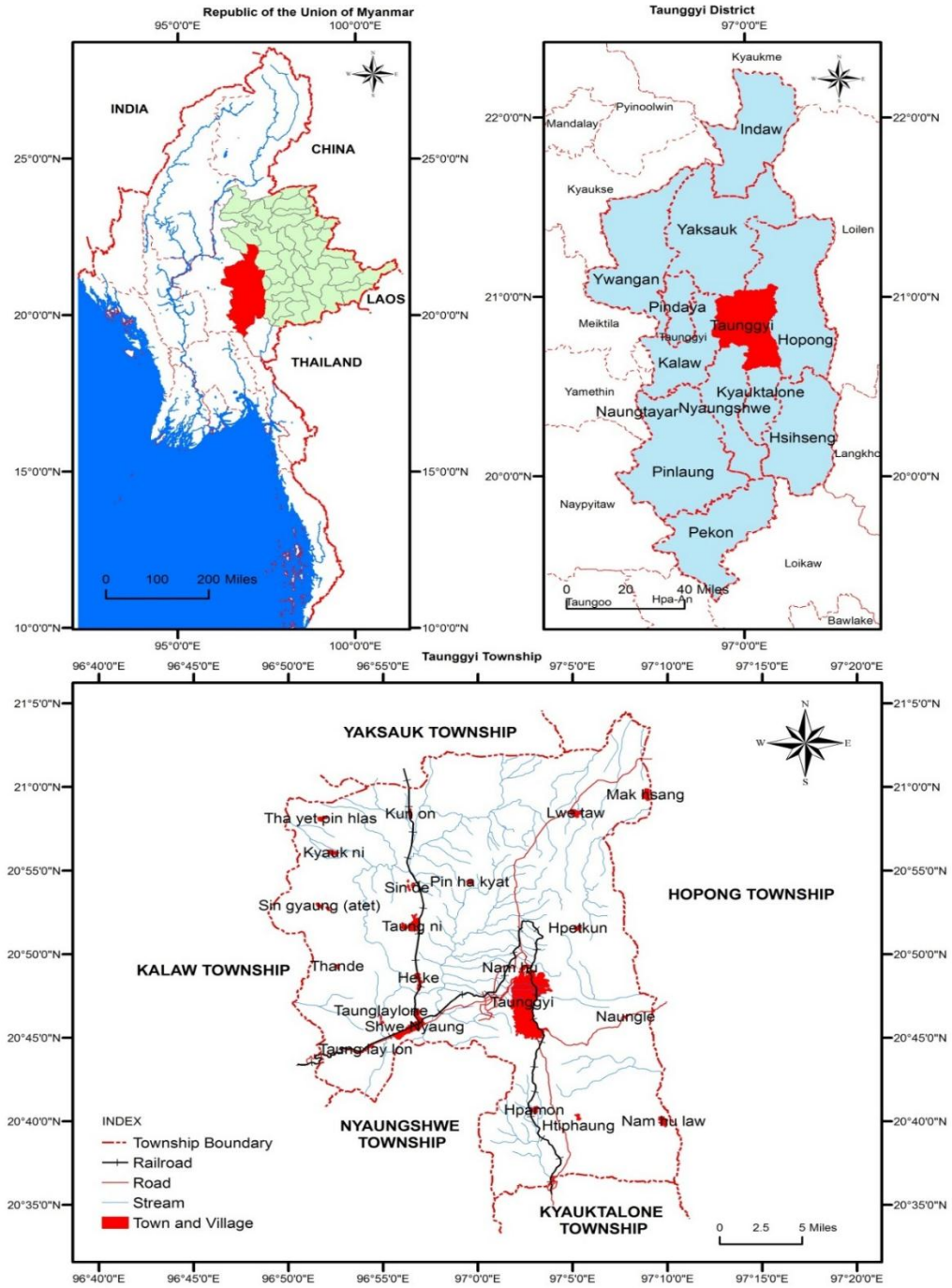
The main objectives are

- To assist for the environmental management
- To evaluate the images and perception of local people on their human environment

Methodology

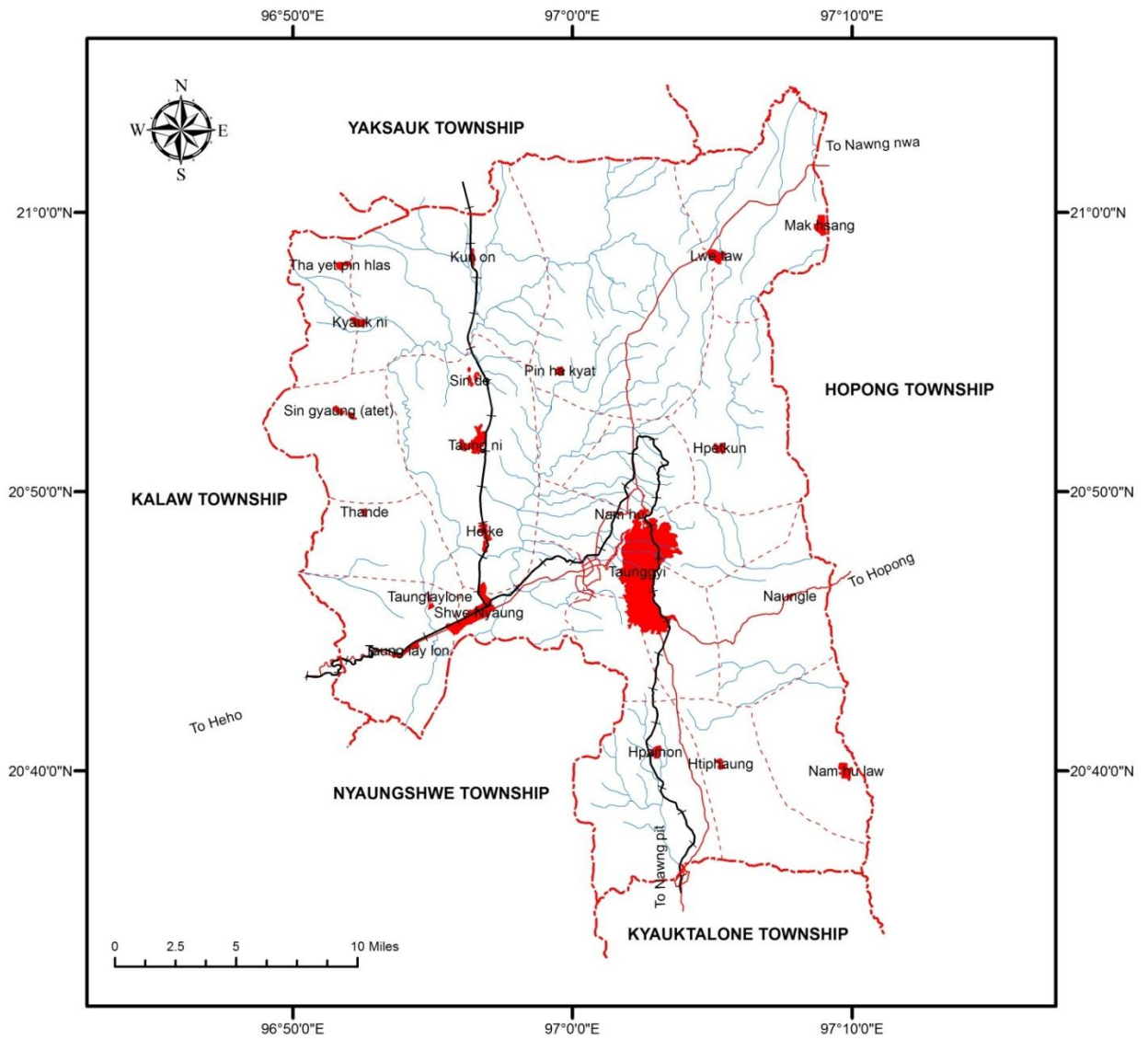
Taunggyi Township is chosen because its physical environment is easy to realize for the changes in recent decades. For data collection, primary and secondary data collection methods are applied. Appropriate statistical techniques and maps are applied. Data are obtained and analyzed by GIS, statistics, quantitative and qualitative methods. In this set of measures people in the study areas are asked questions about what they have experienced in their environment and how they become aware of it.

MAP 1 LOCATION OF TAUNGGYI TOWNSHIP



Source : Department of Geography, University of Taunggyi.

MAP 2 VILLAGE TRACTS OF TAUNGGYI TOWNSHIP

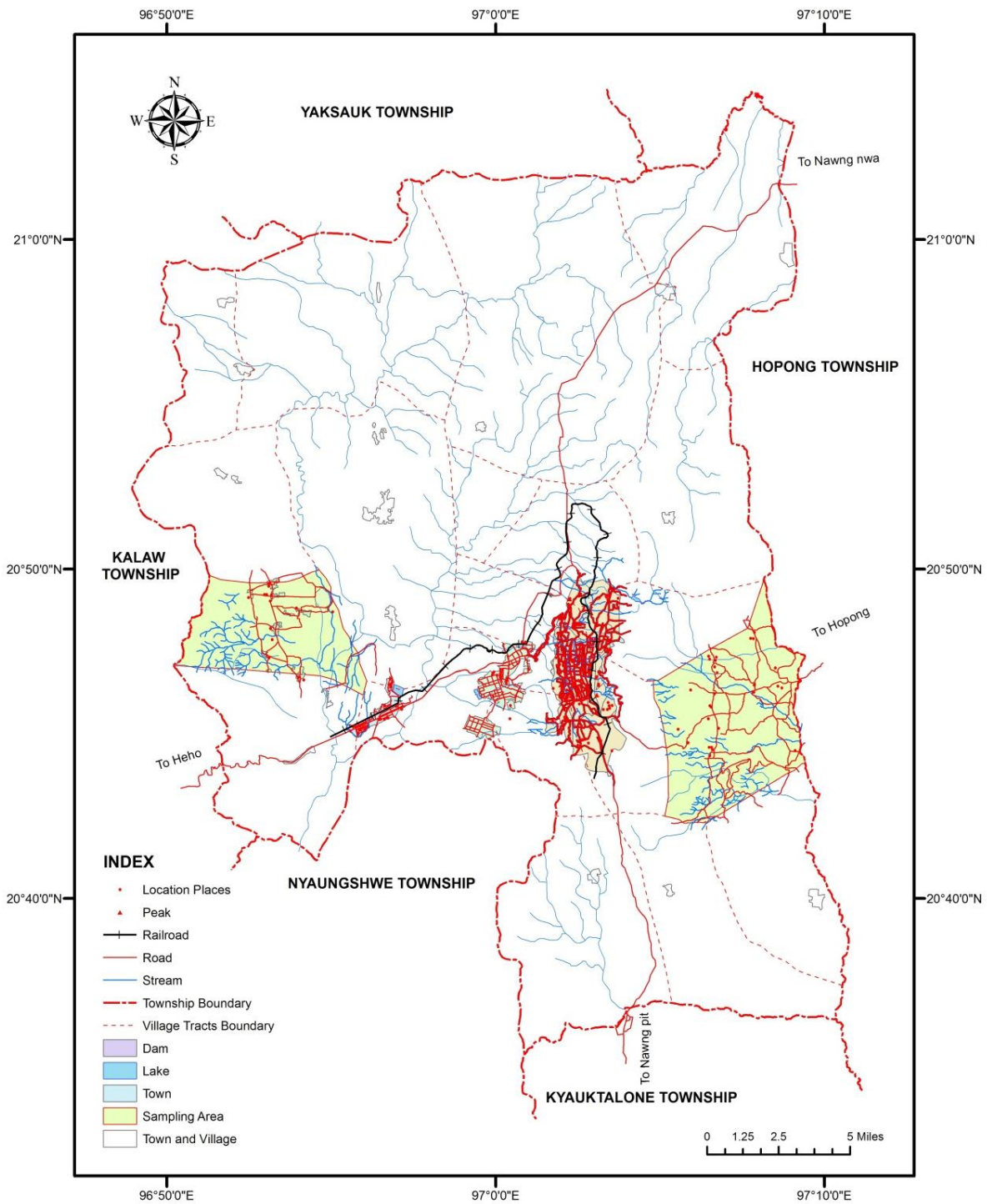


INDEX

- Township Boundary
- Village Tracts Boundary
- Railroad
- Road
- Stream
- Town and Village

Source : Land Records Department, Taunggyi Township.

MAP 3 LOCATION OF SAMPLING AREAS IN TAUNGGYI TOWNSHIP



Source : Field Observation.

Finding and Discussion

Images and Perception on Markets as Socio - economic Environment

By collecting the questionnaires from four sample groups illustrated six markets for purchasing goods and items for their daily needs. The names of the market in each group are Myoma Market, No (5) market, Sao San Htun Market, Shwenyaung Market, Namsi Market and Thande' Market. These markets include in the images and perception of urban and rural residents in Taunggyi Township.

There are three common items of purchase which are described as images in responses of sample groups. These are food, clothes and household materials. The highest percentages of four sample groups are found for food items. The second most important items and the third most items are clothes and household materials.

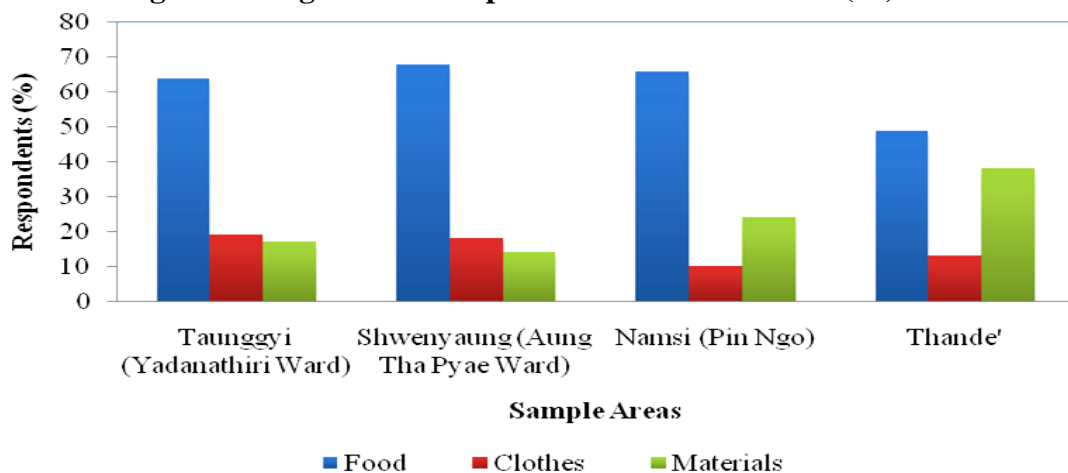
The important image of socio-economic environment of respondents is the reasons of buying. The reasons include purchasing for family, for cooking, for necessity and for re-selling. (Table 1, Figure 1 and 2)

Table 1 Images and Perception on Items Purchased (%)

No	Items Purchased	Taunggyi (Yadanathiri Ward)		Shwenyaung (Aung Tha Pyae Ward)		Namsi (Pin Ngo)		Thande'	
		Number	%	Number	%	Number	%	Number	%
1	Food	319	64	283	68	81	66	19	49
2	Clothes	104	19	73	18	12	10	5	13
3	Materials	97	17	57	14	30	24	15	38
	Total	520	100	413	100	123	100	39	100

Source: Field Observation

Figure 1 Images and Perception on Items Purchased (%)

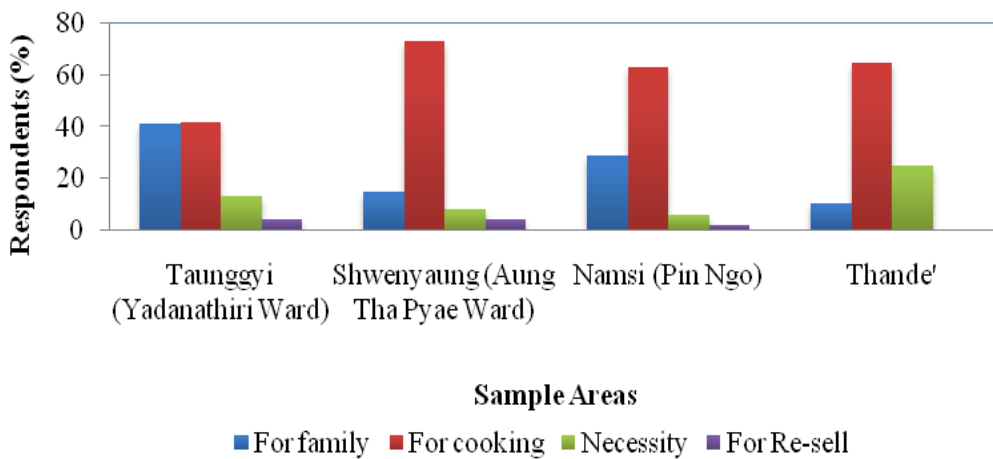


Source: Based on Table 1

Table 2 Images and Perception on Reasons for Buying (%)

No	Reason for Buying	Taunggyi (Yadanathiri Ward)		Shwenyaung (Aung Tha Pyae Ward)		Namsi (Pin Ngo)		Thande'	
		Number	%	Number	%	Number	%	Number	%
1	For Family	209	41	62	15	36	29	4	10
2	For Cooking	220	42	302	73	77	63	25	65
3	Necessity	68	13	29	8	7	6	10	25
4	For Re-sell	23	4	20	4	3	2	0	0
	Total	520	100	413	100	123	100	39	100

Source: Field Observation

Figure 2 Images and Perception on Reasons for Buying (%)

Source: Based on Table 2

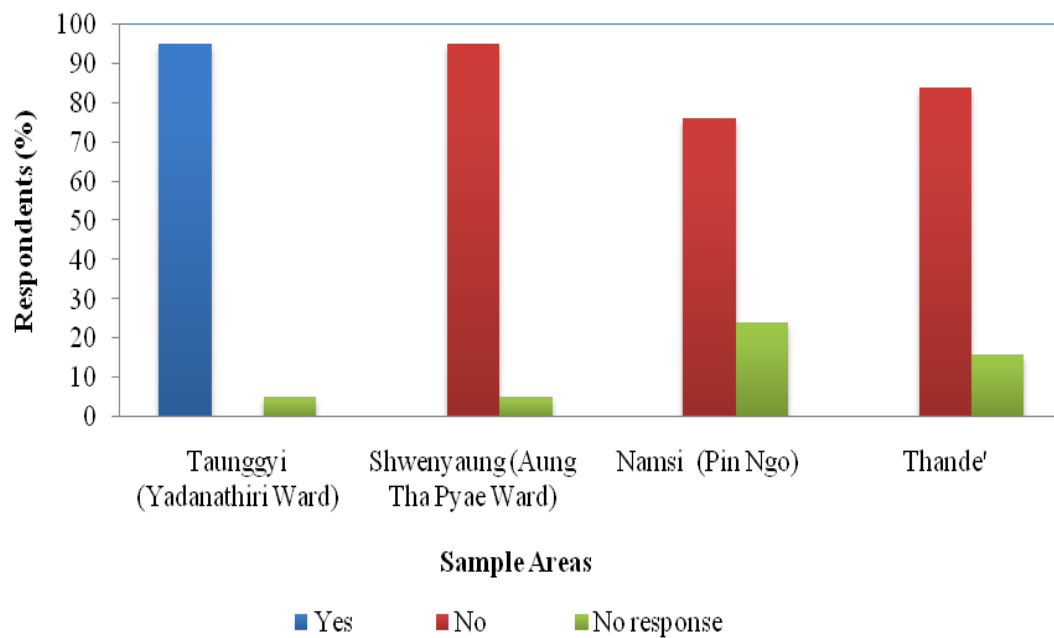
The changes of market building style are asked to respondents from four sample groups to access the environmental image. The respondents in Taunggyi Town answered that there is little change in market building style. Other sample groups revealed that there is no change of market building styles. (Table 3, Figure 3)

Reasons of changing building style are also studied to focus on environmental image of respondents. The reasons are renovation and making new plans.

Table 3 Images and Perception on Changes in Market Building Style (%)

No	Changes in Market Building Style	Taunggyi (Yadanathiri Ward)		Shwenyaung (Aung Tha Pyae Ward)		Namsi (Pin Ngo)		Thande'	
		Number	%	Number	%	Number	%	Number	%
1	Yes	492	95	0	0	0	0	0	0
2	No	0	0	393	95	94	76	29	84
3	No Response	28	5	20	5	29	24	6	16
	Total	520	100	413	100	123	100	35	100

Source: Field Observation

Figure 3 Images and Perception on Changes in Market Building Style (%)

Source: Based on Table 3

Images on Fuel in Human Environment

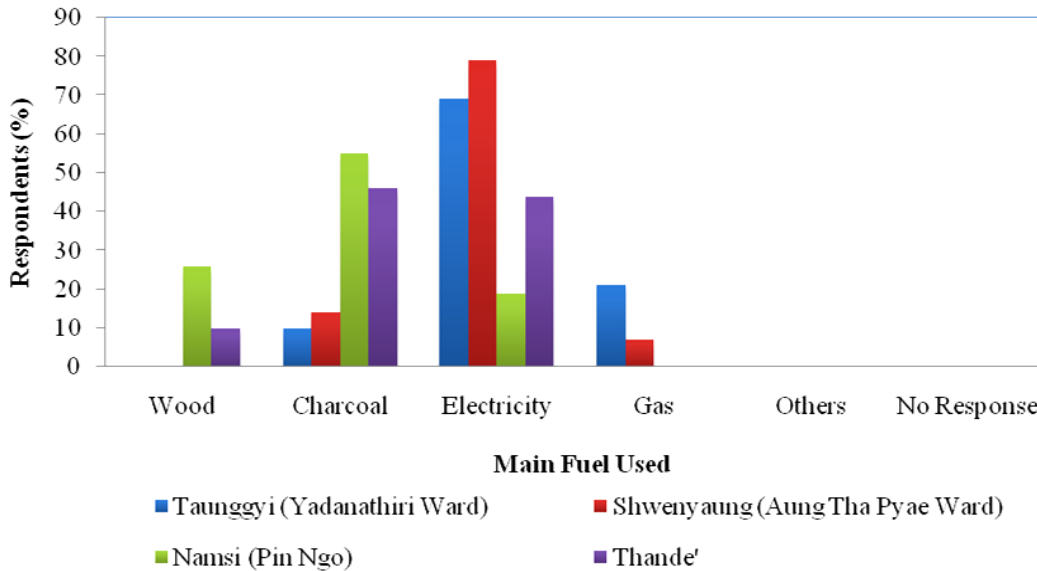
In the result of main fuel used, highest respondent rates are found for electricity. Other common fuels used by urban and rural residents are wood, charcoal and gas. Table 4, Figure 4

Table 4 Images on Main Fuel Used (%)

No	Main Fuel Used	Taunggyi (Yadanathiri Ward)		Shwenyaung (Aung Tha Pyae Ward)		Namsi (Pin Ngo)		Thande'	
		Number	%	Number	%	Number	%	Number	%
1	Wood	0	0	0	0	32	26	4	10
2	Charcoal	52	10	56	14	68	55	18	46
3	Electricity	359	69	328	79	23	19	17	44
4	Gas	109	21	29	7	0	0	0	0
5	Others	0	0	0	0	0	0	0	0
6	No Response	0	0	0	0	0	0	0	0
	Total	520	100	413	100	123	100	39	100

Source: Field Observation

Figure 4 Images on Main Fuel Used (%)



Source: Based on Table 4

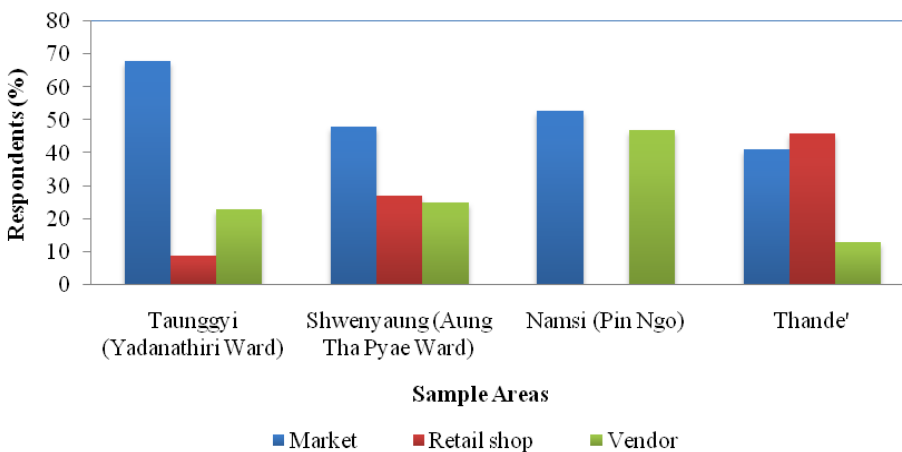
The respondents from each sample group revealed three buying sources for fuel namely market, retail shops and vendors. Among these sources, the highest percentages are found for market. The second most important source is vendor and retail shop is the third important source buying fuel such as charcoal and wood. (Table 5, Figure 5)

Table 5 Images on Places of Fuel Purchased (%)

No	Places of Fuel Purchased	Taunggyi (Yadanathiri Ward)		Shwenyaung (Aung Tha Pyae Ward)		Namsi (Pin Ngo)		Thande'	
		Number	%	Number	%	Number	%	Number	%
1	Market	356	68	199	48	65	53	16	41
2	Retail Shop	44	9	111	27	0	0	18	46
3	Vendor	120	23	103	25	58	47	15	13
	Total	520	100	413	100	123	100	49	100

Source: Field Observation

Figure 5 Images on Places of Fuel Purchased (%)



Source: Based on Table 5

Images on Power Supply

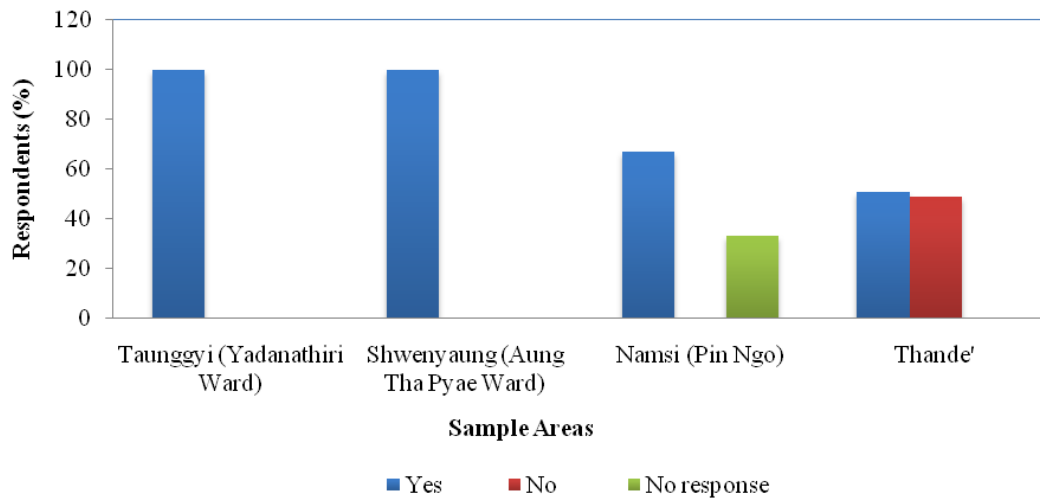
To assess the environment impact of energy use, electricity supply is primarily studied. All respondents from four sample groups answered that there is an environmental impact of electricity such as lighting for house. But the respondents from Thande' Village, about 49% pointed out that there is no impact of electricity. (Table 6, Figure 6)

Table 6 Images and Perception on Environmental Impact of Electricity (%)

No	Impact of Electricity	Taunggyi (Yadanathiri Ward)		Shwenyaung (Aung Tha Pyae Ward)		Namsi (Pin Ngo)		Thande'	
		Number	%	Number	%	Number	%	Number	%
1	Yes	520	100	413	100	82	67	20	51
2	No	0	0	0	0	0	0	19	49
3	No Response	0	0	0	0	41	33	0	0
	Total	520	100	413	100	123	100	39	100

Source: Field Observation

Figure 6 Images and Perception on Environmental Impact of Electricity (%)



Source: Based on Table 6

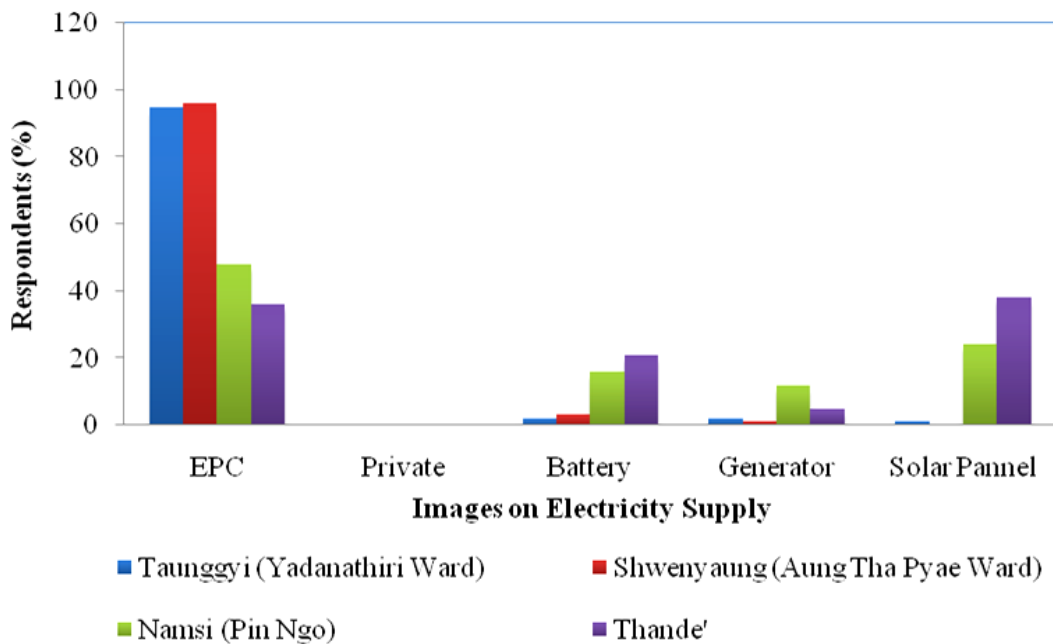
The image on electricity use is also related to the supply sources. In the images of urban and rural respondents in Taunggyi Township, the major electricity source is government supply. There are other three sources of electricity supply which are obtained from private supply, batteries, and solar panels. (Table 7, Figure 7)

Table 7 Images on Electricity Supply (%)

No	Types of Electricity Supply	Taunggyi (Yadanathiri Ward)		Shwenyaung (Aung Tha Pyae Ward)		Namsi (Pin Ngo)		Thande'	
		Number	%	Number	%	Number	%	Number	%
1	EPC	490	95	398	96	59	48	14	36
2	Private	0	0	0	0	0	0	0	0
3	Battery	10	2	10	3	20	16	8	21
4	Generator	10	2	5	1	14	12	2	5
5	Solar Panel	10	1	0	0	30	24	15	38
	Total	520	100	413	100	123	100	39	100

Source: Field Observation

Figure 7 Images on Electricity Supply (%)



Source: Based on Table 7

Image on Economic Activities

To study images of respondents on economic activities, the factors related to business are studied from the result of questionnaires.

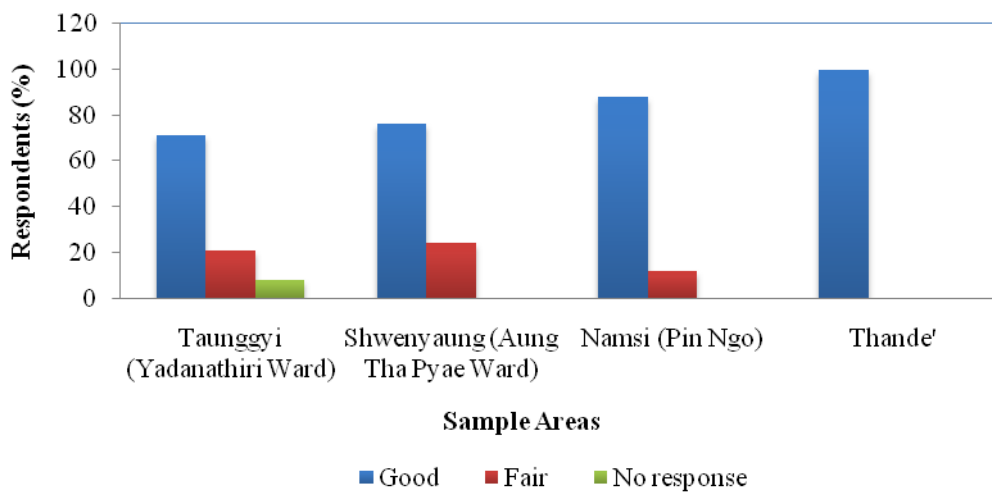
Environmental Images on Conditions of Air Ventilation of Work Place

Observing of air ventilation, the highest percentage (100%) of respondents in Thande' Village responded that air ventilation of their work place is good, others 73 % to 88 % also answered that air ventilation is good. Among all respondents from 12% to 24% responded that air ventilation is fair. But only 8% of respondents from Taunggyi Town (Yadanathiri Ward) did not respond whether good or fair. (Table 8, Figure 8)

Table 8 Images on Condition of Air Ventilation of Work Place (%)

No	Air Ventilation	Taunggyi (Yadanathiri Ward)		Shwenyaung (Aung Tha Pyae Ward)		Namsi (Pin Ngo)		Thande'	
		Number	%	Number	%	Number	%	Number	%
1	Good	380	71	312	76	108	88	39	100
2	Fair	110	21	101	24	15	12	0	0
3	No Response	30	8	0	0	0	0	0	0
	Total	520	100	413	100	123	100	39	100

Source: Field Observation

Figure 8 Images on Condition of Air Ventilation of Work Place (%)

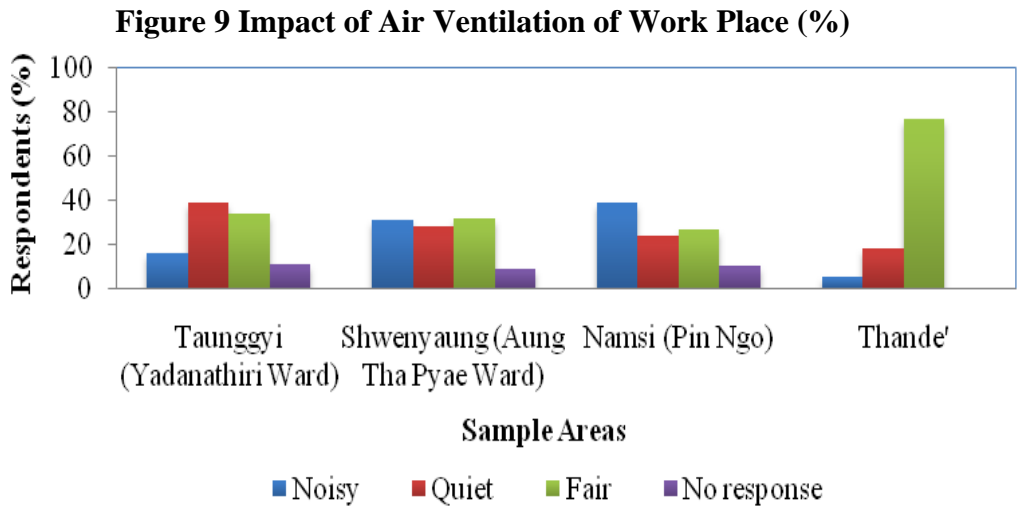
Source: Based on Table 8

One of the important factors in the working environment is noise pollution. In this study, high percentages on noise environment are found in Namsi Village. The high percentage in quiet environment is found at Taunggyi Town (Yadanathiri Ward) and high percentage for fair condition of noise in the working places among respondents is found in Thande' Village. (Table 9, Figure 9)

Table 9 Impact of Air Ventilation of Work Place (%)

No	Impact Air Ventilation	Taunggyi (Yadanathiri Ward)		Shwenyaung (Aung Tha Pyae Ward)		Namsi (Pin Ngo)		Thande'	
		Number	%	Number	%	Number	%	Number	%
1	Noisy	83	16	128	31	48	39	2	5
2	Quiet	202	39	114	28	30	24	7	18
3	Fair	178	34	132	32	33	27	30	77
4	No Response	57	11	39	9	12	10	0	0
	Total	520	100	413	100	123	100	39	100

Source: Field Observation



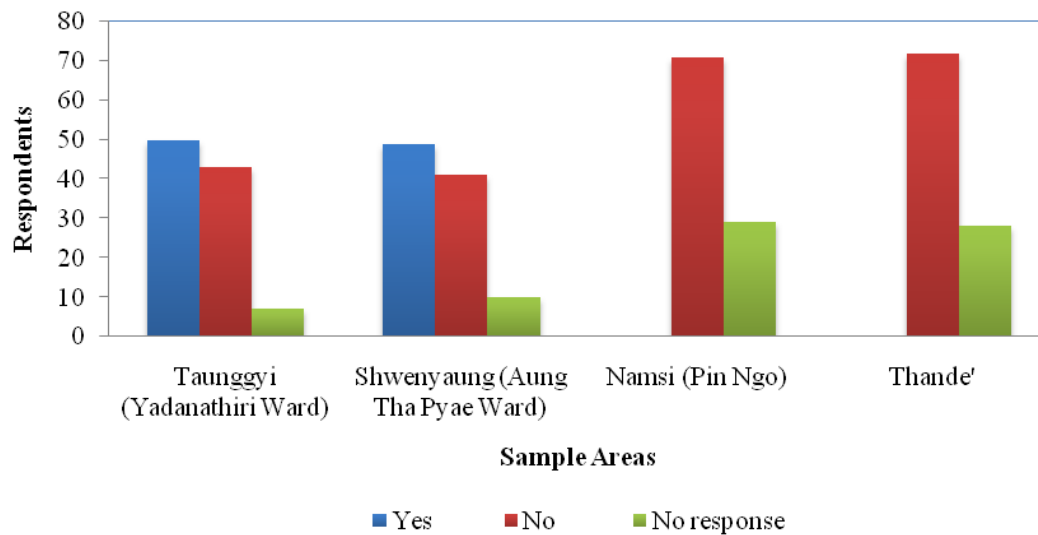
Source: Based on Table 9

For all sample urban areas and villages, images on environmental impact of working places or working environment are also observed. Except Taunggyi Town (Yadanathiri Ward) and Shwenyaung Town (Aung Tha Pyae Ward), other two groups pointed out that there is no significant environmental impact of work places to their environment. Respondents from Taunggyi Town and Shwenyaung Town gave the answer that there is a significant impact of work place on environment. On the other hand, there are some respondents from four sample groups who did not point out the impact of workplace on their environment. (Table 10, Figure 10)

Table 10 Environmental Impact of Work Place (%)

No	Impact of Work Place	Taunggyi (Yadanathiri Ward)		Shwenyaung (Aung Tha Pyae Ward)		Namsi (Pin Ngo)		Thande'	
		Number	%	Number	%	Number	%	Number	%
1	Yes	258	50	201	49	0	0	0	0
2	No	225	43	170	41	87	71	28	72
3	No Response	37	7	42	10	36	29	11	28
	Total	520	100	413	100	123	100	39	100

Source: Field Observation

Figure 10 Environmental Impact of Work Place (%)

Source: Based on Table 10

Conclusion

The study area covers seventeen Village Tracts, Shwe Nyaung Town, Taunggyi Town and Ayethayar New Town in Taunggyi Township. Taunggyi Town is located on the top of the Shan Plateau. It has a very unique and distinctive physical features and social environment. Taunggyi Township has a compact shape although Taunggyi Town has an elongated form. Taunggyi Township is situated in the south-western part of Shan State and in the centre of Taunggyi District. The topography of Taunggyi Township is rough and the surface became irregular with mountain ranges, valleys and plateaus. The latitudinal zone of Taunggyi Township is located in the tropics, but due to its average elevation of over 3000 feet, the township enjoys Temperate Mountain Climate. Taunggyi Township was covered with temperate mountain forest and mixed deciduous forest. In the area of town proper, the natural vegetations including cherry trees had been cleared for settlements. Except on the northern part, Taunggyi is surrounded by mountains. Strategically it has a good location. At present, Taunggyi is not only an administrative centre but also economic, trade and communication centre developed and due to the increasing population, it became a big town.

Images related to human factors are **market, fuel, power supply and economic activities**. Awareness on environment near living place or intimate environment and awareness on human environment has been analyzed for the environmental awareness of local people in the study area. In the result of the main fuel used, the highest respondent rates are found for electricity. Other common fuels used by urban and rural residents are wood, charcoal and gas. The respondents from each sample group revealed three buying sources for fuel are markets, retail shops and vendors. Among these sources, the highest percentages are found for markets. The second most important source is vendor and retail shop is the third important source buying fuel such as charcoal and wood. This fact reflects the depletion of forest for using firewood as fuels.

All respondents from four sample groups answered that there is an environmental impact of electricity such as lighting for houses. The image on electricity use is also related to the supply sources. In the images of urban and rural respondents in Taunggyi Township, the major electricity source is government supply. There are other three sources of electricity supply such as private supply, batteries, and solar panel. The increased use of these sources could help to reduce the use of firewood as home consumption. Images, perception and

awareness are closely related to effective environmental management and environmental planning.

Suggestion and Future Prospect

There are some suggestions to study on images and perception of local people on human environment in Taunggyi Township. It is also necessary to study more in different areas, to compare other results and to give ideas for the regional planning related to people's participation based on research outcomes. People's participation for further study on the images and perception of local people is expected because public awareness and perception is the most important one in conservation for the management in the environment.

This paper is one of the research papers on the environment. There are other research papers focusing on the images and perception of local people for the environment. By studying the results from these research papers, the researchers will be able to study and focus on the images and perception of people on the human environment in the future.

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