

## **GEOGRAPHIC STUDY ON THE QUALITY OF LIFE IN HAKHA TOWNSHIP, CHIN STATE OF MYANMAR**

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### **Abstract**

This research paper is to analyze the Quality of Life (QOL) of the natives residing in the capital of Hakha Township of Chin State of Myanmar. It lies 96 km (60 miles) away from the North-western edge of Myanmar, and is adjoining to Mezor State of India. Hakha Township lies along the motor car routes connecting the Chin hill region with the flat plain regions of Gangaw in Magway Region. Hakha is also connected by air routes of Kalay Town in Sagaing Region and the big cities of Myanmar such as Mandalay and Yangon. Nowadays, this township is facing with socio-economic difficulties. The data required for this research paper are collected by using the questionnaires, under the Selected Random Sampling Method to (550) households of (68) villages of (30) village tracts within Hakha Township. Other necessary data are collected from the offices of the township. In this research the spatial analysis on daily quality of life (QOL) has been made by means of qualitative and statistical methods by using 9 Human Development indices of UNDP (2018) with 45 variables issued by the Myanmar Human Resources Development (MHRD). According to this research, in order to get the daily QOL, it is found that the upgrading programs of the standard of living are still needed to be achieved.

**Keywords:** Quality of Life, Living Standard, Human Development Index, Spatial Analysis

### **Introduction**

During the years from 2003 onwards, the government of the Union of Myanmar implemented the programmes in order to increase better living conditions and reduce poverty. The aims and goals of the National and International Levels are to observe the goals of the basic information coming out from the calculation of the Indices from (17) Sustainable Development Goals (SDGs). Nine Human Development indices of UNDP (2018) with 45 variables issued by the Myanmar Human Resources Development (MHRD) were used for the analysis on daily quality of life of Integrated Household Living Conditions Assessment (IHLCA). In the year 2018, the Ministry of National Planning and Economic Development (MNPED), under the United Nation Development Programme stated that the poverty of Myanmar was (32 %) in 2007, (26%) in 2010, (32.1 %) in 2015 and (38.1%) in 2016, (MNPED & IDEA).

According to UNDESA (2018) and IMF (2011), the HDI of Myanmar Index was 0.483, (Barro and Lee, 2010). It was 149<sup>th</sup> rank in South-east Asia. As the world standard, Myanmar stood at 148<sup>th</sup> rank in 2018 and it fell in Low Human Development level. In that year, out of 20 Asian countries, the rank was 16 with HDI 0.578, higher than those of Cambodia, Laos, Bangladesh and Bhutan, ([https://en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_Human\\_Development\\_Index#Asia](https://en.wikipedia.org/wiki/List_of_countries_by_Human_Development_Index#Asia)).

In 2018, according to the Report of Hakha Township in Chin State, the poverty of the township found to be 40 %, (Chinstate.gov.mm web portal Record). It was described based on the socio-economic conditions of local people from the geographical point of view. As Hakha

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Township is a mountainous region with many rainy days of heavy rain and with difficulties in transportation and communication, the research area is divided into five parts:

- (1) Main Business Area (MBA) which includes (8) wards; Zayhaung , Zaythit , Pyitawthar, Kyawboke , Myohaung , Myothit , Hahka-Hthara , Hakha -Thit ,
- (2) 6 villages which lie along the Hakha – Gangaw motor car road which leads to Gangaw Township in the Eastern part of Magway Region; Khuabe, Zokhua, Tinam, Cangva, Bungtuach and Khuapi Village Tracts,
- (3) 8 villages lying along the Hakha-Matupi Road in the Southern part: Loklung, Zualtak, Haiphai, Surkhua, Lungrang, Phaipha, Sakta and Lungkhin Village Tract,
- (4) 2 villages lying in the Northern part and along the Hakha- Falam- Kalay road; Chuncung, Hniarlawn Village Tract,
- (5) 14 mountain villages connected with foot paths; Tiphu, Hranhring, Malsawn, Rinpi, Dauchin, Vanhar, Ruan, Lungtar, Sumsi, Dumva, Buanlung, Dongva, and Leipi Village Tract.

### **Aims and Objectives**

The main aim is to examine the influencing factors on native people life style in Hakha Township.

The objectives are

- (1) To assess the quality of life (QOL) of the natives residing in Hakha Township
- (2) To give suggestion implementation of development programmes in the study area

### **Methodology**

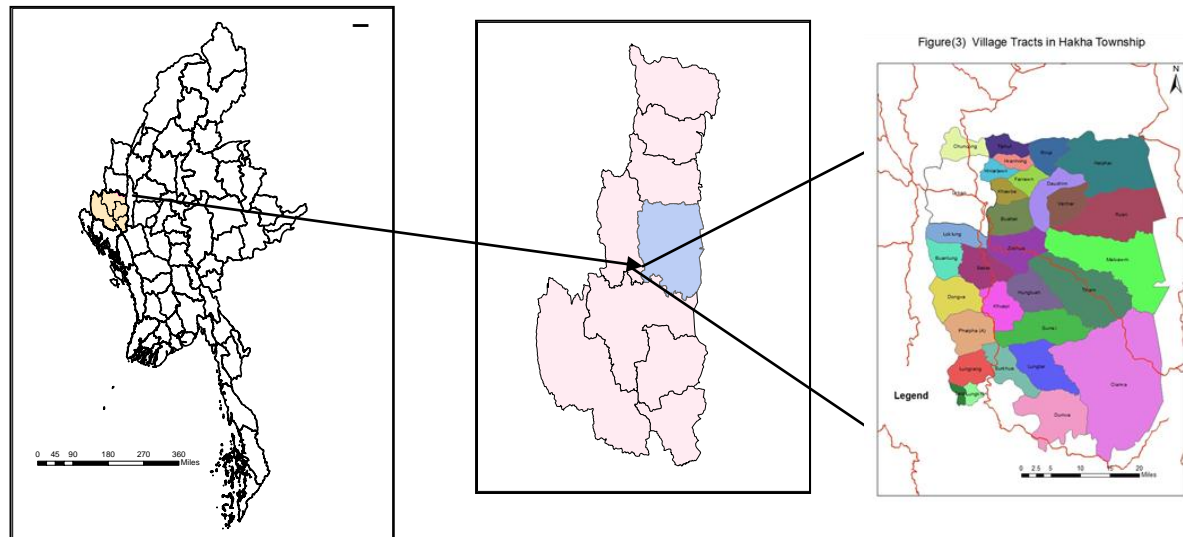
In this research, Primary Data and Secondary Data are used. In order to represent the entire township, 550 households (7 per cent) was given questionnaires to get their responses. Secondary data, however, were collected from various departments and offices. For detail individual open interviews, 45 representatives from various village tracts are examined. Random Selected Sampling Method was used in questioning to the heads of families. In calculation of QOL Indices and by GIS Method, 9 indicators on 45 variables are used, (Mark Rapley (2010) and (William Edwards Deming, 2001).

Analyses were made later for QOL Indices by means of Qualitative Measurement. Analyses by different parts are made in the geographical assessment on emigration and the Quality of Life in Hakha Township and its potentialities for the Rural Development.

### **Study Area**

Chin State in Myanmar is located in the Northwestern part of Myanmar between the latitudes of 22 01' North and 22 50' North, and between the longitudes 93 32' East and 94 45' East. Hakha Town and Htantlang Town lie in the Hakha District of the Chin State of Myanmar. Although Hakha is the capital of Chin State, it is still lack of urban infracture. This research examines whether the people living in the townships have the high standard of living or not. Hakha is at an elevation of over 1865 meters (6,120 feet). Hakha Township has an area of 4164.7 square kilo meters (1,608 square miles) and lies between 914 meters (3,000 feet) and 2,438 meters (8,000 feet ) above sea level. The township is hilly and mountainous. Bwaypa Hill

(2,704 meters or 8,873 feet), Rhone Hill (2,300 meters or 7,543 feet), Seinmu Hill (2042 meters or 6,700 feet) and Pawpi Hill (1951 meters or 6,402 feet) are distinguished ones. The distinguished River is Tio, which flows from north to south. Other distinguished streams flowing towards the eastern part of the town are Daungva Stream, New Stream and Daung Stream. Moreover, there are small waterfalls and small streams. Drinking water is obtained from these streams and natural springs.



Source: General Administrative Department of Hakha Township, 2018

**Figure 1** Location Map of Hakha Township, 2018

## Results and Findings

### Analysis on Quality of Life Indices of the Native People of Hakha Township

In describing the QOL of the natives living within Hakha Township, the factors based on the Physical, Economic and Social Geography. The 9 Indicators for the living condition of the households are stated together with a total of (45) variable indices, (Mark Rapley, 2010). The comparisons among the regions of the township are described in (1) the urban area (Main Business Area) (2) the Eastern part (3) the Southern parts (4) the northern and (5) mountainous villages. The western part of this township is not calculated because there are no villages.

In the physical factors, (19) variables of the basic factors such as Physical, Immediate Environment, Transportation and Communication Indicators are included.

#### (1) Physical Indicators

Physical indicators are represented as the ownership of house, types of residential building structure, availability of electric power supply, distribution of water supply system and availability of purified drinking water. With regard to the ownership of residential houses, 80 percent of the house are owned by private owners are made of wood (timber) and corrugated iron sheet. Residential houses with building structure of the arrangement with rooms amounted to 92 per cent.

## **(2) Immediate Environment Indicators**

With regard to Immediate Environment Indicators for the Waste Disposal System, 92 per cent of the township use latrines. Systematically used types of toilets with water closets and papers and fly-proofed latrines represented 60 per cent. The ordinary pit systems of latrines, which are not fly-proofed, also are found. Waste Disposal Method is found and 57 per cent of the garbage is burnt and cleaned. The heaps of burnt residues are found on the hill slopes.

## **(3) Transportation and Communication Indicators**

As for transportation and communication Indicators within the region, in order to know the condition of transportation, expenses used for travelling within the region from one place to another by travelers are found less. It found that only 34 per cent of the native could use the travelling expense. With respect to the News Media those watching television relating to the use of electric power energy accounted for 30 per cent. Only 6 per cent of the natives of the township are found as regular readers of the daily newspaper. The news papers are not distributed regularly every day. Sometimes newspapers are piled because of less punctual delivery of the newspapers. In use of telecommunication, 65 per cent of the natives found using the post office, telegram and mobile telephones. Today, households using telephone amount to only 90 per cent of the total.

## **(4) Economic Indicators**

In the economic factors, (10) variables of the basic factors concerning the well-being of the households are used as the economic indicators.

In assessing the income of the household per month based on GDP value, 30 per cent of the households have an income less than 50,000 *kyats* per month, 70 per cent of the households have an income ranging between (50,000 *kyats* and 100,000 *kyats*) and income above (100,000 *kyats*). Members of family staying in foreign countries supplied other income.

For the maintenance and well being of the households, the heads of the families are also responsible for the security of their households. Some are engaged in their own business, as owners of shops, shopkeepers and some are car owners, and some owned gardens and cropland. 50 per cent of the households are engaged in those jobs and occupations. 80 per cent of the households are engaged as permanent labourers who get wages during the crop growing season. 10 per cent of the households are engaged as government employees and as permanent workers.

## **(5) Social Indicators**

In the social factors, Social life, Education, Health, Recreation and Safety Indicators have been used. Among the indicators, the size of household, use of language and education, literate and development of the region are the important factors.

Within Hakha Township, the sizes of households are big because of their Chin tradition, custom and culture. The whole family members beginning from the Grandparents to the Great-grand children live together. Most of adults are emigrants and they live in foreign countries: America, Malaysia, Korea, Japan, etc.

Thus the household size is middle. In this region, the number of family with (6 to 10) members amounts to 20 per cent, those with members (1 to 5) to over 70 percent and those with more than 10 members to 10 per cent. The language used as their mother tongue is Chin

language and only 69 per cent of the people can speak Chin language. 31 per cent of the people can speak and use Myanmar language as official language at office and schools. Native people of the township usually go to abroad for income and education purposes. It annually amounts to more than 200 emigrants, mostly to USA, Malaysia, Korea, Japan, Thailand... etc.

#### **(6) Education Indicator**

In the assessment of the condition of Education levels of household heads respondents in this case are examined through questionnaires on behalf of respective households.

According the results, 60 per cent of the respondents found to be Primary School Education level and 40 per cent in Middle School and High School levels and above.

Most of the villages have only Primary Schools and Post –Primary Schools. In order to join and proceed to the Middle Schools and High Schools, the school children have to go to Hakha Town. For the Basic Education School Entrance Enrolment of the region, it is found that 65 per cent of the students enroll in various levels of Basic Education. Of the respondents, 60 per cent are found, using their income for child education.

As High Schools, Middle Schools and Primary School are very far from their houses only 70 per cent of the school children can attend the schools. After passing the Matriculation High School Examination, if the children want to continue their studies they can join the Colleges and the Universities. Regarding this 55 per cent of the students, could attend the colleges and University. The rate of literacy was 98 per cent and 50 per cent of the natives cannot speak and do not know Myanmar Language and Literature.

#### **(7) Health Indicator**

Among the natives, when they are sick, 89 per cent of them go to the nearby health centers or hospitals for the treatment. As the hospital and the houses of doctors are far from the villages, only 70 per cent of the patients can go there for the treatment. Only 22 per cent of the natives have the knowledge for personal Healthcare habit. The ratio of doctors to patients for healthcare is found to be (1:1750).

#### **(8) Recreation Indicator**

Regarding the Recreation Indicator, 10 per cent of individual income of all the respondents is spent for the Expenses on Entertainment and recreations by drinking alcohol. For the development of general knowledge, the native go to the libraries which have library's facilities within the region. It is found that 10 per cent of the natives go to the Chin University's libraries to read books. They need to collect more journals, magazines, table and chairs (furniture) in village's libraries.

#### **(9) Safety Indicator**

The rate of occurrence of crimes within the region is very low. As there is security within the region, the rate of crime is only 15 per cent on Sundays. Some minor crime cases are by means of negotiations according to their traditional cultural habits and means. Although there are peace and security within the township of Hakha, 99 per cent of youth are facing with the soldier collection of Chin Peace Organization in villages of Hakha Township.

## Spatial Comparison on the QOL of the four Sectors with respect to the Nine Indicators at Hakha Township

In describing the living standard (QOL) of the people living in Hakha Township by means of the Indicators, the variable Indices are classified as Very High, High, Medium, Low and Very Low. (World Bank (2011a) and IMF (2011), Source UNDP).

**Table1 Classification of Quality of Life in Hakha Township, 2018**

Sr .	Variable	Index
1	0.81 - 1.00	Very High
2	0.61 - 0.80	High
3	0.41 - 0.60	Medium
4	0.21 - 0.40	Low
5	.01 - 0.20	Very Low

Source: Based on UNDP Data, (2018)

The Physical Indicators of the whole township is Medium with 0.35. However, (1) in Main Business Area (Urban Downtown Area) of the township the indicator is the highest with 0.85. The second largest is found in the Northern with 0.55, (3) the third in the southern with 0.52,(4) the fourth in eastern part of with 0.51 whereas (5) the least indicator is found in the mountain villages of the township with 0.30.

As for the Immediate Environment Indicators, that of the whole Township is medium with 0.42. In the Southern part, the indicator is the highest with 0.65. The second highest indicator is found in the Northern with 0.51, then eastern part with 0.50 and Mountain Village with 0.25. The least indicator is found in the MBA with 0.20.

Regarding the Transportation and Communication Indicators, that of the whole township is medium with 0.59. The indicators are very high in MBA with 0.80, the second highest in the Eastern Part with "High" (0.75), the third highest in the Northern (0.58) and Southern Parts with "Medium" (0.56), and the least in the mountain villages, which have foot paths and cycle lanes, with "Very Low" (0.20).

Regarding the Economic Indicators, it is medium (0.55) for the whole township. However the highest indicator is found in Main Business Area (Urban Downtown Area) with "Very High"(0.81), the second highest in the Northern part(0.70) and the third highest in the Eastern (0.55) and Southern part with "Medium" (0.51) while the least indicator is found in the Mountainous Villages with "Low" (0.19).

The Social Indicators, the indicators for the whole township is medium (0.56). The highest indicator is found in Main Business Area with "Very High" (0.82); the second highest in the Eastern (0.55) and Southern part (0.53) with "Medium" and the third highest is in the Northern part with "Medium" (0.52). The least indicator is found in Mountainous Villages of the township.

For Education Indicators, the indicator of the whole township is Medium with QOL index of 0.45. The highest is found in Main Business Area with "High"(0.70), the second highest in the Eastern with 0.52, the third highest the Northern parts with 0.50, the fourth in the Southern part with "Low" (0.40) and the least in mountain villages with "Low" (0.18).

For Health Indicators, the whole township has "Medium" with (0.42). It is highest in Main Business Area with "High"(0.65), the second highest in the Eastern part with 0.44, the third

highest in the Northern part with 0.42 , the fourth highest in the Southern part with and the least in mountain villages with “ Very Low”. (Table 2& 3-a,3-b)

By classifying the rank of values, the places having medium and low rank need to be supplemented with suitable and appropriate ones. For very low parts, they should supplement. Moreover, for the villages lying near the borders of Myanmar, similar programmes should be implemented lest the natives leave their villages to other places.

**Table 2 Situation of QOL Indicators in Hakha Township of Chin State, 2018**

Sr.	QOL and Indicators	Situation by regions in Hakha Township of Chin State
1	QOL with respect to Physical Indicators	MBA > N, S, E > Mou
2	QOL with respect to Environmental Indicators	S > N, E > Mou > MBA
3	QOL with respect to Transportation & Communication Indicators	MBA > E > N, S > Mou
4	QOL with respect to Economic Indicators	MBA > N > E, S > Mou
5	QOL with respect to Social Indicators	MBA > E , S , N, Mou
6	QOL with respect to Education Indicators	MBA > E , N > S > Mou
7	QOL with respect to Health Indicators	MBA > E , N > S > Mou
8	QOL with respect to Recreation Indicators	MBA, E , N > S , Mou
9	QOL with respect to Safety Indicators	MBA > E , N, S > Mou

QOL with respect to Nine Indicators = MBA > E > N > S > Mou , (Michael Pacione (2003)

**Table 3-a Classification on Quality of Life in Hakha Township, Chin State , 2018**

Sr.	Indicators	MBA	Eastern Villages	Northern Villages	Southern Villages	Mountainous Villages	Hakha Township
1	<b>Physical</b>	<b>0.85</b>	<b>0.51</b>	<b>0.55</b>	<b>0.52</b>	<b>0.30</b>	<b>0.55</b>
2	Environment	<b>0.20</b>	<b>0.50</b>	<b>0.51</b>	<b>0.65</b>	<b>0.25</b>	<b>0.42</b>
3	Transportation/Communication	<b>0.80</b>	<b>0.75</b>	<b>0.58</b>	<b>0.56</b>	<b>0.20</b>	<b>0.59</b>
4	<b>Economic</b>	<b>0.81</b>	<b>0.55</b>	<b>0.70</b>	<b>0.51</b>	<b>0.19</b>	<b>0.55</b>
5	<b>Social</b>	<b>0.82</b>	<b>0.55</b>	<b>0.52</b>	<b>0.53</b>	<b>0.51</b>	<b>0.56</b>
6	Education	<b>0.70</b>	<b>0.52</b>	<b>0.50</b>	<b>0.40</b>	<b>0.18</b>	<b>0.45</b>
7	Health	<b>0.65</b>	<b>0.44</b>	<b>0.42</b>	<b>0.40</b>	<b>0.20</b>	<b>0.42</b>
8	Recreation	<b>0.90</b>	<b>0.65</b>	<b>0.62</b>	<b>0.48</b>	<b>0.45</b>	<b>0.71</b>
9	Safety	<b>0.75</b>	<b>0.58</b>	<b>0.55</b>	<b>0.51</b>	<b>0.20</b>	<b>0.52</b>

Source: Based on Field Observation, 2018. Michael Pacione (2003)

**Table 3-b Classification on Quality of Life in Hakha Township, Chin State, 2018**

Sr.	Indicators	MBA	Eastern Villages	Northern Villages	Southern Villages	Mountainous Villages	Hakha Township
1	<b>Physical</b>	<b>VH</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>M</b>
2	Environment	<b>VL</b>	<b>M</b>	<b>M</b>	<b>H</b>	<b>L</b>	<b>M</b>
3	Transportation/Communication	<b>VH</b>	<b>H</b>	<b>M</b>	<b>M</b>	<b>VL</b>	<b>M</b>
4	<b>Economic</b>	<b>VH</b>	<b>M</b>	<b>H</b>	<b>M</b>	<b>VL</b>	<b>M</b>
5	<b>Social</b>	<b>VH</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>M</b>
6	Education	<b>H</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>VL</b>	<b>M</b>
7	Health	<b>H</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>VL</b>	<b>M</b>
8	Recreation	<b>H</b>	<b>H</b>	<b>H</b>	<b>M</b>	<b>M</b>	<b>H</b>
9	Safety	<b>H</b>	<b>M</b>	<b>M</b>	<b>M</b>	<b>L</b>	<b>M</b>

Source: Based on Field Observation, 2018

Index; L= Low, VL= Very Low, M= Medium, H= High, VH= Very High

### Variations of the Resident's Opinion among Different Parts of Hakha Township

Regarding relationship of Indicators and Variables on QOL within Layshi Township, in order to find out whether there is or not satisfactory relationship between each variables, Spearman's Rank Correlation Coefficient ( $r_s = 1 - 6\sum d^2 / n^3 - n$ ) was used and calculated, (William Edwards Deming , 2001). Within the region of Hakha Township individual QOL Indicators are measured in order to find out whether there is satisfactory QOL or not depending upon the demands of each individual variable, (Michael Pacione , 2003).

If the Index value is from +0.01 to +1 .00, it has direct relationship ( $r_s$ ) between the indicators , the Index value from -0.01 to -1.00 refers to reverse relationship between the indicators.

It is found that the relationship between Physical Indicators and Electric supply is (+0.8) and Water Supply System is (+0.65). They have high positive correlation.

It is found that the relationship ( $r_s$ ) between Immediate Environment Indicators and types of toilet is (0.8) and thus there is high positive correlation. The values of Forest Area Cover (-0.7) , conservation of Ecosystem (-0.8), Prevention of Hazard (-0.75), Use of Wood for fuel (-0.83) show that they are in high negative relationship.

Regarding transportation and communication, such Indicator and each of Near the Main Road (+ 0.6) , Transportation at Junction (+0.5), Telephone Utilities (+0.8), Accessibility by Vehicle (+0.8), and Telephone Utilities (+0.8) show that, there is high positive correlation. Moreover, in relation with Television Watching (+0.3), with Regular Delivery and Reading of Newspaper (+0.6) there are low and high positive correlation between them respectively.

In the relation between Economic Indicators and Ownership of Agricultural Land (+0.9), Household Income per month (+0.7), Expenses on other things per month (+0.8) ,Expense on Food including meat and vegetation (+0.9) ,Ownership of Business and Enterprise (+0.9), Permanent Labourers (+0.9), they are found to have high positive correlation. In relation with Expenses on Food (+0.8), Owners of Poultry Farms (+0.6), and Household Expenditure per month (+0.8), they also have high positive correlation.

In relationship between Social Life Indicator and Use of Chin and Bamar Language (+0.8) and Household Size (+0.5), there is t high positive correlation, and moderate positive correlation, respectively.

As for Education Indicators, Education of Respondents (+0.6), Expense on Child Education (+0.6), Distance to College (+0.75), Basic School Enrolment (+0.9) show that and there are high positive correlation but low positive correlation with distance from High School (+ 0.3). With the Literacy Rate (-0.6), there is high negative correlation.

As for Health Indicators, there are high positive correlations. There is high positive correlation with Treatment for Disease (+0.8) and, Distance from Hospital (+0.7).In relation with the Ratio of Doctors to Population is (-0.8), there is high negative correlation.

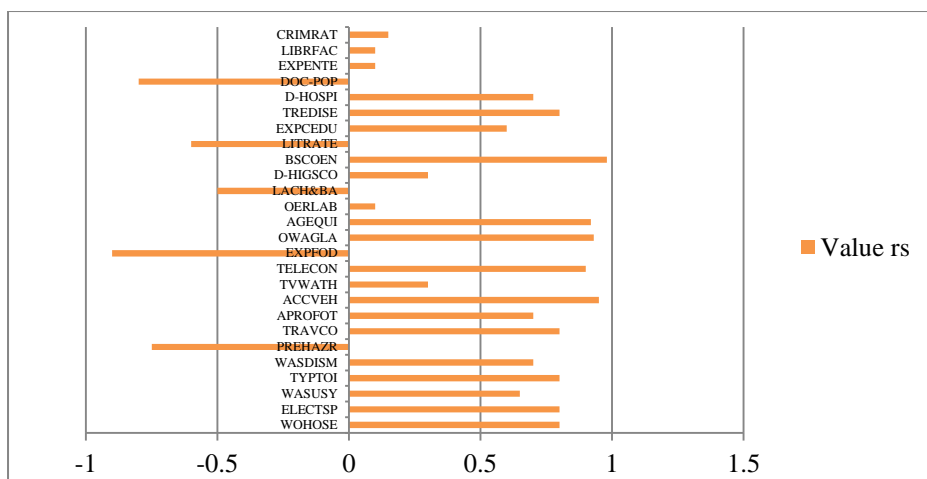
As for Recreation Indicators, there are absolutely high positive correlation with those who go to Library in order to read (+0.1), and Library Facilities (+0.10). Expense on Entertainment (-0.8), there is high negative correlation. Between Safety Indicators (Medium), and crime rate (+0.15), there is low positive correlation.



**Table 4 Spearman's Rank Correlation Coefficient ( $r_s$ ) of Indicators and Variables of QOL in Hakha Township**

Indicators	Name of Variable	Code	$r_s$
Physical	Wooden House	WOHOSE	0.80
	Building Structure	BLDSTR	0.92
	Electricity supply	ELECTSP	0.80
	Water Supply System	WASUSY	0.65
	Drinking Water	DURWAT	0.67
Immediate Environment	Types of Toilet	TYPTOI	0.80
	Waste Disposal Method	WASDISM	0.70
	Forest Area cover	FORARE	-0.70
	Conservation of Ecosystem	CONECO	0.80
	Prevention of Hazard	PREHAZR	-0.75
	Use of Wood for Fuel	NOWOFL	-0.83
Transportation & Communication	Does Travel Cost	TRAVCO	0.80
	Has Near Main Road	MAIROA	0.60
	Approach Road (on foot)	APROFOT	0.70
	Accessibility by Vehicle	ACCVEH	0.95
	Transportation at Junctions	TRAJUN	0.50
	TV Watching	TVWATH	0.30
	Regular delivery and Reading of Newspaper	REGNEW	0.60
	Telephone Utilities	TELECON	0.90
Economic	Expenses on Food	EXPFOD	-0.90
	Ownership of Agricultural land(1)Arce	OWAGLA	0.93
	Owners of Poultry farms ( Chicken+pig)	OWPOUL	0.70
	Agricultural Equipment	AGEQUI	0.92
	Household Income/month	FAINCOE	0.70
	Household Expenditure/month	FAEXPEN	0.80
	Expenses on Other things /month	EXPOTHE	0.80
	Does eat meals & vegetation	EATME&VE	0.90
	Ownership of Business & Enterprise	OWNBUS	0.90
	Permanent Labourers	PERLAB	0.10
Social Life	Household Size	HOHSIZE	0.50
	Language (Naga+Bamar)	LGNA&BA	0.99
Education	Distance to College	D_COLLE	0.75
	Distance from High School	D_HIGSCO	0.30
	Basic School Enrolment	BSCOEN	0.98
	Middle Education on Respondents	EDURES	0.60
	Literacy Rate	LITRATE	-0.60
	Expense on Child Education	EXPCEDU	0.60
Health	Treatment on Disease	TREDISE	0.80
	Distance from Hospital	D_HOSPI	0.70
	Personal Health-care Habits	PREHEAL	-0.22
	Doctor: Population	DOCPOP	-0.80
Recreation	Expenses on Entertainment	EXPENTE	0.10
	Does go to Library	DOLIBR	0.10
	Is Library Facilities	LIBRFAC	0.10
Safety (or) Security	Crime Rate	CRIMRAT	0.15

**Source:** Calculation based on field Observation, 2018 (William Edwards Deming (2001))



Source: Calculation based on field Observation, Table ( 4 ) 2018.

Figure 2 Difference (+/- ) QOL Value of Hakha Township

### Discussions

In this research paper, the QOL Indicator of Hakha Township and the related factors are analyzed, with respect to the physical Indicator (Medium). In order to get sufficiently the Electric Power Supply Projects and Plans, the solar energy plant or cells system should be installed at the mountain villages in Hakha Township.

In order to have good Water supply System, Systematic Supply System should be operated in the whole Township. In conserving the Forest Area excessive cutting of trees should be prohibited and the area of Taungya Shifting Cultivated lands should be reduced. Systematic upland rice cultivation should be introduced. Moreover, knowledge of the new methods of crop farming should be introduced to the farmers of the township. Near and along the main roads, extension and expansion of roads should be carried on Roads and highways passing through the mountain villages should be upgraded in the eastern part, southern parts and northern part.

Moreover, there go –down should be built at the bus stops of terminal points. The goods and commodities can be stored before sending them to their destinations. In addition, the bus stops, stations and terminals for vehicles should be placed in the urban area and the places for rest should be constructed especially at the junctions of the crossroad. Accessibility of vehicles should be smooth to modernize its vehicles. The time of arrival and departure for the vehicles should be punctual and regular. For watching television, and listening to the news and good music programmes, good electric generators and transformers should be installed wherever necessary.

Similarly, as mobile phone is commonly used in the township, there are no telephone cables. Therefore, mobile phones substations should be built and transmitted to the mountainous villages lying in the southern, northern and eastern parts.

In the agricultural sector included the Economic Indicator, it is found that most of farmers own only 1 ha (2.47 acres) of cropland and, they do not receive adequate amount of the crops or money.

Appropriate jobs should be created by the authorized persons and organizations in order to increase the household income per month for other general expenditure of the family. By getting sufficient income the villagers can eat meals with meat and vegetables regularly.

In this township, there are also people who have their own business with permanent employees and labours. The households mostly spend their income for food. In order to reduce their expenses on food some of the villagers breed animals for their livelihood. By carrying out the livestock farming, they can spend more money on Food or on other things they want. Although the Economic Indicator shows that the township is in the medium level, it still needs to upgrade the economic status to reach the living standard level of Myanmar.

With regard to the social life Indicator (medium) and the use of the languages of Chin and Barmar, the households of Chin land should learn Myanmar, official language and literature, with their native language and literature. For the illiterates, the 3- Rs classes should be opened for them in mountain villages of southern parts, eastern part and northern part.

In education Indicators (Medium) sector, there are difficulties for children to attend the high schools because their villages are very far. Although there are local teachers, it still lacks of teaching aids and insufficient income for their families. In order to spend more money on child education and to increase their income, for their children, the parents and elders of the households, better jobs should be created particularly in cottage industries and in handicraft industries. Moreover, the problem of insufficient teaching staff should be solved in the schools of this township.

For Health Indicators with (Medium), more treatment on diseases should be given to the patients by the doctors, nurses, and mid-wives efficiently. As the hospitals are very far from the villages, more doctors and nurses should be appointed in the township. Medicines and good medical aid should be given to the patients of the mountain villages in the southern parts, northern part and eastern part respectively.

For Recreation Indicators with (Medium), the habit of going to the Library can provide learning to read books and one can get general knowledge regarding health, education, agriculture and economic knowledge. There should be good library facilities in the library. Books daily newspaper, journals, chairs, seats, computer and Internet should be kept. For Safety Indicators (Medium) or security measures should be taken and the occurrence of crime and the crime rate should be reduced in the mountain villages in the southern parts, northern part and eastern part respectively.

### **Conclusion**

In Myanmar, out of 17 Sustainable Development Goals (SDGs) Indices, the ratio of people earning less than one American Dollar per day should be reduced to half. The ratio of hungry starving people from famine should also be reduced to half. All the boys and girls of schooling age should complete the Primary School level of education. Moreover, there should be equal rights in education for the Men and Women too. Death and mortality of children under 5-year of age should be reduced to two –thirds. The spread of fatal diseases such as Malaria and HIV /AIDS should be eliminated and reduced. Distribution of medicine should be given to the poor people.

There should be less loss in natural environment and loss of mineral resources. Knowledge for use of safe purified clear drinking water should be given to the poor people. Clean sanitation system should be carried out in the township especially in the poor wards and villages. In order to reduce the problems of debts of the poor people living in the wards and villages better jobs for them should be created.

In describing the reasons for migration, it is found that there are people who want to go as migrants. Most are young people who can work and who have keen interest and desire to go to other regions. However, there are also unwilling migrants to other places. They consist of children, women and housewives together with old people. Migration and shifting to other regions may be due to people who has to accompany with their families who had already gone to a new place. All these shifting and migrations to other regions are monthly, depending upon the physical and socio-economic QOL indicators in accordance with Migration Theory. When the benefits of getting new technologies are known and when jobs are created as a strategy for the poor, the Hakha Township can be upgraded to reach the goal of High Human Development Level according to HDI (Human Development Index), ([https://en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_Human\\_Development\\_Index#Asia](https://en.wikipedia.org/wiki/List_of_countries_by_Human_Development_Index#Asia)).

### Acknowledgements

I wish to express my most grateful appreciation to U Paul Lum Mint Htan Minister of Social Affairs, Ministry of Social Affairs in Chin State, for help during field observations in Chin State, Rector Dr. Thida Win, and Dr. Nyo Nyo, Professor and Head, Department of Geography, Mandalay University for their kindness in giving me permission to do this research. I would like to thank my teachers Daw Agnes Klaipo and Dr. Win Maung, Retired Professors of Department of Geography, University of Mandalay, for their critical reading and for correcting the errors. I wish to express my most grateful appreciation to my pupils, teachers and students of Geography Department, Hakha Degree College for participating with me to do this research paper. I am also grateful to all my teachers, friends, officers and staff of Departments of various offices for their help in field survey in Hakha Township.

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