

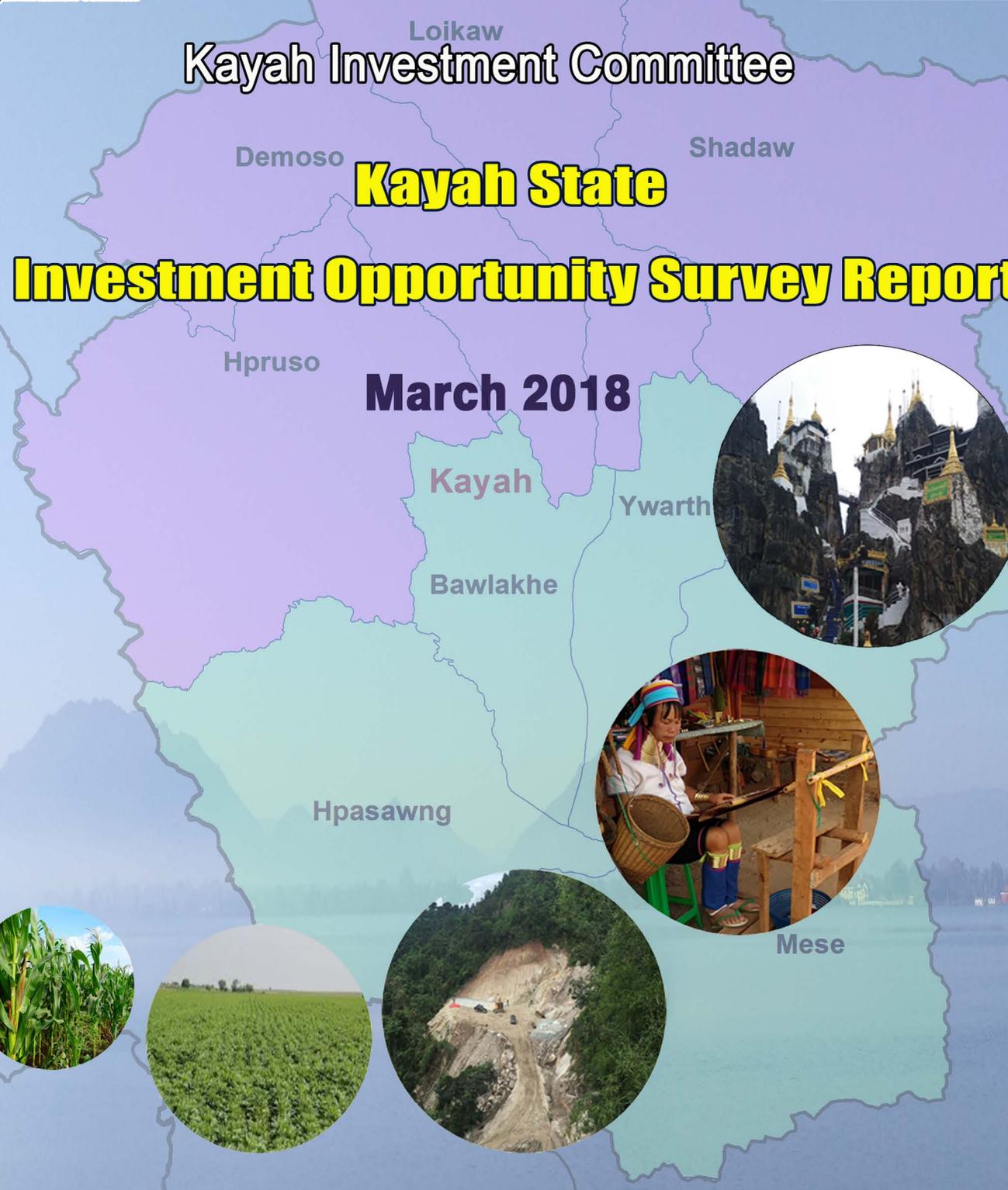


Kayah Investment Committee

Kayah State

Investment Opportunity Survey Report

March 2018



Prepared by
MMRD Research Division



Foreword

Improvement in investment value will increase the country's GDP value as well as new job opportunities. This will make the socioeconomic status of the local people higher with the increased employment rate. Moreover, it would undermine the rate of workforce moving abroad. The noticeable progress in three investment opportunity surveys conducted in Mandalay Region, Shan State and Kayah State can be found. It is increased in the interest of potential investors along with the investment projects and values.

It can be found that there are a lot of investment opportunities to be explored in various states and regions of Myanmar with diverse strengths and weaknesses. For instance, some regions have more opportunities for investment in agricultural sector while others in hotel and tourism sector. But Kayah State is filled with distinctive features compared to any other states and regions of Myanmar. It has virgin lands, virgin forests, cultivable lands and pastures which are valuable for the agricultural and livestock industries. The state also possesses abundant natural beauties of water, lands, forests and mountains which are great opportunities for tourism industry likewise for hotel industry. Further, there are other potential sectors and businesses which are profitable to make an investment in.

The government is guiding to encourage the competition between private business sectors and development as well as enhance the better and convenient investment procedures for the investors. The new Myanmar Investment Law will improve the investment environment and systematic regulations and legal framework. The procedures which would help the investors have been laid down to improve the investment in potential areas with slow development such as Kayah State. We hope that the Kayah State Investment Opportunity Survey Report will be a good reference for potential investors who are interested to invest in Kayah State and everyone from various sectors who are conducting for the development of Kayah State.

With best wishes,

U Kyaw Win

Chairman, Myanmar Investment Commission (MIC)

Union Minister for Planning and Finance



Preface

Kayah State with an area of 4,529.61 square miles (11,731.64 square kilometres) has a total population of 279,615. The state has less population density namely 62 per square mile (24 per square kilometre). Kayah State is blessed with numerous natural resources including the loaded uncultivated land areas, mineral ores, hydropower resources, forests, beautiful rivers, streams, mountains, hills and ponds. Sharing borders with Thailand is one of the strengths of Kayah State for trading. To strengthen the border trade between the two countries, Myanmar and Thailand, the Kayah State government has been improving its basic infrastructures needed for smooth transportation and logistics systems. In order to improve the Mese border trade, a lot of changes have been made in the procedures and services of the governmental departments and associations for that trade.

Full regional peace and stability is at the heart of the comprehensive development of the Kayah State. As the state's peace and stability condition is better, the investment entering the state increases. In the same way, the numbers of domestic and foreign tourists who love to enjoy the natural beauty of Kayah State is increasing year after year. It is necessary to get ready to provide services for the various conditions to be improved in the future. There are a lot of potential businesses to be invested in Kayah State. In the current condition of local area, people are mainly doing agribusinesses, mineral productions, trading, logistics and livestock farming but the operation methods are needed to be upgraded in accordance to the modern technology. This means that the investors can find a lot of opportunities to invest even in one sector among several potential sectors that is the agricultural sector. Moreover, it can be profitable to invest in livestock farming of the marketable animals adapted to local climate conditions. Although there are trading and logistics businesses in the state, they are not large-scale businesses and they have potentials to be developed and expanded more.

Hotel and tourism is the best sector for investment. Currently, there are some international hotels in Kayah State but more hotels are needed and it is also necessary to improve the hospitality services provided by hoteliers. I strongly believe that the development of tourism sector will be more effective if we could build goodwill and relationships with local people. On the other hand, it is required to give special consideration to conserve the natural resources, preserve cultures and traditions, and develop the local economy and living standards. Stakeholder involvement is essential for rapid growth of the Kayah State. The Kayah State government and Kayah State line departments and associations promise all necessary support for the state. This report is believed to be a substantial contribution towards the development of Kayah State.

U L Paung Sho
Chief Minister, Kayah State Government
Chairman, Kayah State Investment Committee

Background of the Kayah State Investment Opportunity Survey

Investment promotion is a priority for the Myanmar Investment Commission to achieve economic growth. For the purpose of achieving national development goals, promoting foreign direct investment specific to each state and region is considered to be a key strategic implementation process contributing to nationwide development. The investment committees at all state and regional level are formed and it could provide permits for small enterprises with the investment amount of under USD 5 million.

Therefore, in order to attain national economic growth in Myanmar, the Myanmar Investment Commission should prioritise to investment promotion. Kayah State Investment Committee, chaired by Chief Minister should encouraging investment in Kayah State.

Kayah State is located in the eastern part of Myanmar and shares its borders with Thailand, its regional growth was slow due to various reasons. Lack of stability and peace were the main barriers and limitation for businesses and potential investors. However, Kayah State has continuously improved its regional safety, security and transportation since 2012. Kayah State has a number of hydropower contributing significantly to the national power grid.

Kayah State has become one of Myanmar's main tourist attractions for domestic and foreign visitors. Attracted by the hospitality, culture and tradition of Kayah local people, existing natural beauty and natural resources, there are many untapped investment opportunities in Kayah State. To foster Kayah State's economic growth, potential business investment opportunities need to be identified. Moreover, it is necessary to facilitate investment procedures and encourage both foreign and local investment by building networks between investors and continually exploring new opportunities in Kayah State.

Therefore, with the permission of Kayah State government, Kayah State Investment Committee assigns Myanmar Marketing Research and Development Co Ltd (MMRD) who have an extensive track record in investment opportunity research in Myanmar to conduct Kayah State Investment Opportunity Survey.

The main objective of the study is to promote investment opportunities in Kayah State and to strengthen links between Kayah businesses and local & foreign investors. It is also to encourage the interest of potential investors from local and foreign countries to invest in Kayah State.

The Kayah State investment opportunity survey was conducted in Loikaw District and Bawlakhe District by MMRD in February 2018 and the survey report was submitted to Kayah State Investment Committee on 30 March 2018.

Executive Summary

This study investigated potential business opportunities in Kayah State (excluding Shadaw Township of Loikaw District). Kayah State has only recently gained stability after a long period of ethnic tension.

Businesses currently operating in the Kayah State are looking to cooperate with interested local and foreign investors. The potentials are exciting for investors to work with local businesses who are seeking capital investment, technology and development of local markets and products. Kayah state leaders predicts a range of favourable growth in business and commerce industries include agriculture, livestock, hotel and tourism, mining, hydroelectricity, manufacturing and border trading. Kayah State's fertile soil and temperate climate are conducive for strong agricultural, agri based and food processing industries. Neighbouring with Thailand, has seen cross border trade of foodstuffs, produce and consumer goods to flourish.

Located in Eastern-central Myanmar, Kayah State is renowned for its environmental beauty, with mountain, forest and river sceneries and its diverse ethnic groups. Dwelling in the highlands are the Kayan Padaung the world famous long-necked' womenfolk, wearing the bronze rings encircling their necks and legs. The state developing stability and peace, has encouraged the growth of tourism as well as industry in the last few years.

Three initial sectors have been prioritised for potential investment;

- Agriculture; cultivation of crops, paddy, maize and sesame and production of value-added goods.
- Hotel and tourism; eco & community-based tourism.
- Mining; extraction and purification of tin and tungsten from Mawchi Mine.

Up to 20% of business owners responding to the Kayah State investment opportunities survey started their businesses due to strong market growth combined with limited business competition. Obtaining business information and business permits in Kayah State was found to be relatively simple.

Business owners have limited knowledge and understanding of business law and regulations in the state. Survey respondents rated as fair the quality of government departmental services, and public administration. More than half the survey respondents were positive about the activities and services of departmental official's implementation status on infrastructure, which it is believed will improve business prospects in the next three years. They also responded that industrial development is slow due to few industries already located in the state, this effected logistics and procurement of local and foreign raw materials. It is hoped local and foreign direct investment, will lead to growth in SMEs, increasing production and growth in markets.

Additional comments included hope for further improvements in peace and security, increasing demand in the marketplace.

However, there are some challenges; a significant issue is to be found in recruiting skilled workers. It is important to conduct educational campaigns in order to motivate employees and youth in the state to attend further education and vocational training courses. Vocational training needs to include machinery and vehicles maintenance courses, agricultural practices courses, hospitality service courses, language courses (Thai, English, French and German), handicraft courses and manufacturing, foodstuffs and consumer goods courses.

In general, for the above to be initiated, businesses and SMEs in the Kayah State need improved cooperation between state government, line departments and local business operators.

The investment environment in Kayah State is generally favourable, despite short-term challenges, longer term potential is positive with a lot of still untapped resources.

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Abbreviations

ADSL	Asymmetric Digital Subscriber Line
AIS	Agriculture, Industry and Services
BP	Border Point
CBI	Centre for Promotion of Imports from developing countries
CBOs	Community Based Organisations
CBT	Community Based Tourism
CMP	Cutting, Making and Packaging
CSR	Corporate Social Responsibility
Cusec	Cubic feet per second
DICA	Directorate of Investment and Company Administration
DISI	Directorate of Industrial Supervision and Inspection
DOA	Department of Agriculture
FTTH	Fiber-to-the-Home
FY	Fiscal Year
GAP	Good Agricultural Practice
GDP	Gross Domestic Product
hp	Horsepower
ITC	International Trade Centre
JICA	Japan International Cooperation Agency
JPY	Japanese Yen
KII	Key Informant Interview
KNPP	Karenni National Progressive Party
kV	Kilo Volt
kW	Kilo Watt
LME	London Metal Exchange
MADB	Myanmar Agricultural Development Bank
Mbps	Megabits per second
MMK	Myanmar Kyat
MOA	Memorandum of Agreement
MOHT	Ministry of Hotel and Tourism
MOU	Memorandum of Understanding
MW	Mega Watt
NCA	Nationwide Ceasefire Agreement
NGOs	Non-Governmental Organisations
ODA	Official Development Assistance
PRRS	Porcine Reproductive & Respiratory Syndrome
PST	Production, Services and Trading
RC	Reinforced Concrete
ROR	Run-of-the-River
SMEs	Small and Medium Enterprises
USD	United States Dollar
USDP	Union Solidarity and Development Party

1. Macroeconomic Overview of Kayah State

This section includes the brief overview of Kayah State's macroeconomic situation. The information is presented from the perspectives of government officials interviewed for this research.

1.1. Brief Profile of Kayah State

Kayah State is situated in eastern part of Myanmar and it is bounded on the north by Shan State, on the east by Thailand and on the south and west by Kayin State. Total land area of the state is about 4,529.61 square miles (11731.64 square kilometres). It shares 1.72% of the whole Myanmar area. At the widest east-west point of Kayah State is 65 miles (105 kilometres) across and 105 miles (169 kilometres) for north-south. Kayah State lies approximately between 18 degrees 30 minutes and 19 degrees 55 minutes north latitude and between 94 degrees 40 minutes and 97 degrees 93 minutes east longitude. Kayah State has a tropical monsoon climate with approximately 103 rainy days and rainfall of 47.16 inches was recorded in the year of 2016-2017. The state is blessed with a topographical mix of flat plains and mountainous areas; and Kayah State is between 985 and 6,000 feet above sea level. Ka Phu Mountain in Shadaw Township of Loikaw District is the highest peak at 6,000 feet while the lowest point of Kayah State is in Shadaw Township in Loikaw District. There are limited rivers and streams in the state and the Than Lwin River is the most prominent river flowing north to south. Balu Chaung, Pun Chaung and Htoo Chaung are also north-south flowing streams that feed into the Than Lwin River.

There is ample opportunity for hydroelectricity generation on those streams and river. The Lawpita Dam built on the Balu Chaung river produces a quarter of the total hydroelectric power for Myanmar.

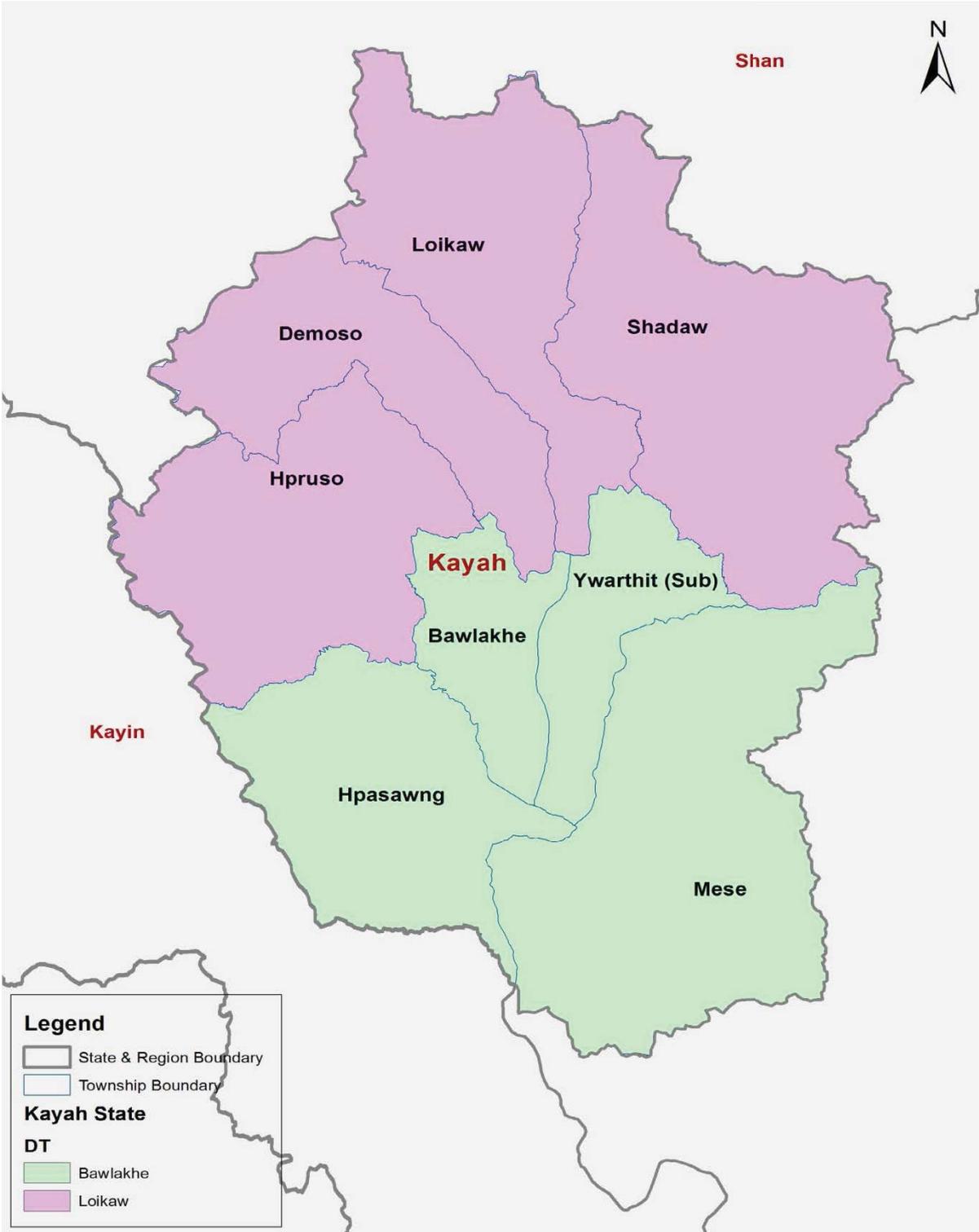
The area by district is shown in the following table: -

Table 1: Area by districts in Kayah State

No	District	Area by district (square miles)	Total city and town area by district (square miles)
1	Loikaw	2534.85	12.18
2	Bawlakhe	1994.76	2.19
Total		4529.61	14.37

Source: Kayah State government

Figure 1: Map of the location of Kayah State in Myanmar



Source: Department of Population, Ministry of Labour, Immigration and Population

Table 2: Key facts and figures of Kayah State

Area	4,529.61 square miles (11,731.64 square kilometres)
Population	279,615 (2016-2017) Population density – 24/square kilometre
Number of households	52,177
Number of districts	2
Number of townships	7 + 2 Sub-townships
Capital	Loikaw
Gross Domestic Product per Capita	MMK 934,727 (FY 2016-2017)
Total Gross Domestic Product (GDP)	MMK 284,157 million (FY 2016-2017 – current price) 0.36% of overall Myanmar GDP (FY 2016-2017 – current price)
Major industries	<ul style="list-style-type: none"> • Agriculture • Minerals and mining • Trading and logistics • Livestock

Source: Kayah State government and State Planning Department

1.2. Administrative status

Kayah State previously lacked regional stability and the region was presented as a “brown” area (partially stabilised areas - meaning there was active conflict between the Myanmar army and the ethnic armed groups). After 2012, when ethnic armed groups entered into a ceased fire agreement, the region began developing.

Kayah State has 2 districts, 7 townships, 44 wards, 74 village tracts and 517 villages and the capital city of the state is Loikaw. Of the Kayah races, Kayan Padaung (Kayan Ke` Khong), Kayan Lahta (Za Yein), Kayan Gay Kho (Kayan Ke` Dot), Yin Baw (Kayan Ka Ngan), Mo Nu, Gay Par, Kayah, Kayaw and Yinnatale` are considered nine ethnic minorities. Kayah State’s ethnic mix is: Kayah (60%), Bamar (15%), Shan (15%), Kayin (8%) and others (2%). Moreover, Pa-O and Intha are also living in the Kayah State. (See nationalities in Annex.)

Table 3: List of districts, townships and villages in Kayah State

No	District	Townships	Towns	Wards	Village tracts	Villages
1	Loikaw	4	2	36	54	429
2	Bawlakhe	3	1	8	20	88
Total		7	3	44	74	517

Source: Kayah State government

1.3. Economy

Located in Eastern-central Myanmar, Kayah State is one of the regions where encouragement is needed to develop the economy. Agriculture is the principle business of Kayah people, the state also has large mineral deposits to be extracted. In the fiscal year of 2016-2017, Kayah State's GDP contributes 0.36% of the country's GDP. The state government expects the average GDP growth rate of FY 2017-2018 to be 1.6% and GDP per capita to be MMK 974,166.

Looking at the GDP (current price) of two districts of Kayah State in FY 2016-2017, Loikaw District earned most of the state's GDP, claiming 84% of the total while Bawlakhe District followed by 16%. Broken down by sector, agriculture is the major contributor, earning 39% of Kayah State's GDP. The livestock and fishery sector is also a potential sector. After agriculture, the second-most promising sector is the trading industry contributing 20% of the state's GDP.

Although Kayah's GDP contribution to the country's GDP is low in FY 2016-2017, the current economic growth of Kayah State predicts a continuous improvement in the GDP contribution percentage. The GDP value projections for the two districts of Kayah State in FY 2017-2018 are MMK 184,519 million for Loikaw District and MMK 32,301 million for Bawlakhe District.

Offices for border trade, customs and immigration are located in Mese, the border town and these offices adequately manage the flow of goods at the border gate. In the future this will need to be upgraded as border trade increases. With the improvement in transportation, stability and peace, Kayah State will not only increase its trade value but will attract increasing tourist numbers year on year. Mae Hong Son, the border town of neighbouring country, is a tourist destination. With co-operation between Mae Hong Son and Kayah State there is great opportunity for developing tourism. Presently there are hotels in Loikaw, some still under construction while there are proposal being submitting for more.

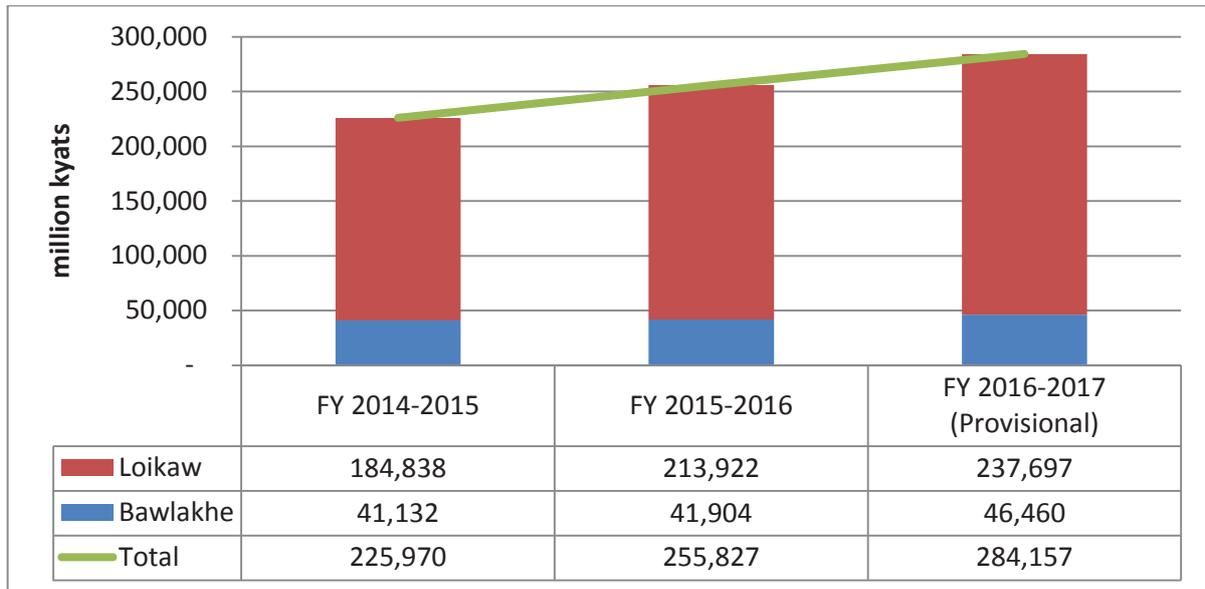
Major crops of Kayah State are paddy, maize and sesame. These products are exported to China and Thailand across the border, while some of them sent to Mandalay, Yangon regions and Shan State. Minerals, especially lead and antimony are extracted in Kayah State. Only when full regional stability is attained will the illegal excavation of minerals be ended and some of the more remote mines will become operational. Valuable, exotic tree species such as teak and pine can be found in some townships of Kayah State.

Table 4: GDP contribution of Kayah State in country GDP

Fiscal year	FY 2012-2013	FY 2013-2014	FY 2014-2015	FY 2015-2016	FY 2016-2017
Contribution to Myanmar's GDP (current price)	0.35%	0.34%	0.35%	0.35%	0.36%

Source: Kayah State Planning Department

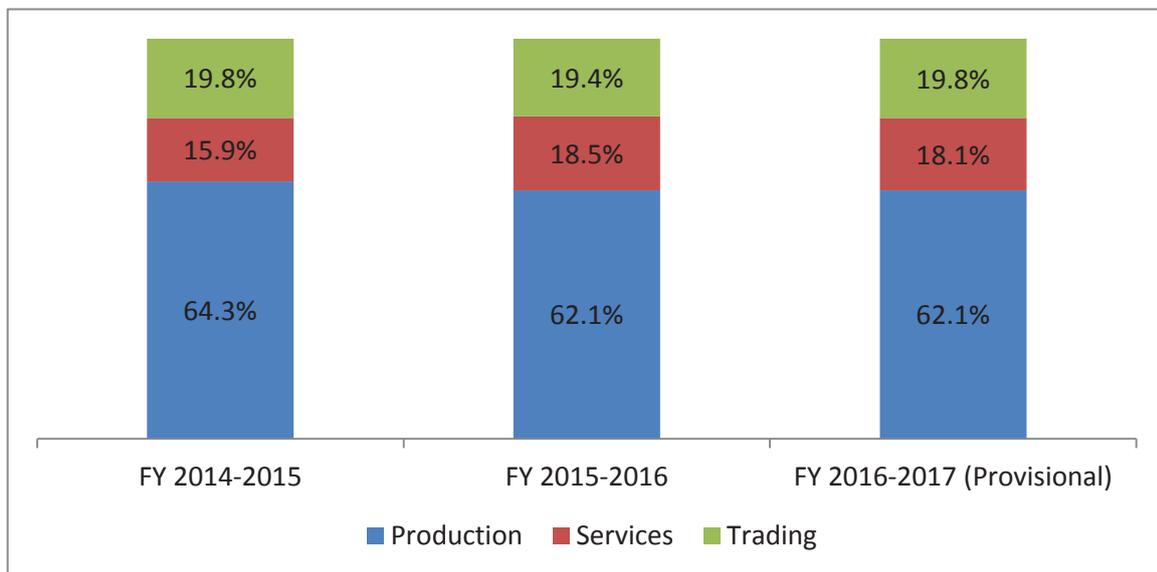
Figure 2: Illustration of Kayah State’s GDP value in current price



Source: Kayah State Planning Department

Studies show services and trading percentages of Kayah State’s GDP in production the sector have slightly diminished year on year. As Kayah State shares its border with Thailand’s border towns, the contribution of GDP trade value compared to services is historically larger.

Figure 3: GDP sector contribution of Kayah State in current price (PST - Production, Services & Trading)



Source: Kayah State Planning Department

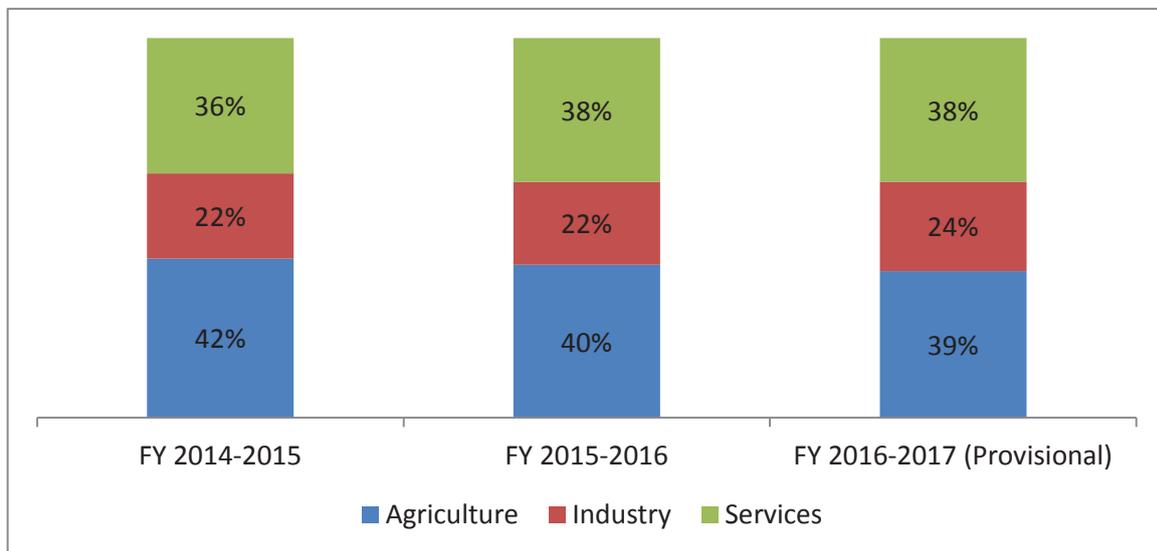
An analysis of the Marco economics shows the contribution of (PST) production, services and trading sectors and the contribution of (AIS) agriculture, industry and services sectors to the GDP of Myanmar.

In Myanmar National Comprehensive Development Plan, a projected increase in industry and services sector contribution ratio is expected compared to a decrease in agriculture sector contribution.

It does indicate a reduction in the overall agriculture sector but an improvement in the industrial sector. Due to an increase in agricultural products and improvement in the services sector, financial service, tourism service, health service and education service.

The contribution of agriculture sector in Kayah State's GDP has slightly decreased from FY 2014-2015 to FY 2016-2017. The industry sector contribution percentage has increases in FY 2016-2017 compared to FY 2015-2016, while services sector contributions remain the same compared to the previous year.

Figure 4: GDP sector contribution of Kayah State in current price (AIS - Agriculture, Industry & Services)

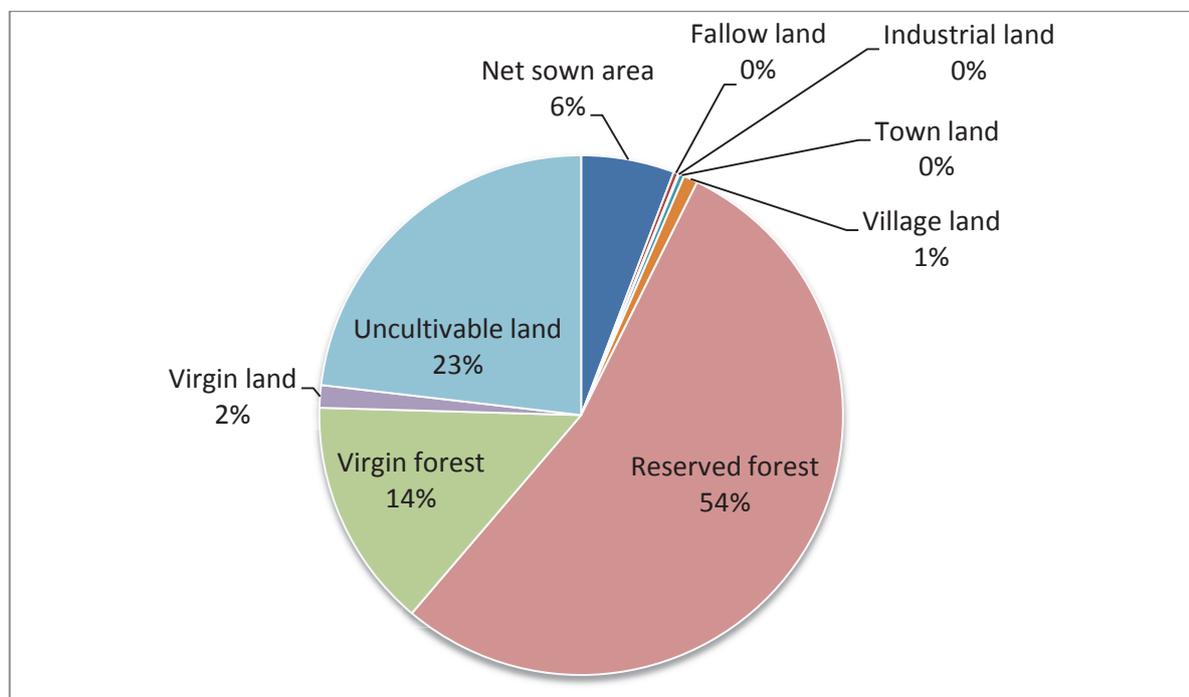


Source: Kayah State Planning Department

1.4. Land utilisation

The utilised area by various types of land in Kayah State is shown in the following: -

Figure 5: Land utilisation in Kayah State



Source: Kayah State Department of Land Management and Statistics

Table 5: Land utilisation of Kayah State (Acre) (FY 2016-2017)

No	Type of land	Area (acres)
1	Net area sown	167,696
	(a) Paddy	52,816
	(b) Ya	93,074
	(c) Kaing	-
	(d) Garden	798
	(e) Dhani	-
	(f) Taungya	21,008
2	Fallow land	10,275
3	Grazing land	-
4	Industrial land	2,150
5	Town land	9,802
6	Village land	25,181
7	Others	65,127
8	Reserved forest	1,562,100

9	Virgin forest	409,573
10	Virgin land	41,637
11	Uncultivable land	605,380
	Total	2,898,921

Source: Kayah State Department of Land Management and Statistics

There are six types of land classification in Kayah State: net sown area, fallow land, cultivable land, reserved forest, other forest and other land. The total net cultivated area in Kayah State is about 0.17 million acres. There are 8,393 acres of fallow land, 413,313 acres of virgin forest and 40,514 acres of virgin land; total area of 462,220 acres can be utilised as land for agricultural, livestock and other suitable businesses.

There has been a reallocation of 300 acres of forestry, and of 200 acres of crop land for commercial use. Two hundred acres of this is allocated to police battalions, staff residence and industry. The remaining 300 acres is allocated to four government offices, four business, three crop warehouses, three fuel filling stations and two telecommunication towers.

Some virgin land is allowed for use in four types of businesses; (1) agriculture, (2) livestock, (3) mining and (4) others (hotel, hospital etc.). For agricultural businesses, using under 50 acres land must be approved by state government but over 50 acres of land must have permission of central government. Any other businesses except agriculture must get permission of central government. All land area abandoned by military will be allotted for agriculture while the rest land will be for government officials and their offices. There will be also some allotment for private businesses and lands in Bawlakhe and Hpasawng can be applied for land use permit. Mese has a lot of forest area, leaving little acreage for business allowable by land management. The government has been asked for permission to re-designate 790 acres of forest area into town land because the current town land area of Mese is only 210 acres.

1.5. Agriculture

Kayah State's fertile soil, water supply and temperate climate is conducive to excellent agricultural conditions. The state's soil type suit various varieties of plants and crops. Kayah State is 2,898,921 acres of which 6% is presently cultivable (175,225 acres). There are 2,723,696 acres uncultivable, much being virgin forest and virgin land. Paddy and maize are mainly grown in Loikaw District, sesame in Bawlakhe District and other monsoon crops are sweet corn, pigeon pea, mung bean (green gram), other pulses & beans, coffee, tea leaf and vegetables.

Table 6: Production status of 10 major crops in Kayah State in FY 2016-2017 (Acre)

No	Name of crop	2016-2017 projection (acre)		FY 2016-2017			
				Cultivated acre	Harvested acre	Yield (basket/acre)	Production (basket)
1	Paddy	Summer	9,611	4,501	4,501	89.13	401,174
		Monsoon	98,965	90,679	90,679	67.19	6,093,103
2	Groundnut	Monsoon	12,122	11,819	11,819	45.35	535,957
		Winter	2,562	2,162	2,162	48.78	105,461
3	Sesame	Monsoon	18,819	22,644	22,644	9.83	222,656
		Winter	1,931	1,127	1,127	11.23	12,653
4	Sunflower	Monsoon	2,867	1,826	1,826	29.28	53,464
		Winter	2,817	2,288	2,288	28.71	65,681
5	Mung bean (green gram)	Monsoon	1,692	919	919	13.61	12,505
		Winter	1,187	975	975	12.75	12,434
6	Pigeon pea	Monsoon	13,985	10,389	10,389	12.82	133,223
7	Sugarcane	Monsoon	71	71	71	17.32	1,230
8	Maize	Monsoon	36,743	52,766	52,766	65.01	3,430,247
9	Black gram	Winter	-	177	177	8.65	1,531

Source: Kayah State Department of Land Management and Statistics

In Kayah State, over 90,000 acres of monsoon paddy, over 4,500 acres of summer paddy and nearly 14,000 acres of groundnut are grown. Maize productions cover 53,000 acres. By district, Loikaw District grows over 52,000 acres and Bawlakhe District grows only 100 acres. About 8,700 acres of millet is grown and Pyaung Kout (kind of maize) is used in the productions of Khaung Yay (Kayah traditional liqueur). Groundnut is grown in Loikaw, Demoso and Hpruso. Bawlakhe, Hpasawng, Mese and Ywarthit Townships of Bawlakhe District mainly grow sesame and there are about 23,000 acres in area. Cotton is not suit to Kayah's climate, and only 71 acres of sugarcane is planted irregularly.

Major water resources for irrigated agricultural land are Moebye Dam and Ngwe Taung Dam while Daw Ta Char Dam in Bawlakhe Township mainly potable water. Although 41 inches of rainfall was recorded in 2017, only a few acre of paddy was able to be grown in Bawlakhe District due inadequate water efficiency. Paddy productivity from pilot field is about 140 baskets per acre and average yield is about 82 baskets per acre of paddy field, 50 baskets per acre of Ya (cropland) and the state average yield is 67 baskets per acre. Yield for maize is 60-65 baskets per acre. In the fiscal year of 2016-2017, Kayah local rice demand was 4.7 million baskets, leaving rice production at 136.98%. Kayah State produces oil crops such as groundnut, sesame, sunflower, mustard, and sorghum, and oil production is about 162.46%.

Table 7: Production status of perennial plants in Kayah State in FY 2016-2017 (Acre)

No	Types of perennial plant	Perennial plants cultivated acre		
		Loikaw District	Bawlakhe District	Total
1	Coconut	53	118	171
2	Tea leaf	52	-	52
3	Coffee	1,490	250	1,740
4	Cardamom	2,335	2,340	4,675
5	Areca nut	76	63	139
6	Betel leaf	198	50	248
7	Banana	1,723	600	2,323

Source: Kayah State Department of Land Management and Statistics

A potential perennial crop in Kayah State is areca nut. Bawlakhe District grows a small amount of areca nut but this is presently not commercial viable. Avocado, orange, mango and coffee are grown extensively in Kayah State. Coffee cultivation has increased and there are over 700 acres planted in the state. Tamarind is cultivated in the state, and in good condition can fulfil local demand. There has been little subsidiary crop cultivation, in the past, however more recently farmers are starting to plant oil crops, garlic, onion and pulses & beans after harvesting paddy.

Table 8: Production status of other marketable crops in Kayah State in FY 2016-2017 (Acre)

No	Types of crop	Cultivated acre		
		Loikaw District	Bawlakhe District	Total
1	Onion	2,079	143	2,222
2	Garlic	2,468	496	2,964
3	Chilli	3,132	1,148	4,280
4	Sorghum	10,556	200	10,756
5	Banana	1,723	600	2,323
6	Long pepper	-	90	90
7	Vegetable	20,866	6,107	26,973

Source: Kayah State Department of Land Management and Statistics

Some larger equipment is used for soil toiling before cultivation, however for economic reasons some farmers prefer mini hand tractors/ power tillers. Recently farmers are utilising advances in technology, combine harvesters and seeding machines. Kayah State's agriculture industry is embracing mechanised farming.

1.5.1. Agricultural production cost

(1) Paddy

Paddy is mainly grown in Loikaw District. Monsoon paddy is grown in July and August; and harvested in November and December. Monsoon paddy of about 90,000 acres and summer paddy of about 4,500 acres is grown. The most common varieties of paddy are Shwe Yin Aye (1, 2) and Ta Yoke Mway. The average paddy yield is 80-100 baskets per acre. While there is significant paddy production in Kayah State, most rice mills use only rice hullers or rice huskers. There is only one large rice-milling machine in the state producing qualified rice. The total production cost for cultivation of monsoon paddy is MMK 357,000, detailed costs for each stage are shown in the following table: -

Table 9: Production costs for one acre of monsoon paddy

No	Task	Price for one unit (MMK)	Total costs (MMK)
1	Nursery soil preparation		14,500
	Ploughing	15,000	1,500
	Hallowing	15,000	3,000
	Putting cow dung	5,000	5,000
	Seed sowing	5,000	5,000
2	Cultivation soil preparation		40,000
	Ploughing	15,000	15,000
	Hallowing	15,000	15,000
	Cleansing	5,000	10,000
3	Cultivation		80,000
	Pull out rice seedling and carrying	5,000	30,000
	Transplanting	5,000	50,000
4	Care for seedling		60,000
	Cleansing	5,000	50,000
	Spreading agro chemical	5,000	10,000
5	Harvesting		55,000
	Harvesting	5,000	55,000
6	Threshing and winnowing		20,500
	Threshing and winnowing	100	5,500
	Carrying to the warehouse	5,000	15,000
7	Inputs		87,000
	Seeds - half basket	10,000	15,000
	Urea – one bag	22,000	22,000
	Compound – one bag	40,000	40,000
	Insecticides – 0.5 litre	15,000	10,000
	Total		357,000

Source: Kayah State Department of Agriculture

(2) Maize

Maize, mainly cultivated in Loikaw, is grown in May and harvested in October. Kayah State grows about 53,000 acres of maize, yielding 60-65 baskets per acre. Some maize farmers currently buy maize seeds at expensive prices from companies, while others buy from the Department of Agriculture at cheaper prices. Corn drying has potential as a business in Kayah State as there are few corn drying machines in the state. The total production cost for cultivation of maize is MMK 293,000 and the detailed costs for each stage are shown in the following table: -

Table 10: Production costs for one acre of maize

No	Task	Price for one unit (MMK)	Total costs (MMK)
1	Soil preparation		40,000
	Ploughing	15,000	15,000
	Hallowing	15,000	15,000
	Other preparation	5,000	10,000
2	Cultivation		10,000
	Seed sowing	5,000	10,000
3	Care for seedling		40,000
	Weeding	5,000	40,000
4	Harvesting		131,000
	Reaping	5,000	40,000
	Carrying	5,000	30,000
	Plucking	5,000	30,000
	Sun drying	5,000	10,000
	Seed producing	200	11,000
	Winnowing	5,000	10,000
5	Inputs		72,000
	Seed – one sack	18,000	18,000
	Compound – one bag	22,000	22,000
	Cow dung – two carts	5,000	10,000
	Urea – one bag	22,000	22,000
	Total		293,000

Source: Kayah State Department of Agriculture

(3) Groundnut

Groundnut is mainly grown in Loikaw, Demoso and Hpruso Townships with nearly 14,000 acres of groundnut grown. The total production cost for cultivation of groundnut is MMK 317,800 and the detailed costs for each stage are shown in the following table: -

Table 11: Production costs for one acre of groundnut

No	Task	Price for one unit (MMK)	Total costs (MMK)
1	Soil preparation		45,000
	Ploughing	15,000	15,000
	Hallowing	15,000	15,000
	Other preparation	5,000	5,000
	Broadcasting chemical fertilizers	5,000	5,000
	Putting cow dung	5,000	5,000
2	Cultivation		40,000
	Seed preparation	5,000	20,000
	Seed sowing	5,000	10,000
	Seed covering	5,000	10,000
3	Care seedling		50,000
	Weeding	5,000	30,000
	Land	5,000	20,000
4	Harvesting		30,000
	Reaping	5,000	30,000
5	Threshing and winnowing		70,000
	Threshing	5,000	30,000
	Sun drying	5,000	20,000
	Winnowing	5,000	20,000
6	Inputs		82,800
	Seeds – six baskets	7,000	42,000
	Compound – half bag	40,000	20,000
	Cow dung – two carts	5,000	10,000
	Calcium carbonate – six bags	1,800	10,800
	Total		317,800

Source: Kayah State Department of Agriculture

(4) Sesame

The major crop grown in Bawlakhe District is sesame. Sesame cultivation, starts with soil preparation in May and June and seeds sown during the second week of June. Some farmers use direct seeding method (broadcasting method) while others use transplanting method by applying technology provided by the Department of Agriculture. Weeding takes place in the last week of July after which the sesame seed is separated at the end of June. According to the condition of sesame, the plants are harvested during September and October. After harvesting of sesame plants, bunches of sesame are shaken to clean and sent to the farmers' home for storage. The total production cost for cultivation of sesame is MMK 238,000 and the detailed costs for each stage are shown in the following table: -

Table 12: Production costs for one acre of sesame cultivation in Bawlakhe District

No	Task	Price for one unit (MMK)	Total costs (MMK)
1	Soil preparation		30,000
	Ploughing	15,000	15,000
	Harrowing	15,000	15,000
2	Cultivation		15,000
	Seed sowing	5,000	15,000
3	Care for seedling		40,000
	Weeding	5,000	40,000
4	Harvesting		75,000
	Harvesting	5,000	40,000
	Carrying plants and piling	5,000	20,000
	Prepare for threshing	5,000	15,000
5	Threshing and winnowing		20,000
	Sesame cleaning	5,000	20,000
6	Inputs		58,000
	Seed – two Pyi	4,000	8,000
	Insecticide - one litre	16,000	16,000
	Compound – half bag	40,000	20,000
	Fungicides – one bag	14,000	14,000
	Total		238,000

Source: Kayah State Department of Agriculture

1.5.2. Agricultural produce trading

(1) Paddy

Rice produced in Kayah State is primarily for local consumption with surpluses exported annually to Shan State and China. That slightly sticky rice species is mostly preferred by Shan and Chinese People as well as Kayah local people. Rice required for local consumption is also imported from Yangon, Sagaing and Magway Regions. Annually over 30,000 bags (50 kilograms per bag) is being imported.

(2) Maize

Maize produced from Kayah State is dried before sending to mainly the Mandalay Region. About 1,938.41 tonnes per week (i.e. 277 tonnes per day) is exported with a current price of MMK 470 per viss¹. Farmers generally sell their crops to the brokers who buy directly at the villages.

Currently, there is only one large machine (production capacity is 90 tonnes per day) and two small machines for maize drying and there is demand for corn dryers in the state. There are business opportunities for establishing high quality corn drying machines to produce value-added maize/corn products and distribute them to domestic and foreign countries. At the moment, Myo Myanmar Corn Drying Machine is preparing to run small machines that have the output of 15 tonnes and 30 tonnes per day.

(3) Sesame

Sesame is grown mostly in Bawlakhe District, farmers generally sell directly to the brokers who come and buy at their villages. Some farmers sell their product at the Mandalay wholesale centre. The farmers define the prices for their products based on the daily opening prices at the Mandalay wholesale centre via phone connection with the brokers in Mandalay. It is recorded that the yield of the sesame produced from Meihtan, Wonchae, Shitkwat, Zaunglot and Nantnount villages of Bawlakhe Township is about 30 trucks. Sesame farmers have experienced difficulties with the decreasing sesame price during the current year of 2018. Brokers offering lower prices for lower quality sesame resulting in lower income for farmers.

¹ 1 viss = 1.64 kg (0.0016 tonnes)

1.5.3. Agricultural findings

Kayah State Department of Agriculture (DOA) does not distribute agricultural chemicals such as chemical fertiliser and insecticide anymore, only distributing seeds to the farmers. The department conducts trials and operates pilot fields of a range of crops and plants in the region. DOA periodically inspects chemical fertilisers sold by private companies and takes effective sanctions against invalid products. In accordance with the policy of Department of Agriculture to implement the cultivation processes under GAP² protocol, the department occasionally conducts the training courses using GAP protocol system and educates the farmers to utilise the chemical fertilisers and insecticides safely. Agricultural Mechanisation Department also provides the training courses for using agricultural machinery.

From the perspective of DOA, potential agricultural businesses in Kayah State are production of paddy (rice), sesame and maize; mulberry cultivation and silk production; establishing corn drying machines; building of fusion maize food factories; and biscuit factories. Labour costs are relatively high for manual seeds sowing, automation saves on labour cost. Quality chemical fertilisers at reasonable price are provided by the relevant government departments. Systematic controlled livestock breeding plans will be improved by installing fences to prevent free-roaming cattle interfering with breed herds.

Encouraging the export of Kayah agricultural products to domestic and foreign markets and to prevent purchasing lower priced products by traders and brokers in domestic and border trade markets, farmers and Kayah local traders should communicate directly with the traders from foreign countries. In Kayah state the largest miller is Swe Myo Rice Miller, whose machines can produce 30 tonnes and 25 tonnes of rice per day, while there are over 30 smaller family operated rice millers. Swe Myo Rice Miller cultivates paddy themselves and buys paddy locally, distributing the milled rice to other states and regions. By 2018, Swe Myo Rice Miller is planning to increase production by 60 tonnes per day.

1.6. Water resources

In Kayah State, water from irrigation canals funded by the government and local citizens are being used for agricultural purposes. Although there are government and self-built dams in Loikaw District, there are only two dams funded by the government in Bawlakhe District. There is no dam projects, embankments, or dam gates and shutters. Kayah State has 35,802 acres irrigated.

² Good Agricultural Practices

Table 13: Irrigation canals, embankments and irrigated area in Kayah State

No	District	Dam	Stone Pitching	Concrete	Wood/ Earthen	Spillway	Irrigated area
(A) Dams built by the government							
1	Loikaw	21	-	-	-	9	43,951
2	Bawlakhe	1	-	-	-	-	-
	Total	22	-	-	-	9	43,951
(B) Self-built dams by citizens							
1	Loikaw	8	-	-	-	14	1,124
2	Bawlakhe	2	-	-	-	9	1,645
	Total	10	-	-	-	23	2,769

Source: Kayah State Irrigation Department

Ngwe Taung Dam

Ngwe Taung Dam is an earthen dam located in Ngwe Taung Ward of Demoso Township. The dam was built with the background of Shwe Taung (Golden Mountain), Ngwe Taung (Silver Mountain) and Padamyar Taung (Ruby Mountain) in 1965. The dam is over 50 years old, systematic maintenance is carried out on the dam. There are about 33 inches of yearly rainfall on average and the yearly average amount of water that flows into the dam is 17,189 acre-feet. The dam is 35 feet in height, 6,000 feet in length, with 8,920 acre-feet capacity and it is projected to irrigate an of 6,291 acres. Ngwe Taung Dam attracts many Kayah local people and foreign tourists.

Figure 6: Ngwe Taung Dam



Moebye Dam

Located in the Shan State and 18 miles (29 kilometres) away from Loikaw of Kayah State, Moebye Dam's water source is Inle Lake and it continues flowing to the south as Balu Chaung. Moebye Dam construction started in 1968 and finished on 30 September 1970. Before the construction of Moebye Dam, Lawpita Hydropower Plants only water resource was the Balu Chaung river, electric capacity has increased as a result of the construction of Moebye Dam. A distinctive feature of the dam is that there are two locks that are used for raising and lowering the watercraft with four feet draught and there is 76 miles (122 kilometres) canal that reaches Pekon, Inle and Loikaw. It is the only dam in Myanmar that is different in size but with the same functions as the Panama Canal. However, the waterway through the dam has been closed since 1999 due to security concerns. Planning is under to conduct maintenance on Moebye Dam in coordination with the foreign experts.

Figure 7: Moebye Dam



Source: Kayah State Directorate of Hotel and Tourism

1.7. Livestock

Kayah State offers good potential as a livestock breeding area. The following table shows the status of livestock breeding in Kayah State: -

Table 14: Livestock breeding in Kayah State (Head) (till January 2018)

No	Type of animal	Loikaw District	Bawlakhe District	Total
1	Buffalo	34,341	4,181	38,375
2	Cow	96,377	5,947	102,324
3	Pig	144,582	15,723	160,305
4	Sheep/ Goat	1,102	2,838	3,917
5	Chicken	2,883,863	153,782	3,037,645
6	Duck	24,261	1,896	26,157
7	Turkey/ Goose	8,223	501	8,724

Source: Kayah State Livestock Breeding and Veterinary Department

Most of the animal breeding in Kayah State takes place in the form of small-scale livestock farming rather than commercial farms. Chicken consumption rate is high in the state while there are no commercial duck breeding farms due to consumption rate. Although there is high potential for chicken breeding, larger companies dictate price, making smaller farms harder to run profitably. Vehicles from Mandalay carrying about 10,000 heads of chicken enter Kayah State every week. Pig, chicken for egg production and cow breeding are potential businesses in Loikaw and Demoso. Priority should be given to cow and pig breeding due to the easy access to rice bran and broken grains.

Pig and goat breeding is beneficial in the short-term while dairy cows breeding is better for long-term benefits. Kayah people prefer to consume black pig rather than white pig. In the past, there were pig-breeding farms of up to 30-40 pigs, however, breeding has decreased after the disease 'Porcine Reproductive & Respiratory Syndrome' entered the state. Kayah State Livestock Breeding and Veterinary Department distributed over 1,000 heads of pigs for breeding within three years. There is a great opportunity for goat breeding due to plentiful acreage of rich pasture in Kayah State. Currently, goat breeding is low and goats brought from elsewhere in Myanmar face high mortality risks through unsuitable weather. To mitigate this risk, it should consider crossbreeding mainland goats with Boer goat from Thailand. The building of fusion food factory is a potential enterprise in Kayah State as there presently none in the state. Support for livestock breeding and veterinary are being provided with the arrangement of Union Government or State Government. However, it is necessary to conduct education of livestock breeding for potential businesses and there is also a need for disease prevention and treatment technology for animals.

Fishery

Kayah State’s Department of Fisheries (DOF) has adopted a policy for self-sufficiency level for fishing, consumer food safety and sustainable economic growth of fishery enterprises. The department is looking to increase the per capita income of fish farmers and fishery workers, meet the fish self-sufficiency level and long-term development for the fishery enterprises without damaging the state diversity of fish species. The activities conducted by Department of Fisheries mainly targets the fishing farms in villages. On average there are 160 fish farmers, 859.9 acres of fishing farms and over 400 viss of fish caught per acre.

Kayah State Fishery Federation was formed in 2016 with 95 members. Kayah State Department of Fisheries occasionally has meetings with the Fishery Federation to coordinate fishery related issues.

For the development of the fisheries sector of rural communities, 11 groups were formed with the permission of Department of Fisheries (headquarters) and the approval of the state government to be called the emerald green groups (fishery sector). These groups are operating fishery enterprises with capital provided from Union Budget.

The current area of fishing farms in the state is 892.91 acres and the DOF is looking to expand this acreage for fishery enterprise development. Demoso Township and Phaung Taw Inn region are potential areas for fish farming zones. The areas are marshland and unsuitable for agricultural cultivation. There are currently 20 fish farmers with more than 250 acres of fish farms and a prospective area of about 200 acres available for more fish farms.

In addition to wild caught freshwater fishes and breeding fishes within the state, freshwater fishes and prawns and saltwater fish and prawns are imported from Yangon Region, Mandalay Region and Pekon Township of Shan State arriving at the wholesale centre and distributed to the whole state. There is currently no prawn breeding in Kayah State.

Table 15: Kayah State fisheries status

No	District	Fish		
		No of farms	Acre	Production (tonne)
1	Loikaw	57	119.95	121.30
2	Bawlakhe	-	-	-
Total		57	119.95	121.30

The followings are three small-scale backyard hatcheries which were established with the Union’s Budget in the Kayah State and producing fingerlings: -

- (1) The State Department of Fisheries, small-scale backyard hatchery,
- (2) Military owned small-scale backyard hatchery,

(3) U Shar Mu Aye Hla, Naung Pa Le Village, Demoso Township, small-scale backyard hatchery.

In the fiscal year of 2017-2018, the status of fingerlings production is as follows: -

Table 16: Kayah State fingerlings production status

No	Backyard Hatchery	Production (thousand heads)		
		Particles	Fry	Total
1	The State Department of Fisheries	-	510	510
2	Military	-	210	210
3	Naung Pa Le	-	200	200
		-	920	920

The Department of Fisheries uses natural methods and water resources to grow fingerlings to provide free to fish farmers. The military backyard hatchery provides fingerlings for fish farms owned and operated by the military. Naung Pa Le is a private hatchery producing for own use and selling fingerlings to local village fish ponds at reasonable prices.

In the fiscal year of 2017-2018, a total of 97,100 fries were distributed to fish farmers. With a total of 585,000 fingerlings going to 13 locations, namely, Naung Yar Lake, Balu Chaung, Ngwe Taung Dam, Seven Serial Lakes, Loi Nan Pa Dam, Ngwe Taung Agricultural Farm, Hoe Htar Dam, Htoo Lwei Bee Lar Lake, Par Do Du Lake, Htee Por So Lake, Nwarlawo Dam, Htee Ngar Lyar Lake, and Bar Do Lake.

The following requirements need to be met and develop fish sustainability in Kayah State: -

1. To improve the underdeveloped wild fish catching enterprises,
2. To provide technology for the fish farmers who lack the technical and financing support for local fish farming,
3. To educate the farmers about legal restrictions, rules and regulations for fishing enterprises,
4. To provide sufficient manpower for the DOF's to conduct efficient operations and departmental services, and
5. For the DOF to develop a backyard fish hatchery in order to fulfil the fingerling requirement for the fish farmers.

1.8. Mining

There are a multitude of mineral resources in Kayah State, including, antimony, lead and lead mixed ore, tin-tungsten, and industrial use limestone. Mawchi Mine is located in Hpasawng Township, 96 miles (154 kilometres) from the south-west part of Loikaw, located between 1,500 and 4,500 feet altitude above sea level. This mine is the largest tin and tungsten mine in Myanmar and started mineral production in 1930. There is no gem or precious stone production in Kayah State.

Table 17: Mineral production of mining companies, Kayah State Ministry of Natural Resources and Environmental Conservation

No	Particulars	Company	Production (Metric tonne)
1	Antimony ore	9	4,566
2	Lead and lead mix ore	2	500
3	Tin-tungsten mix ore	5	770

Source: Department of Mines

In Kayah State, under Department of Mines, No (1) Mining Enterprise manages the production of antimony and lead & lead mix ore while No (2) Mining Enterprise manages the production of gold and tin-tungsten. There are 7,024 acres of large mine sites, 722.4 acres of small mine sites, 583.3 acres of small testing mine sites and totally 8,329.7 acres, under Kayah State Ministry of Natural Resources and Environmental Conservation control. Land utilized for mine extraction is about 0.287% so has limited environmental impact. Gunpowder is used during the extraction of minerals. On the Mohs' scale of mineral hardness for tin and tungsten product from Mawchi Mine is quite high. The system of license extension for mineral excavation sites was annually in 2012, since 2015 this has been extended to five years. This change has reduced mineral production companies operating costs. However, the global mineral price has been continuously decreasing for three years since 2012, with a slightly increase in the FY 2016-2017.

Annual mineral extraction plan for antimony and lead is submitted to the No (1) Mining Enterprise, extraction of tin-tungsten is submitted monthly to the No (2) Mining Enterprise.

When the company requests sales of the minerals, the company must request to headquarters collection of sample of the mineral to be sold. Headquarters send a sample collecting team for inspection of samples in the laboratory at the head office. Based on the result and the percentage of minerals, the value for the minerals is calculated according to the market price at current global mineral market price (London Metal Exchange - LME), and the mineral tax to the government is calculated. Tin and tungsten of Kayah State is defined as a mineral percentage of 65% but has been set as 55% by the Ministry of Natural Resources and Environmental Conservation.

Mawchi Mine can provide job opportunities for the local Kayah population. The mining companies currently use traditional methods in extraction of minerals. No (2) Mining Enterprise is under pressure to extract 100 tonnes of minerals per annum, while joint extraction with private companies produces over 500 tonnes per year. Recent mineral extraction companies have temporarily stopped exploring since 2015. The labour cost at Mawchi Mine is MMK 6,000 to 10,000 for daily workers and MMK 15,000 is paid for skilled workers.

Priority should be considered into mineral veins research, concurrently with construction of mineral purification factories with the view to potential foreign markets, when considering the present market is limited to China.

Table 18: The status of antimony production of collaborative companies with No (1) Mining Enterprise of Kayah State

No	Company Name	Antimony ore (tonne)
1	Thura Kan Chon Mining Co Ltd	1,384
2	Hawk Eye Mining Co Ltd	911
3	Trade Supporting Myanmar Co Ltd	313
4	Kayah Golden Gate Mining Co Ltd	560
5	C1	454
6	Htee Day Star	614
7	Kayan Mining Co Ltd	90
8	Asia A & T	240
	Total	4,566

Table 19: The status of lead and lead mix ore production of collaborative companies with No (1) Mining Enterprise of Kayah State

No	Company Name	Lead and lead mix ore (tonne)
1	Thuwana Shwe Zin	250
2	Kayah Htar Ni Mining Co Ltd	250
	Total	500

Table 20: The status of tin-tungsten production of collaborative companies with No (2) Mining Enterprise of Kayah State

No	Company Name	Tin-tungsten mix ore (tonne)
1	Kayah State Mining Co Ltd	390
2	Kayah Htar Ni Mining Co Ltd	150
3	Ye Htut Kyaw Mining Co Ltd	50
4	Lae Mu Kho	50
	Total	640

Mawchi Mine

The Mawchi Mine extracts the largest commercial tin-tungsten mix ore in Myanmar. Extraction of tin-tungsten has been reached with an agreement between Karenni Chief Kay Pho Du and British Government after conducting research in 1830 and is still in operation today. At the moment, the Kayah State Mining Co Ltd covers 7,024 acres, Ye Htut Kyaw Mining Co Ltd 99 acres, Kayah Htar Ni Mining Co Ltd 49.5 acres, and Lae Mu Kho 48.4 acres for a total 7,220.9 acres of production.

Figure 8: Mawchi Mine (Ye Htut Kyaw Co Ltd.'s mining site)



Myanmar Golden Bonanza Co Ltd

Myanmar Golden Bonanza Co Ltd (from 1 August 2017 to 31 January 2018) obtained a business license and permit in Loikaw to build a purification factory for tin and tungsten from No (2) Mining Enterprise, according to deputy manager U Saw Nae Say who submitted the report to the head office of No (2) Mining Enterprise in February 2018.

Myanmar Golden Bonanza Co Ltd purified 112.2931 metric tonnes of low grade mixed ore bought from No (2) Mining Enterprise in May of 2017. This purified mix ore was further purified to produce 7 tonnes of highly purified minerals in July 2017. The factory purified 13 additional tonnes between August 2017 and January 2018. Resulting in a total of 20 metric tonnes purified by the factory.

During the time of this report, Myanmar Golden Bonanza Co Ltd was not invited to tender, while its partner company, Shwe Lan Kabar Co Ltd purified 164.6 metric tonnes of mix ore obtained from the tender of 2015-2016. This purified mineral of 157.328 metric tonnes was planned for exported to foreign countries and the mineral inspection teams conducted the measurement early in January 2018. The monthly purification capacity of No (2) Mining Enterprise is 50 tonnes. Companies are specifically forbidden from buying and purifying illegally extracted mineral resources. In the long-term interests of No (2) Mining Enterprise, simple purification is uneconomical, and the company should investigate mineral extraction.

1.9. Forestry

Kayah State is a woody and mountainous region. Indigenous trees of Kayah State include teak, pyinkado, pine, hard woods, and varieties of bamboo, medicinal plants and flowers. There are 39 species of orchids which can be found in Loikaw, Demoso, Hpruso, Bawlakhe, Mese and Hpasawng Townships, another 6 species of orchid hybrids and a total of 45 species are grown in Kayah State.

State-owned commercial plantations (50 acres) and private plantations (140 acres) are established. Three business owners have established plantations of nearly 0.15 million plants. Timber production tonnes in Bawlakhe district total 787 tonnes of teak, in Loikaw District 2,363 tonnes of teak and 3,810 tonnes of pyinkado in Bawlakhe District.

Forestry products found in Kayah State include firewood, charcoal, bamboo, Dhani, resin, bark, thanakha, cardamom seeds, honey and bongmaiza (*Rauvolfia*).

Table 21: The status of forests in Kayah State

No	District	Reserved forest (acres)	Protected public forest (acres)	Total acres	Varieties of plants
1	Loikaw	71,564	463,318	534,882	30
2	Bawlakhe	101,115	926,103	1,027,218	17
Total		172,679	1,389,421	1,562,100	47

Source: Kayah State Forest Department

Nationally, Kayah State has the largest acreage under forest. The state government rejected requests from hardwood timber companies for felling indigenous wood and this has hampered the wood industries. Local consumption is met by importing from Yangon, Mandalay and Tachilek of Shan State, increasing costs due to transportation charges.

Wood product industries are numerous due to the former government allowing foreign exporting. For the sake of peace, wood industries by ethnic groups was permitted, however, the current government is lobbying against this.

The government is projecting 3,000 tonnes of timber in 2018-2019. Timber from illegal logging and trading are seized by the State Forest Department and transferred to state government for re-sale back to the timber market.

Private wood plantations should be encouraged. Wood factories of the Myanmar Timber Enterprise stopped operation in 2013. Although no private plantations are presently allowed, the government is making changes and planning to allow the establishment of private plantation organizations in the year of 2018-2019. There is demand for raw materials for local timber enterprises and wood products for manufacturing companies.

Wood Production Status

Kayah State has extensive forestry, cultivating of pyinkado, and predominately teak, and padauk. While logging is illegal and the legal system is weak, there remain some areas with illegal wood and timber production. Predominate timber production is in Kayah State Bawlakhe, Mese, Hpasawng and Ywarthit. Mese has some illegal timber trading as well as other products from border trade. Illegal logging can be found in the opposite site of Than Lwin River some, four miles from Ywarthit of Bawlakhe District, Hwayhaw Village of Ywarthit Sub-township and Hway Pone Laung Village of Mese Township.

Rather than selling wood as a raw material, wooden product manufacturing, with the support of the government, should be established, stimulating local profits and employment opportunities in the state. Teak is the dominate product, followed by padauk. Wood trading takes place as either raw logs or sawn wood blocks. A large volume of wood can be found on the opposite site of Than Lwin River, in Ywarthit, It could be predicted that a large volume of wood is being cut in the forest from the debris in the stranded area. This logging is known to have been carried out by those related to ethnic armed groups and this wood is being carried by trucks or by Z- crafts. Wood is illegally exported to other states and regions through Loikaw. Raw wood and wood off-cuts are carried by trucks to Loikaw via Pyidaungsu main road at night. For this illegal wood export to other states and regions to be controlled this issue needs to be addressed by the state government and Forest Department.

Although the use of wood within Mese area is not limited, carrying any kind of wood to other area is prevented. Township administrator have made it illegal to take beds, wardrobes and settees made of any kind of wood to the area out of Mese. Valuable teak and padauk in Bawlakhe District of Kayah State is used in illegal logging.

If the government can establish forestry and wooden products manufacturing enterprises and this would create job opportunities for local people and that products will be one of the profitable goods manufactured in the Kayah State. If the government can establish and control forestry and wood product enterprises in Kayah State, this would encourage manufacturing, creating income and employment opportunities for locals.

Figure 9: Wood production status at the opposite site of Than Lwin River, Ywarthit Township



2. Infrastructure

Sustainable infrastructure development in Kayah State can effectively contribute to the country’s development. Currently, both government and private sectors are participating in various projects to improve infrastructure in the region. The Kayah State government has detailed plans for regional development to reduce the gaps between regions and improve the overall living standards of the people.

2.1. Road

2.1.1. Road conditions in Kayah State

The length of road managed by the union government in Kayah State is 550.92 miles (886.62 kilometres). It takes a day to travel within the Kayah State. There are 19 roads and 10 township-to-township roads in the state. There is a road widening project for the main asphalt road that connects the state’s major cities such as Loikaw, Demoso, Hpruso, Bawlakhe, Hpasawng, Mese and BP-13 from 12 feet (3.66 metres) to 18 feet (5.49 metres). There is a project plan for upgrading the road of Than Lwin Bridge (Soupai) which is situated on the road of Bawlakhe-Ywarthit-Soupai-BP10.

Table 22: Number of roads and distance in FY 2017-2018

No	District	Total number of roads	Distance (miles)
1	Loikaw	14	315.56
2	Bawlakhe	8	235.36
Total		22	550.92

Source: Kayah State Department of Highway

Table 23: Number of township-to-township roads in FY 2017-2018

No	District	Total roads	Length (mile)	Types of road (mile)				
				AC	Asphalt	Gravelled	Earthen	Solid earthen
1	Loikaw	6	178.38	7.30	168.57	-	-	2.50
2	Bawlakhe	4	136.56	2.38	134.19	-	-	-
Total		10	314.94	9.68	302.76	-	-	2.50

Source: Kayah State Department of Highway

Figure 10: Road map of Kayah State

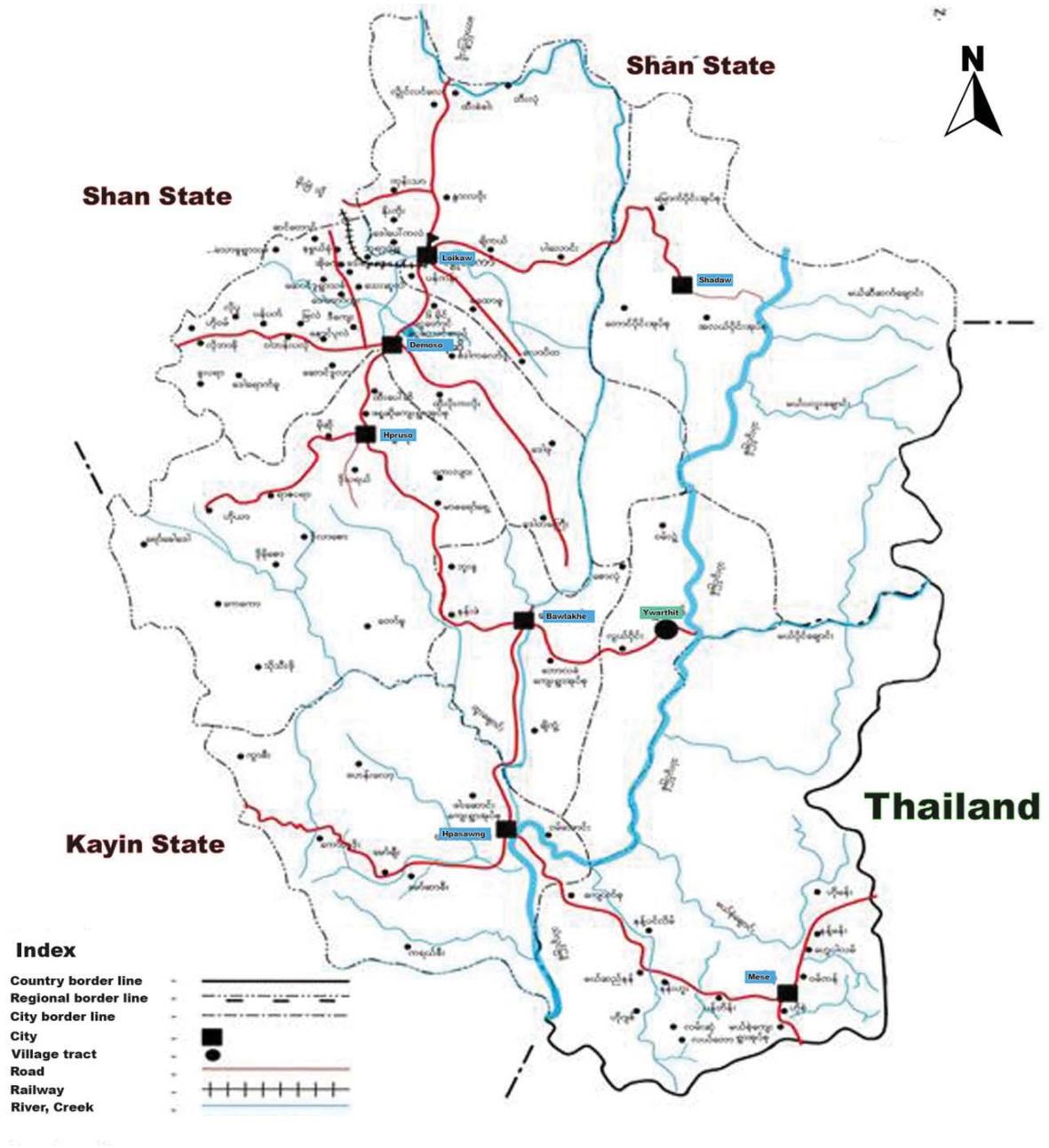


Table 24: Number of roads and distance in Kayah State (FY 2017-2018)

No	District	Name of the road	Length (mile)
1	Loikaw	Aungban-Pinlaung-Moebye-Loikaw	6.75
2		Taungoo-Leiktho-Yardo-Loikaw-Hopone	48.46
3		Taungoo-Mawchi-Demoso	28.50
4		New Loikaw City Road	37.81
5		Loikaw-Punchaung-Shadaw	47.04
6		Loilin-Teelon	8.00
7		HteeSeKha-PaineChit	2.50
8		Loikaw-Lawpita	12.25
9		Demoso-NanMaeKhon-Moebye	12.25
10		Demoso-Dawnyaykhu-Bawlakhe	35.38
11		Lupo-Pikin	5.13
12		Hpruso-Muso-Hoyar	25.00
13		Yardo-Kaykaw	21.50
14		Shadaw-Ywarthit	25.00
		Loikaw Total	315.57
1	Bawlakhe	Taungoo-Mawchi-Demoso	81.75
2		Pharpon-Kawtludo-Sawhta-Hteehta-Kemaphyu	40.25
3		Hpasawng-Mesenan-Mese-Nanman-BP13	49.25
4		Demoso-Dawnyaykhu-Bawlakhe	4.50
5		Shadaw-Ywarthit	23.00
6		Bawlakhe-Ywarthit-Soupai	27.06
7		Pun Chaung Bridge Approach(Bawlakhe)	0.55
8		Mesenan-Hogit	9.00
		Bawlakhe Total	235.36
		Total	550.93

Source: Kayah State Department of Highway

There are 13 bridges over 180 feet the Than Lwin Bridge (Hpasawng) is one of the major bridges, and is located on the Hpasawng-Mese road, this bridge will become more useful as border trading is developed.

Table 25: Over 180-foot bridges in Kayah State in FY 2017-2018

No	District	Total bridges of 180 feet and over
1	Loikaw	9
2	Bawlakhe	4
Total		13

Source: Kayah State Department of Highway

Balu Chaung Bridge (Daw Noe Kuu)

Ministry of Construction of Union of the Republic of Myanmar and Kayah State government built Balu Chaung Bridge (Shan Paing) this bridge opened on 11 June 2017, located in Loikaw, the bridge is 230 feet (70 kilometres) in length. There are six bridges over the Balu Chaung river in Loikaw city. The wooden Daw Noe Kuu Bridge is being upgraded into a RC bridge (reinforced concrete) in the fiscal year of 2017-2018. This bridge is 200 feet long and 24 feet wide.

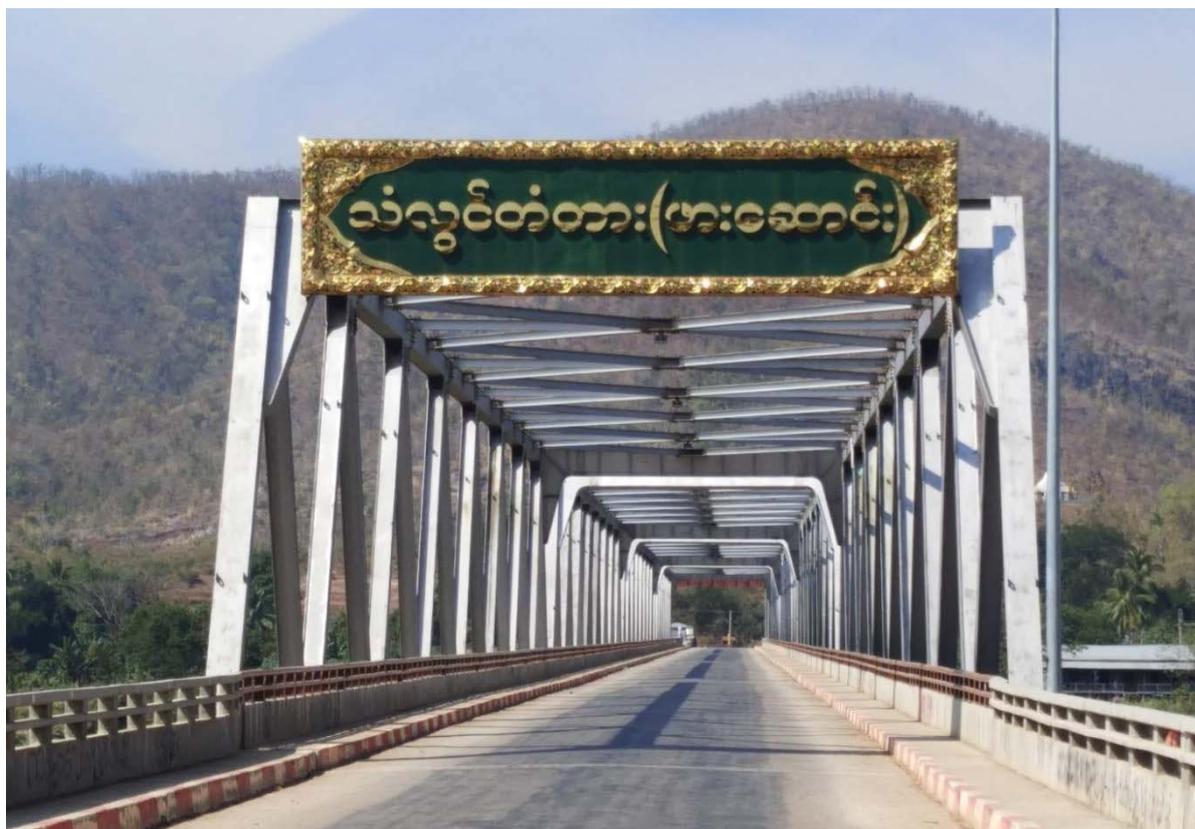
Figure 11: Balu Chaung Bridge (Shan Paing)



Than Lwin Bridge (Hpasawng)

The Than Lwin Bridge (Hpasawng) spans the Than Lwin River that passes through Hpasawng Township. The length of the bridge is 1,260 feet (384 kilometres), the width is 30 feet (9 kilometres) it is RC (reinforced concrete) bridge with RC foundation and RC frame and it opened in 2015. The bridge is on the main road of Hpasawng-Mese-Nantman and is an important conduit for Mese border trade with Thailand.

Figure 12: Than Lwin Bridge (Hpasawng)



2.1.2. Waterway conditions in Kayah State

Despite the Than Lwin River passing through Kayah State, it is rarely used for business purposes. Balu Chaung River is used as a waterway while other streams are unsuitable due to being too shallow and rocky. It is planned to use the waterway via Balu Chaung to travel to Inle Lake after the opening of Moebye Dam.

Table 26: Waterway condition in Kayah State

No	District	Total waterways	Total miles	Total jetties
1	Loikaw	1	12	-
2	Bawlakhe	-	-	-
Total		1	12	-

Source: Kayah State Department of Marine Administration

2.1.3. Transport and logistics in Kayah State

Kayah State Public Transport Association was established in 1987. There are two forms of transportation, internal bus lines (seven townships of Kayah State) and external bus lines (the Kayah bus that goes outside the state). The seven townships are Loikaw, Shadaw, Demoso, Hpruso, Bawlakhe, Hpasawng and Mese. There are totally 48 bus lines, 15 internal bus lines, 17 external bus lines and 16 bus lines from other states and regions. There are 40 quality buses and two express buses used for external bus lines. Most of the bus lines in Kayah State have over 10-year experience and online booking is now available for the bus tickets for Shwe Ya Zar bus line.

It takes about 12 hours to drive from Yangon to Loikaw whether NayPyiTaw-Paunglaung (347 miles/ 558 kilometres) or Leiktho-Taungoo (270 miles/ 435 kilometres) route is used. Travelling by highway buses takes nearly 15 hours using the route of NayPyiTaw-Pekon. Departure time from Aung Mingalar Highway Bus Terminal is about 1400hrs or 1500hrs; and the arrival time is 0500hr the following day. The buses going Mandalay from Loikaw depart the bus station at 0800hrs or 1800hrs and it takes 10 hours to get to Mandalay. By using the road transportation, the duration to travel from Yangon to Loikaw is 12 to 15 hours and from Mandalay to Loikaw is 10 to 12 hours.

Improvement in the road system will reduce travel times to Loikaw from other states and regions.

The planned upgrade to the Taungoo Road in FY 2017-2018 will mean travel times of 6 hours from Yangon to Loikaw. An upgrade proposal turning the two-lane road into four lane road has been submitted to the line departments.

A construction project for a highway bus terminal near Padaing Market at Pakye Village in Loikaw Township has been submitted to state government for permission. The construction will cover 10 acres of land and the project duration will be five years. The bus terminal will include a two-storey building for accommodation with the ground floor commercial for ticket sales. This project will help the future development of the tourism sector.

For logistic sector, the transportation cost for one viss of hard goods from Loikaw to Yangon is MMK 50-60; from Yangon to Loikaw, the delivery cost is MMK 120 for one viss of soft goods and MMK 80 for one viss of hard goods. From Loikaw to Mandalay, it costs MMK 40 for one viss of hard goods and MMK 50 for one viss of soft goods. For instance, the delivery cost of 12 wheeler truck for one viss of maize is MMK 40 (i.e. MMK 1,350 per bag) and one viss of rice is MMK 45 (i.e. MMK 1,450 per bag). It takes 24 hours for Loikaw-Mandalay goods delivery. It takes 26 hours for Yangon-Loikaw goods delivery and MMK 80,000 has to be paid for road trolls when the trucks go through Kalaw. The expense for a 12 wheeler truck to Yangon is MMK 510,000 in value (i.e. 340 x MMK 1,500) and it takes 24 hours by using the route of Pinlaung-NayPyiTaw (Paunglaung). It is rare to deliver goods from Loikaw to Mandalay and the cost of a 12 wheeler truck to Mandalay is MMK 408,000 (i.e. 340 x MMK 1,200).

There are goods exported to Yangon. In the case of Mandalay, buses, 6 wheeler trucks and 12 wheeler trucks compete for commercial loads. Yangon-Loikaw trucks have a profit of MMK 250,000 to MMK 300,000 for delivery of hard goods such as cement, iron, wheat, rice and soil (fertilizer) and profit is MMK 300,000 for soft goods. Mandalay-Loikaw trucks profit of MMK 150,000 for hard goods while it is about MMK 250,000 for soft goods. The current number of vehicles in operation is 135 trucks of 12 wheeler trucks and 22 wheeler trucks. Transportation of goods is not profitable and the logistics sector shows loss. Express and 6 wheeler trucks compete to for loads and the profitability is low at the moment in Kayah State.

Kayah State has historically had difficulty with safety and security, the 50 miles (80 kilometres) between Loikaw and Bawlakhe was an overnight trip. In 2014 the ethnic armed groups signed a ceasefire agreement. The Loikaw-Bawlakhe road was upgraded and Loikaw and Bawlakhe trip now takes 2 hours. Transportation costs for one viss of sesame from Bawlakhe and Loikaw decreased from MMK 80 to MMK 30.

Table 27: Bus line overview: Kayah State

No	District	Total bus lines	Routes	Total number of buses
1	Loikaw	44	46	217
2	Bawlakhe	16	3	139
Total		60	49	356

Source: Kayah State Business License and Transport Coordination Department, Road Transport Administration Department

2.2. Airport

Before 2015, Myanmar National Airline (MNA) flew two days a week, this has increased to daily flights by MNA flight for Yangon-Loikaw and Loikaw-Yangon every morning. Only MNA flights offer a passenger service to Loikaw Airport in Kayah State. Air KBZ (Air Kanbawza) formerly landed at the Loikaw Airport. It takes about an hour to fly from Yangon to Loikaw. The airport has been upgraded and prepared to receive increased domestic and foreign tourists entering the Kayah State.

Figure 13: Loikaw Airport



2.3. Rail transport

Railway transportation in Kayah State, is limited to the Loikaw-Thazi route. In 2015, there was a train from Loikaw to Pyinmana but due to low passenger numbers, in October 2016 this changed to the Loikaw-Aungban route. This changed again to the Loikaw-Thazi route, running on alternate days since 24 October 2017. There are only two carriages on the train, and it usually leaves Loikaw at 1700hrs, alternate days. The train fares are MMK 2,300 for ordinary class and MMK 3,100 for upper class (first class). The average number of passengers per trip is 6 to 7 passengers. On average of 65 passengers for 10 trips with the revenue of over MMK 130,000 this route runs at a loss for the railway transport. For goods delivery by trains, it costs MMK 183 per viss.

Figure 14: Loikaw Railways Station



2.4. Electricity

Electrical demand for Kayah State is 20.35 MW and over 70% is supplied from the national grid. Major electric power production in Kayah State comes from the Lawpita Hydropower Plant, is 16 miles (26 kilometres) from the south-east part of Loikaw city. The Lawpita Hydropower Plant produced about 30% of the whole Myanmar power demand in 2008. There are three factories, No (2) factory was built in 1954, No (1) factory was built in 1982 with aid of Japan and No (3) factory was constructed in 2008. Electricity demand, distribution and consumption by districts in Kayah State are as follows: -

Table 28: Electricity usage status in Kayah State (FY 2017-2018)

No	District	Demand (MW)	Distribution (MW)	Consumption (MW)	Power surplus/shortage (MW)
1	Loikaw	17.55	17.55	17.55	-
2	Bawlakhe	2.8	2.8	2.8	-
Total		20.35	20.35	20.35	-

Source: Kayah State Electricity Supply Enterprise

Table 29: Numbers of transformers in Kayah State (FY 2017-2018)

No	District	No of transformers	Distributed power (kW)
1	Loikaw	535	109,310
2	Bawlakhe	102	49,145
Total		637	158,455

Source: Kayah State Electricity Supply Enterprise

Table 30: Electrified households according to districts in Kayah State (FY 2016-2017)

No	Township	Total villages	Electric power	Hydro-power	Solar	Diesel	Total electrified villages	Remaining villages
1	Loikaw	123	107	1	9		117	6
2	Demoso	165	133		22	2	157	8
3	Hpruso	114	65		20		85	29
4	Shadaw	20	11		3		14	6
5	Bawlakhe	17	17				17	
6	Hpasawng	55	15		32		47	8
7	Mese	12	9		3		12	
Total		506	357	1	89	2	449	57

Source: Kayah State Electricity Supply Enterprise

Hydropower plants in Kayah State are as follows: -

Table 31: Status of Balu Chaung Hydropower plants

Particulars	No (1) factory	No (2) factory	No (3) factory	Remark
Capacity	14 × 2 = 28 MW	28 × 6 = 168 MW	26 × 2 = 52 MW	
Production per year	200 million units	1,200 million units	334 million units	
Maximum head (water level)	228 feet	1,388 feet	398 feet	
Flow rate	1,680 cusec ³	1,680 cusec	1,800 cusec	
Turbine type	Francis (vertical)	Pelton (horizontal)	Francis (vertical)	
Project started year	1987	First 3 machines (1954) Second 3 machines (1970)	2008	
Operation started date	09.08.1992	First 3 machines (01.04.1960) Second 3 machines (01.03.1974)	01.01.2014	
Electricity distribution				
230 KV line		1. To ShweMyo substation 2. To Taungoo substation		
132 KV line		To Loikaw 132 kV main substation		
132 KV line	To No (2) factory		To No (2) factory	
33 KV line (3) line				To local cities of Kayah State from 66 kV, 33 kV substations via 132 kV substation
11 KV line	Loikaw (local use)			

Source: Kayah State Electricity Supply Enterprise

³ Cubic feet per second

(A) Balu Chaung No (1) factory

Construction of Balu Chaung No (1) factory cost a total of MMK 535.106 million including national budget of MMK 533.334 million (i.e. JPY 16,000 million of Japanese loans). The project began in 1987 and was completed in 1992. The capacity is 28 MW (14 MW x 2 units).

Figure 15: Balu Chaung substation (2)



(B) Balu Chaung No (2) factory

Balu Chaung No (2) factory was built in 1953, with engineers from Electricity Supply Enterprise and Japanese experts cooperating to survey water resources. The first three machines of Balu Chaung No (2) factory were built with MMK 140 million of Myanmar local funds and MMK 143.8 million of Japanese loans. The project started in 1954 and the three machines started operation on 1 April 1960, with a total capacity of the three machines are 84 MW (28 MW x 3 units). Moebye Dam Projects commenced in 1967 and began operation in 1971. Total cost was MMK 37.7 million. The second three machines projects started in 1967 and the operation started in January of 1974. The project budget was MMK 71 million including local money of MMK 33 million and foreign money of MMK 38 million. The capacities of the second three machines are 84 MW (28 MW x 3 units). A maintenance operation was started on the machines of Balu Chaung No (2) factory, costing JPY 3,460 million of Japanese loans from the year of 1992 to 1994. With the Japanese ODA⁴ grant

⁴ Official Development Assistance

money, the first stage of machine repair had been made from November of 2003 to January of 2004, the second stage from July 2014 to February of 2015, and the third stage from July of 2015 to February of 2016.

(C) Balu Chaung No (3) factory

Balu Chaung No (3) is located 16 miles (26 kilometres) from the south-east part of Loikaw city, Kayah State and 3.25 miles (5 kilometres) from No (2) factory; and No (3) factory is situated near the junction of Balu Chaung and Pun Chaung. The Department of Hydropower Implementation of No (1) Ministry of Electricity and High Tech Concrete Technology Co Ltd, a partner company of Future Energy Co Ltd, signed a MOU on 2 May 2008 to develop Balu Chaung No (3) hydropower factory. AF Consult Switzerland (formerly AF Colenco Ltd), a Swiss energy consulting company, works as a consultant for the whole project and the MOA⁵ was signed on 8 February 2008, the project started in 2008 and the factory started its operation in 2014. The capacity is 52 MW (26 MW x 2 units) annually.

2.5. Telecommunication

The telecommunication sector in Kayah State is developing fast. About 43% of the state's 301,656 populations already have a telephone (120,500⁶ phone connections).

Additional projects to upgrade and extend the network are also underway or at the planning stage. Myanmar's telecom operators – MPT, Telenor, Ooredoo and MEC Tel – all offer coverage in Kayah State.

Up to date exchange lines have already installed in Kayah State. Within the area of the state, MPT plans to launch 7 more telecommunication towers, there are currently 55 towers. Other competitor company, Telenor has installed 80 telecommunication towers while Ooredoo has 35. The new mobile operator to Myanmar, Mytel Telecom has already installed 20 towers but this operator is not ready to use in Kayah State yet.

The state is currently using ADSL (Asymmetric Digital Subscriber Line) and departmental offices, government parliament office, USDP⁷ office, MPT (State Manager's office), Loikaw University, construction office and irrigation office can run video conferencing. Although 1,224 ADSL lines were installed up to January of 2018, the actual usage by governmental departments and the public

⁵ Memorandum of Agreement

⁶ Only mobile usage status of MPT is availability and figures for other mobile operators are estimated.

⁷ Union Solidarity and Development Party

totals 290 lines 934 redundant lines. The maximum data usages for ADSL are 1 Mbps⁸ and 1.5 Mbps. Universities have installed and use the lines while Technological University of Loikaw is preparing to install the lines. It is planning to install a station for telecommunication at the border area with machinery already in the border area. There is a plan to upgrade the semi auto exchange at Shadaw. Semi auto exchange is mostly used by the universities and Technological University of Loikaw is at the installation preparation stage. The operators found it difficult to build telecommunication towers due to the local people's objection. Therefore, MPT is doing CSR (Corporate Social Responsibility) activities every year and there is a project of installing FTTH (Fibre-to-the Home) programme for hospital of Kayah State.

Table 32: Status of telecommunication in Kayah State

No	District	Post office	Telegram	No of telephones			No of ADSL internet users	Total internet users estimation
				Auto phone	IP Star	Mobile		
1	Loikaw	9	4	2,626	2	87,800	362	26,340
2	Bawlakhe	5	5	286	12	32,700	790	6,540
Total		14	9	2,812	14	120,500	1,152	32,880

Source: Myanmar Post and Telecommunication

⁸ Megabits per second

2.6. Public investment (government project)

The Kayah State government has been focusing on the development of rural areas while upgrading the infrastructure and facilities of urban townships so that inclusive development will be achieved within the region. The Kayah State government is focused on providing enough electricity and meeting transportation, education, health and rural area development needs. The government has also implemented rural electrification projects in all districts.

Table 33: Kayah State's investment plan with the state budget in FY 2017-2018

No	Particulars	Projection (million kyats)
1	Road and bridge construction by state development supervision office	2,018
2	Expansion of Electricity Supply Enterprise	4,000
3	Construction of new Kayah State parliament building	1,798
4	Construction and maintenance of roads by Department of Highway (Loikaw District, Bawlakhe District)	11,093
5	Road and bridge construction by city development group	5,006

Source: Kayah State Planning Department

2.7. Private investment

Peace and security in the region have been achieved and more investments have flowed in because of better transportation. There are one foreign company operating under the Foreign Investment Law and three businesses approved under the Myanmar Citizen Investment Law in Kayah State, according to the statistical data compiled until March 2018. The companies under the Myanmar Companies Act in Kayah State are as follows: -

Table 34: Businesses in Kayah State

No	Particulars	Numbers
1	Firms under Foreign Investment Law	1
2	Firms under Myanmar Citizen Investment Law	3
3	Registered companies in Kayah State	175

Source: Directorate of Investment and Company Administration

In order to develop the domestic and foreign investment sector in Myanmar, Kayah State Office, Directorate of Investment and Company Administration, was opened on 15 May 2017 and to promote investment in Kayah State, the investment committee was formed on 7 July 2017. The State Chief Minister is the chairman of that committee formed with seven members including one minister and the Director of DICA Loikaw branch works as a secretary. The number of companies, capital and initial capital of the companies under the Myanmar Companies Act in Kayah State are as follows: -

Table 35: Registered companies under the Myanmar Companies Act in Kayah State from 15 May 2017 to 7 February 2018

No	Sector	No of companies	Capital (million kyats)	Initial capital (million kyats)
1	Services	3	700	16
2	Hotel and tourism	4	1,300	6,516
3	Industrial/ Manufacturing	5	600	36
4	Gem	1	100	5
5	Construction	24	5,400	976
6	Trading	7	650	47
	Total	44	8,750	7,596

Source: Kayah State Directorate of Investment and Company Administration

Table 36: Foreign direct investment in Kayah State and other states and regions that have been approved by Myanmar Investment Commission from 1988-1989 to August 31, 2017

No	State/ Region	No of investment projects	Investment value (million USD)	Percentage (%)
1	Yangon	781	19,402.49	30.67
2	Kachin	4	12,608.80	19.93
3	Rakhine	29	10,574.98	16.72
4	Mon	28	6,512.36	10.29
5	Tanintharyi	38	4,989.57	7.89
6	Mandalay	54	2,896.10	4.58
7	Sagaing	17	2,637.04	4.17
8	Bago	68	1,346.38	2.13
9	Shan	17	948.40	1.50
10	Magway	14	740.53	1.17
11	Ayeyarwaddy	23	346.49	0.55
12	Kayin	3	228.20	0.36
13	Nay Pyi Taw	5	34.15	0.05
14	Kayah	1	2.43	0.004
	Total	1,082	63,267.92	100

Source: Directorate of Investment and Company Administration, Ministry of Planning and Finance

There is one Myanmar citizen investment project in Kayah State, ranked 14th against the other states and regions.

Table 37: Foreign direct investment in Kayah State and other states and regions that have been approved by Myanmar Investment Commission from 1988-1989 to August 31, 2017

No	State/ Region	No of investment projects	Investment value (million Kyats)	Percentage (%)
1	Yangon	571	6,983,100.82	51.37
2	Mandalay	137	2,600,545.80	19.13
3	Bago	37	880,342.41	6.48
4	Mon	27	770,125.12	5.67
5	Shan	60	691,120.01	5.08
6	Nay Pyi Taw	22	562,301.03	4.14
7	Ayeyarwaddy	24	259,943.73	1.91
8	Rakhine	19	233,347.92	1.71
9	Tanintharyi	42	199,951.95	1.47
10	Kayah	3	181,201.89	1.33

11	Sagaing	24	130,376.91	0.96
12	Magway	8	46,898.40	0.35
13	Kachin	13	40,174.67	0.30
14	Kayin	9	13,672.80	0.10
Total		996	13,593,103.46	100.00

Source: Directorate of Investment and Company Administration, Ministry of Planning and Finance

From 15 May 2017 to 18 March 2018, there are 44 companies registered under Kayah State Office, Directorate of Investment and Company Administration.

2.7.1. Private investments in Kayah State

Hotel project

For private investment in the hotel sector of Kayah State, there are about 15 hotel construction projects. Included among these is an 11-storey hotel that will be constructed on an acre of land at Minelone Ward of Loikaw Township. The hotel will be the highest building in Kayah State it is being constructed by Myanmar New Ray Co Ltd, the project started in December of 2017 with an expected budget at least USD 5 million.

The hotel will be built to international standard hotel and include a ballroom with seating capacity for 600 and accommodation for 200 guests with 80 keys. Project completion is expected by December 2019 and the opening will be in 2020. Currently, foundation for the building are underway.

Figure 16: A model of 11-storey hotel constructed by Myanmar New Ray Co Ltd



Cement factory project

Although there are significant private investors interested in entering Kayah State, delays occur for several reasons. In 2017, Square Power Group Co Ltd began construction of a cement factory with 4,000 tonnes daily capacity in Taung Thone Lone Village of Loikaw Township. However, the project has been halted due to objections by locals. The company is coordinating with the line departments to move the project to Demoso Township. It is expected the construction company will ask the permission of Myanmar Investment Commission for the project location changes with the approval of Kayah State government.

Hydropower plant project

Khin Maung Nyut Trading Co and TBEA Co Ltd, a Chinese company, coordinating a pre-survey for hydroelectric power production at the Nant Ta Phat Stream in Loikaw Township near the border area of Shan State and Kayah State. It is projected to have electrical generation capacity of 110 MW. A unique fact about this project is the pre-survey feasibility for constructing a power plant utilising the ROR (Run-of-the-River) system. The ROR system is hydroelectric system that harvests

the energy from flowing water to generate electricity in the absence of a large dam and reservoir, decreasing or eliminating the environmental and social impact. The pre-survey result will be submitted to Kayah State government and Union Ministry of Electricity and Energy and the survey group will sign a MOU (Memorandum of Understanding) agreement with the Union Ministry for the feasibility study. Khin Maung Nyut Trading will conduct the CSR (Corporate Social Responsibility) activities for the local people as soon as the project starts.

2.8. Manufacturing sector

There are 524 registered private industries or enterprises in Kayah State. These include 28 large-sized enterprises, 354 medium-sized operations and 142 small-sized industries. Among them, 495 are located in Loikaw District while only 29 are from Bawlakhe District.

2.8.1. Private industries in Kayah State

Table 38: Registered private industries in industrial areas in Kayah State (till January of 2018)

No	Sector	No of industries				Percentage
		Large	Medium	Small	Total	
1	Food and beverages	10	173	61	244	46.56
2	Clothing apparel	-	16	2	18	3.44
3	Construction materials/ shelter	12	58	19	89	16.98
4	Personal goods	-	4	-	4	0.76
5	Household goods	2	-	-	2	0.38
6	Literature and arts	-	2	-	2	0.38
7	Raw materials	-	-	1	1	0.19
8	Minerals	4	36	15	55	10.49
9	Agricultural equipment	-	-	-	-	-
10	Industrial equipment	-	-	-	-	-
11	Transportation	-	2	-	2	0.38
12	Electronic equipment	-	-	-	-	-
13	General industry	-	63	44	107	20.42
	Total	28	354	142	524	

Source: Kayah State Directorate of Industrial Supervision and Inspection

2.8.2. Private industries in Loikaw industrial zone

With the purpose of industrial enterprise development and job opportunities for local people, in 2007, the government organised the industrial business owners to develop an industrial ward at the Nwarlawo Village of Loikaw Township where required electricity and land area is available. Loikaw Industrial Ward was built on the area of 817.46 acres including 86 industries.

2.8.3. Small enterprises

The Department of Small Industry is responsible for encouraging legal registration of small enterprise development. These include industrial enterprises having less than 9 employees with

power consumption between 0.25 hp and 5 hp and the handicraft micro-enterprises with over 3 employees register as small enterprises. Doing so will encourage technology sharing; provide support for the development of existing small enterprises; arrange technical courses for manufacturing of hygienic foods, consumer and personal goods; laboratory testing; and other vocational trainings are arranged by the department. This will lead to an increase in the number of small-scale industries.

The present training courses provided by the Kayah State Department of Small Industry are bamboo-based handicraft course, foods and beverages and consumer goods manufacturing course, basic motorcycle repair and maintenance course, basic sewing course, basic furniture making course and basic traditional weaving courses. More intensive courses including 6-month hand loom weaving course and 1-year textile course. The first 6-month weaving courses usually start in January ending in June and the second batch begins in July through to December, on a yearly basis, with an average of 13 trainees per course.

Current training courses provide trainees with the accommodation and could be made more attractive if meals were provided. Graduates would be more effectively employed if the equipment and markets were more readily available.

With the state government guidance, Kayah State Tourism Development Association organised to open a weaving centre at the weaving training school in Loikaw in the fiscal year of 2014-2015. This centre arranges excursion for domestic and foreign visitors to come and study the natural dyeing process used in the loom enterprises and Kayah traditional weaving methods at the weaving training school. A lot of support is still in need of developing weaving enterprise sector.

2.9. Hotel and Tourism

Kayah State was a restricted area in the past and had very little tourism. Once the Myanmar Government signed a ceasefire agreement with Karenni National Progressive Party (KNPP), the Ministry of Hotel and Tourism (MOHT) declared the area officially opened for international tourism. Since then, tourist arrivals to Kayah State have increased rapidly and, many tour companies and industry experts predicted that tourism sector is likely to grow rapidly in Kayah State.

In 2014, MOHT State Office was opened in Loikaw with the aim of promoting the state's tourism sector. Loikaw, Demoso and Hpruso have accessible since 2011, while other areas still require permission at this time. From 2017, all areas in the state are opened to tourism except Shadaw Township.

The natural beauty, impressive natural limestone caves, traditional foods, crafts, clothing and ethnic diversity, an example of local traditions showcase Kayah State's huge potential for eco-tourism and community-based tourism. Hoteliers Association, Tourism Association, Tourist Guide Association and Restaurants Association were established in Kayah State and developed a model for tourism sector development. Concurrently the 'Netherlands Centre for the Promotion of Imports from developing countries' (CBI), the 'International Trade Centre', and 'Directorate of Hotel and Tourism' have jointly implemented a 3-year tourism sector systematic development project implementing community-based tourism, developing human resource and bringing up new itineraries. Consequently, there is a significant increase in the number of hotel, motel, inn and guesthouses.

Currently, Kayah has 18 hotels, with 384 keys. Among them, 13 hotels have guesthouse licenses and the other 5 hotels have hotel licenses. The total number of hotels under construction is 15 (466 keys), of which 13 are in Loikaw District with 422 keys, one is in Bawlakhe District with 24 keys and one is in Hpasawng with 22 keys. One of them is a USD 5 million hotel built to international standard hotel, including a ballroom with seating capacity for 600 and accommodation for 200 guests with 80 keys. Project completion is expected by December 2019. Currently, foundation for the building is underway.

The table below shows annual growth in the number of hotel, motel and room.

Table 39: Hotel, Motel, Inn and hostel in Kayah State

No	Year	No of hotel/ motel	No of room
1	2014	8	175
2	2015	9	201
3	2016	13	291
4	2017	18	384

Source: Kayah State Directorate of Hotel and Tourism

There is a significant increase in the number of visitors to Kayah State year on year. There are 10 tour companies in Kayah State. Local tourist guides are issued licenses and majority of them directly contact with hotels for work. Some areas in Kayah State are still restricted to visit due to security issues. One of the tour companies, namely, 9 Generation Co Ltd, offers cruise service in Than Lwin river and Balu Chaung for visitors to enjoy natural scenery.

Table 40: Domestic and foreign visitor arrivals in the Kayah State in 2016

No	Year	Domestic	Foreign	Total
1	2014	11,313	2,662	13,975
2	2015	13,778	3,933	17,711
3	2016	16,994	6,374	23,368
4	2017	33,492	8,975	42,467

Source: Kayah State Directorate of Hotel and Tourism

Domestic visitor numbers have increased by 97% in 2017 compared to 2016 foreign visitor numbers have increased by 41%. Although there is a considerable annual visitor growth, the numbers are still low compared to the neighbouring city, Mae Hong Son city. Mae Hong Son city and Pai city are Thai cities, located on the border with Mese. These Thai cities welcome 3 million visitors a year while only 9,000 visitors enter Kayah State. Border point BP-13 at Mese Township is critical for tourism from Thailand into Myanmar. Government to Government agreements are necessary to streamline this border crossings. Currently, the majority of the visitors to Kayah State stay for two nights on average.

In Kayah State, visitors can enjoy traditional Kayah cuisines as well as European food. The following is the restaurant list provided by Kayah State Directorate of Hotel and Tourism; -

- 1) Sunday Club (Traditional Food)
- 2) Ko Moe (Traditional Food)
- 3) Naung Yar Lake (Restaurant)
- 4) Daw Palawnia Sausage & Wine
- 5) Kaung Kaung Restaurant
- 6) Ma Shan Rice Noodle Shop

- 7) Loikaw City Restaurant
- 8) Shwe Yati (Myanmar Food)
- 9) Golden Lion Restaurant
- 10) Maw Khan Non Restaurant
- 11) Royal Village Restaurant
- 12) Marcopolo Restaurant
- 13) Shwe Let Yar (Myanmar Food)
- 14) Thiri Daw (Traditional Food)
- 15) Master Restaurant

Kayah State has more than attractive places and restaurants, also souvenir shops. Famous souvenir shops are Ngwe Taung Pyi Souvenir shop, Loikaw souvenir shops and Kayan traditional handicrafts shops located in Pan Pet Village.

2.9.1. Community Based Tourism (CBT)

In Kayah State Community Based Tourism (CBT) visitors have a chance to observe unique traditional dress, food and cultures, visit traditional Kayan homes and seeing artisans making handicrafts and enjoy unspoiled natural scenery.

The ASEAN Secretariat presented the ASEAN Community Based Tourism Award 2017 to Htee Nee La Leh and Pan Pet villages in Demoso Township of the Kayah State. Moreover, it is known that the Kayah State was listed in the top 5 most attractive and visited areas for international visitors in 2015, according to local tour companies. The following is the list of villages where visitors can experience community based tourism in Kayah State: -

(1) Pan Pet Village

Including five small villages, namely, Rang Ku, Daw Kee, Salong Kana, Kathe Ku and Pem Song, Pan Pet Village is situated in Demoso Township of Loikaw District. The village was first built on the hill and later the villagers moved to the foot of the hill. There are over 2,200 inhabitants with more than 290 households.

Pan Pet is the village of Kayan/ Padaung ethnic group and their costumes, traditions and beliefs attract many foreign visitors. For Pan Pet itinerary, the visitors can go trekking for half day or one day. Activities visitors can experience in Pan Pet village are experiencing village life, enjoying the natural beauty and scenery of forests, mountains. Interact in the lifestyles of the local villagers, watch village handicrafts being made, enjoy local dishes and Kayan music. There are small-scale ethnic businesses manufacturing woven clothes and consumer goods made from bamboo. Improving the quality of these products will enhance the potential small enterprises in Pan Pet village.

Figure 17: Kayan/ Padaung ethnic groups from Pan Pet Village



(2) Htee Nee La Leh Village

Htee Nee La Leh Village is located in Dawkalaw Village Tract of Demoso Township, Loikaw District. The Kayah people mostly live in Htee Nee La Leh Village and the visitors can experience traditional costumes, beliefs in spirits and flag mast festival occur every year. The population is over 790 with more than 150 households.

The villagers make their living from agricultural farming especially paddy, Pyaung Kout and maize. They made bamboo baskets with slings on a small-scale, now they have increased production to offer foreign tourists souvenirs. There is foreign earning potential here for small businesses. The villagers need technology to increase the longevity of bamboo.

Figure 18: Flag Mast Festival at Htee Nee La Leh Village



Source: Directorate of Hotel and Tourism, Loikaw

(3) Daw Ta Ma Gyi Village

Daw Ta Ma Gyi Village is situated 27 miles (43 kilometres) far from Demoso Township of Loikaw District. The village was named as Daw Ta Ma Gyi Village by combining three small villages of Daw Ku Li, Daw Ee La and Daw Ta Ma. The old Kayahs wear traditional dress and the unique tradition about this village is that the villagers store their paddy in separate warehouses outside the village. The shaman (spirit medium) of the village is the person who is knowledgeable and can explain the beliefs of the local ethnic people and the history of village to visitors attracting more visitors to their village.

Figure 19: Kayah Races from Daw Ta Ma Gyi Village



Source: <http://placesmap.net/>

(4) Htay Kho Village

Htay Kho Village is situated in Hpruso Township. Most of the people living in Htay Kho Village are from the Kayaw ethnic group, it can be observed that villagers maintain their cultural heritages, they still use bamboo utensils and thin bamboo strips, village can play their traditional instruments very well. Visitors can observe hand weaving and paddy pounding in the village and taste traditional foods. They can enjoy hiking in spectacular and pleasant natural scenery.

Figure 20: Kayah Races from Htay Kho Village



Source: Directorate of Hotel and Tourism, Loikaw

Tourism destinations in Kayah State

The followings are the tourism destinations to visit in Kayah State; -

Table 41: Tourism destinations in Kayah State

No	Place to visit	Location	Distance from Loikaw City (mile)
1	Taung Kwel Pagoda	Loikaw	
2	Myo Nan Pagoda	Loikaw	
3	Christ The King Church	Loikaw	
3	Htee Se Kha Waterfall	Loikaw Township	16.25
4	Aung Tha Pyay Cave	Loikaw Township	7.00
5	Lwel Ta Mu Cave	Loikaw Township	3.25
6	Three Mountain Pagoda	Loikaw Township	3.63
7	Kyet Cave	Loikaw Township	11
8	Lawpita Waterfall	Demoso Township	11.50
9	Kandarawadi Haw Palace	Demoso Township	22.63

10	Loi Nan Hpa Mountain	Demoso Township	22.63
11	Elephant Mountain (Sin Taung)	Demoso Township	26.50
12	Ngwe Taung Dam	Demoso Township	11.00
13	Htee Pwint Kan (Umbrella Pond)	Demoso Township	13.38
14	Htee Nee La Leh (Kayah Tribe)	Demoso Township	16.50
15	7 Serial Lakes	Demoso Township	18.00
16	Pan Pet Group (Kayah Tribe)	Demoso Township	26.13
17	Htee Prunu Cave	Hpruso Township	24.13
18	Htay Kho Village (Kayaw Tribe)	Hpruso Township	42.00
19	Daw Ta Ma Gyi (Kayah Tribe)	Hpruso Township	37.00

Thiri Mingalar Taung Kwel Pagoda

Thiri Mingalar Taung Kwel Pagoda located in Loikaw on the hill at an altitude of 387 feet (118 metres). There are nine separate natural limestone hills on which small pagodas named Pyi Lone Chan Thar, Shwe Yat Taung, Shwe Yin Aye, Shwe Pyi Aye, Su Taung Pyae, Aung Taw Mu, Kyauk Than Ban, Upper Kya Htee Yoe, and Lower Kya Htee Yoe are built. This hill is from the Middle Permian era caused by the land rising 272 to 259 million years ago. The separate hills are formed from small coral reefs. All domestic and foreign travellers visit Taung Kwel Pagoda, one of the land marks of the Kayah State. The hills can be climbed by foot or elevator.

Figure 21: Thiri Mingalar Taung Kwel Pagoda



Myo Nan Pagoda

Myo Nan Pagoda is the place where A Laung Min Ta Yar Gyi built a stupa of sand as Aung Myay (auspicious ground on which one treads to ensure victory or success) when he marched to battle with Thailand. In 1873, border guards and commanders of a military unit of Min Tone King built Koe Taung Pyae Pagoda covering the stupa of sand and called the pagoda as “Mahar Aung Myay Shwe Pagoda”. It was previously called “Ywar Nan Pagoda” and changed to “Myo Nan Pagoda” when Loikaw city was built.

Figure 22: Myo Nan Pagoda



Source: Directorate of Hotel and Tourism, Loikaw

Kyet Cave

There is a natural cave formed with limestone and dolomite on the land 2,990 feet (911 metres) above sea level and 10 miles (16 kilometres) from eastern Loikaw city. The cave is called Kyet Cave (or) Ya Su Ku in Kayah language. There are many wooden coffins of varying lengths some are 15 feet while others are about 2 feet. Some of them can be found hanging from the ceiling of the cave, 20-30 feet up. People who visited the cave 70 years ago said there were human skeletons inside the coffins but they are not found nowadays. This natural cave reveals the beliefs and culture of the Kayah people.

Figure 23: Kyet Cave



Source: Directorate of Hotel and Tourism, Loikaw

Htee Pwint Kan

Htee Pwint Kan (Umbrella Pond) is situated in the Daw Ta Lo Ku village, Ngwe Taung village tract, Demoso Township and 11 miles (18 kilometres) far from the south-eastern part of Loikaw city. This pond is said to be Bote Ta Lote Kan where seven Kinnari sisters. The length of the pond is 227 feet (69 metres) and the width is 115 feet (35 metres). Due to soil metabolic activity, the biogas is expelled and as a result, small mud volcanoes occur. The soil is a types of marsh land, mudstone and sandy mudstone. The pond is called the Umbrella Pond as the shape of rising mud and sand appear like an umbrella. This process mostly occurs on full-moon days and new moon days when there is less water in the pond. The flag mast cherished by Kayah people is set up near Htee Pwint Kan.

7 Serial Lakes

The seven lakes are located at the eastern part of Htee Nee La Leh and Daw Ta Ngu villages of Demoso Township, 14 miles (23 kilometres) far from the south-eastern part of Loikaw city. These lakes appeared due to the shift of rock at the west part of Loikaw city and the lakes formed with limestone and dolomite (Middle Permian). According to the saying of the old people, the seven serial lakes are the lakes where seven Kinnari sisters played in the water.

To boost visitor's experiences in Kayah State, the Kayah State Directorate of Hotel and Tourism presented a priority action plan for implementation of tourism sites to the Union and State Government. Priorities included constructing public toilets at popular tourism sites and villages, constructing of public spaces relaxation and car parking, upgrading Kan Pat Road to 7 Serial Lakes (lovely walks along the lakeside) and identifying the lakes, developing trekking routes and viewpoints, arranging for cycle tracks, elephant riding and rowing activities at Ngwe Taung Dam and having systematic management of shops. Secondary priorities were setting up direction boards in both Myanmar and English Languages, constructing sufficient public toilets in villages and implementing community-based tourism and systematic upgrading of the village streets.

2.9.2. Requirements for hotel and tourism sector

Currently, Directorate of Hotel and Tourism provides training two or three times a year with skilled trainers. Despite tourism sector development in Kayah State, Directorate of Hotel and Tourism still needs a well-defined organizational structure for growth. Although government has made a big effort to acquire adequate skilled workforce, there is still a need for skilled labour in tourism sector due to some restrictions. For example, although a middle school education level graduate can apply for housekeeping positions, the minimum education needed for Front Office (FO) vacancies is to finish high school. Therefore, it is a sensible idea to ease education restrictions and provide language training like English and Thai. Majority of people who have work experience in Thailand are proficient in Thai language and some Christians can speak English very well. Although tour guide trainings should be provided to these youths creating employment opportunities for them, this measure could not be implemented because of aforementioned education restriction which limits to high school level. Therefore, easing this restriction could address the problem of insufficient number of local tourist guides in high season (September to February) by means of providing adequate trainings and ensuring employment opportunities of local people.

2.9.3. Invest in hotel and tourism sector

Kayah State tourism industry is a business based on traditional conservation of local ethnic groups and cultural heritages.

Investment is needed in for the next push for the tourism sector. Transport infrastructures, hotels and restaurants as well as souvenir shops need to be prepared for this growth.

With the aim to develop the Loikaw city, Department of Human Settlement and Housing Development drafted urban development project in 2013. Hotel zone project was also included under this project; 47.5 acres of land will be for building the hotel zone if the project plan put into action. So, this project place would be a great opportunity for hoteliers to invest in Kayah State.

Visitors can explore natural caves and pristine nature as well as traditional festivals held by in Kayah State. Famous traditional festivals in Kayah are Kay Htoe Boe, a festival where a Kay Htoe Boe pole is erected and participants dance around the pole, (2) Ae Du (aka) sticky rice festival, (3) Kae (aka) hunting festival, and (4) new house ceremony.

With the opening of Moebye Dam, visitors can enjoy boat trips from Inle to Loikaw a new and different way to see the natural beauty of the state. Kayah possess many pristine places, it holds great potential for eco-tourism as well as community based tourism. International Trade Centre (ITC) provides regular trainings for Pan Pet and Htee Nee La Leh villages and they are likely to become successful in community based tourism and small-scale manufacturing businesses. Therefore, it is advisable for Small and Medium Enterprises to invest in these villages.

Cruise services are planned for visitors to enjoy Loikaw's sunset from Balu Chaung; it will feature amenities like Kayan traditional musical performances and buffet dinners from 6pm to 9pm. 9 Generation Co Ltd arranges boats which can carry maximum 10 persons for visitors on Balu Chaung river. Visitors are allowed to carry on food or they can order in advance with the tour company to arrange for their meals. As an extra service, crew can arrange tables for outdoor dining.

Visitors can enjoy morning sunrise and evening sunset from Balu Chaung.

Boat prices are as follows: -

- | | |
|----------------------------------|---------------------------------|
| 1) Morning sunrise | MMK 50,000 (6:30 am to 8:00 pm) |
| 2) Evening sunset | MMK 50,000 (4:30 am to 6:00 pm) |
| 3) Loikaw – Monpyar – Loikaw | MMK 30,000 (Duration – 1 hr) |
| 4) Loikaw – Phayar Phyu – Loikaw | MMK 50,000 (Duration – 3 hrs) |
| 5) Loikaw – Moebye – Loikaw | MMK 100,000 (Duration – 6 hrs) |

Visitors can take photos from the boat and the tour company can arrange exclusive boat trip for families and groups as well as events like birthday and wedding anniversary. Meals (breakfast, lunch and dinner) on the boat are arranged by pre-ordering with restaurants.

Figure 24: Cruise with the seating capacity of 10 in Balu Chaung



It is important to make sure that environment and indigenous cultures which have been preserved for a long time are not damaged by visitors while making efforts for tourism development.

2.10.Labour

There are three types of organisations the workers are working for including government departments and associations, cooperative departments and associations, and private organisations. There are 87,136 employees and workers working for the total of 2,286 enterprises. Within the Loikaw District, two foreign joint venture organisations are working with 33 employees. Many migrant workers from the other states and regions such as Shan State, Ayeyarwaddy Region and Magway Region are working in Kayah State.

As Kayah State has few factories and industries, to-date no labour dispute have occurred between employers and employees. No minimum wage rate is exactly defined and most of the employers negotiate with the workers for the salary and mutually satisfied amount is defined to be the labour wages. More hotels, guesthouses and basic infrastructures construction is found in Kayah State and this increases the job opportunities for the workers.

Table 42: Number of employees by type of organisation of Kayah State

No	Organisation	Labour office	No of labours						Total workers		
			Monthly paid worker			Daily wage worker/ piece-rate worker			M	F	Total
			M ⁹	F ¹⁰	Total	M	F	Total			
1	Government	826	3,275	6,186	9,461	399	552	951	3,674	6,738	10,412
2	Cooperative	11	3	18	21	2	6	8	5	24	29
3	Private (Myanmar citizen own)	1,444	1,707	1,486	3,193	364	118	482	2,071	1,604	3,675
4	Joint Venture (local + foreign)	2	14	2	16	13	4	17	27	6	33
5	Joint Venture (private + public)	3	104	42	146				104	42	146
	Total	2,286	5,103	7,734	12,837	778	680	1,458	5,881	8,414	14,295
6	Self-employed/ casual workers					38,062	34,779	72,841	38,062	34,779	72,841
	Total	2,286	5,103	7,734	12,837	38,840	35,459	74,299	43,943	43,193	87,136

Source: Kayah State Department of Labour

⁹ Male

¹⁰ Female

Vocational training courses

Kayah State Department of Labour is conducting educational campaigns for labourers quarterly and villages twice monthly. It is a requirement for hospitality service courses, tour guide courses, construction related courses such as craft masonry, carpentry, electricity installation and plumbing training, driving, vehicle repair and maintenance courses, mobile repairing courses, and sewing courses.

Some local youths and workers cannot attend the vocational training courses because of education background limitations. Some course providers persuade the potential trainees who do not have spare time to attend the courses by paying money for their expenses.

Department of Labour is planning to fulfil the labour force in government departments by building mutual connection between each department to know their needs, promote job opportunities, conduct yearly labour force surveys and mediate disputes between employers and employees. The first labour force survey in Kayah State was conducting from February to April of 2018.

3. Border Trade

3.1. Situation of Border Trade

The eastern part of Kayah State shares its border with Mae Hong Son of Thailand and therefore the border trade businesses can be conducted in that area. There are totally eight border points from BP-9 to BP-16 in the state. BP-11 and BP-14 were previously used to make illegal border trade. BP-11 exists near Ywarthit Township across Than Lwin River. Department of Trade, Ministry of Commerce, opened Mese Border Trade Post at BP-13, Mese Township, Bawlakhe District, on 27 October, 2016 to conduct formal trade procedures. Mese Border Trade Post is 109 miles from Loikaw and it takes six hours to travel from Loikaw to the border trade centre. At BP-13, warehouses are being built to store the import goods from Thailand and then distribute these goods to other states and regions by trucks.

The border trade centre under Department of Trade, Ministry of Commerce, is opened in Mese and it is responsible for inspection on licenses weekly including export licenses and conducting the procedures relating to tax relief on trading between ASEAN countries.

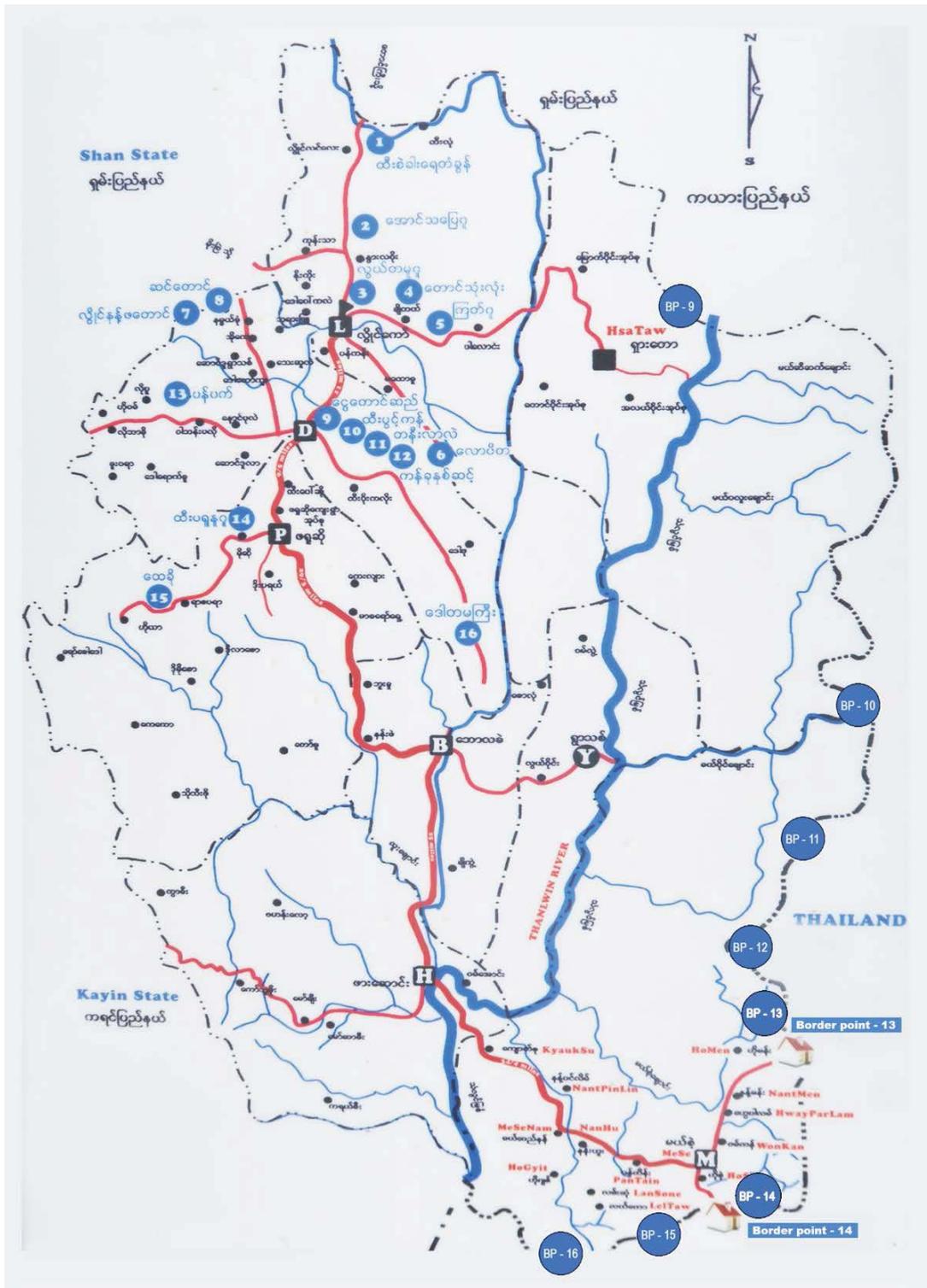
Major export items are dried chilli and garlic while there is some amount of onion export. Import products are foodstuffs, consumer goods, some machinery parts and components. No large machinery import is allowed in border trade. However, there was USD 1.0244 million trade values in the year of 2016-2017 and the trade value has increased after the establishment of Mese Border Trade Post. It is expected to have over 1 million USD in the year of 2017-2018. The detailed increased value is shown in the following table: -

Table 43: The trade value exported from September 2017 to February 2018

No	Product	Volume (tonne)	Value (million Kyats)
1	Maize	25,317	6,977
2	Rice (Shwe Yin Aye/ Ta Yoke Mway)	5,324	3,199
3	Sesame	2,841	3,466
Total		33,482	13,642

Source: Department of Trade

Figure 25: Kayah State border gates



4. Understanding businesses in Kayah State (business owners' perspectives)

To understand the investment climate in Kayah State and identify business opportunities, 49 businesses were interviewed in Loikaw District and Bawlakhe District. Additionally, 54 key informant interviews were conducted with officials from regional ministries and the Kayah State Development Committee, the Kayah State Chamber of Commerce and Industries to obtain meaningful contextual information.

4.1. Methodology

MMRD first conducted a secondary data collection (desk research) to identify possible industries for the study, as well as the rules and regulations to set up and operate a business.

The second stage of research was primary data collection (field research), where MMRD conducted business-to-business interviews in selected local industries such as agriculture, manufacturing, food processing, hotel and tourism and small-and medium-sized enterprises (SMEs) to obtain data on the company, the business setup, operations and future business development. Interviews were conducted with owners and management of the companies, manufacturers and distributors. A total of 49 interviews were conducted in four major sectors in Kayah State such as agriculture, manufacturing, food processing and hotel and tourism and also the responsible persons from other business sectors.

The quantitative data was contextualized using qualitative information obtained through key informant interviews (KIIs) with state authorities and business associations. The topics discussed included the investment climate, insights on the economy of Kayah State, and infrastructure development.

**Table 44: Sample allocation of key informant interview (KII)
(government official and associations)**

No	Types of respondent	Loikaw District	Bawlakhe District	Total
1	Related administrators under Kayah State government	2	5	7
State and district level departments				
2	Planning Department	1	1	2
3	Department of Consumer Affairs	1	1	2
4	Department of Agriculture	1	1	2
5	Directorate of Hotel and Tourism	1	-	1
6	Directorate of Industry, Supervision and Inspection	2	-	2
7	Directorate of Labour	1	-	1
8	Regional Office of Electrical Supply Enterprise	1	1	2
9	DICA Loikaw office	1	-	1
10	Myanmar Posts and Telecommunications	1	1	2
11	Regional Development Committee	1	1	2
12	Road Transport Administration Department	1	-	1
13	Department of Mines	2	-	2
14	Livestock Breeding & Veterinary Department	1	1	2
15	Central Statistical Organization	1	-	1
16	Department of Highway	2	1	3
17	Other departments	8	5	13
Other related associations				
18	Kayah State Chamber of Commerce and Industry	1	-	1
19	Tourism Association	1	-	1
20	Hoteliers Association	1	-	1
21	Transportation Services Association	1	-	1
22	Industrial Zone Management Committee	1	-	1
23	Other associations	3	-	3
	Total	36	18	54

Source: Kayah State Investment Opportunity Survey

Table 45: Sample allocation of B2B interview

No	Types of respondent	Loikaw District	Bawlakhe District	Total
1	Agriculture	6	9	15
2	Manufacturing	7	3	10
3	Food processing	6	-	6
4	Hotel and Tourism	5	-	5
5	Construction	1	4	5
6	Trading, Logistics and Warehouse	2	-	2
7	Mining	-	1	1
8	Others	4	1	5
	Total	31	18	49

Source: Kayah State Investment Opportunity Survey

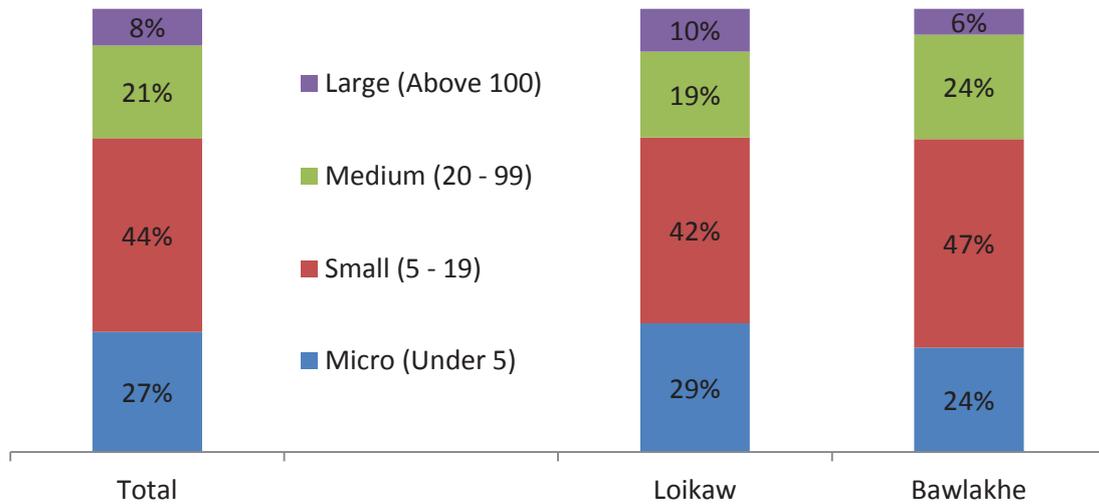
4.2. Business profile

Surveyed businesses were 63% from Loikaw District and 37% from Bawlakhe District. Almost 94% of the enterprises were interviewed at their head offices and the remaining over 6% were interviewed in branch offices or factories. Only an industrial ward exists in Kayah State instead of industrial zone. Of the 49 businesses interviewed, 48 were locally owned, while only one was foreign owned Thai company operates a branch shop for manufacturing and sale of CP animal feed.

The study revealed that 92% of the registered firms in Kayah State are SMEs¹¹ where there are up to 99 employees and only 8% are large firms with over 100 employees. The reasons why there are many SMEs in Kayah State are that most of enterprises are small-scale family owned businesses and more daily workers are employed rather than permanent staffs for the agriculture at the cultivation period. The maximum number of employees in the medium enterprises is only 40 permanent employees.

¹¹ The definition of SMEs for our survey is based on World Bank Enterprise Survey Standard: -Under 5 employees - micro; 5-19 employees - Small; 20-99 employees - Medium; and over 100 - Large.

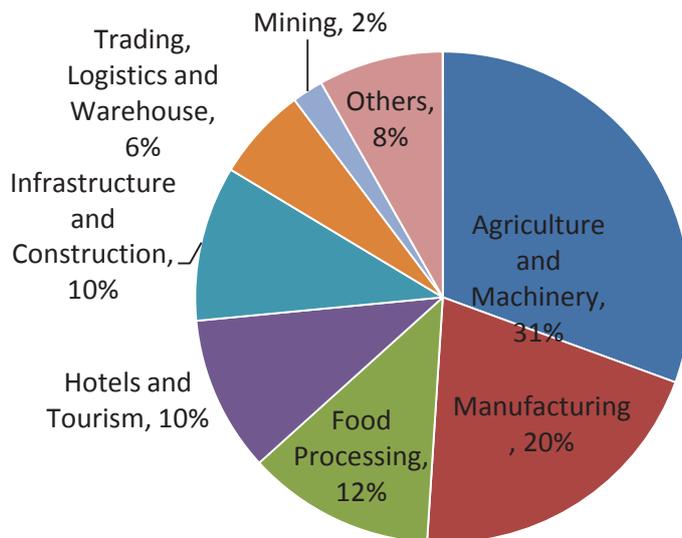
Figure 26: Size of the business



Source: Kayah State Investment Opportunity Survey

The businesses interviewed belonged to diverse sectors such as agribusiness, manufacturing, food processing, hotel and tourism, construction and construction product suppliers, trading, logistics and warehousing, and mining. Others include educational services, handicraft and livestock. Out of all respondents, 59% were from manufacturing 39% from services and 2% from trading sector. Business owners in Loikaw District and Bawlakhe District were contacted to cover all business enterprises in the Kayah State.

Figure 27: Businesses by sector



Source: Kayah State Investment Opportunity Survey

4.3. Setting up a business

From the businesses interviewed, 20% said that the reason they chose Kayah State to set up their business was market demand. In the past, businesses in the state were operated with many limitations and so there are much consumer needs in the local area. Most of the Kayah businesses were established to begin fulfilling these needs and reduce the purchase of food and other consumer products from other states and regions. There are about 8% of enterprises who inherited their parent businesses and most of them are agribusinesses. The other cited reasons for setting up a business in Kayah State are not many similar businesses and little competition in the market, willingness to work on own businesses due to having the appropriate working experience in domestic and foreign area, good future market prospects, and starting own businesses for their living and hobbies. Agribusinesses started their firms as they have easy access to raw materials, land and suitable weather for the growth of the plants. Trading businesses intend to trade goods in Mese, the proximity to the Thai border.

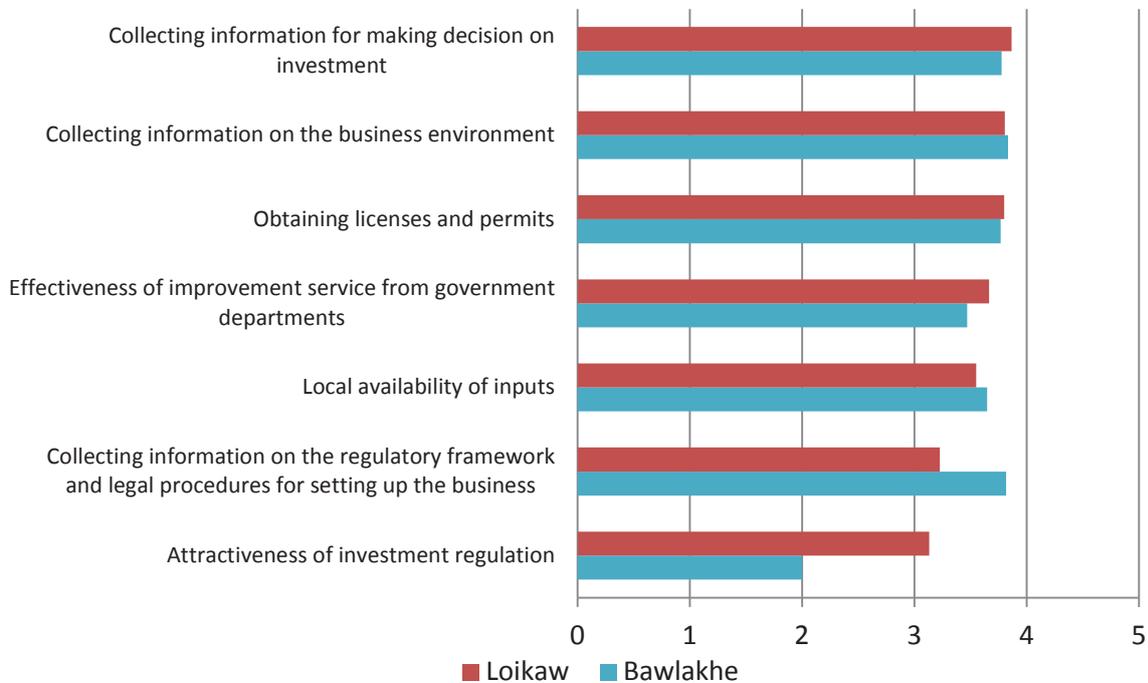
Figure 28: The reason for starting a business in Kayah State



Source: Kayah State Investment Opportunity Survey

Participants of the study were asked to rate the obstacles setting up a business on a scale of 1 to 5, where 1 is very poor, 2 is poor, 3 is fair, 4 is good and 5 is excellent.

Figure 29: Obstacles to business setup in Kayah State



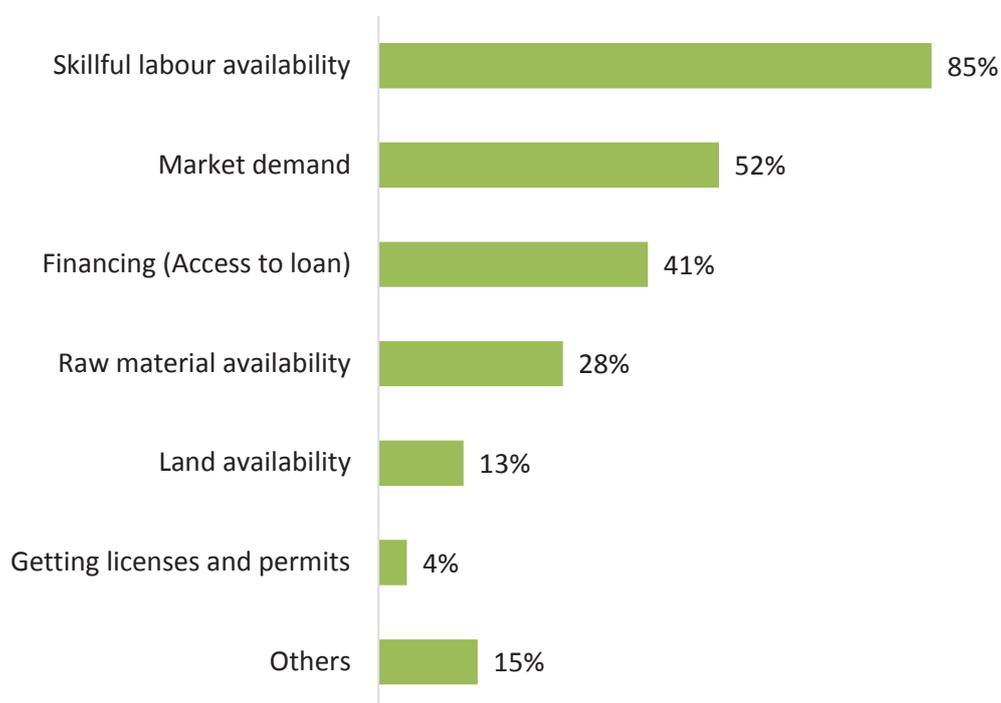
1= very poor, 2= poor, 3= fair, 4= good, 5= excellent

Source: Kayah State Investment Opportunity Survey

In the study of business setup in Kayah State, response figures are 12% for obtaining licenses and permits, 33% for laws related issues and 67% for investment regulations. Overall, Kayah businesses especially those who have limited working experiences have little knowledge on legal procedures and regulatory framework for setting up a business.

Based on the information from the business owners who know well about regulations and procedures, the rating for the attractiveness of investment regulation in Bawlakhe District is poor. However, the business information collection, obtaining licenses and permits and services provided by government is good and effective. Business related information is easily accessible from business partners and staff from department officials. The licenses and permits are easy to obtain for business setup as government departments offer good support. The respondents said that there was no support from the government during unstable periods, but it has improved a lot as the state becomes more and more stable. Some businesses procure inputs and the raw materials needed for their operations from Mandalay and Yangon. Although it is a little difficult to find skilful labours, required amount of labours and inputs are available in Loikaw District.

Figure 30: Major obstacles in starting up a business



Source: Kayah State Investment Opportunity Survey

Nearly 6% of respondents stated that there was no obstacle in setting up their business. However, one of the most common difficulties for the 85% of businesses was the scarcity of skilled labour. It is not very difficult to find general workers in the state. But businesses in Bawlakhe District found it difficult to recruit workers from Loikaw and Demoso. This has had limited impact on business operation as staffs and workers receive on-the-job training and there are many migrant workers who come and work from other states and regions of Myanmar.

In the study of market demand, there is no obstacle in finding markets for the enterprises who distribute their products within Kayah State or export to Yangon, Mandalay, Magway and Shan. However, the market is limited for sesame farmers and sesame traders whose only customer is the Chinese market. Some crops, fruits and vegetables grow well in Kayah State where the weather is more conducive, however farmers struggle to find markets for those products.

Some owners do business on their own capital and take private bank loans to finance their operations. Forty one percent (41%) of respondents said the interest rate is high. Government loan were insufficient to meet the financing needs of the businesses; the interest rate for the loans from traders and brokers is from 5% or 8% and it is a large amount to pay. Raw material availability is defined to be difficult for 28% of the respondents. Those 28% of businesses have to source their

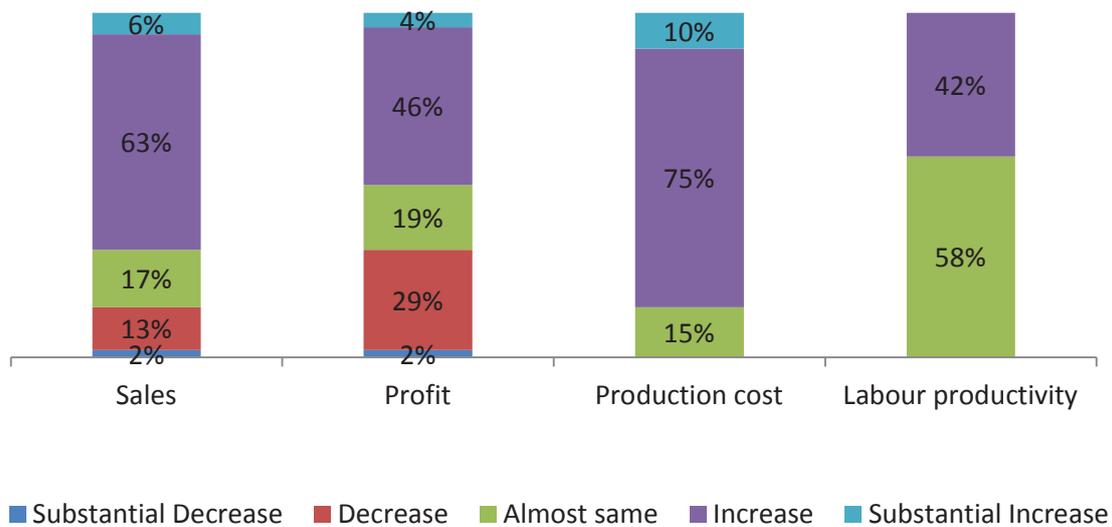
inputs and raw materials from Yangon, Mandalay and Taunggyi as they cannot find them easily in the local area of Kayah State.

No obstacle is found in land availability for the businesses working on their own land but 13% said that selling or rental prices of the land and shop spaces for business expansion is quite expensive and it is reported land permits are not easily obtained in the area of Mese. With the support of government departments, license application is easy for the businesses excluding mining enterprises. Other obstacles mentioned by the respondents are high tax rates and limited access to high quality in transport vehicles.

4.4. Operating the business

Compared to 2016, 69% of the businesses increased revenue but only 46% of the businesses enjoyed improvements in profits in the year of 2017. Revenue of businesses rose due to expansion as a result of safety and security rising. The survey found that 85% of the businesses incurred higher production costs due to rises in raw material prices. Labour productivity stayed the same for 58% of respondents, while 42% said they had noted an increase in productivity over the past year.

Figure 31: Business operation



Source: Kayah State Investment Opportunity Survey

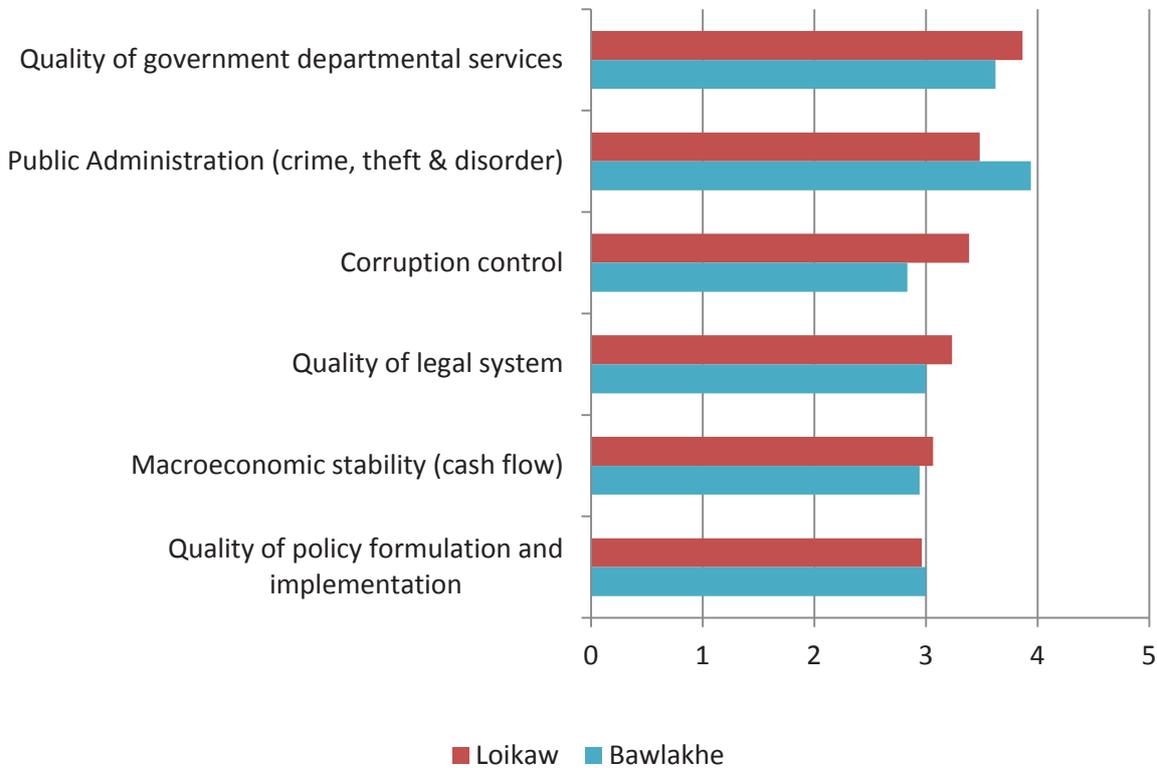
3.4.1. Microeconomic overview and regulatory framework

Businesses surveyed rated the quality of administration and services provided by the line departments and administrative body as fair. Submitting each case step by step to Nay Pyi Taw for permission can cause delays, but generally government departments provide much support to businesses and line departments try to fulfil the businesses' needs that are lawful. Crime, theft and robbery are rare in Kayah State and the respondents rated the public administration as good as a result of less disorder after signing the ceasefire agreement. The rating for corruption control by the government is fair.

Legal requirements are of little interest to business owners and 62% cannot answer questions on laws related issues. According to the opinion of business people who understand laws and regulations, the quality of legal system is fair but changes are needed to bring it into line with regional conditions. Twenty two percent (22%) cannot answer questions of policy formulation and implementation, however the remaining 78% considered policy implementations to be a little slow due to a shortage of employees in the government departments.

Some manufacturing businesses saw sales decrease due to the limitation and control on mineral and timber production and market difficulties. This caused a fall in cash flow in the state. Nevertheless, it is found that hotel and tourism industry, service industry and construction industry have improved and this has, overall maintained the state economy.

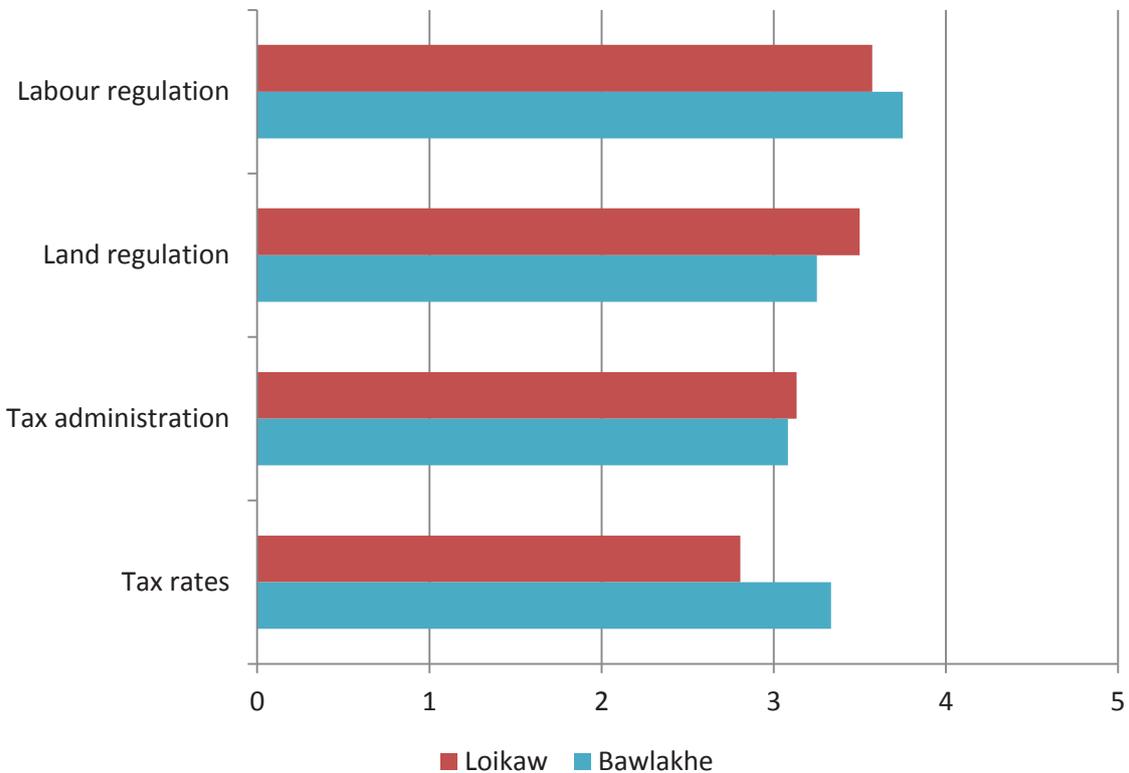
Figure 32: Macroeconomic and governance issues that seriously affect the business environment



1= very poor, 2= poor, 3= fair, 4= good, 5= excellent
 Source: Kayah State Investment Opportunity Survey

Although the taxes for businesses are higher year on year, some smaller enterprises pay only for land, farm and property tax and this tax expense is small for the businesses. There are 14% of the respondents who do not understand and lack knowledge about tax administration and the rest rated it to be fair. No labour disputes were recorded between the employer and the employee. Generally businesses follow the rules and regulations assigned by Department of Labour and they found no difficulty following these rules and regulations. Business owners have little knowledge of land regulation and Department of Land Management and Statistics do inspections and the land ownership forms are given to the land owners.

Figure 33: Regulatory framework



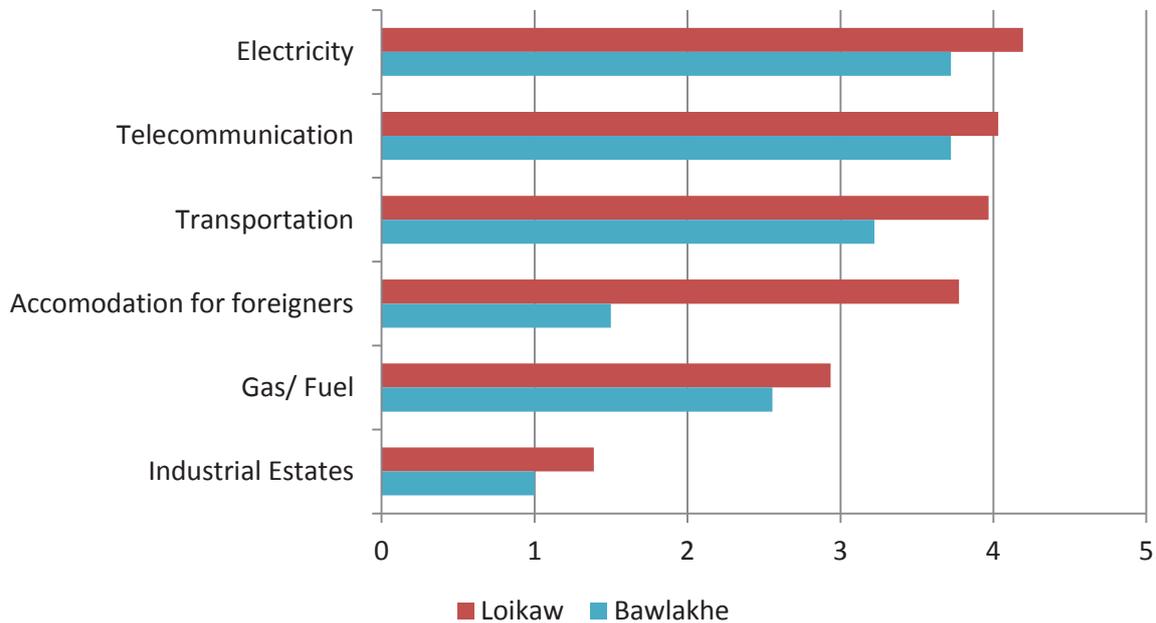
1= very poor, 2= poor, 3= fair, 4= good, 5= excellent

Source: Kayah State Investment Opportunity Survey

3.4.2. The need for infrastructure

Despite the fact that some of the remote villages of Kayah State have no electricity, there is sufficient electricity for businesses as the state produces its own hydroelectric power. Moreover, electrical production provides a stable voltage supply at reasonable electricity charges of MMK 35 per unit. Mining companies use generators for power supply. The telecommunication system is good and transportation is also much better than previously. It becomes quite convenient for foreign investors to work and live in Loikaw but not in Bawlakhe where there are no guesthouse and good restaurants. Gas and fuel supply is easily accessible in large quantities in Loikaw but the price is a little bit high. However, larger quantities of fuel are not plentiful in Bawlakhe and people have to buy from Loikaw, with increased costs, including the transportation expenses. For the industrial development, Kayah State only has industrial ward and business owners prefer not to run their businesses in the industrial ward due to insufficient water supplies and its location quite far from the city. Therefore, the ward has less production and not enough infrastructure for the industries and factories. In order to fulfil this requirement and develop the industrial zone, the Chief Minister of the Kayah State increases the investment in basic infrastructures for industrial zone.

Figure 34: Current infrastructure situation in Kayah State



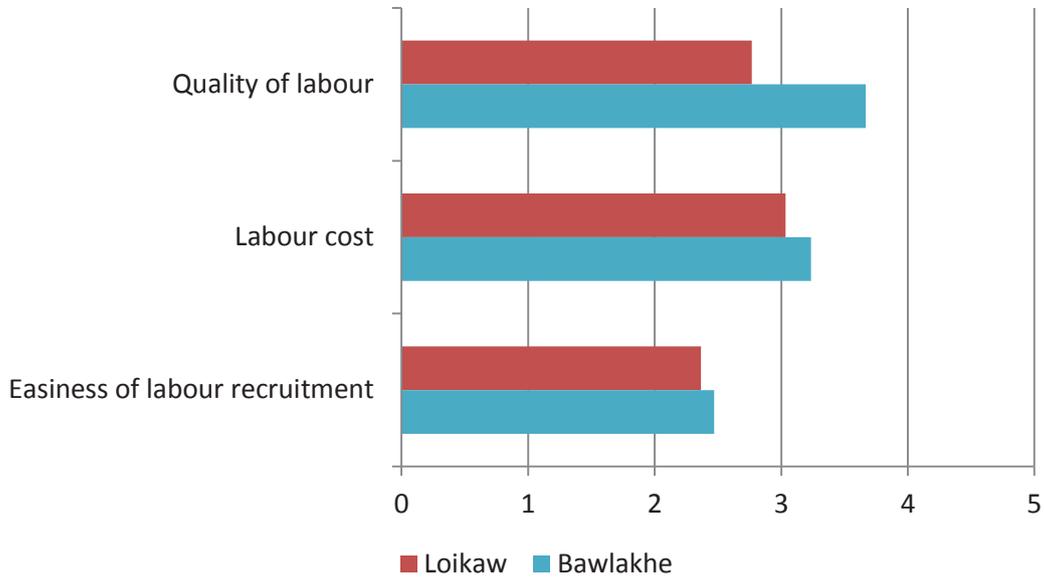
1= very poor, 2= poor, 3= fair, 4= good, 5= excellent

Source: Kayah State Investment Opportunity Survey

3.4.3. Quality of labour

There are no labour disputes between the business owners and employees in Kayah State. Shortage of labour force has occurred in the state as a result of workers emigrating to Thailand as work in Kayah State tends to be seasonal, with a lack of subsidiary crop cultivation after harvesting the major crops. Skill level is fair in Kayah State and it is challenging to find skilled labour. Most workers in Kayah State are migrant labourers who travel from Shan State, Ayeyarwaddy Region and Magway Region. Although employee works skill level is low, with the proper trainings and practices there is potential to grow a skilled work force. Almost 33% of Loikaw labours are graduates while most of the workers in Bawlakhe (67%) are educated to middle school level. The majority of the Bawlakhe workforce is lower education level as most of the businesses in Bawlakhe District are agricultural and livestock farms.

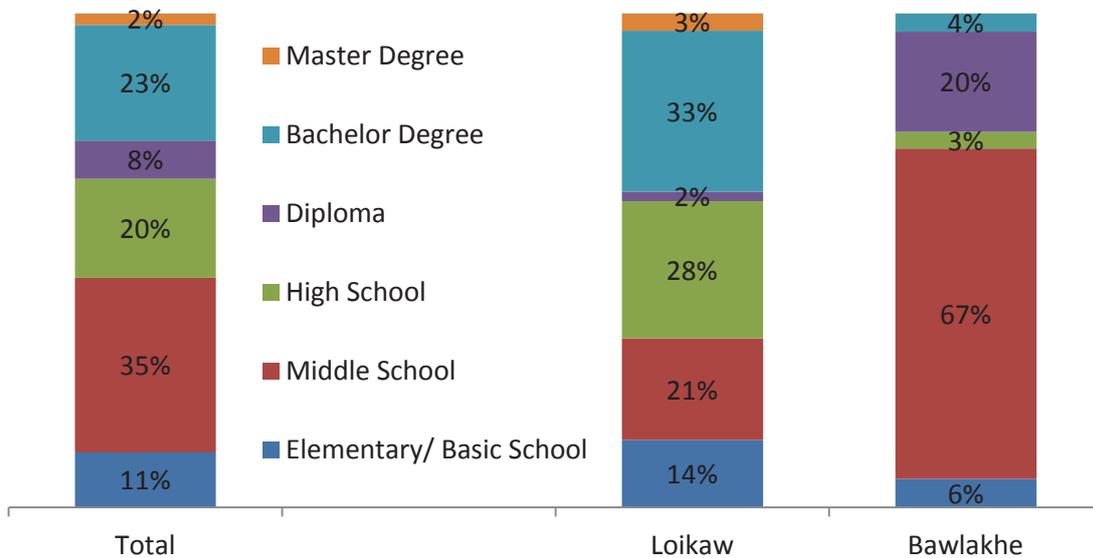
Figure 35: Assessment of the labour force in Kayah State



1= very poor, 2= poor, 3= fair, 4= good, 5= excellent

Source: Kayah State Investment Opportunity Survey

Figure 36: Educational background of employees in Kayah State



Source: Kayah State Investment Opportunity Survey

3.4.4. Labour cost in Kayah State

The average wage for a semi-skilled worker is MMK 190,000 per month, rising to MMK 200,000 for middle management employees. Supervisors' average monthly salary is MMK 280,000, managers earn MMK 400,000, engineers can on average command salaries of around MMK 540,000 per month. The minimum wage rate for daily workers in Kayah State is MMK 5,000 and the maximum level that they can earn is MMK 15,000.

Table 46: Average wages in Kayah State

Particulars	Response Company	Loikaw District (MMK)		Bawlakhe District (MMK)	
		Minimum	Maximum	Minimum	Maximum
Semi-skilled worker	30	90,000	500,000	100,000	450,000
Staff	26	80,000	500,000	150,000	500,000
Supervisor	14	150,000	500,000	200,000	200,000
Mid-management	9	250,000	1,000,000	200,000	200,000
Engineer	6	220,000	1,500,000	200,000	450,000

Source: Kayah State Investment Opportunity Survey

3.4.5. Land utilisation and access to loan

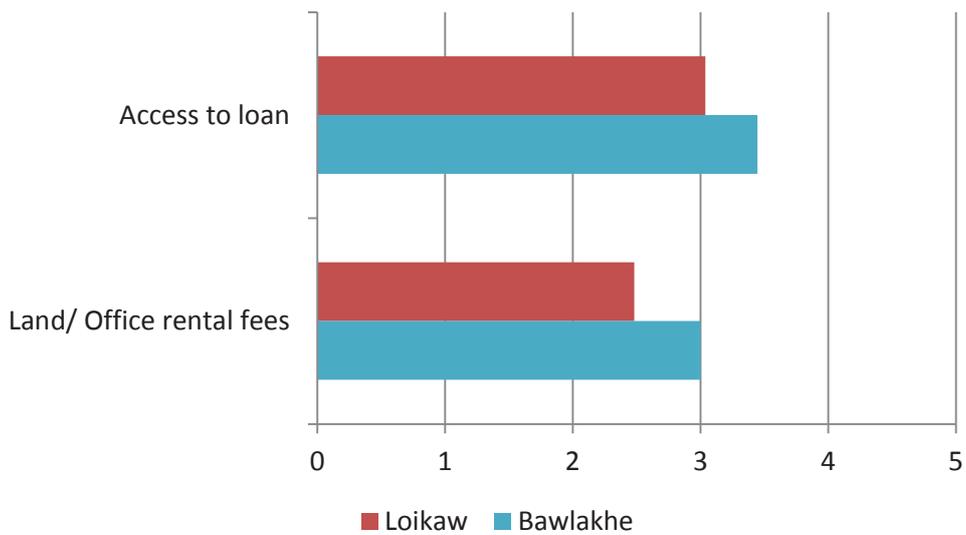
In Kayah State, real estate market has been in the good condition after 2010. The price for a 40x60ft² plot including building in Loikaw downtown is around MMK 700 – 800 million. And price for land is about MMK 0.1 million per ft². With 40x60 ft² in Loikaw semi-downtown is about MMK 300 - 500 million. It is about MMK 200 million to MMK 300 million in suburban areas. The price for one acre of field near town area is MMK 5 - 8 million and decreasing to MMK 1 - MMK 3 million for land that is distant from the city. In Hpruso and Demoso Townships, the price for one acre of field near the main road is about MMK 1 million and MMK 0.6 million per acre away from the road.

The real estate market has been cooling down after 2013-2014 and there is currently neither supply nor demand for real estate properties in Kayah State. In the industrial ward, the current value of 100x100 ft² plot is about MMK 15 to MMK 20 million. Regardless of little demand in the real estate market, land price is increasing in Kayah State.

The rental price for lands and shops in downtown area of Loikaw is high and relatively cheaper with increasing distant from the city. Rental charges are moderate in Bawlakhe District and the land and shop space rental market is cooling down. Some Kayah business owners do investment with their own capital. For those in need of finance, the government and other associations provide low interest loans, however the business owners do not prefer short-term loans and have difficulties in

accessing finance. Although Myanmar Agricultural Development Bank (MADB) provide loans of MMK 150,000 per acre of field and MMK 50,000 per acre of farm, this amount is insufficient for farmers who take loans from traders and brokers with interest rate of 5%. At the moment, there is increasing number of businesses trying to register under Directorate of Industrial Supervision and Inspection (DISI), as the Japan International Cooperation Agency (JICA) is planning to support loans for registered SMEs.

Figure 37: Financing and land price



1= very poor, 2= poor, 3= fair, 4= good, 5= excellent

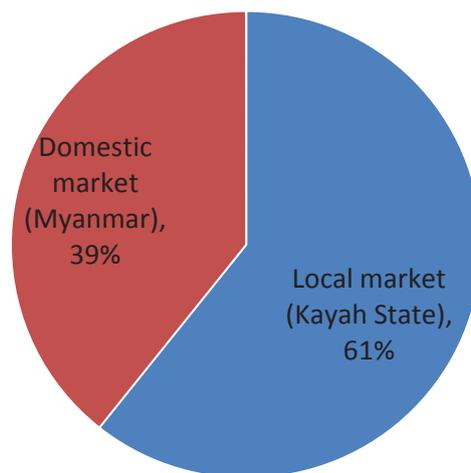
Source: Kayah State Investment Opportunity Survey

4.5. Logistics

According to respondents, businesses in Kayah State focus mostly on the domestic market within Kayah State. There are 61% of local market distributor within Kayah State and other 39% trade with Yangon, Mandalay, Nay Pyi Taw, Lashio and Muse of Shan State.

Road is the most common transportation method used by Kayah businesses for trading and raw materials procurement. For Loikaw-Yangon goods delivery, Aungban and Pinlaung routes are most utilised; Loikaw-Shan goods delivery uses the Hsihseng-Taunggyi route; Loikaw-Mandalay goods delivery uses the Kalaw route. Road conditions have improved in recent times; however, some are still too narrow for the passage of two trucks causing delivery delays in some regions. Road expansion and straightening is needed, especially for Paunglaung Road, where goods delivery times would be significantly improved. Currently goods delivery by trucks from Loikaw, takes one and half day to Yangon and one day to Mandalay on average.

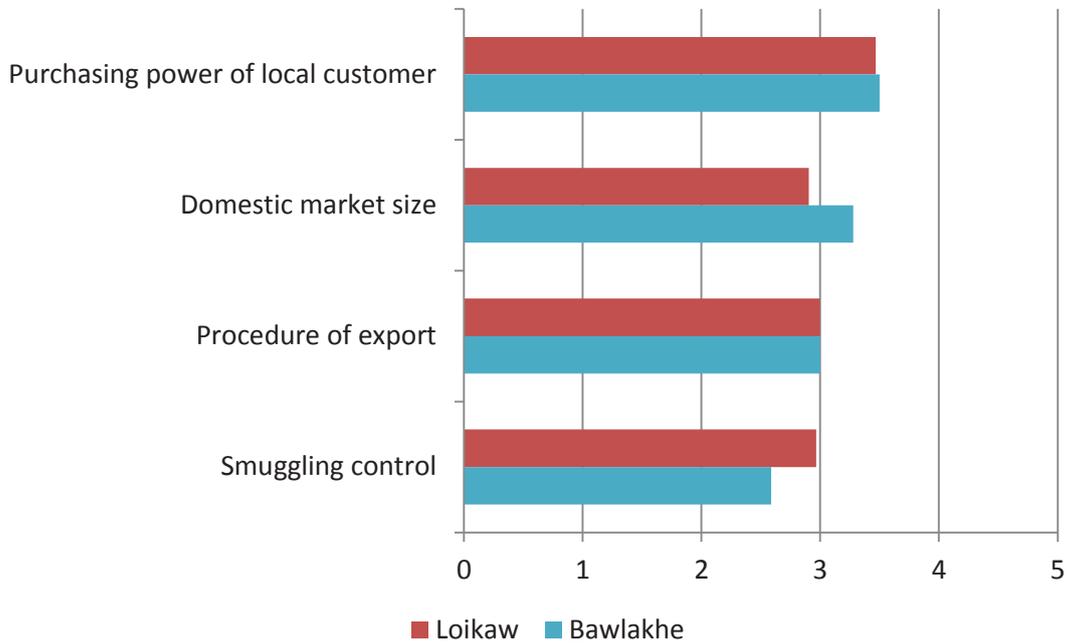
Figure 38: Types of trade by respondents



Source: Kayah State Investment Opportunity Survey

Stricter controls of Illegal businesses in Kayah State such as timber production and mining have lowered sales and financial conditions of related businesses are suffering. The average purchasing power per capita has slightly decreased. However, the booming construction market employs more migrant workers from other states and regions and total purchasing and consumption has slightly increased. Therefore, overall rating for purchasing power of local customers and the market size is fair. Even though Kayah products are exported to other countries, less than 4% of respondents understand the export procedures, as local Kayah businesses and farmers sell their products to the traders and brokers of other regions rather than direct exporting to foreign countries. Smuggling control in Loikaw District is rated as fair, but poor for Bawlakhe District as there illegal logging and wood trading continues.

Figure 39: Rating logistics in Kayah State

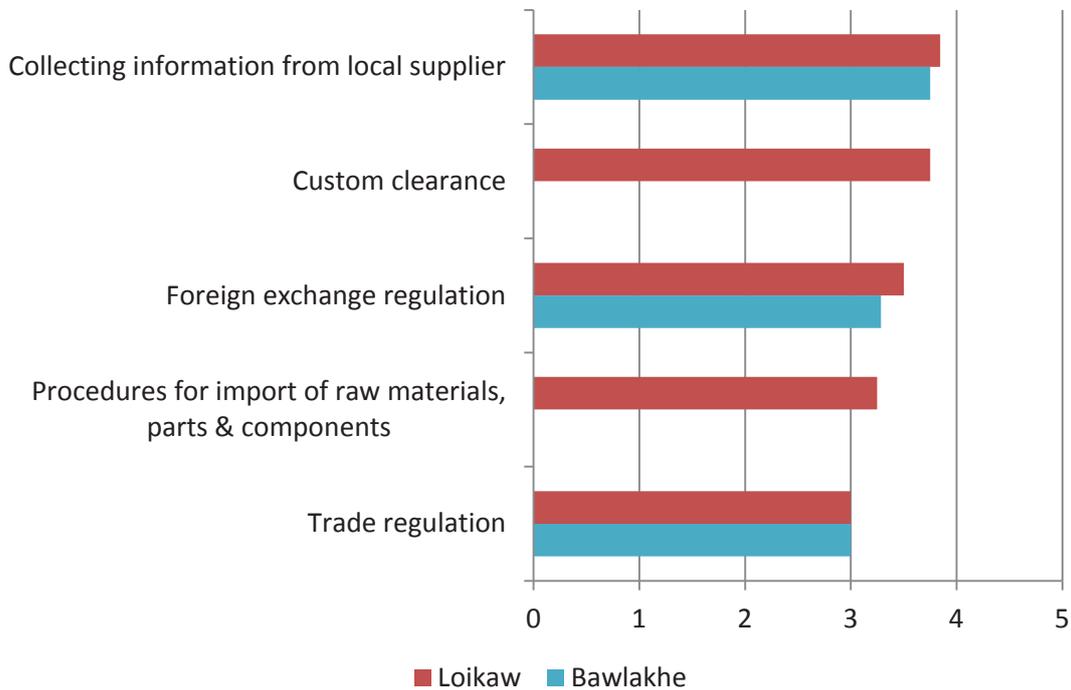


1= very poor, 2= poor, 3= fair, 4= good, 5= excellent

Source: Kayah State Investment Opportunity Survey

Kayah local businesses get enough information relating to goods, transportation, and logistics from the associations, business partners, farmers and wholesale centres. Current information for up-to-date changes in prices of the goods is received from the wholesale centres of Yangon and Mandalay due to advances of the news media, wide usage of internet and the improved telecommunication system. Over 80% of the respondents have little knowledge on procedures for import of raw materials, parts and components, custom clearance and trade regulation and all businesses and farmers in Bawlakhe District struggle to answer questions on these matters. There are imports of foodstuffs and consumer goods from Thailand. The United State Dollar is currently under pressure and this is adversely affected the value of Myanmar Kyat. So, the respondents rate the foreign exchange regulation as fair.

Figure 40: Rating domestic and foreign procurement in Kayah State

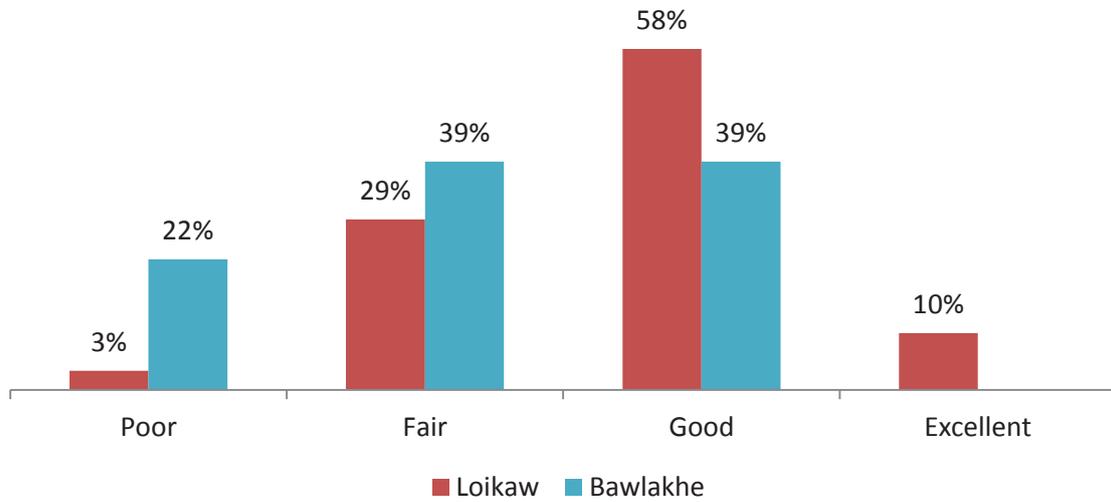


1= very poor, 2= poor, 3= fair, 4= good, 5= excellent
 Source: Kayah State Investment Opportunity Survey

4.6. Future business development

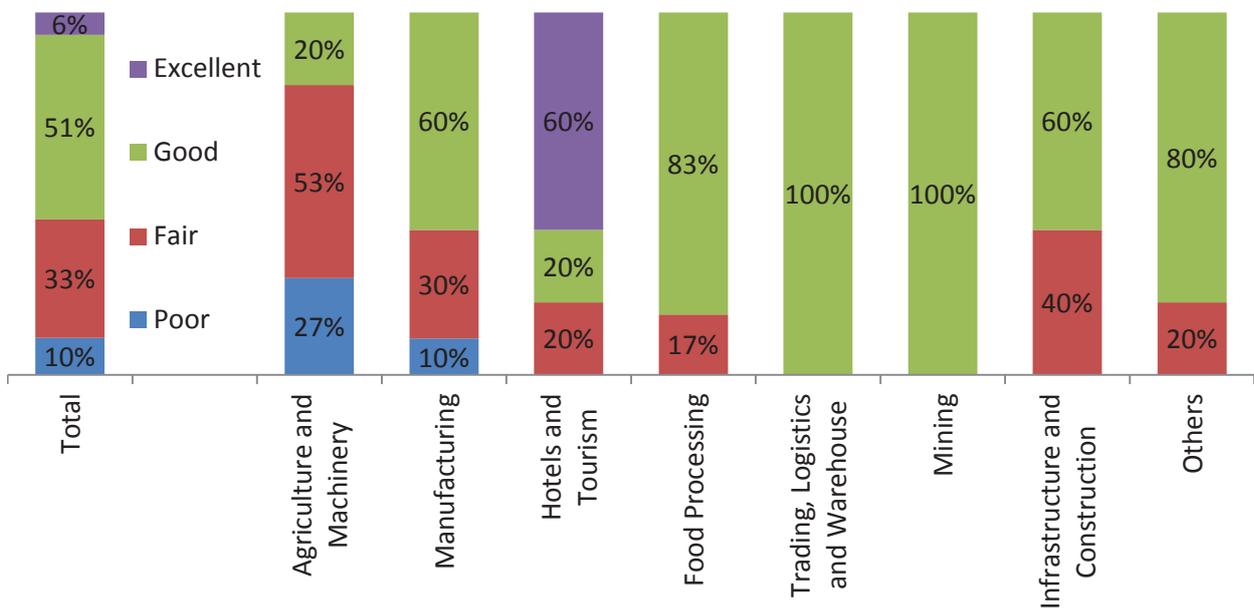
Almost 68% of respondents expected prospects to be good or excellent in the next three years. With the active cooperation between the state government, line departments and local businesses, there is an expectation that basic infrastructures, peace and security will further improve in the future. Hotel and tourism businesses are mostly predicting excellent prospects as there are many unexplored tourist sites and itineraries that will boost domestic and foreign tourism to the Kayah State. Respondents also commented on improving peace and security in the region, higher market demand, improved infrastructure and electricity supply, and governmental services as positive factors affecting their future businesses.

Figure 41: Predicting the future of industry in next three years



Source: Kayah State Investment Opportunity Survey

Figure 42: Predicting the future of industry by each sector in next three years

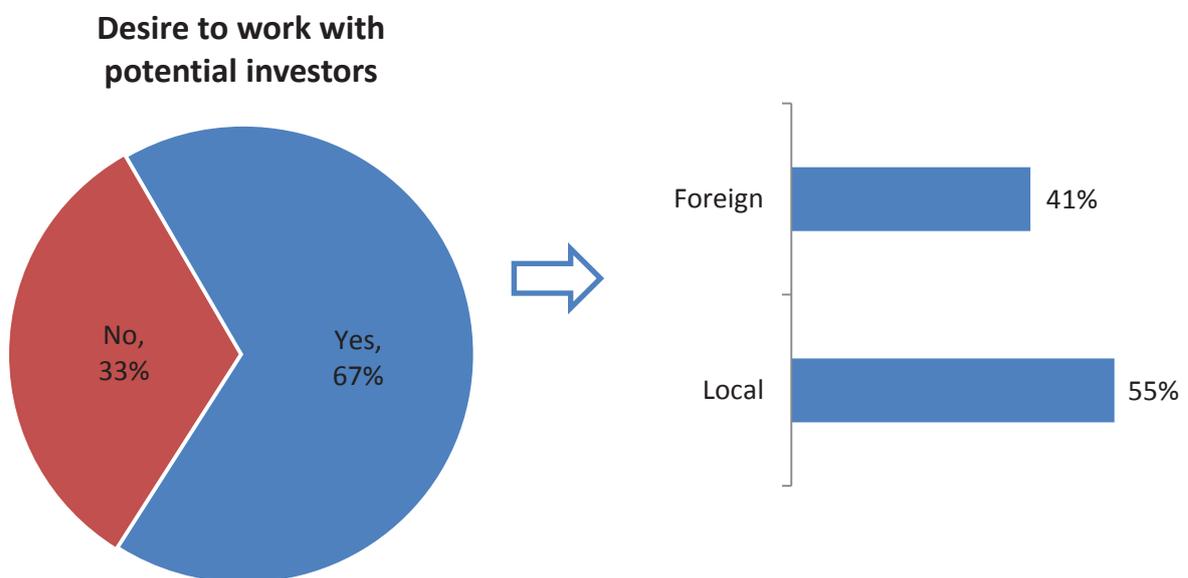


Source: Kayah State Investment Opportunity Survey

4.7. Requirements to improve the businesses

In the study of the willingness to cooperate with other local and foreign investment companies by the Kayah local businesses, 67% want to cooperate and 55% among them prefer local investment while 41% prefer foreign investment. The preferred collaborating style is local businesses providing the labour force and land for business operation and the investors providing capital, technology, machines and markets. The owners would like to share the profits with percentages satisfactory to both sides.

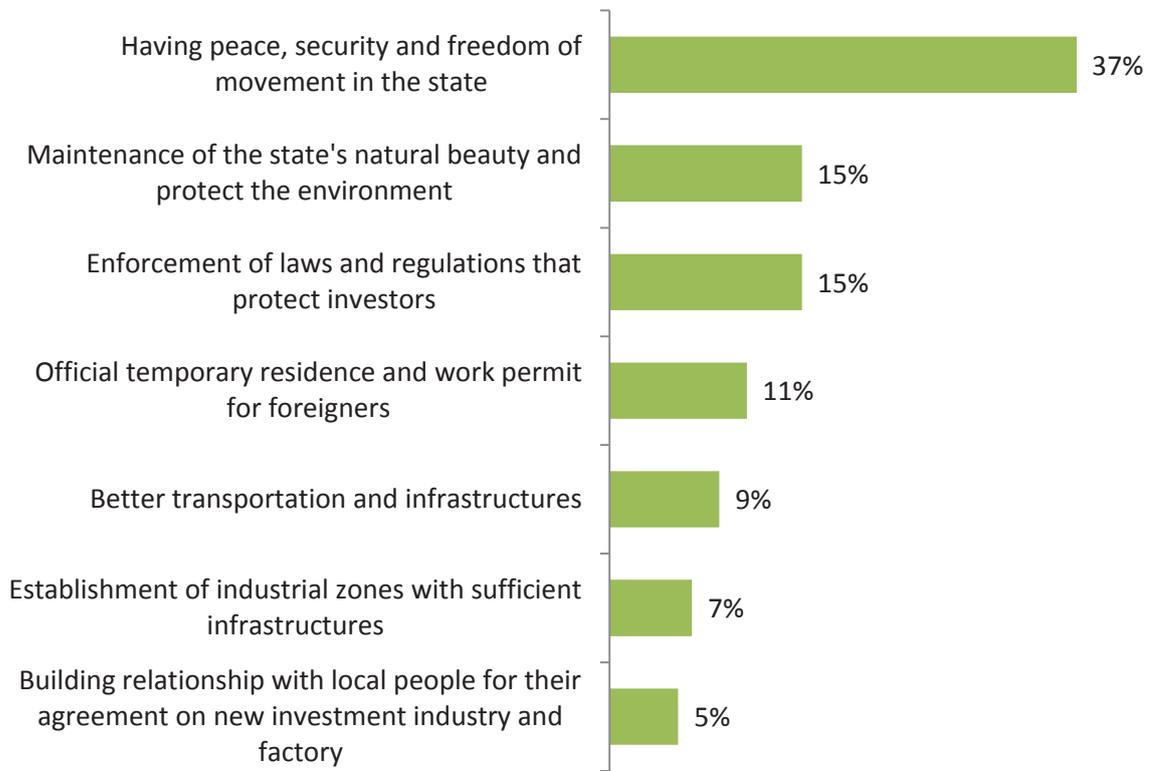
Figure 43: Local business owners' willingness to cooperate with local and foreign investment enterprises



Source: Kayah State Investment Opportunity Survey

According to the survey, the first priority to implement in order to attract more investments into the Kayah State mentioned by the respondents is full regional stability and freedom to travel to every part of the state. It is also an important task to protect and maintain the natural beauty of the state for the long-term sustainability. The investment laws and regulations should be clear and convenient for potential investors and facilities for accommodation and freedom to travel to some extent in the state should be provided to foreigner tourists. The transportation system lining other states and regions should be improved. Before potential investors are invited to the state, educational campaigns should be initiated to educate and encourage local people to realise, the profitability that will come with investment and regional development for the implementation of industrial zone, without local demonstrations hampering this development. Also highlighted is the responsibility of the state government and line departments to fulfil the requirements mentioned above.

Figure 44: Requirements to attract local and foreign investments in the area of Kayah State



Source: Kayah State Investment Opportunity Survey

In the opinion of business owners, the business with most potential is the cultivation of paddy, maize and sesame in Loikaw, Demoso, Hpruso and Bawlakhe Townships. Kayah State’s climate is best for growing but there are market limitations for the agricultural products. This sector will see its greatest potential if local businesses and farmers cooperate with the larger enterprises and investors who can find markets for the products. A second- potential sector is hotel and tourism. There are numerous activities that the domestic and foreign visitors can enjoy in Kayah State such as its natural beauty, unexplored tourist sites, observing the indigenous lifestyles of the ethnic groups, activity excursions such as biking, rowing and mountain hiking. This business sector can lead the development of state’s economic growth when restricted areas are opened and full regional stability is attained.

5. Obstacles and limitations of doing business in Kayah State

According to the study result, the obstacles and limitations of doing business in Kayah State are no full regional stability, peace and security for businesses, conservative thinking of local people, high land prices, trespass farming, scarcity of skilled labour, illegal businesses transactions, too few entrepreneurs and limited technology.

4.1. Peace

Weakness in regional stability is a significant obstacle for potential investors. Without safety and security, the tourism sector will struggle to develop, and the state's economy will stagnate. This is the biggest threat for potential investors with significant capital investment. Therefore, peace is the first priority to be considered in order to develop the Kayah State. It is known that the investors are keen to invest in the state if the state government can offer guarantees of a peaceful solution to the present situation. In 2016, Thai investors offered Myanmar Government investment in cement factory, wooden products producing factory and other consumer goods manufacturing factory. However, all these projects were cancelled due to regional insecurity.

4.2. Agriculture

Major hurdle standing in the way of agricultural sector progress is the shortage of labour especially skilled farmers. The current labour cost per day is MMK 5,000 for a woman and MMK 7,000 for a man. The second barrier is free-roaming cows and buffalos requiring farmers to grow subsidiary crops after harvesting first crops in monsoon season. The third obstacle is limited market demand and the fourth is high costs for ploughing, harrowing, reaping, threshing and winnowing. The cost for reaping, threshing and winnowing is MMK 40,000 to MMK 50,000 per acre.

Large tractors are used for agricultural soil preparation before cultivation but smaller farm can only afford mini hand tractors/ power tillers. For the transformation of Kayah State's agriculture into mechanised farming, more agricultural equipment is needed and at affordable prices, presently it is difficult to buy equipment and machines easily.

Finding markets for the products is also a hurdle for farmers. Farmers with low financing capacity for agricultural expenses take credit from brokers, repaying it after selling their harvest. Should weather conditions damages the harvest, farmers struggle to repay their debt and the interest increases. With expenses increasing over the years, accumulated interest some farmers unable to repay their debts. The farmers are also exposed to price fluctuations as the brokers calculate the amount based on the value of crops at the time of taking credits not on the sale price. At the moment farmers are increasing their production year on year, markets are not expanding to absorb

the increase in production. To make matters worse, local sesame traders buy agricultural products from the farmers for lower price than market value. Thereby, the farmers suffer from lower prices for their products.

Investment in Bawlakhe District should be for dam water for the agricultural businesses. In forestry, teak cultivation can be done by taking 30-year permit for cultivation. The weather in Bawlakhe District is particularly suitable for teak cultivation.

4.3. Transport and logistics

Air transportation, is challenging because only Myanmar National Airlines flies in once a day for Yangon-Loikaw-Yangon flight. People who would like to travel from Loikaw to other states and regions (except Yangon) by air have to get to Heho Airport. New air routes are proposed to make it more convenient for passengers and encourage tourism.

Road transportation is still arduous, it takes 12 to 15 hours to travel from Loikaw to the major cities of Myanmar such as Yangon and Mandalay via mountain roads. Road conditions have improved since 2015, however, some of the mountain roads are in poor condition, resulting in traffic jams especially in rainy season. There are about 200 travellers a day and six bus lines are sufficient for daily operation, however they are underutilised. A good road transportation system is important for livelihood of local people/consumers as the foodstuffs and consumer goods are transported to and fro the other states and regions by road.

4.4. Technology

The application of modern technology in terms of manufacturing is weak and traditional method is more often being used. Technology is the basic need of most enterprises; e.g. production technology in manufacturing enterprises and farming technology in agricultural firms.

4.5. Labour (training, skill development and capacity building)

In Kayah State, most of the young people tend to work in Thailand either officially or illegally. There are three routes to enter Thailand illegally, from Ywarthit, Mese, and Shadaw. Kayah State is facing a labour shortage because Thailand has more job opportunities for the labourers and offers higher salaries. Young people working in Thailand earn from MMK 200,000 to MMK 400,000 per month. Additionally, local generally lack of desire to work full-time working instead enjoying local festival activities. Most of the labourers come from the central Myanmar and the Ayeyarwaddy delta region and are employed as daily workers.

In order to solve the issues of labour shortage and develop job opportunities for Kayah local people, Department of Small Industry has initiated vocational training courses for the manufacturing industry; Directorate of Hotel and Tourism introduced hotel, tour guide and languages training courses; and Department of Labour runs various vocational training courses.

Although various types of trainings are being conducted by the line departments, there are challenges with the local youths not comprehending the benefits of attending training courses. In order to solve this issue, course providers are persuading and urging local youth and workers to attend the provided training.

The hotel and tour guide trainings provided by the Directorate of Hotel and Tourism also gives the business licenses after the training courses. This requires trainees to have a minimum educational level of high school graduate. This eliminates potential trainees without adequate education achievements, causing some youth to lose the opportunities to attend the courses. This includes Christian youth, who can speak good English and returned workers from Thailand speaking good Thai but as middle school graduates, they are not qualified to attend the tour guide training courses. In this situation, the minimum education level limitation should be liberalized by the government for the Kayah young people to have the opportunity to attend the training.

4.6. Others

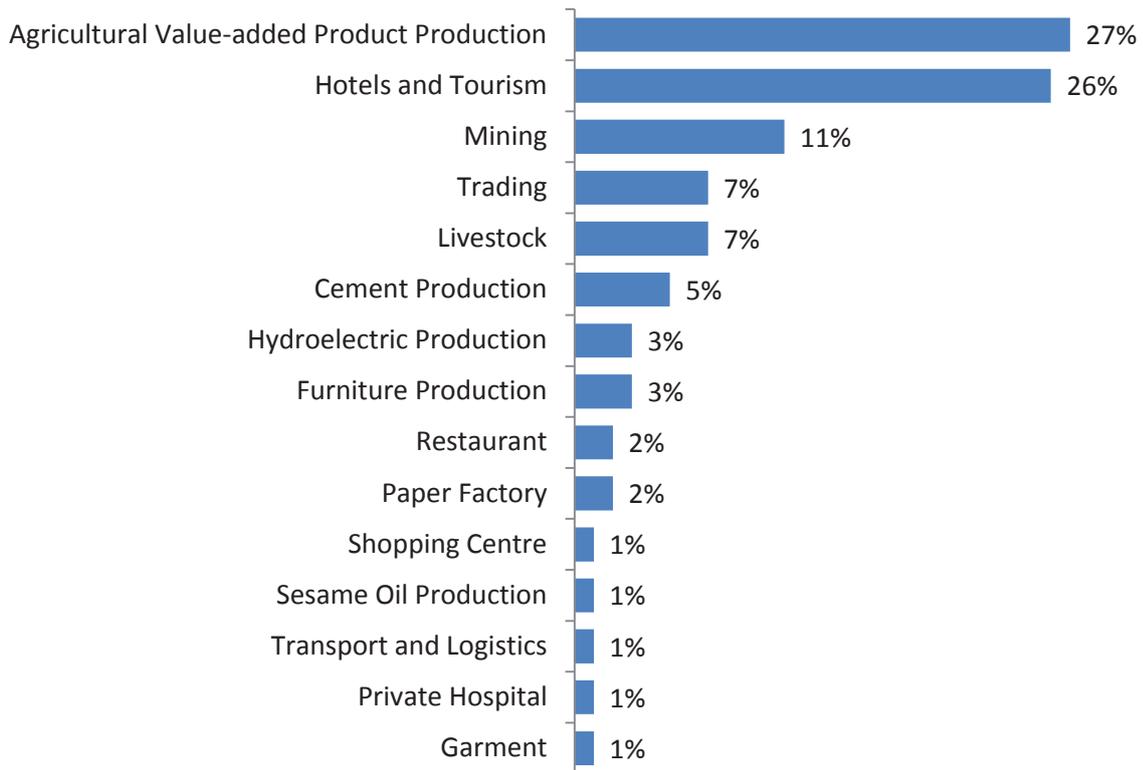
Few job opportunities for Kayah youths exist in the State as there are fewer factories and industries offering casual works. As the number of factories and industries increases, so job opportunities for locals will increase and this will lower the outward flow of workers to Thailand. This will benefit the state as well as improving the image of the country.

In Kayah State, soil erosion is a problem and it is difficult to record the fields & farms ownership as the impacts of shifting cultivation. Local people used to do shifting cultivation freely because there were plenty of land and soil resources, but this has changed with the introduction of trespass laws. In the future this may incite demonstrations against private businesses, regional projects and governmental projects.

6. Potential investment opportunities in Kayah State

Based on the Kayah State investment opportunity survey, the potential sectors are agri based products manufacturing, hotel and tourism and mining according to the opinions of the business owners in the Kayah State.

Figure 45: The best investment opportunities in the state according to the opinions of the business owners



Source: Kayah State Investment Opportunity Survey

6.1. Potential sectors in Kayah State

For potential local and foreign investors, Kayah State has the greatest potential for businesses in the; hotel and tourism sector, agri-based enterprises, border trading, hydroelectric power production, cement production and mining. The potential businesses in Bawlakhe District of Kayah State are agriculture, agri-based products manufacturing, wooden products production, livestock, hydroelectric power production and mining.

5.1.1. Production of agricultural value-added products

As Kayah State is an agricultural based region, investment should focus on establishing factories for manufacturing value-added products that use the agricultural products as raw materials; e.g. establishing of corn drying machine, sesame oil mill and animal feed factory.

(1) Corn drying machine

Kayah State produces over 3.4 million baskets of maize per year. Therefore, it is a good opportunity to establish a corn drying machine in order to dry this amount of maize in a short period for maximum quality. Currently, there are only three drying machines and more machines are presently needed for maize production. The capital investment needed for a corn drying machine with the capacity of 15 tonnes is about MMK 35-40 million and for the machine with the capacity of 30 tonnes is about MMK 65-70 million. If the government can provide the SMEs loan (or) other types of loan for the capital investment of the local business owners, the owners of the dry machines as well as the maize farmers will reap the benefits.

(2) Sesame oil mill

Sesame oil mill business is also a potential business as Bawlakhe District in Kayah State has a high yield of sesame oil crops. There are about 15 oil mills in Loikaw District but in Bawlakhe, people are producing oil using the traditional oil press method of extraction. Loikaw District mainly produces groundnut oil. The sesame crops left from the oil sufficiency level are sold to brokers and traders. There is significant opportunity to establish oil mills and produce sesame oil in Bawlakhe District. At the moment, oil produced from the traditional oil press is low quality and is uncompetitive in market sales. So, most of the farmers sell the sesame receiving low profits.

Early in 2018 in Yaynipout Village of Bawlakhe Township, a small oil mill was established due time and inconvenience of using traditional oil press methods. The second-hand machine from Loikaw was bought for MMK 2 million. The oil mill offers the services of oil production from the sesame brought from the various villages of the state, charging for the services. The income for producing nine viss of sesame is MMK 1,000. The sesame oil meal obtained after oil extraction is owned by the mill and it is sold as animal feed for MMK 600 per viss. The oil mill could produce four viss of

sesame oil and five viss of sesame oil meal from nine viss of sesame crops. There is enough raw material for establishing larger sesame oil mills in Bawlakhe. The capacity of the current small oil mill in Bawlakhe is only about 30 viss per day. Production of sesame oil from Kayah State could be increased with investment in more sesame oil mills.

(2) Animal feed factory

Rice, maize and sesame are the major agricultural products produced from the Kayah State and the by-products from these crops are useful as raw materials in animal feed factories. Broken grains, rice bran, sesame oil meal and the maize bran are the raw materials for the animal feed production. Establishing a production factory would provide the necessary animal feed for the developing livestock zone in the Kayah State.

5.1.2. Tourism sector

No all townships in Kayah State are presently open to travel, Shadaw Township is restricted. People have the opportunity to visit and see the original natural beauty of water, land, forests and mountains in Kayah State. People can visit Taung Kwel Pagoda, Myo Nan Pagoda, Kandarawadi Haw Palace where Shan chief of former times lived, Kyet Cave, Lawpita Waterfall and Ngwe Taung Dam in Loikaw Township, 7 Serial Lakes, Htee Pwint Kan (Umbrella Pond) and Lwel Ta Mu Cave in Demoso Township, Htee Prunu Cave near Mawthido Village of Hpruso Township and more, people can also visit and enjoy the scenery of Than Lwin river and Balu Chaung. Pan Pet Village, Htee Nee La Leh Village and Daw Ta Ma Gyi Village in Demoso Township, Htay Kho Village, Hoyar Village and Biyar Village in Hpruso Township are the interesting excursions for domestic and foreign visitors where community based tourism (CBT) is being conducted. Visitors can observe the beautiful forests and mountains (huge trees that four people can hug), hundred-year-old caves, the places where Japanese used as shelters during war and the natural lifestyle of Kayaw ethnic group.

The border point of BP-13 at Mese and Thai border was opened in October of 2016 and the border trade was conducted. In addition to border trade, immigration through this gate is allowed, increasing numbers of tourists visiting Pai of Mae Hong Son Province, Thailand can cross into Kayah State, made easier and this would greatly enhance the Kayah's tourism sector.

Shadaw, is currently inaccessible, and is the best place for eco-tourism. Shadaw Township has Tar Ta Mout Mountain, natural hot spring and ancient pagodas built by U Aung Zay Ya. The development of a hotel or resort on the high Tar Ta Mout Mountain in Kayah State is needed and improving tourist sites to attract foreign tourists like excursions from Pai City, Mae Hong Son Province. If the border points of BP-8 and BP-9 in Shadaw are officially opened, the tourism sector as well as border trade will flourish. In addition, a MOU agreement was signed between Myanmar and Thailand to define the two cities, Loikaw and Mae Hong Son, as Sister Cities. The agreements

contained in the MOU need to be implemented to improve the tourism and trading sector of Kayah State.

The potential tourism types in Kayah State are CBT, culture tourism and activity tourism. There are plans for adventure tours at Pun Chaung before entering Shadaw Township. The scenery of Htoo Chaung and Pun Chaung prior to entering Hpasawng Township are spectacular. Other places of beautiful are Dway Mae Naw 7 Serial Lakes and Htee Pwint Kan at Demoso Township. There is a monastery built from several old and ancient teak logs at Ywarthit Sub Township. This place has potential as a tourist destination and the state government's approval has been requested to make this area a tourist site in 2018. Bawlakhe District was an old town of Shan chief of former times, Yayni Chaung passing an ancient cave and waterfall. The cave where Yayni Chaung passes through is situated three miles from the southern part of Bawlakhe and people can visit that cave and the villages of the ethnic groups freely. Planning is underway to open the waterway transportation by using Moebye-Pekon-Inle route for the visitors to Shan State and Kayah State. Nya Zay (Night Market) opened beside Naung Yar Lake at Loikaw on 2 December 2018 as a tourist destination.

5.1.3. Paper factory

There are a lot of forests and bamboo forests in Bawlakhe District. Although various kinds of bamboo are grown in the district, there is no local bamboo commercial production. Rubbing of the branches of the bamboo forests on the mountain frequently causes fire in hot and dry seasons. There are three sources of forest fire; hunters burning the forests to scare the animals, burning by farmers to clear the land for farming, and natural burning from the rubbing of the branches of the trees. From these fires, valuable bamboo trees are lost every year. However Bamboo forests are not all lost as they grow again from the bamboo stumps in the rainy season. So becomes the cycle of plant growth in the rainy season, burning and loss in the hot season. To protect natures and wild animals from fire and running away, the bamboos should be systematically harvested and used as raw materials to produce paper. Establishing a paper factory in Bawlakhe would benefit investors, maintain the natural forest and wildlife and create job opportunities for local people.

5.1.4. Livestock and fishery

During the fiscal year of 2016-2017, with the state government's guidance, productive goats flocks, requiring low cost for foods (quick win) were distributed in Hogit, Lansone and Laetaw Villages of Mese Township, Dawtadar Village of Demoso Township and Lwelwine Village of Ywarthit Sub Township. If this livestock farming is successful, the number of goats and the goat meat production of the state will increase in line with other states and regions.

In 2018, it is planned to distribute over 1,500 goats mainly to areas getting the hot weather. There is pig farming in Demoso Township. The government could distribute over 1,000 pigs within three

to four years. Currently, chicken for local consumption is imported from Mandalay and there is a potential for chicken farming in the Kayah State.

5.1.5. Electricity generation

There is a long-term benefit for investment in the hydroelectric power production sector. The water flow rate at the junction of Htoo Chaung and Balu Chaung is very high and suitable for production of hydroelectric power. There is a potential for investment in the building of hydropower plant at the Nant Ta Phat Chaung where water flow is strong; this construction would be a long-term large project and research is currently being conducted for this project. Than Lwin river and Pun Chaung have potential for production of hydroelectric power. Although there was Pun Chaung hydropower plant project, was cancelled due to objections from locals.

5.1.6. Cement production

Kayah State is rich in limestone mountain and foreign expenditure could be reduced by ending cement imports if local cement production can be financed and local demand fulfilled. Cement demand within Kayah State is increasing as the construction industry expands and basic infrastructure is gradually developing. There are also the opportunities for export to Thailand.

5.1.7. Border trade

There are potential to invest in warehouses at the border trade zone near the border points of BP-13 and BP-14 for storage of commodities and goods. If the project being implemented by the state government for the 2 nights 3 days itinerary is successfully, and tourists can pass the border gates, the tourism sector and border trading will flourish. Should border trading be opened, there will have the great opportunity to invest in the garment industries and the factories using CMP¹² system.

5.1.8. Wood industry

There is a potential to invest in wooden products manufacturing industry, Hpasawng Cooperative Association started operation in January of 2018. The operation is presently operating in the government's own warehouse, the objective was to sell the wooden products at the Kayah State Day Festival. The shop at this festival sells all the products sent from Hpasawng. Therefore, the production is continued at Hpasawng under the guidance of Loikaw Head Office. The raw materials such as the disqualified Padauk woods from local timber production, the Padauk woods obtained from clearing the lands for farming are collected and used in making consumer goods. The wooden

¹² Cutting, Making and Packaging

products being manufactured are vases, pencil cases, cups, coffee cups, mugs, plates in various sizes and wine glasses. The handicraft expert is employed from Bago Region and the monthly wage for the expert is MMK 450,000. The association is conducting knowledge sharing session for interested people. There are currently one expert and two interns. The cost of hiring a truck is MMK 150,000 and it takes 10 days to manufacture the wooden products for one truck. The sizes of the products are varied and difficult to account for the products, the revenue is nearly MMK 0.7 million. The wholesale price for the products is MMK 50 per inch. The finished products are delivered to the State headquarter and there are currently no customers from Hpasawng Township and other regions. As the same way, there is a potential to manufacture finished wooden products by using the woods produced from Bawlakhe District and the waste woods.

5.1.9. Mineral purification

There are opportunities to invest in extraction of the mineral ores such as antimony, tin and other minerals as well as building mineral purification plants.

7. Recommendations and action plan to improve the business environment and promote investment

Kayah State has abundant natural resources with many arable areas for the agriculture sector and mineral extraction. There is also tremendous potential in the tourism sector to promote the state's wonderful natural, geographical, culture and religious sites. Moreover, developing infrastructure, an investor friendly state government and business community, and improving peace and stability in the state are all seen as attractive to investors.

All townships of Kayah State are included in Zone 1 in terms of tax holidays offered under the latest Investment Law.

According to the survey findings, the most common reason to choose Kayah State to set up a business is market demand. Respondents said it is easy to obtain licenses and permits when setting up a business in Kayah State. Survey respondents said the current business climate is quite slow but nearly 70% of them expect better prospects in the next three years because of improving peace and stability and higher market demand in Kayah State.

It is found that there are great opportunities to invest in the following sectors; -

- (1) Tourism services,
- (2) Hydroelectric power generation,
- (3) Distribution of agricultural inputs and productive seeds,
- (4) Building infrastructure for transportation and logistics,
- (5) Construction,
- (6) Production of construction materials (cement),
- (7) Hotel services,
- (8) Agricultural businesses (coffee, white latex, macadamia),
- (9) Agricultural products based industrial enterprises (corn drying machines, animal feed factory, oil mill, rice mill),
- (10) Mining.

The following priorities should be considered to improve investment environment; -

- 1) Improving regional peace and security (to persuade the ethnic armed groups who haven't sign for Nationwide Ceasefire Agreement (NCA) to sign for agreement and exploring the business and job opportunities for the ethnic armed groups who have already sign for NCA),
- 2) Guarantee for freedom of travelling in the local Kayah area by the state government,
- 3) Arrangement of land permits for the investors,
- 4) Holding educational campaigns to persuade the local people for their positive perception on the investors,

- 5) Getting help of non-governmental organisations (NGOs) and community based organisations (CBOs) to hold these campaigns and events,
- 6) Quick implementation of official border points passing trading according to the bilateral trade agreement between the two countries, Myanmar and Thailand, to improve the border trade,
- 7) Providing the vocational training courses to increase the number of skilled workers,
- 8) Providing modernised machines and technology,
- 9) Supporting to transform from traditional agriculture to mechanised agriculture,
- 10) Fulfilling the financing needs of SMEs.

7.1. Action plan for infrastructure needs

Kayah State needs support to fulfil its infrastructure and organisational or policy requirements. The priority of favourable action plans is extracted as the followings; -

6.1.1. Priority implementation plan

The following issues should be prioritized to promote investment in the Kayah State; -

- 1) For investment promotion, making the Kayah State investment opportunity survey reports accessible on the DICA website or the official website of the Kayah State government and books distribution,
- 2) Promotion of investment fairs, investment seminars, exhibition booths, business matching and site visits,
- 3) Listing the potential sectors and businesses for investment,
- 4) Official announcement of the available areas for investment and implementing the development of industrial zones and sector zones,
- 5) Announcement of investment procedures and regulations to make it easy to follow,
- 6) Enhancement of the linkage and network between foreign investors and local businesses,
- 7) Persuade and educate local people for no demonstration against the investment projects,
- 8) Coordination between Union Ministries and neighbouring states and regions to improve the basic infrastructures and better transportation system,
- 9) Coordination with Mae Hong Son Province of Thailand for trading businesses and tourism businesses,
- 10) Describing and highlighting the possible advantages and benefits getting from the investment entering the Kayah State to all organisations, associations and local people.

Annex

Table 1: Respondent lists of business interviews

No	Company	Sector	District
1	Company - 1	Hotel and tourism	Loikaw
2	Company - 2	Hotel and tourism	Loikaw
3	Company - 3	Food processing	Loikaw
4	Company - 4	Agriculture	Loikaw
5	Company - 5	Food processing	Loikaw
6	Company - 6	Garment	Loikaw
7	Company - 7	Agriculture	Loikaw
8	Company - 8	Animal feed trading (others)	Loikaw
9	Company - 9	Mining	Loikaw
10	Company - 10	Agriculture	Loikaw
11	Company - 11	Hotel and tourism	Loikaw
12	Company - 12	Hotel and tourism	Loikaw
13	Company - 13	Trading	Loikaw
14	Company - 14	Trading	Loikaw
15	Company - 15	Food processing	Loikaw
16	Company - 16	Education service	Loikaw
17	Company - 17	Trading & logistics	Loikaw
18	Company - 18	Construction	Loikaw
19	Company - 19	Food processing	Loikaw
20	Company - 20	Manufacturing	Loikaw
21	Company - 21	Manufacturing	Loikaw
22	Company - 22	Manufacturing	Loikaw
23	Company - 23	Agriculture	Loikaw
24	Company - 24	Construction materials production	Loikaw
25	Company - 25	Agriculture	Loikaw
26	Company - 26	Food processing	Loikaw
27	Company - 27	Stone carving	Loikaw
28	Company - 28	Food processing	Loikaw
29	Company - 29	Livestock & distribution (Chicken)	Loikaw
30	Company - 30	Handicraft	Loikaw
31	Company - 31	Private high school	Loikaw
32	Company - 32	Construction	Bawlakhe
33	Company - 33	Drinking water production & distribution	Bawlakhe
34	Company - 34	Agriculture & trading (sesame)	Bawlakhe

35	Company - 35	Sesame farmer (Ywarthit)	Bawlakhe
36	Company - 36	Construction (Ywarthit)	Bawlakhe
37	Company - 37	Sesame farmer (Ywarthit)	Bawlakhe
38	Company - 38	Sesame farmer (Miehtan)	Bawlakhe
39	Company - 39	Sesame farmer (Miehtan)	Bawlakhe
40	Company - 40	Sesame farmer (Yaynipout)	Bawlakhe
41	Company - 41	Sesame farmer (Yaynipout)	Bawlakhe
42	Company - 42	Sesame farmer (Yaynipout)	Bawlakhe
43	Company - 43	Sesame oil production (SME)	Bawlakhe
44	Company - 44	Trading	Bawlakhe
45	Company - 45	Construction	Bawlakhe
46	Company - 46	Rock for road construction	Bawlakhe
47	Company - 47	Fish fingerling	Bawlakhe
48	Company - 48	Loikaw- Bawlakhe bus line	Bawlakhe
49	Company - 49	Hotel and tourism	Bawlakhe

Nine ethnic groups of Kayah

(1) The Kayah Race



The Kayah live mostly in the eastern parts of Kayah State in Loikaw, Demoso, Shadaw and Hpruso Townships. Few of them live in Taungoo Township, Bago Region and Pekon Township, Shan State.

The Kayah living in the eastern part of Kayah State are called “Mi Htay”. “Mi Htay” means “the part of the rising sun”. Other nationals call the Kayah living in the northern part of Kayah State “Law Kee”. “Law Kee” means “the upper part of the river”. The genealogy (Lineage) mark of the Kayahs is a tattoo of the rising sun on their backs. A Kayah male’s name ends with “Reh” (e.g. Maung Byar Reh, Maung Bu Reh) while a Kayah female’s name ends with “Myar” (e.g. Ma Pa Le` Myar, Ma Baw Myar).

Old Kayah traditional attire was that the Kayah males pierced their ears and wore stylised earrings. They wore short red pants and clothes that buttoned down the front or back. The females knotted their hair covered with 6-foot long red scarf and tied the white shawl around their waists. They wore the red longgyi and the lacquered cotton leg rings. The accessories worn by the old Kayah were silver coin locket, silver earrings, silver bracelets, and silver rings. Amber beads and coral beads were tied around the waists and feet.

(2) Kayan Padaung (Kayan Ke` Khong) Ethnic Group



They live in Loikaw and Demoso Townships, Kayah State as well as in northern Thandaung Township, Kayin State in eastern Pyinmana Township, Mandalay Region and in Pekon, Pinlaung and Hsihseng Townships, Shan State.

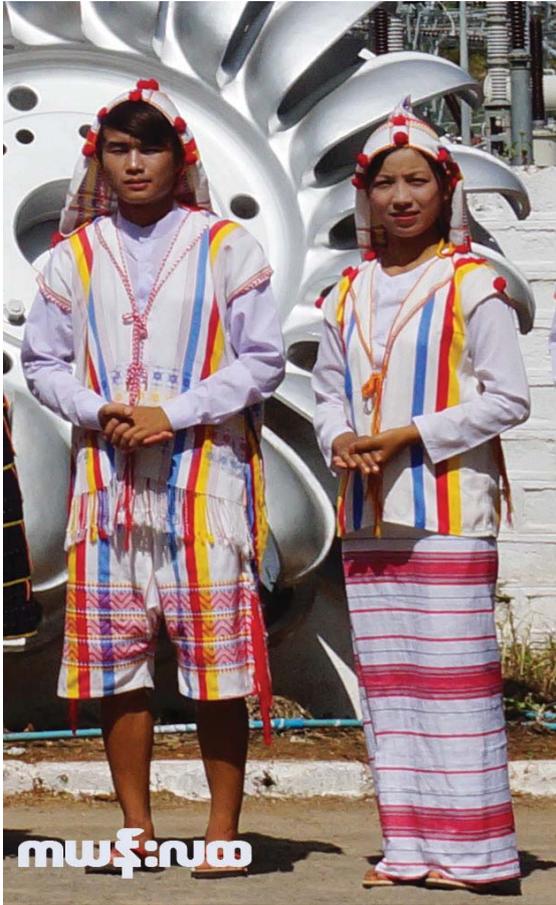
The Shan call the Kayah who wear bronze rings around their necks, arms and legs below the knees, Yan Pat Taung. “Yan” means “Kayah”, “Pat Taung” means “Kayah wrapped with bronze”. The Padaung call themselves Kayan Ke` Khong which means the people who live among the forests and mountains. Other national races call them Padaung.

A tattoo of the risings sun on their backs and on the napes of their necks symbolizes their tribe Kayan Padaung in a member of La Hwi genealogy.

The males begin their names with “Khun” (Khun Htet, Khun Mine) while the females begin with “Mu” (Mu Sa, Mu Lai).

Modern Kayan (Padaung) traditional attire is that the males wear long black baggy trousers and the white smocks on the long sleeved white shirts. They wear pink (or) yellow turbans as the headdress. The females wear hand-woven clothes and self-woven longgyi with red and black horizontal stripes.

(3) Kayan – Lahta (Za Yein) Ethnic Group



They live in Loikaw Township in Kayah State and Moebye, Pekon and Pinlaung Townships in Shan State.

The Shan call these Kayah who never keep long hair but shave their heads “Yan-Ho-Htar”. “Yan” means “Kayah”, “Ho-hta” means short hair, and thus, “Yanho-hta” means “Short haired Kayah”. These tribes are called “Gaung To”. They usually call themselves Kayan.

Other Kayah usually call them “Hta-Ru” which means those who live in the place where the river originated.

Kayan-Lahta (Za-Yein) tribes have their symbol of half-moon that appears on the 6th or 7th waxing day tattooed from below the jaw to their bosom (Layer by layer).

Kayah ethnic groups such as Kayan-Lahta, Kayan-Ka-Ngan, Kayan-Ge-Kho, and Kayan-Padaung have their names “Khun” for males at the beginning (e.g. Khun Yoe Ru, Khun-Ka Lo Ru) and “Mu” for females (Mu Lote, Mu Dan) respectively.

Modern Kayan-Lahta traditional attire is that the males wear vertically striped sleeveless clothes on the white shirts and short white trousers. The headdress of the men is long scarf with the decoration of pom-pom balls. The females wear white and red horizontal striped longgyi and the white smocks on the long sleeved white blouses. The headdress of the women is also a long scarf with the decoration of pom-pom balls. They usually wear silver locket, silver bracelet and beads belt.

(4) Mo Nu Ethnic Group



These people live in the western part of Hpruso Township and in Bawlakhe and Hpasawng Townships.

The Kayah Mo Nu living in the western parts are called (“Mo No”, “Mo Nu”). “Mo Nu” means the place of the setting sun or the western part. The Shan called them “Yan Ma Nay”.

The distinguishing mark of the Mo Nu ethnic group is the piercing of their ears, about the size of the stem of a thatch leaf. The aim of piercing them is to show that one is frank and manly. The females wear round earrings with silver balls dangling. Their names usually end with Ei, Ri, Mo, Le` (Maung Ka Le` Ei, Maung Mar Tay O Ke` Ri, Ma Kaw Mo, Ma Pwe` Mo).

Modern Mo Nu traditional attire is that the males wear red (or) pink turbans and a red (or)

pink shawl is tied around the waists. They wear the long black baggy trousers and the long sleeved white shirts under the jackets. The females wear the black turbans with the red trim and the black blouses covered with red cloaks. They wear the horizontally striped red longgyi and a 5-foot long white shawl is tied around the waists with the two edges at the front.

(5) Gay Par Ethnic Group



These people live in Loikaw Township, Kayah State. Most of them live in the northern part of Thandaung Township, Kayah State. The late comers of the Kayah tribes who come to settle in Kayah State are called “Gay Bar” which means “return”. In other words, it means the late comers of the Kayah genealogy. With the passage of time, Gay Bar changes to Gay Par.

The Kayahs call them La Hwi genealogy. The tattoo of the rising sun on their backs symbolizes their genealogy. The males begin their names with “Saw” (Saw Polo, Saw Kyaw Aung) while the females begin with “Naw” (Naw Mo Reh Hpaw, Naw Kham Thein).

Modern Gay Bar traditional attire is that the males wear the pink turbans with the two edges down. They wear long black baggy trousers and half pink half white smocks over the long sleeved white shirts. The females wear reddish

brown striped longyi and half pink half white smocks over long sleeved white blouses. A white turban is tied on the head with the two edges down on each side of the shoulder.

(6) Kayan Gay Kho (Kayan Ke` Dot) Ethnic Group



Most of them live in Loikaw and Demoso Township, Kayah State as well as in northern Thandaung Township, Kayin State, in eastern Pyinmana Township, Mandalay Region and in Pekon, Pinlaung and Hsihseng Townships, Shan State.

The Gay Bar people call the upper region “Gay Kho” in their language. (Gay = region, State and Kho = the upper region). Thus “Gay Kho” means the upper state or region. The Gay Bar race calls the Kayan who live in the north of them Gay Kho. The Gay Kho call themselves “Kayan Ke` Dot” which means people who live among forests and mountains. Other national races call the “Kayan Ke` Dot” Gay Kho.

A tattoo of the rising sun on their backs and on the napes of their necks symbolizes their genealogy. The Gay Kho tribe is a member of the La Hwi genealogy.

The males begin their names with “Khun” (Khun Sein Thaug, Khun Pi Yo) while the females begin with “Mu” (Mu Nan Nge, Mu Ah Mu).

Modern Kayan Gay Kho traditional attire is that the males wear long black baggy trousers and the white smocks covered on the long sleeved white shirts. A pink (or) yellow turban is worn as a headdress. The females wear long sleeved white blouses under the white smocks. The longyi with black and reddish brown horizontal stripes is worn and a white turban is tied on the head with the two edges down.

(7) Yin Baw (Kayan Ka Ngan) Ethnic Group



They live in Loikaw and Demoso in Kayah State. Some of them live in Pekon and Pinlaung in Shan State.

Shan Races call Kayan who wear silver and Baw Plates as an ornament on their necks as Yan Baw. “Yan” means “Kayan”, “Baw” means “silver” and thus “Yanbaw” means “Silver Kayah”. Later, the term “Yanbaw” is changed into “Yinbaw”. Yinbaw tribes called themselves as Kayan Ka Ngan. Kayan Ka Ngan ethnic groups who belong to Lahwi tribes settle in plaintive regions. Thus, they are known as Plaintive-dweller-Kayans.

Yinbaw ethnic groups who belong to Lahwi tribes have the sun tattooed on their back as the mark of their tribes. Their naming system is, at the beginning, “Khun” for males (Khun Maung Htan) and “Mu” for females (Mu Nyae). Some male names end with “Ri” (Maung Ta Ri)

and some females “Mu” (Pan Mu) at the end.

Modern Kayan Ka Ngan traditional attire is that the males wear the short black trousers with the decoration of pom-pom balls, black smocks on the white shirts. The head is tied with the wool pom-pom headband on the white turban with two edges down. The females wear black blouses under the black cloaks. They wear black horizontally striped longgyi and a 5-foot long white shawl is tied around their waists with the two edges down. The head is tied with the wool pom-pom headband on the black turban.

(8) Kayaw Ethnic Group



These people live mostly in the western part of Loikaw, Demoso and Hpruso Townships, Kayah State and also in the northern part of Thandaung Township, Kayin State.

Other races call them “Pa Re` Ta Re`” because they always keep their hair untidy without combing them (Pa Re` = human, Ta Re = ruffled hair). They call themselves Ka Yaw.

The Kayah La Hta call them “La Ku”. Their backs and the napes of their necks were tattooed with the rising sun as a symbol of their race or genealogy. The males’ names end with “E, Gyi, De, Kyaw, So” (Maung Thaw Ke` E, Maung Yoe Doe Gyi) while the females’ names begin or end with “Mo, Mu, Oo” (Ma Re Mo, Ma Lay Kho Oo).

Modern Kayaw traditional attire is that the males wear red (or) pink turbans, vertically striped short cotton trousers, and the various coloured smocks. The females wear vertically striped red cotton

smocks, longgyi with black and reddish brown horizontal stripes, and pink turbans with the two long edges on each side of the shoulder.

(9) Yinntale` Ethnic Group



These people live mostly in Bawlakhe Township, Kayah State. They call themselves “Taline”, but the Shan call them Yannta line. “Yanna”, here means Kayah, and the word “Yinntale`” is believed to come from “Yanntaline`”.

The natural symbol of Yinntale` people is the tattoo of the rising sun on the backs. Kayan people identified them as La Hwi tribe. The males end their names with “Rine”. (Maung Kyaw Rine, Maung Ko Rine) while the females end their names with “Mine” (Ma Moe Mine, Ma Soe Mine).

Modern Yinntale` traditional attire is that males wear red (or) pink turbans on their heads and tie a red (or) pink shawl on the waist as a belt. They wear long black baggy trousers, long sleeved white shirts and traditional jackets on the shirts. The headdress of the females is pink turban with

two knots on each side of head. They wear reddish brown striped longgyi and white blouses with pink trim containing two pockets.