



MALAWI GOVERNMENT

ANNUAL ECONOMIC REPORT 2018

Ministry of Finance, Economic Planning and Development

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Ministry of Finance, Economic Planning and Development,
Department of Economic Planning and Development,
P.O. Box 30136,
Lilongwe 3.
Telephone: (265) 1 788 888
Fax: (265) 1 788 247
E-mail: epd@malawi.net

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Chapter 1

THE WORLD ECONOMIC OUTLOOK

1.1 World Output

Global economic activity picked up to 3.8 percent in 2017 from 3.2 percent in 2016. This increase in growth was driven by investment recovery in advanced economies, continued strong growth in emerging Asia, a notable upswing in emerging Europe, and signs of recovery in several commodity exporters. In 2018 and 2019, the global output growth is forecast at 3.9 percent.

1.1.1 World Output Developments in 2017

In advanced economies, growth rose to 2.3 percent in 2017 from 1.7 percent in 2016. The economic activity in the United States rebounded to 2.3 percent in 2017 from 1.5 percent in 2016. In addition, growth in the Euro area improved to 2.3 percent in 2017 from 1.8 percent in 2016, reflecting stronger momentum, in both domestic and external demand, in Germany, Italy and the Netherlands. Advanced Asian economies also registered better growth in 2017. For instance, growth for Japan rose to 1.7 percent in 2017 from 0.9 percent in 2016.

TABLE 1.1: WORLD OUTPUT (ANNUAL PERCENTAGE CHANGE)

	2016	2017	2018	2019
Global Growth	3.2	3.8	3.9	3.9
Sub-Saharan Africa	1.4	2.8	3.4	3.7
Advanced Economies	1.7	2.3	2.5	2.2
United States	1.5	2.3	2.9	2.7
Euro Area	1.8	2.3	2.4	2.0
Japan	0.9	1.7	1.2	0.9
United Kingdom	1.9	1.8	1.6	1.5
Canada	1.4	3.0	2.1	2.0
Emerging Market and Developing Economies	4.4	4.8	7.9	5.1
Developing Asia	6.5	6.5	6.5	6.6
China	6.7	6.9	6.6	6.4
India	7.1	6.7	7.4	7.8
Commonwealth of Independent States	0.4	2.1	2.2	2.1
Emerging and Developing Europe	3.2	5.8	4.3	3.7
Latin America and the Caribbean	-0.6	1.3	2.0	2.8
Middle East and North Africa	4.9	2.6	3.4	3.7

Source: IMF World Economic Outlook April 2018

Furthermore, growth in emerging markets and developing economies rose to 4.8 percent in 2017 from 4.4 percent in 2016. This growth was supported by the steady growth in China and India, which was driven by resurgent net exports and strong private consumption, respectively. The ASEAN-5¹ countries and emerging Europe also registered an economic upturn.

1.1.2 World Output Prospects for 2018 and 2019

In 2018 and 2019, the global output growth is forecast at 3.9 percent. The growth prospects reflect an increased global growth momentum, favourable market sentiment, accommodative financial conditions and positive impact from the revised United States tax policy. The US tax policy reforms include reduction of corporate tax and a temporary allowance for full expensing of investment.

The growth forecast for advanced economies is at 2.5 percent and 2.2 percent for 2018 and 2019, respectively. These prospects are premised on favourable financial conditions and sustained acceleration in demand and investment. Growth for the US economy is expected to rise to 2.9 percent in 2018 from 2.3 percent in 2017, on account of projected external demand and the macroeconomic impact of the tax reforms. The Euro area is projected to grow by 2.4 percent in 2018 and moderate to 2.0 percent in 2019. Economic activity is projected to remain stronger in emerging and developing Europe at 4.3 percent in 2018, reflecting stronger external demand and an accommodative policy stance in Turkey. The recovery is expected to strengthen in Latin America, reflecting stronger commodity prices and easing financial conditions. Due to an increase in oil prices, growth is projected to improve in the Middle East, North Africa and parts of Asia (in particular Afghanistan and Pakistan). However, in this region fiscal adjustments may impact growth prospects.

1.2 Regional Output

1.2.1 Regional Output Developments in 2017

In Sub-Saharan Africa, growth rebounded to 2.8 percent in 2017 from 1.4 percent in 2016, largely supported by improved commodity prices. The Nigerian economy rebounded to 0.8 percent growth from a contraction of 1.6 percent in 2016, primarily reflective of rising oil prices. Similarly, South Africa registered a growth rate of 1.3 percent in 2017 from 0.6 percent in 2016. In addition favourable rainfall conditions supported growth in a number of economies in this region.

¹Indonesia, Malaysia, Philippines, Singapore and Thailand

TABLE 1.2: REGIONAL OUTPUT (ANNUAL PERCENTAGE CHANGE)

	2016	2017	2018	2019
Global Growth	3.1	3.8	3.9	3.9
Sub-Saharan Africa	1.4	2.8	3.4	3.7
Tanzania	7.0	6.0	6.4	6.6
Zambia	3.7	3.6	4.0	4.5
Mozambique	3.8	2.9	3.0	2.5
Zimbabwe	0.7	3.0	2.4	4.2
South Africa	0.6	1.3	1.5	1.7
Nigeria	-1.6	0.8	2.1	1.9

Source: IMF World Economic Outlook April 2018

1.2.2 Regional Output Prospects in 2018 and 2019

Growth in Sub-Saharan Africa is expected to improve to 3.4 percent in 2018 and 3.7 percent in 2019. The projected increase is attributed to improved oil and non-oil commodity prices. Nigeria is expected to continue benefiting from the rising oil prices, with growth rates of 2.1 percent and 1.9 percent in 2018 and 2019, respectively. Meanwhile, South Africa is estimated to grow by 1.5 percent in 2018 and 1.7 percent in 2019.

1.3 Inflation and World Commodity Prices

1.3.1 Inflation and World Commodity Prices in 2017

Headline inflation increased in developed economies to 1.7 percent in 2017 from 0.8 percent in 2016. The rise in inflation emanated from increasing fuel prices while wages and core inflation remained weak. Emerging and developing economies registered a slowdown in inflation to 4.0 percent from 4.3 percent. Similarly, inflation in Sub-Saharan Africa slowed down to 11.0 percent from 11.3 percent in 2016, however, it remained high due to pass-through of earlier exchange rate depreciations.

TABLE 1.3: CONSUMER PRICES AND WORLD COMMODITY PRICES (ANNUAL PERCENTAGE CHANGE)

	2016	2017	2018	2019
Consumer Prices Growth				
Advanced Economies	0.8	1.7	2.0	1.9
Emerging Markets and Developing Economies	4.3	4.0	4.6	4.3
Sub Saharan Africa	11.3	11.0	9.5	8.9

Source: IMF World Economic Outlook April 2018

1.3.2 Inflation and World Commodity Price Prospects in 2018 and 2019

Headline inflation is projected to increase in 2018 on account of strong demand exerting pressure on commodity prices. Core inflation is expected to rise gradually, driven by wages reflecting tighter labour markets.

In advanced economies, inflation is projected to accelerate from 1.7 percent in 2017 to 2.0 percent and 1.9 percent in 2018 and 2019, respectively, driven by pressures from narrowing output gaps. In emerging market economies, inflation is projected to increase to 4.6 percent in 2018 from 4.0 percent in 2017, and moderate to 4.0 percent in 2019, as output gaps close and energy prices stabilise. On the other hand, in Sub-Saharan economies, inflation is expected to slow down from 11.0 percent in 2017 to 9.5 percent and 8.9 percent in 2018 and 2019, respectively.

Oil prices averaged USD52.81 per barrel in 2017 and are projected to rise to USD62.30 per barrel in 2018, as the Organisation of the Petroleum Exporting Countries (OPEC) extends the production cut to the end of 2018 against increased demand arising from the global economic recovery. In 2019, oil prices are expected to moderate to USD58.20 per barrel.

1.4 Global Financial Sector

1.4.1. Global Financial Sector Developments in 2017

Monetary and financial conditions remained accommodative as slightly higher interest rates were offset by easing lending conditions. Financial stability risks declined with the strengthening global recovery and declining macroeconomic risks. However, sluggish inflation was fuelling risk appetite.

TABLE 1.4: LONDON INTERBANK OFFER RATES (PERCENTAGE)

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
London Interbank Offered Rate (LIBOR)				
On US Dollar Deposits (six months)	1.1	1.7	2.4	3.4
On Euro Deposits (six months)	-0.3	-0.3	-0.3	0.0
On Japanese Yen deposits (six months)	0.0	0.0	0.0	0.1

Source: IMF World Economic Outlook April 2018

Advanced economies continued with normalisation of monetary² policy, resulting in growth of central banks' balance sheets, following huge asset-purchase programmes. The normalisation process resulted in declining government bond yields, term premiums and credit spreads, while boosting equity valuations.

²Normalisation is the process of Central Banks returning to their policy norms which were changed in response to the recent Great Recession and financial crisis

1.4.2 Global Financial Sector Prospects in 2018 and 2019

Global financial conditions are expected to remain accommodative during 2018 and 2019. The ease in the cost of borrowing, especially in the Euro area, is expected to offset the gradual rise in interest rates. Normalisation of monetary policy in the United Kingdom and the United States does not pose financial market volatility risks. In addition, most emerging economies are expected to register accommodative financial conditions. However, it is projected that the normalisation of monetary policy will reduce portfolio inflows to emerging economies.

1.5 International Trade

1.5.1 International Trade Developments in 2017

Global trade recovered strongly in 2017 and registered 4.9 percent growth. The increase was more pronounced for emerging and developing countries, reflective of improved investment for commodity exporters. The recovery in investment and domestic demand in advanced economies also contributed to the rebound in trade. Among the emerging and developing economies, emerging Asia, in particular China, registered a strong growth in exports, while the increase in imports was explained by import recovery in commodity exporters. In advanced economies, import growth was broadbased, except in the United Kingdom. Export growth was remarkable in large exporters such as Germany, Japan, the United Kingdom and United States .

Current account balances remained broadly stable in 2017 compared to 2016. However, a significant change (about 3 percent of GDP) was registered in the current account balance of oil exporters, reflective of the increase in oil prices.

TABLE 1.5: WORLD IMPORTS AND EXPORTS
(ANNUAL PERCENTAGE CHANGE)

	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
World Trade Volume (Goods and Services)	2.3	4.9	5.1	4.7
Imports				
Advanced Economies	2.3	4.7	5.4	4.8
Emerging Market and Developing Economies	2.3	7.0	6.2	5.8
Exports				
Advanced Economies	1.8	4.4	4.7	3.8
Emerging Market and Developing Economies	2.6	6.4	5.1	5.3

Source: IMF World Economic Outlook April 2018

1.5.2 International Trade Prospects for 2018 and 2019

Growth in global trade is projected to increase to 5.1 percent in 2018 from 4.9 percent in 2017. Reflecting economic recovery in advanced countries, import demand is estimated to increase to 5.1 percent and 4.5 percent in 2018 and 2019 respectively. In terms of exports, advanced economies are projected to register a growth rate of 4.5 percent and 3.9 percent in 2018 and 2019, respectively. Meanwhile, exports from emerging and developing economies are estimated to grow by 5.1 percent in 2018 and 5.3 percent in 2019, supported by global economic recovery and improved commodity prices.

Chapter 2

MACROECONOMIC PERFORMANCE IN 2017 AND PROSPECTS FOR 2018 AND 2019

2.1 GDP Performance and Forecast

In 2017, the economy experienced a recovery from the previous year and registered a growth of 5.1 percent. This was attributed to the rebound in agricultural production and a continued reduction in inflation. However, in the last quarter of 2017 the economy was negatively affected by acute power shortages, which affected production levels and increased operation costs for most businesses.

As shown in table 2.3 in 2017 the economy showed substantial growth in the following sectors: agriculture, forestry and fishing; financial and insurance; and public administration and defence. The favourable weather conditions which led to a bumper harvest had a profound effect on overall GDP. The agricultural sector is the largest contributor to the overall economy, at 28.3 percent, as illustrated in table 2.2. The driving forces behind growth in the other sectors included increased demand, stability of the foreign exchange rate and declining inflation rate.

The real GDP growth estimate for 2018 has been projected at 4.0 percent. Although the macroeconomic variables are expected to remain stable, this figure takes into account the dry spells and fall army worms which hit many parts of the country. The growth for 2018 will be driven mainly by good performance in the following economic activities: human health and social work, financial and insurance services, wholesale and retail trade, public administration and defence, information and communication, and transportation and storage.

In 2019, real GDP growth is projected at 6.0 percent if Government follows the developmental plans, as outlined in the Malawi Growth and Development Strategy III (MGDS III) and if macroeconomic and environmental conditions are favourable.

**TABLE 2.1: GDP BY ACTIVITY AT CONSTANT PRICES,
(IN MK' MILLION)**

Constant 2010 prices (in K'million)					
Sector	2015	2016	2017	2018*	2019*
Agriculture, forestry and fishing	365 106	364 903	388 036	388 340	410 857
Crop and animal production, hunting and related service activities	252 485	249 510	268 483	264 734	285 985
Forestry and logging	93 103	95 257	98 418	101 194	101 194
Fishing and aquaculture	19 518	20 136	21 135	22 412	23 677
Mining and quarrying	11 597	11 647	11 837	12 107	12 430
Manufacturing	121 493	123 096	125 328	129 792	136 447
Electricity, gas and water supply	15 955	15 978	16 410	17 262	18 217
Construction	35 781	37 002	38 761	40 822	43 181
Wholesale and retail trade	203 911	208 654	219 698	231 811	245 725
Transportation and storage	33 995	35 652	37 774	39 849	42 145
Accommodation and food services	24 554	25 957	27 043	28 281	29 681
Information and communication	55 194	57 951	61 668	65 057	69 053
Financial and insurance services	64 948	68 748	73 354	77 852	81 607
Real estate activities	98 289	101 287	105 235	109 136	112 100
Professional and support services	3 858	3 998	4 209	4 382	4 592
Public administration and defence	25 530	27 123	28 951	30 728	32 940
Education	32 718	35 308	38 664	41 041	44 711
Health and social work activities	33 379	35 777	37 904	40 257	43 206
Other Services	62 769	66 210	69 090	72 686	76 333
GDP at constant market prices	1 272 260	1 306 377	1 372 731	1 427 353	1 513 264
GDP at current prices	3 213 173	3 812 566	4 629 404	5 152 743	5 910 839

Source: National Statistical Office (NSO) and Department of Economic Planning and Development (DEPD)

*Projections

**TABLE 2.2: SECTORAL CONTRIBUTION TO GDP
(IN PERCENTAGES)**

Constant 2010 prices (in K'million)					
Sector	2015	2016	2017	2018*	2019*
Agriculture, forestry and fishing	28.7	27.9	28.3	27.2	27.2
Crop and animal production, hunting and related service activities	19.8	19.1	19.6	18.5	18.9
Forestry and logging	7.3	7.3	7.2	7.1	6.7
Fishing and aquaculture	1.5	1.5	1.5	1.6	1.6
Mining and quarrying	0.9	0.9	0.9	0.8	0.8
Manufacturing	9.5	9.4	9.1	9.1	9.0
Electricity, gas and water supply	1.3	1.2	1.2	1.2	1.2
Construction	2.8	2.8	2.8	2.9	2.9
Wholesale and retail trade	16.0	16.0	16.0	16.2	16.2
Transportation and storage	2.7	2.7	2.8	2.8	2.8
Accommodation and food services	1.9	2.0	2.0	2.0	2.0
Information and communication	4.3	4.4	4.5	4.6	4.6
Financial and insurance services	5.1	5.3	5.3	5.5	5.4
Real estate activities	7.7	7.8	7.7	7.6	7.4
Professional and support services	0.3	0.3	0.3	0.3	0.3
Public administration and defence	2.0	2.1	2.1	2.2	2.2
Education	2.6	2.7	2.8	2.9	3.0
Health and social work activities	2.6	2.7	2.8	2.8	2.9
Other Services	4.9	5.1	5.0	5.1	5.0

Source: National Statistical Office (NSO) and Department of Economic Planning and Development (DEPD)

*Projections

**TABLE 2.3: ANNUAL PERCENTAGE GROWTH RATES,
(IN PERCENTAGES)**

Constant 2010 prices (in K'million)					
Sector	2015	2016	2017	2018*	2019*
Agriculture, forestry and fishing	-1.0	-0.1	6.3	0.1	5.8
Crop and animal production, hunting and related service activities	-3.0	-1.2	7.6	-1.4	8.0
Forestry and logging	3.5	2.3	3.3	2.8	0.0
Fishing and aquaculture	5.3	3.2	5.0	6.0	5.6
Mining and quarrying	1.1	0.4	1.6	2.3	2.7
Manufacturing	3.8	1.3	1.8	3.6	5.1
Electricity, gas and water supply	2.4	0.1	2.7	5.2	5.5
Construction	3.5	3.4	4.8	5.3	5.8
Wholesale and retail trade	4.9	2.3	5.3	5.5	6.0
Transportation and storage	4.3	4.9	6.0	5.5	5.8
Accommodation and food services	5.1	5.7	4.2	4.6	4.9
Information and communication	8.6	5.0	6.4	5.5	6.1
Financial and insurance services	5.9	5.9	6.7	6.1	4.8
Real estate activities	1.9	3.1	3.9	3.7	2.7
Professional and support services	5.0	3.6	5.3	4.1	4.8
Public administration and defence	6.3	6.2	6.7	6.1	7.2
Education	6.1	7.9	9.5	6.1	8.9
Health and social work activities	3.6	7.2	5.9	6.2	7.3
Other Services	5.9	5.5	4.3	5.2	5.0
GDP at constant market prices	3.3	2.7	5.1	4.0	6.0
GDP at current prices	26.8	18.7	21.4	11.3	14.7

Source: National Statistical Office and Department of Economic Planning and Development (DEPD)

*Projections

2.2 Real Sector Performance in 2017 and Prospects for 2018 and Beyond

2.2.1 Agriculture, forestry and fishing

The growth estimate for agriculture, forestry and fishing for 2017 is 6.3 percent. The economic activity has registered a substantial growth in 2017 mainly on account of growth in production of crops such as maize which according to Third Round Crop Estimates (APES) has grown by 46.2 percent. Similarly, other crops have also grown in the following manner: rice by 44.6 percent, groundnuts by 40.4 percent and pulses by 32.6 percent. Although tobacco production declined in 2017 following the low prices in the 2016 agricultural growing season, farmers switched to other leguminous crops such as groundnuts and soya bean among others.

The growth estimate for 2018 is 0.1 percent. Consideration has been made on the impact of the dry spell and fall army worms which significantly affected the southern region. It was established that about 270,180 hectares of maize have been affected by the dry spells in the Central and Southern regions whilst about 375,390 hectares have been attacked by the fall army worms countrywide. Consequently, it is projected that the dry spells will reduce maize production by 210,740 metric tonnes while the fall army worms are expected to reduce maize production by 73,201 metric tonnes resulting in a total reduction of 283,941 metric tonnes in maize production.

According to the second round of the 2017/18 Agricultural Production Estimates (APES), maize production for 2017/18 is expected to decline by 19.4 percent compared to a growth of 46.2 percent registered in 2016/17 growing season. Similarly, other crops are also expected to register a significant decline as follows: rice by 6.2 percent, groundnuts by 6.7 percent and pulses by 11.0 percent.

In 2019, the economic activity of this sector is projected to grow by 5.8 percent. This is dependent on normal rains and control of the fall army worm infestation.

2.2.2 Mining and Quarrying

In 2017, growth in the Mining and Quarrying sector was estimated at 1.6 percent. Growth in 2018 is projected at 2.3 percent. Growth in this sector has been undermined by competition from imported coal even though some companies have resorted to buying coal locally.

The Department of Mines has put in place a number of interventions to boost growth in the sector. Firstly, the anticipation of the endorsement of the revised Mines and Minerals Act in 2018 and the adoption of a computerised Licencing Management System will encourage transparency and attract more investors. As a result of these two interventions, the sector has witnessed an increase in applications for Coal Exploration Licences, which is expected to translate into

more production of coal in the coming years. A slight growth of 2.7 percent in 2019 is expected as a result of the above and the newly established export market in Rwanda.

2.2.3 Manufacturing

Manufacturing is one of the economic activities that was greatly affected by the intermittent power supply during the last quarter of 2017. The frequent power outages heavily impacted the sectors performance as factories could not operate full time. Companies had to resort to using diesel generators to supplement the power supplied by ESCOM and this was very costly. In addition, the sector experience low credit levels in 2017 compared to previous years. Due to the difficult environment in 2017, growth in this sector is estimated at 1.8 percent.

In 2018, the sector is estimated to grow by 3.6 percent. The sector has benefitted from low inflation and availability of foreign exchange. However, the industry will continue to be affected by the intermittent electricity supply and the persistence of cheap smuggled products which create unfair competition with locally produced products. Furthermore, the decline in agricultural production may have an adverse affect on demand for manufactured goods.

In 2019 as the economic activity is projected to grow by 5.1 percent. The projected growth is on account of anticipated improvement in power supply due to the increase in water levels in the Shire River and the Malawi-Mozambique power interconnection.

2.2.4 Electricity, Gas and Water

Electricity, gas and water supply is estimated to have grown by 2.7 percent in 2017. Electricity performed badly in 2017 due to low water levels in Lake Malawi which impacted the generation of energy along the Shire River and the rehabilitation of the hydropower station at Nkhula A station which resulted in a reduction of energy generation in the country. The growth in 2017 in this activity is explained by better performance of the water sub-sector. Almost all the five Water Boards have reduced non-revenue water losses through replacement of old pipes and installation of pre-paid meters.

This sector is expected to show significant growth in 2018 of 5.2 percent and 5.5 percent in 2019. Most of this growth should be attributed to a number of initiatives by the Water Boards to increase water supply. Lilongwe Water Board is re-constructing Kamuzu Dam 1 water reservoirs and water treatment lakes. The Northern Region Water Board is also in the process of constructing water reservoirs in Nkhata Bay. There are also efforts to improve power generations through projects such as the Malawi–Mozambique interconnection project, the installation of the diesel generators by EGENCO, full scale operation of Solar

Photovoltaic generators and the resumption of full generation of electricity at Nkhula A power station.

2.2.5 Construction

Construction is estimated to have grown by 4.8 percent in 2017 and projected to grow by 5.3 percent in 2018 and 5.8 percent in 2019. This growth is partly explained by sector confidence as the Government has been settling arrears through the issuance of Zero Coupon Promissory Notes (ZCPN) to most of the affected companies. In 2018, growth will be driven by major construction works, such as the construction of a dual carriage from Gulliver to the Parliament Building in Lilongwe and the 20 storey Twin Towers which are expected to be constructed by Old Mutual in Blantyre.

2.2.6 Wholesale and Retail

In 2017, the Wholesale and Retail sector registered substantial growth of 5.3 percent following a favourable agricultural season. In 2018 the sector is estimated to grow by 5.5 percent. The high growth estimate is explained by the stable exchange rate and the anticipated increase in credit to the sector due to a reduction in lending rates. Similarly, in 2019, the sector is projected to grow by 6.0 percent.

2.2.7 Transportation and Storage Services

The growth for transport and storage services is estimated at 6.0 percent. this growth is attributed to high tonnage movement in the first half of the year as the National Food Reserve Agency (NFRA) was transporting maize from rural areas to the Strategic Grain Reserves. In addition, growth for the sector is attributed to increased rail transport by VALE Logistics which increased its tonnage movement in 2017 compared to 2016, which was a pilot year. Similarly, the sector is expected to perform well in 2018 and 2019, with projected growth rates of 5.5 percent and 5.8 percent, respectively. This is partly down to increased travelling due to the campaigning for the elections in 2019.

2.2.8 Accommodation and Food Services

Accommodation and Food Services is estimated to have grown by 4.2 percent in 2017. Prospects are high in 2018 and 2019 with projected growth of 4.6 percent and 4.9 percent, respectively. Growth will be driven by more tourists which are expected to visit as the country is becoming a more attractive tourist destination. Additionally, the 2018 Population Census and the 2019 Elections will boost demand for accommodation and food services.

2.2.9 Information and Communication

This sector performed well in 2017, at an estimated 6.4 percent. This growth is mainly on account of developments in the technology sub-sector, including introduction and widespread usage of mobile money and internet services. In addition the two major networks carried out a series of upgrades and increased the cost of data bundles in response to high consumer demand.

The economic activity is anticipated to continue growing in 2018 by 5.5 percent and in 2019 by 6.1 percent. As the country develops, information and communication is increasingly becoming a necessity and, therefore, strong growth in this sector will continue to be registered. Furthermore, growth will be driven by the 2019 elections as there will be more advertisements and more communication during the campaigning period.

2.2.10 Financial and Insurance Services

There is strong growth in financial and insurance services; growth in 2017 was estimated at 6.7 percent, and growth for 2018 and 2019 are projected at 6.1 percent and 4.8 percent, respectively. Although there has been a decline in the interest rate, credit to private sector has not risen substantially. Nevertheless, banks performed well as they have moved from financial intermediation (fees and commissions on loans) to sale of foreign exchange and other such activities. In this situation credit has reduced but banks are still generating above average income from non-interest activities. Growth in the insurance sector is benefiting from the current contributory pension arrangement with the introduction of the Pension Act.

2.2.11 Real Estate

Estimated growth in 2017 for real estate in 2017 is 3.9 percent. Strong growth in this sector is hampered by a number of challenges including Government arrears and high energy expenses through the use of diesel generators. In particular, the performance of the Malawi Housing Corporation was affected by delays in increasing rentals and a further reduction in the proposed rental increase from 48 percent to 43 percent, this affected the company's cash flow.

Real estate growth in 2018 is projected to remain similar at 3.7 percent. This growth is partly explained by the construction of residential units. For instance, the Malawi Housing Corporation (MHC) has a two stage plan: the construction of 2500 houses in 2018, followed by the construction another 2500 houses in 2019. In 2019, the sector is projected to grow by 2.7 percent.

2.2.12 Professional, Scientific and Technical, Administrative and Support Service Activities

In 2017, this sector is estimated to have grown by 5.3 percent, reflecting the higher growth observed in the economy overall, which increased demand on service activities. Whilst this industry has concerns about widening its customer base, it is still expected to show strong growth of 4.1 percent in 2018. For 2019, the sector is projected to grow by 4.8 percent.

2.2.13 Public Administration and Defence

Growth in activities in public administration and defence has been strong. It is estimated at 6.7 percent in 2017 and projected at 6.1 percent and 7.2 percent for 2018 and 2019, respectively. This growth is explained by the recruitment drive by the Malawi Defence Force.

2.2.14 Education

The growth estimates for education for 2017 and 2018 are 9.5 percent and 6.1, respectively. This growth is partly driven by Government investment in education, as it continues developing human capital. In 2017 there was a Government drive to employ over 10,000 teachers. Growth in this sector is also down to good performance of private schools. In 2019, the sector is projected to grow by 8.9 percent and this is attributed to an anticipated increase in student enrolment in both private and public schools.

2.2.15 Human Health and Social Work Activities

Human Health and Social Work Activities is a priority sector for the Malawian Government. In 2017, the Ministry of Health launched the Health Sector Strategic Plan (HSSP II, 2017 – 2022). One aspect of the plan is to provide an Essential Healthcare Package for all Malawian citizens at a lower cost. Therefore, there has been strong growth in this sector. In 2017, growth was estimated at 5.9 percent. The outlook for growth in this sector is high for 2018 growth is projected at 6.2 percent and for 2019 growth is projected at 7.3 percent. Nevertheless, the sector does face difficulties as there are funding challenges for the different initiatives.

2.3 Prices

2.3.1 Inflation Rates in 2017 and Projections for 2018 and 2019

In 2017, inflation followed a downward trajectory largely on account of declining food inflation. According to the third round 2017 Agricultural Production Estimates, maize registered a production increase of 3.2 million metric tonnes. Non-food inflation declined only marginally, despite the Reserve Bank of Malawi's contractionary monetary policy, the stability in the exchange rate

against the currencies of Malawi's major trading partners and the stability of fuel price on the domestic market. As illustrated in Table 2, the end period inflation for 2017 was 7.1 percent with annual average inflation rate of 11.5 percent. This is compared to the end period rate of 20.0 percent and annual average inflation rate of 21.8 percent in 2016.

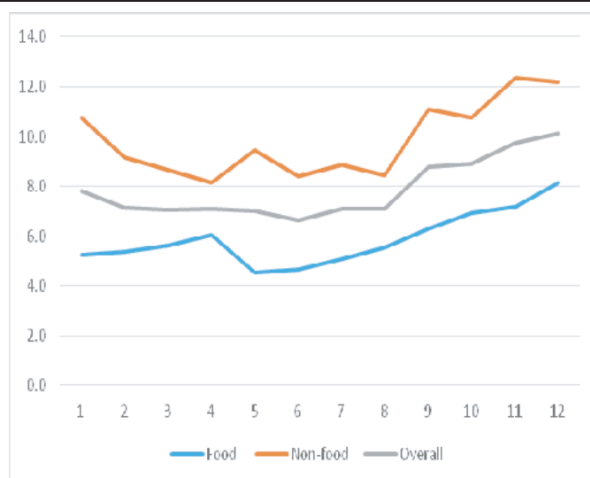
TABLE 2: AVERAGE AND END PERIOD INFLATION RATES

	2016	2017	2018	2019
Inflation rate (end of period)	20.0	7.1	10.1	9.0
Inflation rate (annual average)	21.8	11.5	7.9	8.2

In 2018, the average inflation rate is estimated to decline to a single digit rate of 7.9 percent with the end period inflation rate of 10.1 percent. In 2018, an expected reduction in food production due to the dry spell and the Fall Army Worms infestation which hit most parts of the Central and Southern regions of the country will exert pressure on food inflation. Nevertheless, this is expected to be contained by carry-over stocks from the bumper harvest of last year.

However, the energy challenge, which is expected to continue in 2018, is likely to have negative impact on the non-food inflation. Companies are expected to continue using generators for industrial production to meet demand. This will affect cost structures in the production processes which will ultimately be transmitted to the final consumers.

CHART 1: TRENDS IN FOOD AND NON FOOD INFLATION FOR 2018



Source: Department of Economic Planning and Development Projection

Chart 1 illustrates the trend of inflation in 2018. The graph shows that food inflation will be the primary driver of inflation in 2018. Food inflation is expected to rise gradually during the first quarter and the last half of the year. This is due to inflation expectations arising from the low harvest, as compared with last year. Food inflation is expected to slightly decline during the second quarter of the year following the harvest period. Uncertainty on the price of crude oil on the international market and the intermittent power supply is expected to negatively affect non-food inflation. This explains the gradual increase in non-food inflation during the second half of the year.

In 2019, the annual average inflation is projected to be in single digits at 8.2 percent, with an end period inflation rate of 9.0 percent. This is in anticipation of good rains which will result in continued low food inflation.

2.4 Balance of Payments

2.4.1 Current Account Balance 2017 and 2018

Malawi displayed a current account deficit of US\$ 1,021.4 million in 2017; this is expected to increase to US\$ 1,205.9 million in 2018, representing an increase in deficit by 18.1 percent. General slowdown in tobacco production; decrease in exports prices coupled with tobacco ban in most of the countries resulted in stagnant export proceeds between 2017 and 2018.

Current account deficit increased from 16.1 percent of the GDP in 2017 to 17.4 percent of the GDP in 2018. This is due to prominently increase in imports at a higher pace compared to improvements in exports.

In the medium term the government has launched Buy Malawi Strategy which is encouraging consumption of local products as opposed to imported materials. This is expected to improve Malawi's current account deficits.

2.4.2 Capital and Financial Account Balance 2017 and 2018

Malawi's financial assets required to finance payment imbalances are sourced from foreign loans, general government loans, monetary authorities as well as foreign direct investment. Malawi had a capital account surplus of US\$ 237.8 million in 2016 and decreased by 3.5 percent in 2017 to US\$ 229.6 million. This is expected increase slightly in 2018 by 0.2 percent. The country recorded US\$ 701 million in 2016 of net financial inflow, this reduced by 9 percent in 2017 to about US\$ 637.9 million. It is expected that in 2018 financial net flows will reduce further by 25.4 percent. The slowdown in net inflows of financial account is clarified by a sharp decrease in loans by general government as well as loans from monetary authorities.

2.5 2017/18 Fiscal Performance

The overarching objective of the 2017/18 budget and fiscal policies was to achieve a fiscal position that is consistent with sustaining and entrenching macroeconomic stability. The economy showed signs of macroeconomic recovery from the shocks of the past years which largely emanated from the drought in 2015 and the floods in 2016 growing seasons. Fiscal policy during the 2017/18 period was also supported by the continued accumulation of foreign exchange reserves by the central bank that led to a relatively stable exchange rate even during the post-tobacco season.

This notwithstanding, the downside risks on economic growth during the 2017/18 growing season, included the dry-spells and fall army worms in some parts of the country which led to a slowdown in forecasted growth in 2018. In addition, reduced development assistance continued to put pressure on the country's resource envelope which resulted in increased borrowing.

In the 2017/18 fiscal year, revenue declined compared to the 2016/17 fiscal year. As a percentage of GDP, total revenue in 2017/18 stood at 22.4 percent compared to 23.3 percent in 2016/17. This reduction was on account of reduction in disbursements of grants from 3.5 percent of GDP in 2016/17 to 2.4 percent in 2017/18. Tax revenue marginally improved, amounting to 18.6 percent of GDP compared to 18.4 percent of GDP in 2016/17.

In 2017/18, expenditure as a percentage of GDP increased to 27.1 percent from 26.6 percent in 2016/17 fiscal year. The increase was on account of a rise in expenses on goods and services and grants to other general government units. Recurrent expenditure was recorded at 21.0 percent of GDP, up from 20.0 percent in 2016/17. Development expenditure increased from 6.5 percent of GDP in 2016/17 to 6.0 percent of GDP in 2017/18. Consequently, net borrowing increased from -3.3 percent of GDP in 2016/17 to -4.7 percent of GDP in 2017/18.

During the same period, the IMF Executive Board approved US\$112.3million under the Extended Credit Facility (ECF) arrangement to support the country's economic and financial reforms. The objective of this ECF Program is again to entrench macroeconomic stability and attain a more inclusive, resilient and sustainable economic growth.

The Government is committed to ensuring that the macroeconomic environment of the economy remains stable. Focus is on creating an enabling environment for private sector led growth and employment creation. Going forward, the Government will therefore endeavor to increase and enhance its revenue mobilization efforts and rationalize its expenditures in order to lower its annual fiscal deficit. This will in the long run help Government to reduce its debt stock thereby creating fiscal space for investment in infrastructure development. To this end, the Government will also mainly focus on borrowing on concessional basis.

2.6 Monetary Policy Developments

Reflective of macroeconomic stability evidenced by declining inflation rate and stable exchange rate against the US dollar, the Reserve Bank of Malawi reduced the policy rate by 800 basis points to 16.00 percent in December 2017 from 24.00 percent in January 2017. Resultantly, money supply growth picked up to 19.7 percent in December 2017 from 15.2 percent in December 2016. Liquidity conditions for the banking system eased in 2017 relative to 2016, reflected by a decline in Treasury Bill yields. The average yield for the all-type-Treasury Bill dropped to 25.07 percent in 2017 from 15.10 percent in 2016.

Net government domestic borrowing as at end December 2017 amounted to K733.8 billion (15.8 percent of GDP), compared to K567.1 billion (14.9 percent of GDP) recorded in December 2016.

Gross official foreign exchange reserves rose to USD757.4 million (3.6 months of import coverage) at end 2017 from USD605.0 million (2.9 months of import coverage) in December 2016. Monetary authorities will ensure that foreign exchange reserves remain above the 3.0 months' threshold.

Chapter 3

AGRICULTURE AND NATURAL RESOURCES

3.1 Overview

This Chapter reviews to the performance of the Agriculture and Natural Resources Sector for the 2017/18 fiscal year. The chapter is divided into three sections namely: agriculture, fisheries and the forestry sector.

3.2 Agriculture Sector

This section reviews weather forecast, crop and livestock production, national food security, Farm Input Subsidy program (FISP), National Agriculture Investment Plan (NAIP) and the Agriculture Sector Wide Approach (ASWAp).

3.2.1 2017/18 Weather

The combined effects of prolonged dry spells in some parts of the country during the 2017/18 growing season negatively affected overall crop production in Malawi. From October 2017 to March 2018 actual cumulative rainfall performance was average to above average in some parts of Central and Northern Malawi. However, below average rainfall was recorded in some parts of the Southern region. From March 2018, an improvement in rainfall was observed.

3.2.2 Crop Production

The second round Agricultural Production Estimates Survey (APES) projects a decrease in production of all major crops, except some tubers, such as cassava and sweet potato. National maize production has decreased from 3,464,139 metric tons in the 2016/17 growing season to 2,791,741 metric tons in the 2017/18 growing season, representing a 19.4 percent decrease. This decrease in production is attributed to prolonged dry spells faced during the months of October 2017 to March 2018 and the fall army worm infestation which seriously affected crop development and maturity in some districts. Production of cassava and sweet potatoes is nevertheless expected to increase due to seed availability.

However, production of some cash crops, including cotton and wheat, is expected to decrease due to unfavourable weather conditions and poor incentives such as low prices and lack of competitive market outlets for the produce. Tobacco production is expected to increase from 106,538,615 metric tonnes in the 2016/17 season to 147,800,000 metric tonnes in the 2017/18 season. This increase is due to last season's price incentives which encouraged farmers to expand their crop area of production. However, the projected production is estimated to be 23,220,000 metric tonnes less than the potential demand of 171,020,000 metric tonnes. Table 3.1 below gives a summary of production in metric tons of major crops.

Table 3.1: NATIONAL CROP PRODUCTION IN METRIC TONS

Crops	2016/17 Third Round	2017/18 Second Round	Percentage Change
Maize	3,464,139	2,791,741	(19.4)
Rice	121,079	113,580	(6.2)
Cassava	4,960,558	5,528,587	11.5
S/Potato	5,472,013	5,685,215	3.9
Potato	1,226,603	1,160,220	(5.4)
Wheat	745	711	(4.6)
Sorghum	90,370	86,023	(4.8)
Millet	35,121	34,015	(3.1)
Tobacco	106,538,615	147,800,000	38.7
Groundnuts	386,319	360,627	(6.7)
Cotton	29,545	28,062	(5)
Pulses	958,898	853,138	(11)

Source: Ministry of Agriculture, Irrigation and Water Development

3.2.3 Livestock Production

All major livestock species registered increased production with the exception of chicken broilers and ducks, as shown in the Table 3.2 below. The increase in livestock production was mainly attributed to improved management practices, including disease control, which resulted in more births than deaths, high breeding prolificacy in pigs, and good control of African Swine Fever. In addition, an increase in ownership of livestock by households because of the livestock pass-on programs also contributed to the increase in livestock production.

TABLE 3.2: LIVESTOCK CENSUS

Type of Livestock	2016/17 Third Round	2017/18 First Round	% Change
All Cattle	1,540,009	1,617,485	5
Beef Cattle	1,449,654	1,521,842	5
All Dairy Cattle	90,355	95,643	6
Goats	7,672,737	8,124,346	6
Sheep	302,090	310,761	3
Pigs	5,051,874	5,752,742	14
All Chicken	99,995,311	106,585,261	7
Indigenous Chicken	51,702,720	57,997,631	12
Broilers	40,224,671	39,760,744	(1)
Layers	6,737,380	7,255,461	8
Black Australorp	1,373,494	1,571,425	14
Rabbits	1,735,875	1,998,280	15
Guinea Fowl	2,008,983	2,114,819	5
Turkey	269,227	284,639	6
Guinea Pigs	445,126	548,175	23
Doves/Pigeons	5,823,436	6,228,494	7
Ducks	2,390,304	2,324,349	(3)

Source: Ministry of Agriculture, Irrigation and Water Development

3.2.4 National Food Security

Between January and March 2018, all the eight Agriculture Development Divisions (ADDs) reported an improved food situation compared to the same period last year, which is mainly attributed to good rainfall conditions and bumper harvest from the 2016/17 growing season. This is signified by the decrease in the number of farm families without food from their own production.

Families without food are engaging in various income generating activities (IGAs), such as selling of vegetables, charcoal, firewood⁴, livestock, fish, and casual labour which has enabled them to purchase maize from vendors in markets. Food was reported to be readily available at the local markets and ADMARC markets, resulting in lower prices of the commodity when compared to the same period last year. The prevailing price range for maize is MWK100/kg to MWK200/kg in 2018, compared to last season's price range of MWK175/kg to MWK250/kg. Table 3.3 shows details of the National Food Situation as of end March, 2018.

TABLE 3.3: NATIONAL FOOD SITUATION AS AT 30TH MARCH 2018

ADD	2017/18 SEASON			2016/17 SEASON		
	Total Farm Families	Farm families without food	%Farm families without food	Total Farm Families	Farm families without food	%Farm families without food
Karonga	156,33	6,076	3.9	150,923	17,023	11.3
Mzuzu	384,351	21,197	6	404,527	64,022	16
Kasungu	743,498	23,885	3.2	743,498	69,585	9.0
Lilongwe	848,603	89,494	11	848,603	169,929	20
Salima	231, 893	10,138	4.0	221, 296	28,779	13
Machinga	851,047	78,697	9	807,254	127,013	16
Blantyre	826,353	110,460	13	806,693	162,207	20
Shire Valley	218,659	23, 252	11	218,659	66, 343	30
Total	4,260,740	363,199	8.5	4,201,453	704,90	16.8

Source: Ministry of Agriculture, Irrigation and Water Development

3.2.5 Agriculture Sector Wide Approach (ASWAp)

The Ministry of Agriculture, Irrigation and Water Development (MoAIWD) and the Food and Agriculture Organization (FAO) are finalizing the development of the successor of the Agriculture Sector Wide Approach (ASWAp), namely, the National Agriculture Investment Plan (NAIP). In the coming years, all projects and programmes of the Ministry will be implemented in line with the NAIP. Meanwhile, the 2018/19 budget of the Ministry has been formulated in line with the NAIP intervention areas and programmes.

⁴ The IGA of selling charcoal and firewood is not sustainable in the wake of environmental degradation. As such, households engaged in this type of IGA should be encouraged to plant trees or engage in other IGAs.

Currently, the Ministry is implementing its programmes in line with the ASWAp. Within the ASWAp, the Ministry is expected to implement the Agriculture Sector Wide Support Project (ASWAp- SP II) in the next coming months. Besides this, the Ministry continues to implement other projects including; the Smallholder Irrigation and Value Addition Project (SIVAP); Agriculture Infrastructure and Youth in Agribusiness Project (AIYAP); the Agriculture Productivity Programme for Southern Africa (APPSA); the Farm Input Diversification Programme II (FIDPII); and the Sustainable Agriculture Production Programme (SAPP).

Apart from the Seed Policy which has already been approved by the Office of the President and Cabinet (OPC), the Ministry has also developed and reviewed a number of policies to enhance the performance of the sector. The policies that are in draft form waiting for approval are the Farm Organization Development Strategy; the Agriculture Sector Food and Nutrition Strategy; the Crops Act; the Agriculture General Purposes Act; the Contract Farming Legislative, and the Extension and Advisory Services Strategy.

3.2.6 Farm Input Subsidy Programme (FISP)

The Farm Input Subsidy Programme (FISP) is designed to help poor households achieve food self-sufficiency and increase their incomes. In recent years, reforms of FISP have included retailing contracts to private companies to supply seeds and fertilizer to beneficiaries and improving the selection process to avoid repetitive beneficiaries.

In the 2017/18 growing season, a total of 900,000 smallholder farmers were supplied with 89,380 metric tonnes of fertilizer, of which 44,755 metric tonnes was NPK and 44,625 metric tonnes was Urea. Through the programme, each of the beneficiaries received two coupons; one for buying a 50kg bag of NPK and one for a 50kg bag of Urea. In addition, each farmer was issued with two coupons; one for 5kg of maize or sorghum seed and another for 2kg of legume seed. The Government's contribution was MWK15,000 for each bag of fertilizer, MWK3,670 for each maize and sorghum seed pack and MWK 2,050 for each legume pack.

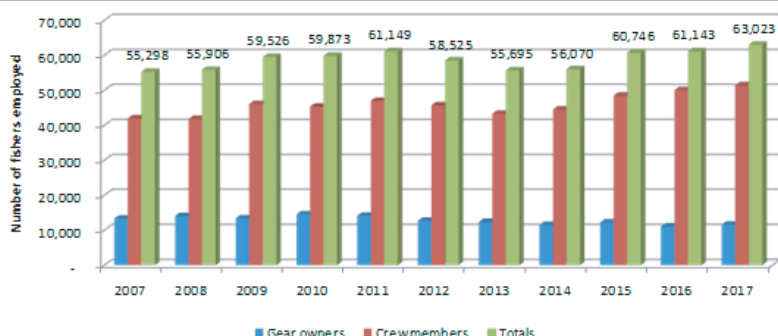
3.3 The Fisheries Sector

3.3.1 The Socio-Economic Role of the Fisheries Sector

3.3.1.1 Employment

The Fisheries sector is composed of capture fisheries, aquaculture, and aquarium trade sub-sectors. The sector continues to be a major source of employment. Figure 3.1 shows that in 2017 there was a 3 percent increase to 63,023 in the number of fishers employed from 61,143 in 2016.

FIGURE 3.1: NUMBER OF FISHERS EMPLOYED IN THE FISHING INDUSTRY FROM 2007 TO 2017



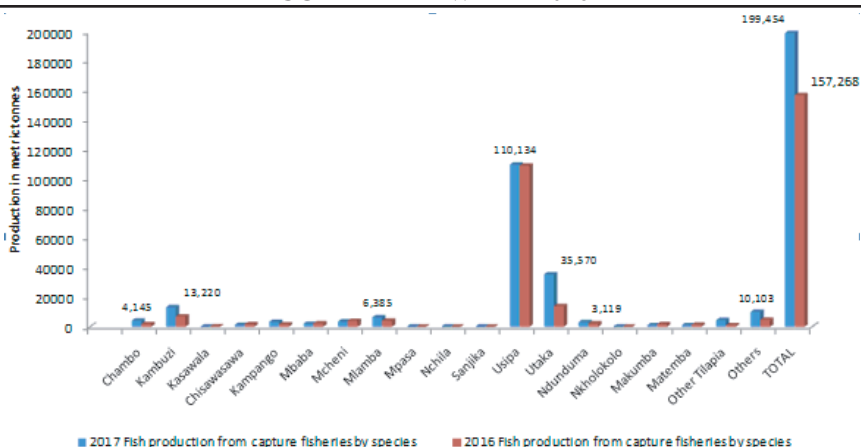
Source: Department of Fisheries

Additionally, the sector continues to indirectly employ over half a million people who are engaged in ancillary activities, such as fish processing, fish marketing, boat building and engine repair. The fish industry supports over 1.6 million people and makes a substantial contribution to their livelihoods.

3.3.1.2 Food and Nutrition Security

The Fisheries sector plays an important role in food and nutrition security. With a production of 199,454 metric tonnes, fish continues to be the main source of animal protein in the country. It contributes over 70 percent of the dietary animal protein intake of Malawians and 40 percent of the total protein supply. Figure 3.2 shows fish production of different species in 2017 compared to 2016. It shows that usipa comprises the majority of fish protein in the Malawian diet.

FIGURE 3.2: FISH PRODUCTION BY SPECIES IN 2017 COMPARED WITH 2016



Source: Department of Fisheries

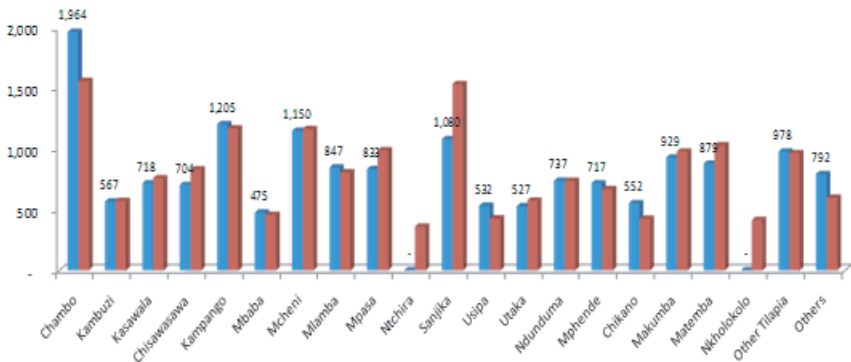
3.3.1.3 Source of Income

In 2017, fish landings had a beach or landed value of MWK173.04 billion (USD235.74 million), with a volume of 199,454 metric tonnes. This is an increase of fish landing volume by 26.82 percent compared to 2016. In 2016, fish landings were worth MWK129.74 billion (USD172.74 million), representing a volume of 157,268 metric tonnes.

3.3.1.3.1 Average Beach Prices

The national average beach price was MWK867.95 per kilogram of fish, which is an increase from MWK824.95 per kilogram in 2016. The rise in beach prices was caused by the increased demand of fish locally and the rising costs of operation. At MWK1,964/kg, chambo continues to fetch the highest average beach price. Figure 3.3 compares fish prices for all species in 2017 compared with 2016.

FIGURE 3.3: AVERAGE FISH PRICES FOR ALL FISH SPECIES IN 2017 COMPARED WITH 2016

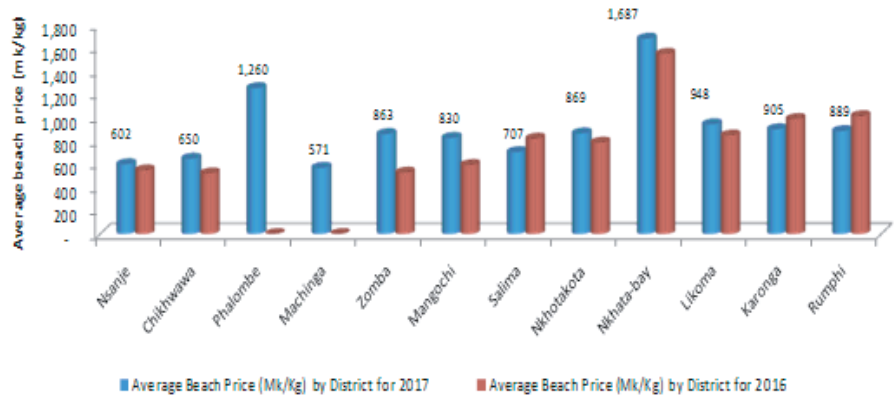


Source: Department of Fisheries

3.3.1.3.2 Average Beach Prices by District

As shown in Figure 3.4 there was a general upward trend of average beach prices in 2017 compared with 2016. Average beach prices for all fish species were reported to be the highest in Nkhata Bay (MWK1,687/kg), whilst the lowest average beach prices were registered in Machinga (MWK571/kg).

FIGURE 3.4: AVERAGE BEACH PRICE (MWK/KG) BY DISTRICT FOR 2017 COMPARED WITH 2016

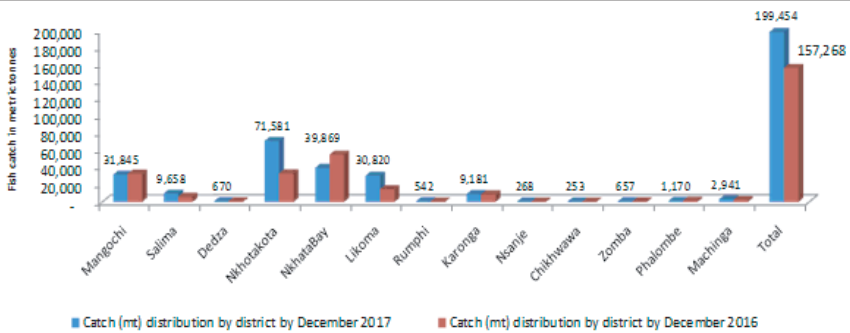


Source: Department of Fisheries

3.3.1.3.3 Fish Landings by District

Figure 3.5 below illustrates fish catch contribution by district in 2017 compared with 2016. The statistics show that Nkhatakota District contributed the highest catch of 71,581 metric tonnes in 2017, representing 35.9 percent of the total. However, in 2016 Nkhata Bay contributed the highest catch.

FIGURE 3.5: FISH CATCH CONTRIBUTION BY DISTRICT FOR 2017 COMPARED WITH 2016



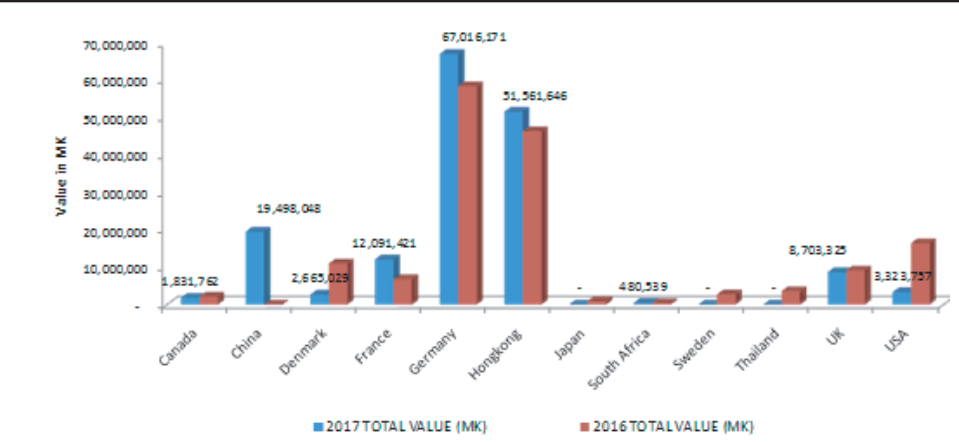
Source: Department of Fisheries

3.3.1.4 Foreign Exchange Earnings from Ornamental Fish Exports

Lake Malawi has over 800 endemic fish species, which are of both local and international scholarly importance and act as a tourist attraction. Some fish species, such as mbuna, are exported outside the country and this helps bring in foreign exchange. Cumulatively, from January to December 2017, a total of 36,367 live fish had been exported, generating MWK167.17 million (USD228, 863). This is slightly higher than the 2016 figure of 36,147 live fish generating

total income of MWK157.997 million (USD222, 280). As shown in Figure 3.6, in 2017 there were exports of live fish to nine countries. The largest market for aquarium trade in 2017 was Germany, which imported fish of a value of MWK67.02 million (USD94,288).

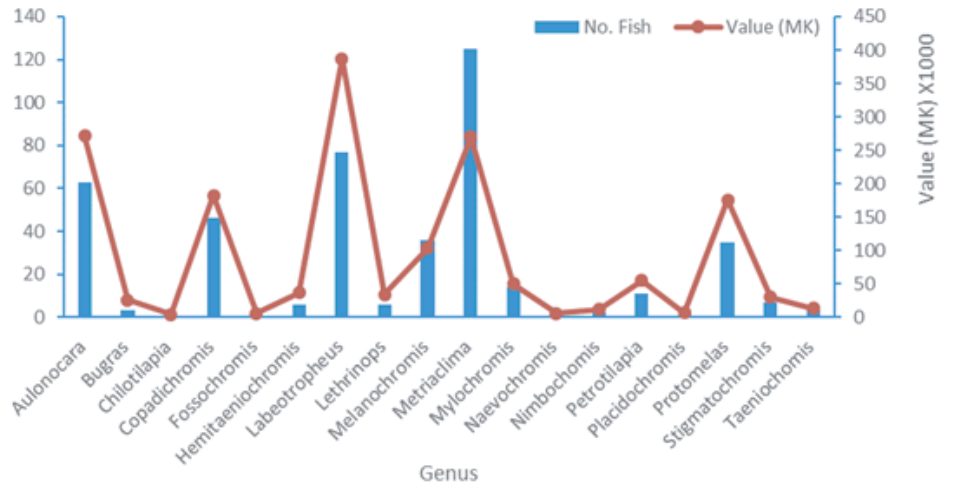
FIGURE 3.6: EXPORT VALUE OF LIVE ORNAMENTAL FISH IN 2016 AND 2017



Source: Department of Fisheries

As shown in Figure 3.7, the fish species genus *Metriaclima* was exported the most. The highest average fish price was for *Labeotropheus* and the lowest was for *Melanochromis*, at a value of MWK15,617.74/fish and MWK2,526.00/fish, respectively.

FIGURE 3.7: QUANTITY AND VALUE PER PIECE OF VARIOUS FISH SPECIES EXPORTED



Source: Department of Fisheries

3.3.2 Status of the Fisheries Sector

3.3.2.1 Total annual fish production by water body

The national catch statistics from all water bodies show that total fish production increased from 157,268 metric tonnes in 2016 to 199,454 metric tonnes in 2017, representing a 26.8 percent increase. Table 3.4 provides information on fish catch by water body in more detail. In 2017, Lake Malawi alone registered a total landing of 188,345 metric tonnes, when artisanal and commercial production figures are added (185,096 and 3,249 metric tonnes, respectively).

TABLE 3.4: FISH CATCH BY WATER BODY (2013 – 2017)

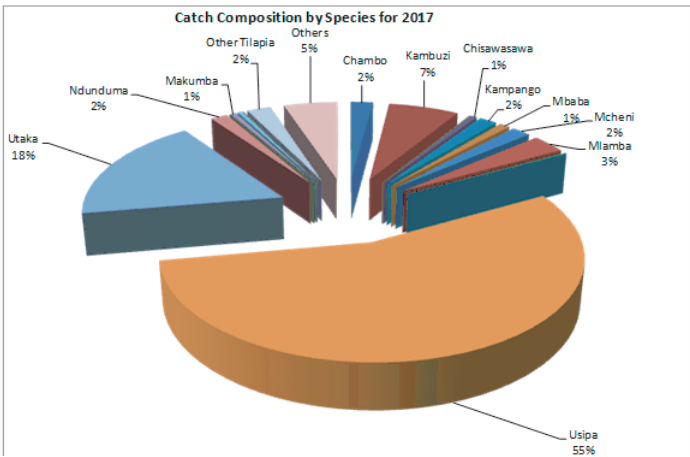
Type	Year				
	2013	2014	2015	2016	2017
L. Malawi - Artisanal (tons)	102,079	105,284	127,438	143,556	185,096
L. Malawi - Commercial (tons)	1,867	2,455	2,672	4,416	3,249
L. Malombe - tons	1,847	4,170	5,904	4,053	4,663
L. Chilwa – tons	2,982	2,889	5,660	2,834	3,270
L. Chiuta - tons	290	293	1,150	1,298	1,498
Upper, Lower & Middle Shire – tons	823	1,037	1,491	1,111	1,679
TOTAL tons	109,889	116,128	144,315	157,268	199,454
Landed value (MK '000)	52,422,568	74,332,669	108,703,888	129,738,211,690	173,036,178
Beach price (MK/kg)	477.05	640.09	753.24	824.95	867.55

Source: Department of Fisheries

3.3.2.2 Catch Composition

Figure 3.8 shows the catch composition in 2017. Usipa contributed the largest share at 55 percent of the total catch

FIGURE 3.8 SHOWS THE CATCH COMPOSITION IN 2017



Source: Department of Fisheries

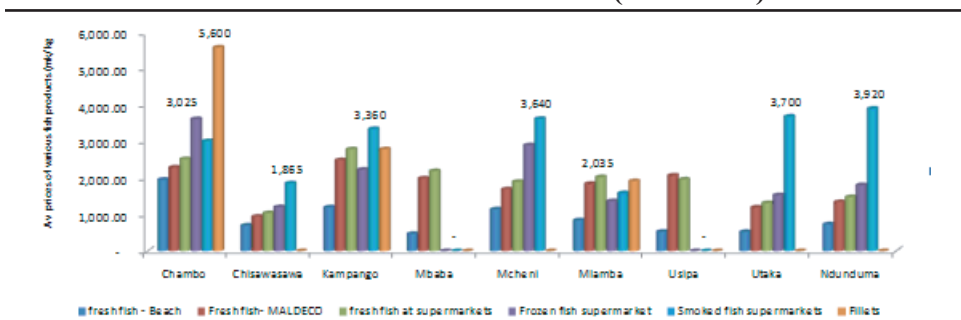
TABLE 3.5: FISH CATCH AND VALUE FROM 2017 TO 2019 FOR MAJOR SPECIES

Local Name	Scientific Name	2017 Provisional		2018 Estimate		2019 Projection	
		Quantity (tonnes)	Value(K'million)	Quantity (tonnes)	Value(K'million)	Quantity (tonnes)	Value(K'million)
Chambo	Oreochromis spp.	4,144.58	3,595,630,379	5,425.46	4,777,117,530	5,647.34	5,028,954,169
Kambuzi	Lethrinops spp. & Allied genera	13,220.17	11,469,158,484	10,714.62	9,434,222,910	10,845.33	9,657,764,876
Kasawala	Juvenile Oreochromis spp.	90.17	78,226,984	74.96	66,002,280	235.15	209,404,215
Chisawasawa	Lethrinops spp. & Allied genera	1,155.79	1,002,705,615	1,604.84	1,413,061,620	1,573.33	1,401,051,848
Kampango	Bagrus meridionalis	3,268.48	2,835,569,824	3,887.76	3,423,172,680	1,562.32	1,391,249,205
Mbaba	Buccochromis spp. & Allied genera	1,949.32	1,691,132,566	1,359.11	1,196,696,355	2,149.34	1,913,989,293
Mcheni	Rhamphochromis spp.	3,529.50	3,062,017,725	3,736.92	3,290,358,060	3,838.92	3,418,555,702
Mlamba	Bathyclarias & Clarias spp.	6,385.25	5,539,525,383	5,480.74	4,825,791,045	5,878.71	5,234,992,130
Mpsa	Opsaridium microlepis	126.68	109,901,234	226.08	199,063,440	13.26	11,812,143
Nehila	Labeo mesops	0.99	858,875	0.99	871,695	0.66	591,029
Sanjika	Labeo cylindricus	112.60	97,686,130	155.54	136,952,970	210.90	187,809,054
Usipa	Engraulicypris sardella	110,134.45	95,547,142,098	94,023.03	82,787,277,915	103,715.49	92,358,646,199
Utaka	Copadichromis virginalis & relatives	35,570.48	30,859,169,924	38,501.45	33,900,526,725	45,315.26	40,353,238,310
Ndumduma	Diplatodon spp	3,118.53	2,705,480,702	4,672.19	4,113,863,295	5,099.07	4,540,723,045
Nholokolo	Synodontis nyassae	-	-	12.30	10,830,150	15.63	13,922,962
Makumba	Oreochromis shiranus & relatives.	1,096.77	951,505,647	1,035.64	911,876,667	1,590.43	1,416,275,074
Matemba	Barbus paludinosus & relatives	963.30	835,713,655	706.54	622,110,916	941.04	837,998,806
Other	Tilapia Tilapia rendalli & others	4,483.53	3,889,686,452	4,094.77	3,605,444,985	4,030.46	3,589,123,652
Others	Various spp	10,103.25	8,765,074,538	9,631.95	8,480,931,975	8,498.59	7,567,990,983
TOTAL		199,453.85	173,036,186,211	185,344.89	163,196,173,213	201,161.25	179,134,092,696

Source: Department of Fisheries

3.3.2.3 Annual fish production and landed value

In 2017, total fish production was 199,453.85 metric tonnes, which translated into a value of MWK173.036 billion (USD 235.744 million). As shown in Table 3.5 below, fish production is projected to follow a similar trend in 2018 and 2019.

FIGURE 3.9: FISH MARKET PRICES (MWK/KG) IN 2017

Source: Department of Fisheries

It is anticipated that fish production will slightly drop from the current 199,453.85 metric tonnes to 185,344.89 metric tonnes in 2018 and later rise again to 201,161.25 metric tonnes in 2019. The reduction is mainly attributed to the reduced water levels that affect fish recruitment and breeding.

3.3.3 Fish Market Prices for various fish products

Fish is sold in various forms, such as sundried, smoked, parboiled, pan-roasted and fresh, depending on the species. Retail outlet market and beach prices were reported to have increased during 2017. Figure 3.9 shows the prices of different fish products in 2017.

Table 3.6 shows that along the value-chain, fish prices increase as the fish and fish products are transported from the lake (beach) to upland supermarkets. The prices vary depending on the form of the product. As value addition is taking place, the price of fish goes up to recover the added costs of processing. Overall, chambo fish products have had the highest price.

TABLE 3.6: FISH MARKET AVERAGE PRICES FOR FISH PRODUCTS IN 2017

Average price for various fish products per kg 2017	Chambo	Chisawasawa	Kampango	Mbaba	Mcheni	Mlamba	Usipa	Utaka	Ndunduma
Fresh fish at Beach	1,964	704	1,205	475	1,150	847	532	527	737
Fresh fish MALDECO	2,300	950	2,500	2,000	1,700	1,850	2,080	1,200	1,350
Fresh fish at supermarkets	2,530	1,045	2,800	2,000	1,905	2,035	1,970	1,320	1,485
Frozen fish supermarket	3,630	1,210	2,240	-	2,910	1,375	-	1,535	1,815
Smoked fish supermarkets	3,025	1,865	3,360	-	3,640	1,595	-	3,700	3,920
Filletts	5,600	-	2,800	-	-	1,925	-	-	-

Source: Department of Fisheries

3.3.4 Fish supply per capita

It has been reported that there has been a continued increase in the per capita fish consumption, reaching 12.47kg/person/year in 2017, from 10.70kg/person/year in 2016, as shown in Table 3.7 below.

TABLE 3.7: PER CAPITA FISH SUPPLY (2007 – 2017) WITH ESTIMATED POPULATION GROWTH

Year	Population	Total catch(kg)	Fish supply/kg/person/yr
2007	11,700,000	65,200,000	5.57
2008	13,100,000	71,266,000	5.44
2009	13,300,000	71,289,000	5.36
2010	13,500,000	95,724,000	7.09
2011	13,700,000	81,070,000	5.92
2012	13,900,000	120,328,000	8.66
2013	14,100,000	109,889,000	7.79
2014	14,300,000	117,094,878	8.19
2015	14,500,000	144,315,275	9.95
2016	14,700,000	157,267,660	10.7
2017	16,000,000	199,453,838	12.47

Source: Department of Fisheries

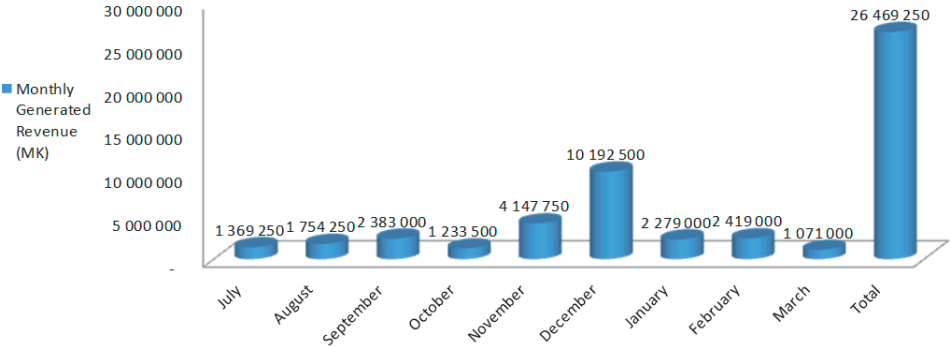
The current average per capita consumption of 12.47 kg/yr is a major achievement as the country is closer to the recommended 13-15 kg/yr consumption levels set by the World Health Organisation (WHO). It is important to note that the revised National Fisheries and Aquaculture Policy, 2016 focuses on fish quality and value addition as a means of promoting the adoption of best practices. These best practices will enhance the quality, hygiene and sanitation, and value addition of fish and fish products, to reduce the annual catch that is lost through post-harvest spoilage and insect infestation. Furthermore, the sector is pioneering aquaculture efforts that will enhance production of major cultured species, such as chambo. This will ensure continued availability of fish in required amounts that will avert a per capita consumption deficit.

3.3.5 Fish Resource Monitoring and Licensing

To increase fisheries and aquaculture investments, the sector continued to promote fishing related activities through Public Private Partnership (PPP) arrangements. In this regard, a total of 32 large scale commercial fishing units have been licensed to tap offshore deep water fish resources. In addition, 503 small scale fishing licenses and 143 sanitary certificates have been issued.

The total revenue generated from the licensing exercise of both commercial and small scale fishers is currently at MWK26,469,250, representing 50.90 percent of the annual revenue target of MWK52,000,000 set by the Treasury. Figure 3.10 shows the monthly revenue collections from July, 2017 to March, 2018.

FIGURE 3.10: MONTHLY REVENUE COLLECTIONS FROM LICENSING OF FISHING ECONOMIC UNITS FROM JULY 2017 TO MARCH 2018



Source: Department of Fisheries

As can be seen in Table 3.8 below, there has been a progressive increase in the collection of revenue from 2011/12 to the current fiscal year. The increase is partly down to the continued revision of licence fees and enhanced awareness by the district offices of the importance of collecting more revenue. However, more

revenue could be collected if certain challenges were addressed, such as the lack of functional patrol boats in some of the districts. In addition, increasing awareness of licensing through campaigns may also improve revenue collection.

TABLE 3.8: TRENDS IN REVENUE COLLECTION FROM LICENSING OF FISHING ECONOMIC UNITS

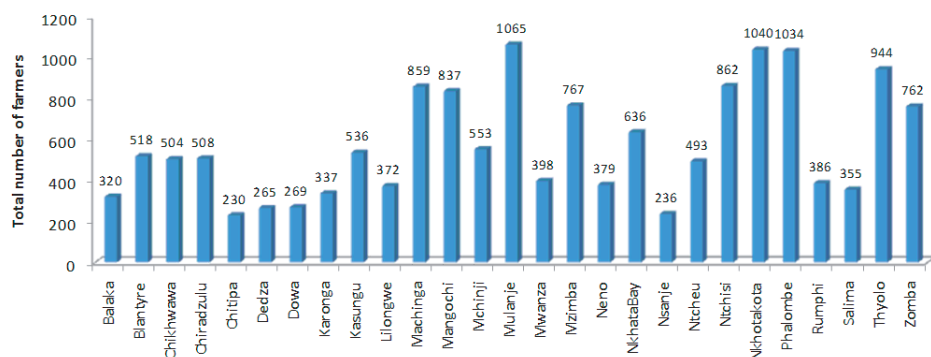
Year	Revenue (Small Scale)	Revenue (Large Scale)	Total Revenue
2011/2012	8,820,000	1,641,750	10,461,750
2012/2013	11,250,000	2,000,000	13,250,000
2013/2014	12,900,000	2,286,000	15,186,000
2014/2015	12,751,400	4,000,000	16,751,400
2015/2016	17,438,250	8,564,000	26,002,250
2016/2017	17,731,700	13,792,000	36,417,200
2017/2018 (ongoing)	14,085,250	12,384,000	26,469,250

Source: Department of Fisheries

3.3.6 Performance of Aquaculture Sector

The sector conducted a national census of all fish farms country wide and the exercise has revealed that in total there are approximately 15,465 fish farmers, of which 61.51 percent are males and 38.49 percent are females. Figure 3.11 illustrates that there are more fish farmers in the districts of Mulanje, Nkhatakota, Ntchisi, Phalombe, Thyolo and Machinga,. The number of farmers has increased in recent years due to communal ownership of ponds.

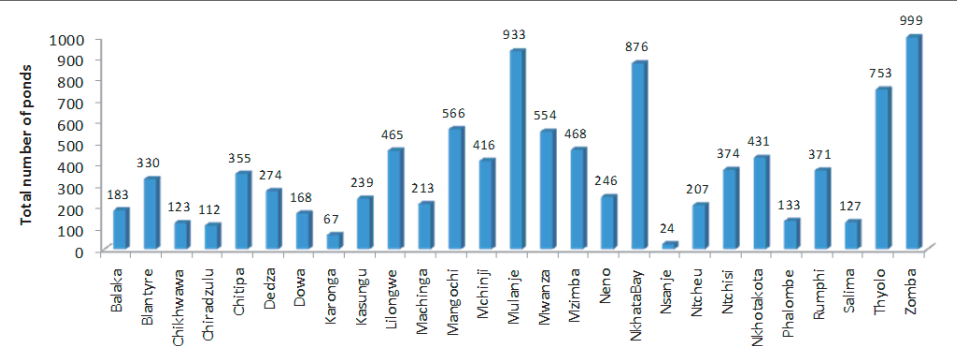
FIGURE 3.11: DISTRIBUTION OF FISH FARMERS BY DISTRICT IN 2017



Source: Department of Fisheries

The census recorded a total of 10,007 fish ponds practicing fish farming, with a total pond area of 251.59 hectares. Figure 3.12 shows the distribution of fish ponds by district.

FIGURE 3.12: DISTRIBUTION OF FISH PONDS BY DISTRICT IN 2017



Source: Department of Fisheries

From January to December 2017, a total of 9,511,755 fingerlings were produced. This production came from four hatcheries: Maldeco Aquaculture (7,619,920), National Aquaculture Centre (1,285,000), Mzuzu Fish Farming Station (450,000), and Kasinthula (87,600). As outlined in Table 3.9, there was a progressive increase in fingerling production from both public and private hatcheries. An increase of quality fingerlings (seed) and feed production boosted aquaculture production, as they are key inputs.

TABLE 3.9: TRENDS IN FINGERLING PRODUCTION FROM PUBLIC AND PRIVATE HATCHERIES

Year	Number of fingerlings produced		Total (Public + Private)
	Public Hatcheries (NAC, Mzuzu)	Private Hatcheries (Maldeco)	
2013	785,906	5,006,011	5,793,930
2014	731,756	5,613,964	6,347,734
2015	965,811	6,423,307	7,391,133
2016	1,670,526	6,625,000	8,297,542
2017	1,891,835	7,619,920	9,511,755

Source: Department of Fisheries

As shown in Table 3.10 below, which outlines fish production from aquaculture, a total of 12,216.8 metric tonnes of fish have been harvested from ponds and cages in 2017.

TABLE 3.10: ESTIMATED PRODUCTION LEVELS (TONNES) AND VALUE (USD) OF MAJOR CULTURED FISH SPECIES (2013 – 2017)

Species	Estimated units	Years				
		2013	2014	2015	2016	2017
	Production (t)	2,578	3,300	3,422	7,080	8,624
Oreochromis shiranus/mossambicus	Value (US\$)	2,704,783	3,462,123	3,849,012	18,893,010	23,498,202
	Production (t)	641	820	851	142	2,593
Tilapia rendalli	Value (US\$)	813,460	1,041,229	957,027	377,860	6,919,542
	Production (t)	333	426	508	212	900
Clarias gariepinus	Value (US\$)	339,786	434,926	571,915	566,790	2,452,316
	Production (t)	71	91	94	118	44
Cyprinus carpio	Value (US\$)	88,884	113,772	106,005	314,884	119,861
	Production (t)	82	105	109	94	56
Oncorhynchus mykiss	Value (US\$)	103,511	132,494	122,428	251,907	152,589
Total major species (t)		3,705	4,742	4984	7,646	12,217
Total value (USD)		4,050,425	5,184,543	5,606,387	20,404,451	33,142,539

Source: Department of Fisheries

3.3.7 Challenges

1. Inadequate support of infrastructure for fish landing, processing and marketing along the fish value chain;
2. Substandard fleet of vehicles and patrol speed boats in most field stations. This has resulted in high operation and maintenance costs of monitoring enforcement of fisheries regulations;
3. Insufficient number of technical and support staff to implement the planned programs;
4. Climate change leading to poor distribution and amount of rainfall. This affects water availability and levels in ponds and reduces breeding grounds for fish, thereby affecting fish recruitment;
5. Unavailability of floating fish feeds for faster growth of fish in cages; and
6. Limited participation of private sector investment in aquaculture.

3.4 The Forestry Sector

This section reviews the forestry sector's performance and contribution to the economy in the 2017/18 Financial Year. In particular, the focus will be on forest utilisation and marketing, budget allocation and revenue collection, tree planting and plantation rehabilitation.

3.4.1 Forest Utilisation and Marketing

3.4.1.1 Exports

The sector gave 28 export licences and 861 export permits to various exporters, such as Raiply Malawi and a number of individuals to export forest products to several countries such as Republic of South Africa, Mozambique, Kenya, Tanzania, Zambia and Zimbabwe. Raiply Malawi is the main exporter in terms of quantity and variety of forest products. The quantities and values of forest products exported from the country are summarised in table 3.11 below:

TABLE 3.11: EXPORT VALUES OF FOREST PRODUCTS FOR 2017/18⁵

Forest Product	Quantity Exported	USD	EXPORT VALUE	
			RANDS	Malawi Kwacha
MDF Plain boards	118,760 sheets	1,138,650.05	20,360,258.50	1,940,578,808.15
Rubber	940m ³		5,600,000.00	310,200,000.00
Rubber timber	970,200 kg	1,424,253.60		1,025,462,592.00
Colombo roots	32,000 kg	80,000.00		58,055,272.00
Total Revenue				334,296,672.15

Source: Department of Forestry

3.4.1.2 Imports of Forest Products

22 import licences have been issued so far in this financial year to ESCOM, Illovo, CGF, All Office Equipment, PLEM construction, Mulanje Energy Generation Agency (MEGA) Limited and IT Centre Limited to import various forest products such as electricity poles and melamine boards. A total of 30 import permits have been issued to different companies.

3.4.2 Budget Allocation, Expenditure and Revenue Collection

In the 2017/18 FY, the Department of Forestry was allocated MWK214,304,630.00 on Other Recurrent Transactions. This was a 16.5 percent increase in allocation of ORT from 2016/17 FY, when the Department was allocated MWK183,821,864.00. The Department has seven Cost Centres. Table 3.12 below shows the allocations and expenditures per Cost Centre.

⁵ Some data had not been fully submitted e.g. from Raiply Malawi such as shutter ply, plywood, shutter board and laminated shelving.

TABLE 3.12: COST CENTRE BUDGETARY ALLOCATIONS AND EXPENDITURES FOR 2017/18 FY (BY MID MARCH, 2018)

Cost Centre	Approved Budget (MK)	Expenditure (MK)	Percentage of funding
Department of Forestry Headquarters	43,420,963.00	15,172,361.00	34
Forestry Research Institute of Malawi (FRIM)	20,881,259.00	8,041,072.00	38
Zone Forestry Office, South	25,321,640.00	9,030,521.48	35
Zone Forestry Office, Centre	30,693,385.00	15,331,939.00	49
Zone Forestry Office, North	21,018,860.00	10,093,707.00	48
Malawi College of Forestry and Wildlife (MCFW)	47,415,022.00	18,445,051.00	38
Viphya Plantations	25,553,501.00	9,691,418.31	37
Total	214,304,630.00	85,806,069.79	40

Source: Department of Forestry

Although the budget was increased, implementation of activities suffered because of low disbursement rate of ORT funds. This resulted into escalation of deforestation in some parts of the country, mainly in forest reserves where forests are under threat. Protection of forests requires adequate and consistent funding throughout the financial year. The Forestry Research Institute of Malawi (FRIM) is struggling to produce improved tree germ plasm and to carry out stakeholder-oriented research on the sustainable management, utilisation and conservation of trees and forests in Malawi. This is because it is failing to collect and process tree seed and as such the quality of trees planted is of inferior quality. The Malawi College of Forestry and Wildlife is unable to train more technical staff in time resulting into decline of forestry services in the country. In the end, forest cover nationwide is adversely affected because even forest rehabilitation activities, for example afforestation and promotion of natural regeneration, cannot be achieved as per outlined plans.

3.4.3 Revenue collection

The major sources of revenue for the Department of Forestry in the year under review were concessions, sale of logs and royalties on forestry products. Most revenue was collected from plantations, mainly Viphya. Table 3.13 below shows revenue collected from various sources by March, 2018.

**TABLE 3.13: REVENUE COLLECTED BY THE DEPARTMENT
OF FORESTRY BY MID-MARCH IN 2017/18 FY**

Source of Revenue	Collection by Mid March, 2018
Sale of firewood	61,614,125.00
Forest Seed Sales	8,087,059.00
Log sales	258,748,986.76
Phytosanitary Certificates/ Receipts on Certificates	39,543,249.94
Course fees	247,500.00
Rest house fees	201,500.00
License fees	19,914,481.00
Miscellaneous fees	30,389,800.00
Accommodation and hall hire	900,000.00
Concessions	40,529,296.72
Rent for MG houses	975,720.00
Royalties on forestry produce	86,002,065.00
Total	647,243,783.42

Source: Department of Forestry

The forest sector has potential to collect more revenue and increase its contribution to GDP. To achieve this, there is need to invest more in the sector, particularly in the development and management of timber, pole and fuelwood plantations which generate much of the revenue for the Department.

3.4.4 Tree Planting and Plantation Rehabilitation

3.4.4.1 Customary Land and Government Plantations

The target for tree planting on customary land and in Government plantations was 60 million trees for the 2017/18 season. About 58 million trees were to be planted on customary land and 2 million trees were to be planted in Government Plantations (1,500 hectares for plantations). As at mid March 2018, approximately 54 million trees had been planted countrywide. In plantations, pine and eucalyptus (blue gum) trees have been planted, whereas on customary land, both exotic and indigenous trees have been planted by different stakeholders, such as non-governmental organisations (NGOs), religious organisations, local communities, companies and schools.

3.4.4.3 Fire Protection

Out of 90,000 hectares of Government plantations, 88,027 hectares were protected from bush fires through firebreak maintenance, weeding activities and early control burning. In particular, complete cultivation of the plantations covered 3,157 hectares.

3.4.5 Forest Development and Management Fund (FDMF)

The Forestry Development and Management Fund became operational in the 2011/12 FY. Its aim is to promote the conservation and management of forest resources in order to increase forest cover in the country. In the year under review, the Fund was allocated MWK800,658,435.47. The major activities for the FDMF in 2017/18 financial year are:

1. Tree Planting and Management, including tree survival promotion;
2. Contract work in Government plantations for various silvicultural activities;
3. Management of natural regenerants;
4. Training 73 Forestry Assistants, 51 of whom are now pursuing the Forestry Diploma course at the Malawi College of Forestry and Wildlife;
5. Conducting law enforcement through patrols in forest reserves and on customary land; and
6. Review of the Forest Act (1997), which is still in progress.

Chapter 4

IRRIGATION AND WATER DEVELOPMENT

4.1 Overview

This chapter provides a brief overview of the major achievements for the irrigation and water development sector during the 2017/18 fiscal year (FY) and a summary of the prospects of the 2018/19 FY. The sector is guided by the following policy objectives: to achieve sustainable and integrated water resources management systems; increase availability and accessibility of water and sanitation services for social economic growth and development; develop the institutional capacity of the water and sanitation sector; increase agricultural production and enhance food security through irrigation development.

4.2. Irrigation

During the reporting period, a total of 4,201 hectare (ha) were developed, that is 2,376 ha for smallholder and 1,825 for private sector. This led to an increase in the total land for irrigation to 112,172 ha from 107,991 ha in the previous FY, representing a 3.9 percent increase. Out of the 112,172 ha developed for irrigation, 55,324 ha was under estates and 56,868 ha was under smallholder farmers. This is, however, still below the 6 percent, targeted minimum annual growth rate stipulated in the Comprehensive African Agriculture Development Program (CAADP) for the agricultural sector. This is attributed to the fact that in the previous agricultural seasons, most of the major irrigation schemes had experienced floods and storms that led to considerable damages, as such, more emphasis was on rehabilitation works.

Out of the total land developed for irrigation, utilisation rate was at 76.9 percent, which is higher compared to 70.2 percent, during the previous FY. As in the previous year, utilisation was affected by floods, which destroyed some irrigation infrastructure, hence reducing output from supplemental irrigation. The estimated production from the land that was being utilised is 360,000 metric tonnes of food crops from smallholder farmers and about 459,000 metric tonnes of export crops for the private sector.

Several development projects/programmes contributed to the achievements registered under smallholder irrigation. With assistance from development partners, the Government implemented the following projects/programmes: Malawi irrigation Development Support Programme (MIDSUP), the Agriculture Infrastructure Support Project (AISP), the Smallholder Irrigation and Value Addition Project (SIVAP), the Small Farms Irrigation Project (SFIP) and the Shire Valley Irrigation Project (SVIP). There are also other projects that are not led by MoAIWD but have contributed to irrigation. These projects include Shire River

Basin Management Project (SRBMP), Malawi Flood Recovery Project (MFERP) and Malawi Drought Recovery and Resilience Project (MDRRP).

The newly developed schemes, under the aforementioned projects/programmes, comprise all the technologies currently being promoted i.e. gravity fed schemes, motorised and treadle pump based schemes. Table 4.1 shows details on utilisation by technology and the total number of beneficiaries disaggregated by gender.

TABLE 4.1: SMALLHOLDER AREA DEVELOPED BY TECHNOLOGY

Irrigation Technology	Number of irrigation sites	Area (Ha)		Beneficiaries	
		Developed	Utilized	Male	Female
Gravity-fed irrigation	3,177	31,208.6	24,518.64	64,861	59,657
Motorized pump based	826	7,144.19	4,290.99	15,601	15,327
Treadle pump based	8,509	11,637.39	8,712.14	57,571	51,318
Watering cans based	24,048	6,879.82	5,859.64	41,305	34,060
TOTAL	36,560	56,870	43,381,41	179,338	160,362

Source: Department of Irrigation Services

4.3 Water Resources Management and Development

The growing national demand on water resources and the concern on its availability during the dry season calls for better management of water resources, to increase its availability for social and economic development. Apart from physical availability, poor quality of water also leads to non-availability of water as people may fail to utilise the resource. Therefore, accurate information on the condition and trends of surface and groundwater in terms of quantity and quality is required. This is a basis for socio-economic development and maintenance of environmental quality.

During the reporting period, the estimated water availability was 1,050m³/capita/year. To increase water availability for various uses, seven multipurpose dams were planned to be constructed, out of which three were constructed; one in Kasungu and two in Monkey bay in Mangochi, with support from Alliance One. Another dam was also designed with support from the MFERP.

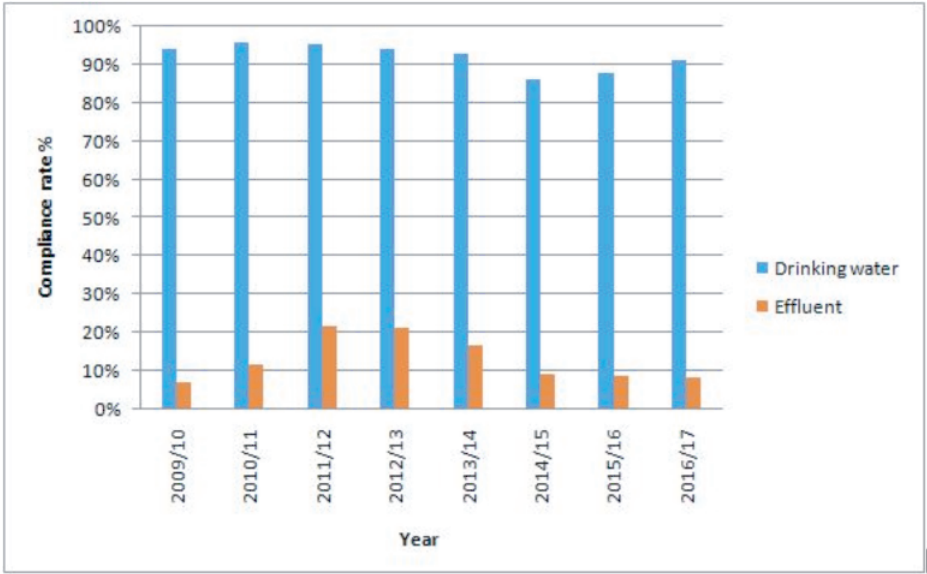
During the year, with support from GEF/GCF a total of 25 hydrometric stations were rehabilitated and 12 stations upgraded out of 125 stations which are operational in monitoring the trends of the available surface water resources, SRBMP and JICA. In addition, a total of 10 monitoring wells were established with support from AfDB. This makes a total of 76 monitoring wells across the country.

To protect flood prone areas, 17 flood protection structures were planned to be constructed. However, only one flood protection structure was constructed at

Njale in Chikwawa, through the Small Grants Project and SRBMP, while designs of 16 flood protection structures were completed.

In terms of quality of drinking water, 91.3 percent samples that were analysed at the point of collection (from Boreholes, Taps, Protected Shallow wells and Protected Springs) conformed with the required standards. This is higher compared to the previous reporting period which registered 87.9 percent compliance rate. For wastewater samples, compliance was 8.3 percent, indicating a decreasing trend compared to 8.65 percent observed in the previous FY. Figure 4.1 depicts the trend in compliance of the drinking water and wastewater samples analysed during the period 2009/10 to 2016/17.

FIGURE 4.1: COMPLIANCE RATE ON DRINKING AND WASTE WATER SAMPLES



Source: Department of Irrigation Services

The quality compliance for drinking water had a declining trend since 2011/12, but has been increasing since 2015/16. As expected, superior water was observed in taps managed by the water utilities at 97.6 percent, seconded by boreholes at 87.9 percent, then protected shallow wells at 45.0 percent, and finally taps from rural gravity-fed piped water supply schemes at 31.2 percent. Non-compliance was mainly on microbiological quality and the other water quality constituents observed not to comply, especially in boreholes, water supply intakes, taps from gravity-fed piped water supply schemes.

Contrary to drinking water compliance, wastewater compliance has been persistently low, it has been below 25 percent in all years. The compliance trend

observed has been a persistent decrease since 2010-11. In all years, parameters like Dissolved Oxygen (DO), power of hydrogen ions (pH), Biochemical Oxygen Demand (BOD5), Chemical Oxygen Demand (CODcr) and Suspended Solids failed to comply. The poor quality of effluent is attributed to inadequate treatment prior to discharge, aging of infrastructures, overloading of the systems, resulting from population increase, poor maintenance of infrastructure and inadequate enforcement of regulations.

4.4 Water Supply

According to Integrated Household Survey 4 (IHS4) 2017, the rural population with access to safe water supply is currently at 86 percent, depicting a 2 percent, increase from 2016. The major source of safe drinking water supply in rural areas is boreholes. The second mostly used source is piped water (taps) which is supplied by Rural Gravity-fed Piped Water Supply schemes, followed by Protected Shallow wells and lastly protected springs. Functionality of rural water supply systems on average still stands at 77 percent of the national level in 2016.

In order to ensure that access to safe water supply is achieved, the subsector continued with the implementation of various projects aimed at extending, upgrading and rehabilitating water supply systems and boreholes across the country.

During the year under review, the subsector completed the preparation of detailed designs and commenced the rehabilitation works of 12 rural piped water supply systems under the Sustainable Rural Water and Sanitation Infrastructure for Improved Health and Livelihoods (SRWSIIHL) Project in the five district councils of Phalombe, Mangochi, Rumphu, Ntcheu and Nkhosakota. To ensure sustainable management of the facilities once rehabilitation works are completed, the project has also started facilitating the establishment and training of Water Users' Associations (WUA) to carry out operations and maintenance of the schemes.

The Ministry also planned to construct 30 boreholes under Borehole Treasury Fund as per requests from various clients, only 26 were constructed making an achievement of 87 percent. In addition, to these boreholes, Civil Society Organisations (CSOs) and Non Governmental Organisations (NGOs) registered with the Water Environment Sanitation (WES) Network installed over 800 water points (377 boreholes, 356 gravity fed taps, 45 kiosks, and 181 shallow wells), and facilitated rehabilitation of 485 water points.

Water coverage during 2016/17 in urban and town centers is presented in Table 4.2. These areas are serviced by the five water boards namely; Lilongwe, Blantyre, Southern Region, Central Region and Northern Region. Table 4.2 illustrates that between 2016/17 and 2017/18, the population covered with safe

drinking water in urban and town centers increased (on average) from 2,951,288 to 3,090,353 representing a 5 percent increase, Blantyre and Southern Region Waterboard registered the highest increase, while Central Region Waterboard (CRWB) grew the least. This increase could be attributed to the increased water production in the year under review, and a rise in the number of new customers that the boards registered.

TABLE 4.2: URBAN WATER SUPPLY COVERAGE

Water Board	Population Served		Increase in Population Served	Coverage Increase in Percentages
	2016/2017	2016/2017		
Lilongwe (LWB)	836,043	872,761	36,718	4%
Blantyre (BWB)	1,150,000	1,220,429	70,429	6%
Central Region (CRWB)	284,832	285,527	695	0.2%
Northern Region (NRWB)	340,425	350,638	10,213	3%
Southern Region (SRWB)	339,998	360,998	21,000	6%
Totals	2,951,298	3,090,353	139,055	5%

Source: Water Boards Reports

From the population currently being serviced by the water boards, the percentage of people able to access water within 30 minutes from a water source on average stood at 83 percent, since the previous FY, as presented in Table 4.3 below. The table indicates that CRWB registered the highest rate at 98 percent, while Lilongwe Water Board (LWB) had the least at 75 percent.

TABLE 4.3: PERCENTAGE OF PEOPLE WHO ARE LESS THAN 30 MINUTES FROM WATER SOURCE

Water Board	2015/2016	2016/2017	2017/2018
Lilongwe	72%	75%	75%
Blantyre	75%	79%	77%
Central Region	98%	98%	98%
Northern Region	76%	76%	77%
Southern Region	84%	87%	88%
Average	77%	83%	83%

Source: Water Boards Reports

Table 4.4 indicates that all Water Boards have experienced Non-Revenue Water (NRW) at different levels. This is attributed to factors such as physical leakages in the distribution system due to ageing and variations in pressure, unauthorised water use, vandalism of water supply plants, and inaccuracies in billing or meter

readings. A reduction in the percentage of NRW implies utility efficiency is being attained, and an increase in customer base, which would increase revenues from water sales. In the period under review, the percentage of NRW on average remained at 31 percent, just as in the previous year. This average is higher than the recommended maximum NRW of 25 percent that is allowable for the boards. Table 4.4 indicates that only CRWB is within the acceptable rate compared to the rest.

TABLE 4.4: NON REVENUE WATER IN WATER BOARDS

<u>Water Board</u>	<u>2016/2017</u>	<u>2017/2018</u>
Lilongwe	35.00%	40.00%
Blantyre	40.00%	33.00%
Central Region	23.00%	25.00%
Northern Region	30.00%	31.00%
Southern Region	26.00%	26.00%
Average	31.00%	31.00%

Source: Water Boards Reports

During the reporting period, the average number of debtor days increased from 100 in 2016/17, to 115 in 2017/18. LWB was the worst performer with its debtor days doubling from 60 to 120 days. While most water boards registered an increase on the number of debtors days during the reporting period compared to the previous year, only CRWB registered a reduction from 75 to 72 debtor days as indicated in Table 4.5 below.

TABLE 4.5: AVERAGE NUMBER OF DEBTOR DAYS

<u>Water Board</u>	<u>2016/2017 Debtor Days</u>	<u>2017/2018 Debtor Days</u>
Lilongwe	60	120
Blantyre	90	91
Central Region	75	72
Northern Region	120	145
Southern Region	156	150
Average	100.2	115.6

Source: Water Boards Reports

4.5 Sanitation and Hygiene

During the reporting period, an average of 44 percent (43 percent in the rural and 48 percent in the urban) of the population had access to improved sanitation facilities (JMP, 2017).

The sector continued with implementation of the Sustainable Rural Water and Sanitation Infrastructure for Improved Health and Livelihoods Project (SRWSIIHLP). The objective of the project is to improve health and livelihoods

of the rural population through provision of sustainable water supply and improved sanitation in the districts of Rumphi, Nkhosokota, Ntcheu, Mangochi and Phalombe. The project completed construction of 80 Sanitation units in public institutions, such as schools, market centers as well as Health Centers bringing to a total of 266 structures constructed under the project against a target of 166. In addition, the CSOs operating in the sector also supported the construction of about 100 VIP latrines in public institutions (schools, health facilities, and markets).

Since the launch of Open Defecation Free (ODF) and National Hand Washing Campaign (NHWC) strategies, the country started with 3 ODF Traditional Authorities (TAs) in 2015, this increased to 25 TAs in 2016 and the 68 in October 2017.

4.6 Prospects for 2018/19 Fiscal Year

4.6.1 Planned Programmes for the 2018/19 Fiscal Year

In 2017/18 FY, the sector will continue to work towards the attainment of its goal of water and sanitation for all and prosperity through irrigation.

In the 2018/19 FY, the sector will continue with catchment protection for both irrigation and water supply schemes. The sector will also continue to diversify into low cost technologies for small scale irrigation while rehabilitation of existing irrigation schemes will also remain an important activity in the coming FY. The sector also intends to extend and upscale its solar powered irrigation schemes under the various projects/programmes being implemented. There will be continued implementation of the ongoing projects such as the SRBMP and SRBDP where issues of water development and management feature highly.

It is expected that the sector will continue with rehabilitation works of twelve (12) piped water supply systems with a total of 2,925 taps. This will be done through the implementation of the SRWSIIHL Project.

4.6 Challenges facing the Sector

Despite the achievements highlighted above, the sector faced a number of challenges ranging from vandalism of irrigation infrastructure, ageing infrastructure, dwindling sources of water, wash-aways of irrigation infrastructure due to floods, inadequate production capacity of water due to increased water demand and lack of access to land for commercial farming. The sector has also been affected by exorbitant electricity tariffs for irrigation schemes using ESCOM power to pump water, as they are charged at Industrial Rates and maximum voltage use. Furthermore, low and delayed disbursement of funds, and low funding levels to district councils affected its operations, maintenance and sustainability of water supply and sanitation systems. Lastly, non adherence to

projected cash flows by Treasury affected implementation of work plans and this is further aggravated by delays in processing of payments by the Accountant General.

Chapter 5

TRANSPORT AND PUBLIC INFRASTRUCTURE

5.1 Overview

This chapter reviews the performance of the transport and public works sector and highlights major activities carried out during the 2017/18 fiscal year.

5.2 Road Transport Infrastructure

The report focuses on physical and financial progress and challenges faced in the implementation of maintenance and development programmes over the reporting period under the Roads Infrastructure subsector, during the reporting period. The report also presents an overview of roads programmes and projects planned for implementation in the 2018/19 fiscal year.

5.2.1 Roads Infrastructure Programmes

The Roads Authority (RA) with funding from the Roads Fund Administration (RFA), the Government and development partners, implemented several road transport infrastructure projects during the year under review. Whereas some of the road projects will be completed by the end of 2017/18, others will be carried over into the 2018/19 fiscal year. These projects will facilitate agricultural production, industrial output, manufacturing, mining, tourism, trade and commerce, among others areas. The outcome of these projects is the positive contribution to the country's overarching goal of poverty reduction through economic growth and development.

During the period under review, the roads sub-sector performed well despite some challenges that were encountered, such as rising costs of road construction materials and unpaid certificates to contractors and consultants. One of the major setbacks has been under-funding of projects which were wholly financed by the Government. This contributed to delays in completing the projects and resulted in accumulation of arrears and surcharges. Untimely completion of road projects leads to delayed benefits to the road users and the general public.

5.2.2 Recurrent Programme

Under the Recurrent Programme, the RA carried out road maintenance programmes as detailed in the following sections:

5.2.2.1 Routine Maintenance

Routine road maintenance programmes consist of maintenance activities that are required on a continuous basis and these include cleaning of drains and other drainage structures, minor culvert and bridge works, edge break repairs (paved roads), crack sealing (paved roads), line marking (paved roads), reinstatement of

road furniture, grass and shrubs cutting (mainly on paved roads), pothole patching (paved roads), grading and reshaping of unpaved roads. However, due to limited funding in 2016/17, maintenance works were limited to opening up blocked drainage structures, minor repairs of road sections and grass cutting, in order to sustain the integrity and functionality of the road network. Overall performance was an achievement of 87 percent of the planned outputs.

In the year under review, the focus was entirely on the above activities, however commitment and expenditure was just 45 percent by December 2017, due to delays experienced in getting “no objections” from the Office of the Director of Public Procurement (ODPP).

Between July 2017 and May 2018, contracts worth MWK16.364 billion were awarded of which works amounting to MWK12.475 billion were committed. It is expected that by the end of the financial year all committed expenditure will have been paid out and over 85 percent of planned works will have been completed.

5.2.2.2 Spot Periodic Maintenance and Spot Rehabilitation

This programme aims at restoring the original condition of relatively short sections of paved roads that are characterized by excessive material loss, deformation and potholes due to aging, traffic action and environmental damage. This programme is applied where other immediate remedial intervention measures are considered ineffective. The total original approved budget for this programme for the 2016/17 financial year was MWK750.6 million. However, by June, 2017, contracts worth MWK857.6 million were awarded to various contractors, out of which MWK793.4 million worth of contracts were certified and 100 percent of the targets were achieved.

5.2.2.3 Grass and shrub cutting

This programme was formed to clear the road sides within the road reserve of grass and shrubs to improve visibility on the roads. For effective management, these activities are best carried out from January to April every year.

5.2.2.4 Pothole Patching

The main objective of this programme is to address and cover a number of areas that may have developed potholes due to old age and other effects of traffic on most of the road network. For the year under review over MWK924.0 million was committed for expenditure, and it is expected that that by end of the financial year all the works will have been completed and paid for.

5.2.3 Development Programmes

The 2017/18 Annual National Road Programme (ANRP) had a development budget amounting to around MWK70.0 billion; out of this, MWK38.7 billion was

secured for donor funded projects and MWK30.0 billion was for projects being wholly or partially funded by the Government. This budget was used for feasibility studies, design, periodic maintenance, rehabilitation, and upgrading/construction of priority roads in Malawi. The scope of works planned and respective estimated budgets are presented in the Table 5.1 below.

TABLE 5.1: DEVELOPMENT PROGRAMMES BUDGET 2017/18

Programmes	Approved budget (MWK) Million	Percentage of total budget (%)
Feasibility and designs studies	300	0.4
Upgrading and construction of roads	48,650	70.5
Periodic and rehabilitation of paved roads	20,400	29.5
TOTAL	69,050	100.00

Source: Roads Authority

Most of these programmes and projects are carried out with funding from development partners such, as the European Union, the Kuwait Fund, the Arab Bank for Economic Development in Africa (BADEA), the OPEC Fund for International Development (OFID) and the Peoples' Republic of China, as well as the Malawi Government. These programmes and projects are at various stages of implementation as detailed below.

5.2.3.1 Feasibility and Preliminary Designs

A number of road projects were earmarked for economic feasibility and preliminary engineering design, as well as for detailed engineering design once they pass the feasibility stage in 2017/18. These include: Rumphi–Nyika–Chitipa and Mchenga Utuwa–Mzuzu University road projects.

5.2.3.2 Maintenance and Rehabilitation

For the 2017/18 financial year, all the periodic maintenance and rehabilitation of paved road projects are on-going, with funding from the African Development Bank, the World Bank and the Government. The two road projects of Mzuzu–Nkhata Bay and Liwonde–Mangochi are funded by the AfDB, the Blantyre–Zomba end points are funded by the Government, and Thabwa–Fatima (East Bank) and Karonga–Songwe are funded by the World Bank.

With funding from BADEA, the implementation of the Zomba–Jali–Phalombe–Chitakale road project is expected to be completed by August, 2018. As of June, 2017, the contractor had completed surfacing 12km of the first seal.

By June, 2017, 15km had been rehabilitated for the Mzuzu–Nkhata Bay project, the project is expected to end in June, 2018. In addition, 5km had been rehabilitated for the Liwonde–Mangochi project by June 2017 and this project is expected to end by August, 2018.

Other wholly Government funded projects made substantial progress during the period under review. These include the Lilongwe Old Airport–Kasiya–Santhe road, Njakwa–Livingstonia–Chitimba and Area 18 roundabout–Area 49. As of June 2017, the contractors had upgraded 35km of the Lilongwe Old Airport–Kasiya–Santhe and completed earthworks of 12km for the Njakwa–Livingstonia–Chitimba road. The Lilongwe Old Airport–Kasiya–Santhe road project is expected to end in January, 2019 and the Njakwa–Livingstonia–Chitimba road project is expected to end in May, 2020.

For the Area 49-Area 18-Parliament Roundabout road project in Lilongwe City, the works commenced on 5th October, 2017 and are expected to be completed by 4th October, 2018.

5.2.3.3 Projects in the Pipeline

There are number of notable projects for implementation in the fiscal year 2018/19 and beyond, which include: Lirangwe–Chingale–Machinga, Livingstonia–Njakwa; Ntcheu–Tsangano–Neno; Jenda–Endingeni (phase 2: Chindoka–Embangweni section); Chikwawa–Chapananga (road and Chapananga bridge), Neno–Mwanza T/O. KIA–Kasungu–Mzimba T/O; Kacheche–Chiweta; Kaphatenga–Nkhotakota–Dwangwa Rehabilitation and Nsipe–Liwonde–Zomba; (feasibility and designs for rehabilitation).

5.2.4 Impact of Road Improvements on the Economy

The main objective of investing in road construction, rehabilitation, periodic and routine maintenance is to provide improved accessibility and mobility this has the overall effect of reducing transport costs for road users and increasing the road network’s contribution to economic growth and development. Table 5.2 below shows the effect of road programmes on the condition of the road network for projects that were implemented in previous years.

TABLE 5.2: ROAD CONDITION OF PAVED NETWORK
2011 - 2022

<u>CONDITION</u>	<u>2011</u>	<u>2014</u>	<u>2017 (EST)</u>	<u>2022(DESIRED)*</u>	<u>STRATEGIC ACTION</u>
GOOD					
Km (%)	2,447 (40%)	1,639 (38%)	1,552 (36%)	2,768 (54%)	Routine Mtce
FAIR					
Km (%)	1,346 (33%)	1,725 (40%)	1,725 (40%)	1,384 (27%)	Periodic Mtce
POOR					
Km (%)	286 (7%)	949 (22%)	1,035 (24%)	974 (19%)	Rehabilitation
Total					
Km (%)	4,079(100%)	4,312 (100%)	4,312(100%)	5,125 (100%)	

Source: Roads Authority – Road Condition Surveys

* Desired estimate after implementation of the RA 5-Year Strategic and Business Plan (2017 – 22).

Comprehensive Road Condition surveys covering the paved network were carried out in 2011 and in 2014. The last survey showed that 38 percent; 40 percent and 22 percent of the paved roads were in a good, fair and poor condition, respectively. The 2014 road condition results projected in 2017 have shown that the road conditions have deteriorated due to inadequate funding and poor performance by contractors. Poor performance by contractors was a result of the Government not paying arrears, which affected their cash flow.

A recent road condition surveys done in 2017 showed that 36 percent of the paved road network is in good condition; 40 percent is in fair condition and 24 percent is in poor condition. The 2017 road condition results, when compared to the two previous survey carried out in 2011 and 2014, show that the condition of the paved network has deteriorated due to inadequate funding for the various periodic maintenance and rehabilitation programmes necessary to keep the road network in good condition. It is estimated that if the RA 5-Year Strategic and Business Plan (2017-22) is implemented in full the desired road network would be 54 percent good, 27 percent fair and 19 percent poor, which would reverse the deterioration and transform the road network. But this is premised on the following assumptions: a) that there is sustainable and adequate funding for all programmes; b) there is a clearing of backlog payments to the construction industry; and c) that necessary reforms are carried out by the Roads Authority and in the transport sector.

5.2.5 Challenges

A number of challenges were experienced by the road subsector in the period under review; namely:

5.2.5.1 Inadequate funding

Over the years, allocations for road maintenance have not been adequate to cover all the maintenance and development requirements of the roads sector. Proposed budgets by the RA are often scaled down during the national budgeting process where the Government fixes ceilings which are dictated by macroeconomic parameters and availability of development partners' support.

5.2.5.2 Clearing the Backlog Payments

Over the last five years, the roads subsector accumulated huge arrears of payments to the construction industry. This practice negatively impacted the sector, as well as the Government which faced interest charges over and above the initial cost of construction works. In addition, this resulted into the industry being denied the necessary cash flow to finance road construction projects. There is need for the Government to take critical steps in addressing this problem and clear the arrears as soon as possible.

5.2.5.3 Inadequate Absorption Capacity of Road Works Funds

Inadequate capacity in the construction industry such as design consultants and local contractors in the unlimited category and non-availability of construction equipment in the country, are some of the major reasons for low absorption capacity of funds for road works.

In general, there is limited availability of qualified and experienced engineers and technicians to design and supervise road construction works. The limited supply is attributed to training institutions, such as the University of Malawi and other institutions of higher learning, which have stopped offering Technician Diploma courses. There is also a low rate of professional registration by the Malawi Board of Engineers. However, efforts are underway to address these challenges.

There are also unfavourable financial conditions for small to medium contractors and consultants to secure capital financing from lending institutions to meet the financial requirements of the industry.

5.3 Road Traffic and Safety Services

The Directorate of Road Traffic and Safety Services (DRTSS) continues to provide Traffic and Safety Management Services, in line with the legal framework derived from the Road Traffic Act (1997) and Regulations (2000). DRTSS has the responsibility of enforcing road traffic regulations and also ensuring and promoting road safety in the country. This section gives a summary of activities in the 2017/18 financial year.

5.3.1 Economic Achievements in 2017/18

5.3.1.1 Malawi Traffic Information System

The DRTSS started implementing the Malawi Traffic Information System (MaTIS) upgrade in 2015 and implementation continued in the year under review. The objective of the upgrade is to improve road safety through, among other things, automation of manual transactions and enhancing the safety procedures for vehicle testing and licensing of drivers. The upgrade of the system has improved efficiency in delivery of road traffic and safety services in the country. The upgrade has also improved the driver license and vehicle administration systems which has led to an upward surge in revenue collection as all transactions are automated eliminating all loopholes inherent in a manual payment system. Through the years, including the year under review, revenue has been increasing at an average of 30 percent per year.

The upgraded system has also been linked with the Malawi Revenue Authority and the Malawi Police Service, Interpol Division, in the clearance of vehicles before vehicle registration. In addition, driving schools are interfaced with MaTIS. The system still needs to be linked to weighbridge stations and insurance

companies. Handover of the system administration from the consultant is expected to be done in the current financial year.

5.3.1.2 Outsourcing of Vehicle Inspection Services (VIS)

The outsourcing of vehicle inspection for the Certification of Fitness (CoF) to the private sector started in 2016/17. The objective was to bring efficiency in the delivery of this service to the public, to decongest the Road Traffic and Safety Services Stations, and to encourage private sector participation in road traffic and safety management. In the period under review, six vehicle inspection stations were licensed and are operational; three in Lilongwe and three in Blantyre. The three stations in Lilongwe are Auto Tec, Motor Service Centre and Nu-Tread; the three in Blantyre are Toyota Malawi, Blantyre Motor Vehicle Inspection Centre and Motor Service Centre. The programme is further expected to extend to Mzuzu, Zomba, Karonga, Mangochi and Ngabu.

5.3.1.3 Corruption and Fraud Prevention and Customer Service

The DRTSS developed a Corruption and Fraud Prevention Policy and Client Service Charter, in the period under review, with an aim of curbing fraud and corruption as well as improving its service delivery to the general public. By nature of its operations, delivery of road traffic and safety is prone to corruption and fraud. Hence, required policy guidelines are to minimise the risks and instill a culture intolerant to corruption. In the past, services such as issuance of Certificate of Fitness, licensing and renewal of drivers' licenses, registration of motor vehicles, vehicle load control services and traffic law enforcement exercises have been a subject of both corruption and fraud. The DRTSS also introduced wearing of uniform for both technical and support staff in order to improve security and visibility of all staff. This has helped to identify staff from middlemen who promote corruption.

5.3.1.3 Road Safety

Road accidents impact the economy negatively and as such the high number of fatal and serious crashes is a concern to the Department. In the period January to December 2017, a total of 3,634 road accidents were recorded, out of 940 accidents were fatal, while 536 caused serious injury. In comparison to the same period last year 2016, this was a 33 percent decrease in the number of accidents which stood at 5,406. Road accidents continue to claim young people's lives aged between 22 to 44. The DRTSS, therefore, continues to undertake a number of measures to address this trend, such as enhancing the capacity of the institution through increasing the number of road traffic officers; increasing and improved general awareness of road safety and civic education through schools programs; print media road safety messages; and film show campaigns. In the year under review, the Directorate also introduced a toll free line 4040 for reporting of road safety issues in the country.

5.3.2 Challenges

The DRTSS faced a number of challenges in implementing its activities in the period under review, including inadequate office and parking space for both clients and staff; inadequate human resources, especially in all technical sections of road traffic and safety management; and poor internet speed, which at times compromised automated processes.

5.4 Rail Subsector

There have been efforts to improve the rail infrastructure in order to enhance efficiency in rail operations. During 2017/18, the Government developed a National Transport Master Plan (NTMP), which advocates, for heavy investment in the rail subsector, with the objective of shifting more cargo from road to rail, in order to reduce transport costs and thereby enhance competitiveness of imports and exports. The Government is carrying out rehabilitation of rail infrastructure, in order to reduce further deterioration of the rail infrastructure and resuscitate some of the route operations that have not been operational for decades.

5.4.1 Progress in Rail Infrastructure

One of the major milestones accomplished in the period under review, is the Limbe–Nkaya rehabilitation works, which were completed in 2017. For the Nkaya–Mchinji line, the feasibility study was completed and rehabilitation works commenced in December 2017; it is expected to be completed by the end of 2019.

Currently, a topography, sedimentation, hydrology and climate change study for the Limbe–Marka and Limbe–Makhanga rail sections is underway and is expected to be completed by June 2018. Rehabilitation for the Limbe–Sandama section is expected to commence in the first half of 2018.

5.4.2 Challenges

In 2017/18, the rail subsector experienced some challenges, such as an increase in vandalism of rail infrastructure, as well as an increase in accidents, mostly due to trespassing. The Ministry intends to address this challenge by intensifying sensitisation in communities along the railway lines and amongst the general public.

5.5 The Water Transport Subsector

During the period under review, the Marine Department continued to play its role of regulating and monitoring the operations of the water transport subsector. The Department implemented a number of activities in order to enhance safety, including the following:

5.5.1 Installation of Solar-Powered Aids to Navigation on Lake Malawi

The Marine Department replaced the old gas-powered aids to navigation equipment on Lake Malawi with state of the art solar-powered equipment. The aids to navigation are intended to identify dangerous points along the lake to prevent accidents. The equipment was procured in 2015/16 and installed in August 2017, at a total cost of about MWK100 million.

The equipment was installed at the following eight strategic locations on Lake Malawi: Thumbi East at Monkey Bay in Mangochi District; Mbenji Island and Namalenje in Salima District; Nkhotakota in Nkhotakota District; Chizumulu Island on Chizumulu Island; Likoma Island on Likoma Island; Chindozwa Point in Nkhata Bay District; and Mphanga Rocks at Chilumba in Karonga District. The objective of the project is to improve the safety of navigation on Lake Malawi and is expected to drastically reduce the number of maritime accidents on the lake.

5.5.2 Rehabilitation of Nkhata Bay Jetty

In collaboration with the Malawi Ports Company Limited, rehabilitation works for the Nkhata Bay Jetty, which had sunk in December 2016, commenced in the third quarter of 2017 and were finished in March 2018. The new jetty will provide a reliable and durable all-weather structure at the port and will be capable of handling more traffic.

5.5.3 Construction of Likoma Jetty

The full feasibility and design studies for the construction of a jetty at Likoma Island were carried out by WTM Chirwa and Associates Consulting Engineers. The studies involved a full Environmental and Social Impact Assessment (ESIA), detailed engineering designs for the Jetty, preparation of Bills of Quantities, procurement of the contractor, execution of the works and construction, final inspection and handover to the client, defects liability period, and final handover at substantial completion. Construction will commence in 2018 and will be expected to be finalised in December 2019.

5.5.4 Shipping Operations

In terms of the performance of shipping operations, the period under review has registered some improvements in reduction of maritime accidents. However, in cargo and passenger haulages, performance has been poor due to down time of vessels.

5.5.5 Major Challenges

The water transport subsector has continued to perform below expectation for many years, despite its potential to contribute to the economy. Some of the main challenges that are contributing to this poor performance are as follows:

5.5.5.1 Effects of Climate Change.

Climate change has adversely affected water transport operations. Due to the drought conditions and the destruction of the environment that Malawi has experienced recently, there has been heavy siltation and low water levels on Lake Malawi. Some navigation channels have seriously been obstructed and others have become completely inaccessible. For instance, currently, ships cannot dock at Chipoka port due to low water levels resulting from heavy siltation.

5.5.5.2 Lack of Adequate and Qualified Personnel

Lack of appropriate personnel has greatly contributed to the subsector's failure to perform to its full potential. Shipping is international in nature and requires highly qualified and competent personnel. Although there is a fully fledged Marine Training College at Monkey Bay, the College is heavily under-resourced, thereby negatively affecting its operations. The Marine Department lacks adequate key technical staff who are supposed to conduct law enforcement and monitor the concessions.

5.5.5.3 Low Levels of Funding

The operational budget of the Marine Department has, for many decades, been among the lowest of the Ministry's departments. In addition, its monthly funding has always been below its monthly budget and as a result, the Department has failed to implement most of its planned activities. There is, therefore, urgent need to increase the Department's budget so it is able to fulfil its mandate.

5.5.5.4 Lack of Appropriate Law Enforcement Equipment

The Department lacks patrol boats, motorcycles and motor vehicles for law enforcement. As a result, there are many boats that are on Malawian lakes and major rivers which are unseaworthy. This is a serious maritime safety hazard and also a huge loss of Government revenue.

5.6 Air Transport Subsector

Air transport continues to be an important contributor to the national economy, particularly development of the tourism sector. Air services between Malawi and other countries are regulated by bilateral air service agreements which have been reviewed continuously over the past years to improve connectivity and transportation of persons and goods to and from Malawi. Latest agreements that have been concluded include Malawi and United Arab Republic and Malawi and Egypt (to be completed by the end of the 2017/18 financial year).

5.6.1 Airports Development Programmes

The Government is currently in the process of upgrading the two primary international airports of Kamuzu and Chileka. The exercise is being implemented under the Upgrade of Aviation Safety and Security Equipment Project through The Project Loan (Authorization) Act of 2015.

The loan will be used to finance some construction and acquisition of essential aviation safety and security equipment, including meteorological equipment for the two airports, in particular: fire-fighting and rescue equipment; perimeter fence and perimeter guard stations; construction of a new fire station at Chileka International Airport; security related equipment; communication, navigation and surveillance equipment; aircraft and airport ground handling equipment; airport light and electrical equipment; and other equipment related services.

5.6.1.1 Extension of Kamuzu International Airport

The project will involve the construction of a new international departures terminal building, new arrivals wing and the rehabilitation of the existing terminal building and installation of a new aircraft surveillance system. This is being financed by Japanese Grant Aid amounting to JPY 3,675,000,000 (MWK 25,725,000,000). The works are expected to be completed by March 2019. It is expected that the expansion and rehabilitation of the airport will increase capacity of the airport to accommodate more passengers and improve safety of aircraft operations through the installation of a more advanced aircraft surveillance system. The existing terminal building will undergo rehabilitation once the new terminal wings have been completed by the end of December 2018 and will be ready for use from January 2019.

5.6.1.2 Chileka International Airport

The project involves rehabilitation of the Chileka terminal building and security fence. The project was planned to be completed in December 2015, but due to funding challenges this has not been possible. The project is expected to be completed by the end of 2017/18. The completion of the project will contribute to improving passenger processing capacity, as well as providing new and modern facilities within the terminal building, so that the airport adheres to special needs requirements.

5.6.2 Institutional Reforms

During the period under review, reforms have been implemented in the air subsector. One of the reforms is the establishment of an autonomous Civil Aviation Authority (CAA) which is currently underway after the passing of the Civil Aviation Bill in June 2017. The purpose of the reform is to separate the delivery of services and the regulatory functions in the aviation sector. The

Department of Civil Aviation (DCA) has been playing the dual role of service provider and a provider of regulatory functions. This has resulted in the failure to meet statutory obligations of providing effective safety oversight in the aviation industry. It is planned that the Civil Aviation Authority will be established within this year thereby making Malawi compliant to statutory obligations set by the International Civil Aviation Organisation.

5.7 Plant Vehicle, Hire and Engineering Services

The Plant Vehicle, Hire and Engineering Services (PVHES) is a Treasury Trust Fund which is mainly involved in the hiring out of plant and equipment to the construction sector. The PVHES is undergoing reforms to improve and sustain its operations. The institution is struggling due to obsolete equipment and the emergence of stiff competition from the private sector.

During the period under review, the PVHES undertook a number of activities including the following: rehabilitation of the District Workshops in Chikwawa (Ngabu), Mangochi, Salima, Kasungu and Karonga. This will enable the workshops to carry out vehicle inspection and issue COFs to clients. A percentage of COF fees, which will be retained by the PVHES, will improve its revenue base. In addition, the PVHES purchased vehicle number plates embossing machines in order to increase its revenue generation. One embossing machine was bought in the 2016/17 financial year for the Lilongwe service centre and four more will be purchased in 2017/18 and early 2018/19 for the Blantyre, Zomba, Mangochi and Mzuzu service centers.

5.8 Buildings Department

The Buildings Department exists to facilitate the provision of a safe and sustainable building environment, through regular enforcement of policies, standards and regulations in an efficient, transparent and accountable manner.

During the year under review, the Department supervised a number of projects, such as the construction of the Government Office Block at Capital (GOCH 7) which was completed in 2017; construction of a female hostel; filling station; a business centre for the Lilongwe University of Agriculture and Natural Resources (LUANAR–Bunda Campus), which was completed and handed over; and construction of health centres and staff houses under the Umoyo Project in different districts across the country.

Projects in pipeline include construction of the Phalombe District Hospital in Phalombe (currently at 20 percent progress); construction of the Mombera University in Mzimba, progress of the connecting road is at 15 percent; construction of the Cancer Centre in Lilongwe, progress is at 36 percent; and the construction of the Malawi Defence Force Military Referral Hospital.

5.10 Challenges Experienced in the 2017/18 Financial Year

During the year under review, the main challenge faced has been inadequate funding especially for Government funded programmes and the ORT. The Ministry has just launched the National Transport Master Plan (NTMP) for the period 2017-2023 and is in the process of reviewing the National Transport Policy (NTP). There is, therefore, need for Government commitment, so that the Ministry can effectively coordinate implementation of the NTMP and realise the intended contribution of the transport sector to the development of the economy.

Chapter 6

MINING

6.1 Overview

Mining is one of the key sectors with great potential to significantly contribute to sustainable economic growth and development of the country. The Government realises that in order to make mining one of the significant contributors to the national economy, there is need to cultivate and maintain a good investment climate; create and sustain a stable regulatory environment that provides for the transparent and equitable treatment of investors; and provide a secure, competitive and fair mining fiscal regime.

The Government approved and launched a modern Mines and Minerals Policy in 2013. In addition, the country's Mining Fiscal Regime underwent serious review and was approved in September, 2016. A review of the Mines and Minerals Act, 1981 was done in an effort to make it resonant with the modern Mines and Minerals Policy and the Mines and Minerals Bill is being vetted by the Ministry of Justice and Constitutional Affairs before it can be tabled before Parliament by the end of 2018. The review process for the mining legislation has taken long time since it needed to be given inputs and analyses from a broad spectrum of mineral sector stakeholders across the country with a view to ensuring that it veritably reflects authentic hopes and aspirations of all Malawians and investors.

Another important development in the mining sector in 2017/18 financial year is the establishment and progressive update of the geo-data management platform at Geological Survey Department, following the successful completion of the high-resolution airborne geophysical survey in 2015, aimed at providing easy access to geo-scientific information by investors, among others. In addition, the Department of Mines has introduced a computer-based mining cadastral system in a quest to promote transparent, effective and efficient processing and management of mineral licenses for investors.

In terms of growth, the mineral sector experienced a tremendous growth trajectory of over 1.6 percent in the year 2017/18. Mineral exploration and production also increased in most cases as a result of continued demand by the mineral consuming industries, and the export market.

6.2 Mineral Production

Table 6.1 below summarises the mineral production levels and monetary values realised from the sale of minerals. The details of mineral production during the period under review are explained in the subsequent subsections. It should be noted that for 2018 only projections of mineral production and monetary values were available during compilation of the report..

TABLE 6.1: MINERAL PRODUCTIONS & MONETARY VALUES

Type	2016 (Actual)		2017 (Actual)		2018 (Estimation)	
	Quantity (tonnes)	Value (K'million)	Quantity (tonnes)	Value (K'million)	Quantity (tonnes)	Value (K'million)
Coal	43 338	638.92	45 230	666.81	48 156.20	709.95
Cement	65 560	71.1	188 946	12 500	200 000	31 432
Agricultural and Cement	33 158	433	38 278	499.86	42 000	548.46
Agricultural and Hydrated Lime	188 946	12 500	210 500	13,925	235 000	15,545.72
Other	38 278	499.86	43 650.00	570.01	48 461.20	632.83
Uranium Concentrates	-	-	-	-	-	-
Rock Phosphate	2 500	12 400	10 000	178	12, 153.54	216.33
Rock aggregate	1 990 000	3 309	2 500 000	4 157	2 650 000	4406.42
Gemstones	1 300	205.72	2 000	315.38	2 300	362.69
Dimension stone	70 000	15.87	1 000 000	22.67	1 100 000	24.94
Iron ore	3 800	9.59	5 000	12.62	6 500	16.41

Source: Department of Mines

6.2.1 Coal Production

Malawi has over 22 million tonnes of proven coal reserves in a number of coal fields across the country. In general, coal remains one of the highest energy mineral mined for industrial use in the country. Coal production declined considerably from 58,774 tonnes produced in 2015/16 to 43,338 tonnes in 2016/17. Much of the coal was produced from Mchenga, Malcoal and Kaziwiziwi Mines. The decline is attributed to competition from coal imports from Moatize in Mozambique which flooded the market. This dampened the effort by some coal mines in the country to produce more for the market. Additionally, one coal mine, Eland Coal Mine closed up prematurely and illegally for no known reasons and the Government is currently following up the matter with the owner of the mine. The coal is mainly used for provision of energy for different production processes in the cement, tobacco, textile, brewery, food processing and ethanol industries.

During 2017, coal production is thought to have increased due to an expected increase in demand, as some companies were venturing into serious thermal electricity production in the country. In the interim, almost all mining companies continue with expansion projects by implementing exploration programs outside their current mining areas.

6.2.2 Uranium Concentrates Production

Kayelekera Uranium Mine continued to be under care and maintenance during the financial year under review, as a result of the continued shutdown of Japanese reactors following the Fukushima nuclear reactors accident, which has been causing the uranium prices at world market to fall far below \$40/lb. There was no uranium production at the Mine during the 2017/18 financial year. Almost all the work at the mine centred on environmental management, care and

maintenance of the plant and machinery. In order for the Kayelekera Mine to resume production, the world market price for uranium should be within the range of USD70 - USD75 per pound. There are, however, some good prospects that the price for uranium may pick up in the near future. As reported recently by the Vancouver-based Haywood Securities, around 22 new nuclear reactors are under construction in China, 6 are reportedly being built in India, 8 in Russia, another 2 in the neighbouring Belarus and, in the Middle East, 4 are reportedly under construction in the United Arab Emirates (UAE) with many more planned in the region. The establishment of these nuclear reactors may result in a global increase in the demand for uranium which may incentivise Kayelekera Uranium Mine to recommence production in the near future.

6.2.3 Cement Production

Most of the local cement used in the country was produced at Shayona and Lafarge Holcim companies and fetched at least MWK12.5 billion in sales. Compared to the previous year, production in 2017/18, considerably increased from 188,946 tonnes to 210,500 tonnes. With an anticipated increase in economic activity in the country in the upcoming financial year, it is expected that cement production will concurrently increase significantly. Cement Products Limited recently opened a clinker plant at Njereza in Mangochi district which is likely to contribute to an increase in cement production.

6.2.4 Agricultural and Hydrated Lime Production

Zalco and Lime-Co are the largest producers of agriculture, hydrated and calcitic lime in the country with a combined production capacity of at least 3,000 metric tonnes of lime products per month. Zalco recently obtained a Mining Licence for Calcimtic Limestone in Balaka district. All lime producing companies increased their respective production capacity in 2017/18 as compared to their productions in the previous year. Demand for agriculture lime from the tobacco estates, poultry and paint industries remained robust within the country. Production of hydrated lime continued to be mostly dominated by medium to small scale operators like the Lirangwe Lime Makers Association and Balaka Lime Makers Association.

6.2.5 Rock Aggregate Production

The production of rock aggregates increased in 2017/18 as compared to the previous financial year due to a considerable increase of economic activities in the country which included construction and rehabilitation of roads and a number of infrastructure development activities. In 2018, there are prospects that the production will increase further as the economy continues stabilizing. Similarly to the previous year, there are more than 20 operating quarries for production of rock aggregate both at the commercial and project level.

6.2.6 Phosphate Production

Phosphate is mined from Tundulu carbonatite complex in Phalombe District for the manufacture of compound phosphate fertilisers by Optichem. The production statistics record indicate about 2,500 tons of phosphate produced from Tundulu. The deposit indicates reserves of about 2 million metric tonnes with a grade of 17 percent P₂O₅. It is likely that greater ore reserves will be found once the adjacent areas capped by agglomerate are investigated. Two other carbonatite complexes, the Kangankunde carbonatite and the Chilwa Island carbonatite, also contain considerable amounts of primary apatite. The P₂O₅ concentration in residual and eluvial phosphate accumulations range from 1.32 percent to 8.9 percent P₂O₅, with an average of 2.5 percent P₂O₅. Other eluvial phosphate accumulations are from the Chingale meta-pyroxenite (8.7 million tonnes at 3.7 percent P₂O₅), the Bilira meta-pyroxenite (mean 1.42 percent P₂O₅), and the Ordovician Mlindi ultrapotassic pyroxenite to syenite which have some potential for extraction of phosphates.

6.2.7 Gemstone

Gemstones in Malawi are best mined by small scale miners but marketing of gemstones requires use of sophisticated marketing techniques. Currently, Malawi is fighting to establish gemstone marketing centres to ease problems of lack of market access encountered by most artisanal and small-scale miners. In the 2017/18 financial year, recorded data indicate considerable a increase in gemstone production from 2000 tonnes in 2016/17 to 2300 tonnes in 2017/18. This may have been caused by the steadily increasing demand for gemstones locally and internationally. However, the production figures might be much more than the declared figures as there are sometimes smugglers camouflaging as innocent and yet clandestine middlemen in the gemstone subsector who do not declare at all what they get from the small-scale miners. Similarly, neither do the small-scale miners bother to declare their production figures for fear of being investigated by Government regulators on the whereabouts of their illegal gemstone buyers. The Government is working very hard to curb illegal gemstone mining and selling through intensive sensitisation campaigns and systematic formalisation of the small-scale subsector..

6.3 Employment Opportunities in the Mining Sector

6.3.1 Employment Levels

Employment levels in the sector increased significantly in 2017 as compared to 2016. The increase was as a result of increased production of rock aggregate in quarries as well as increased cement manufacturing and agricultural and hydrated lime production which significantly increased the employment numbers.

In 2018, there are prospects that there will be some increase in employment numbers due to the prospects of increased economic activities, since the mining investment climate in the impending financial year looks more promising than in 2017. This is shown in Table 6.2 below:

TABLE 6.2: FORMAL EMPLOYMENT IN THE MINING SECTOR

Workforce	2016	2017	2018
Coal	621	650	663
Uranium Mine	179	179	179
Agricultural, Calcitic and Hydrated Lime	1,943	2,050	2107
Quarry Aggregate production	9,582	9,650	9672
Cement manufacturing	1,295	1,500	1550
Gemstones/Mineral Specimens	343	380	418
Ornamental Stones	44	70	74
Terrazzo	105	150	146
Other Industrial Minerals	1,012	1,100	1134
Exploration activities	238	300	515
Total	15,362	16,029	16,458

Source: Department of Mines

6.4 Export Sale of Minerals

6.4.1 Export of Minerals

Export of minerals in 2017/18 by different mine operators continued to be dominated by coal, ornamental/dimension stones and gemstones, as shown in Table 6.3 below. Revenue generated by the Government through the Department of Mines between the period July, 2017 to April 2018 amounted to an estimated MWK500 million in terms of royalties, licence processing and ground fees.

TABLE 6.3: MINERAL EXPORTS

Exports	2016 (Actual)		2017 (Actual)		2018 (Estimation)	
	Quantity (tonnes)	Value (K'million)	Quantity (tonnes)	Value (K'million)	Quantity (tonnes)	Value (K'million)
Type						
Coal	8 071	159. 76	9 500	188.05	9620	190.43
Agricultural/calcitic lime	1,550	310	2,500	500.00	2700	540
Other						
Dimension stones	41,218	0.12	50,000	0.15	52,500	0.16
Rock aggregate	-	-	-	-	-	-
Gemstones	292.60	382.48	4,500	5882.30	4650	6078.38
Rock/Soil samples	32.20	8.04	40.00	10.00	44.00	11.00

Source: Department of Mines

Gemstones continue to be exported to various parts of the world like India, Indonesia, Thailand, Malaysia, South Africa, China, the US, Italy and the UK. Coal was largely exported to Rwanda, while agricultural lime was mainly exported to Mozambique. The average price of the minerals vary per individual operator/producer depending on quality or grade of mineral and their respective production costs, since the country does not have fixed prices for particular minerals.

6.5 New Mining Operations and Licenses

In the 2017/18 financial year, the Government granted various licenses to exploration and mining companies and individuals as presented in table 6.4 below:

TABLE 6.4: NEW MINING AND PROSPECTING LICENCES ISSUED

Type of Licence	Number issued	Mineral(s)
Small Scale Operators		
Non-Exclusive Prospecting Licence	97	Gemstones, Ornamental stones
Mining Claim Licence	40	Gemstone, Ornamental stones
Reserved Minerals Licence	108	Gemstones, Ornamental stones
Large-Medium Scale Operators		
Exclusive Prospecting Licence	67	Uranium, Heavy mineral sands, Base metals and Platinum Group Metals, Limestone, Gypsum, Iron ore, Glass sands
Mining Licence	20	Quarry aggregate, heavy mineral sands, limestone and Rare earth minerals
Reconnaissance Licence	3	Rare earth minerals, Coal and Graphite

Source: Department of Mines

6.6 Mining Investment Opportunities

6.6.1 Mineral Potential of the Country

Like many countries in the resource rich East African Rift Valley, Malawi is endowed with abundant and diverse mineral resources most of which remain unexplored and unexploited to date. These minerals include: rare earth minerals, limestone and dolomite, coal, uranium, heavy mineral sands, semi-precious gemstones, bauxite, graphite, gypsum, kaolinitic ceramic clays, glass sands, brick clays, rock phosphates, vermiculite, talc, Pyrite/pyrrhotite, salt and kyanite, among others. The deposits for these minerals are spread across the country. Alluvial gold mineralisation and kimberlitic anomalies in the country have also

been reported in recent years by the Department of Geological Survey. In 2015, Malawi completed a high resolution country-wide airborne geophysical survey, the results of which also reveal a lot of mineral deposits. Availability of such data should increase opportunities for mineral exploration and mining activities. Table 6.5 below indicates some known mineral deposits in the country including their locations, sizes and grades.

TABLE 6.5: KNOWN MINERAL DEPOSITS, RESERVES AND GRADE

DEPOSIT	LOCATION	DELIANATION RESERVES (Million tonnes/ grade)
Bauxite	Mulanje	28.8/43.9% Al ₂ O ₃
Uranium	Kayelekera	12,5/0.15% Ur ₃ O ₈
Monazite/ Strontianite	Kangankunde	11/ 8% Strontianite and 60% REO
Graphite	Katengeza-Dowa	8.0/75.6gm per m ³
Limestone	Malowa Hill-Bwanje	15/4% CaO, 1.2% MgO
	Chenkumbi-Balaka;	
	Chikoa-Livwezi-Kasungu	10/46.1% CaO, 3.5% MgO
Titanium bearing Heavy Mineral Sands	NKhotakota-Salima	700/5.6% HMS
	Chipoka	
	Mangochi	680/6.0% HMS
	Halala (Lake Chilwa)	15/6.0% HMS
Vermiculite	Feremu-Mwanza	2.5/4.9% (Med+Fine)
Coal	Mwabvi-Nsanje	4.7/30% ash
	Ngana-Karonga	15/21.2% ash
	Mchenga	5/17% Ash, 0.5% Sulphur and calorific value of 6,800kcal/kg
Phosphate	Tundulu-Phalombe	2.017% P ₂ O ₅
Pyrite	Chisepo-Dowa	34/8% S
	Malingunde-Lilongwe	10/12% S
Glass Sands	Mchinji Dambos	1.6/97% SiO ₂
Dimension Stone	Chitipa, Mzimba,	
	Mangochi, Mchinji, Chitipa	Blue, Black, Green, and Pink Granite
Gemstones	Mzimba, Nsanje, Chitipa, Chikwawa, Rumphu, Ntcheu	Numerous pegmatites and volcanic

Source: Geological Surveys Bulletins and Private Companies Mineral Exploration Reports

6.6.2 Pipeline Projects

A number of both international and local companies continue to be actively engaged in mineral exploration and mine development for various minerals. The minerals being sought after include rare earth minerals, Niobium, Uranium, Zircon, Tantalite, Limestone and heavy mineral sands. During the 2016/17 financial year, a number of mineral exploration concessionaires continued to actively explore for different minerals in various parts of the country. The minerals explored included rare earth minerals, platinum group metals (PGMs), coal, heavy mineral sands, base metals and bauxite among other minerals. Generally, the year 2016 experienced a slight increase in exploration activities

compared to 2015. The major projects in the pipeline remain the outstanding Kanyika multi-commodity project in Mzimba, Ntcheu and Mangochi cement production by Bwanje Cement Company, Tengani Heavy Mineral Sands Project and Mkango Resources Rare Earth Project in Phalombe respectively. A summary of potential mining projects is presented in Table 6.6.

TABLE 6.6: POTENTIAL MINING PROJECTS

<u>Company</u>	<u>Minerals to be Mined</u>	<u>Site</u>	<u>Country of Origin</u>	<u>Status</u>
Globe Metals & Mining	Niobium, Uranium, Zircon and Tantalite	Kanyika, Mzimba	Australia	Mining Agreement Negotiation
Mkango Resources limited	Rare Earth Metals	Songwe, Phalombe	Canada	Feasibility Study
The Bwanje Cement Project (Deco)	Limestone	Ntcheu/ Dedza	Malawi	Bankable Feasibility Study
Lynas Corporation	Rare earth elements	Kangankunde, Balaka	Australia	Bankable Feasibility Study
Tengani Titanium Minerals Ltd	Heavy mineral sands	Tengani, Nsanje	Malawi	Bankable Feasibility Study
Cement Products Ltd	Limestone for cement manufacturing	Mangochi	Malawi	Mine Development

Source: Geological Surveys Bulletins and Private Companies Mineral Exploration Reports

It is hoped that these projects will graduate into large-scale operational mines in the near future as the prognosis for the mining sector continues to look more promising, going by the current encouraging price dynamics of most mineral commodities at the world market.

Chapter 7

ENERGY

7.1 Overview

This chapter reviews the performance of the energy sector in the 2017/18 fiscal year (FY) and it focuses on developments in the electricity, petroleum, coal and biomass subsectors and various renewable energy programmes.

7.2 Electricity

In the period under review, Electricity Supply Company of Malawi (ESCOM) sold 1,328.81 GWh units of electricity compared to 1,854.821 GWh in the same period of the previous year, representing a 28 percent decrease. This decrease was attributed to a drop in available generation capacity due to low water levels in Lake Malawi and reduced flow in the Shire River, despite availability of sufficient generation plants, adequate maintenance levels and increased number of registered customers. The number of registered customers increased from 344,953 to 395,923 representing a 14.8 percent increase. In the aspect of diesel generators, 35MW was installed at Chichiri and commissioned in end January 2018, and 20MW at Kanengo and 6MW in Mzuzu were yet to be installed. Hydro generation capacity remained at 351MW as indicated in Table 7.1 below.

**TABLE 7.1: ELECTRICITY GENERATION AND CONSUMPTION
(2008-2017)**

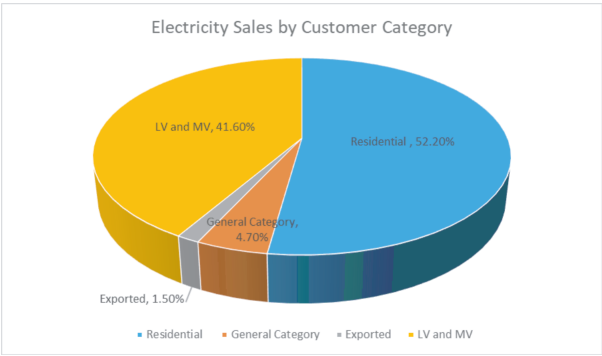
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Installed Hydro Capacity (MW)	285.85	285.85	285.85	285.85	285.85	285.85	351	351	351	351
Maximum (Peak) Demand (MW)	241.88	259.67	273.01	277.75	277.88	279.73	323.91	335.26	328.26	322.56
Energy generation (GWh)	1,543.00	1,642.02	1,809.17	1,871.88	1,911.51	1,828.2	1,906.51	1,975.02	1,976.99	1,808.64
Number of Consumers	75,157	189,166	194,459	205,045	218,164	238,211	269,469	312,857	344,953	395,923
Consumption										
Domestic (GWh)	461.56	502.08	571.56	593.85	596.10	577.65	614.20	699.03	766.3	693.33
General (GWh)	213.73	226.16	253.70	250.43	244.47	214.96	183.26	150.30	117.4	62.2
Power Demand (GWh)	527.08	577.84	580.76	612.23	604.88	613.82	639.27	620	620	552.84
Export (GWh)	17.17	15.94	20.66	19.08	21.1	23.82	23.62	21.85	24.43	20.43
Total Consumption GWh)	1,219.54	1,322.02	1,426.68	1,475.59	1,466.52	1,429.68	1,460.35	1491.18	1,854.82	1,328.8

Source: ESCOM

7.2.1 Electricity Sales by Customer Category

In terms of sales of electricity by customer category, 52.2 percent was sold to residential customers, 4.7 percent to the general category, 1.5 percent was exported to the neighbouring countries, and a total of 41.6 percent was sold to both Low Voltage (LV) and Medium Voltage (MV) Power customers in the year under review. Figure 7.1 below illustrates this information.

FIGURE 7.1: ELECTRICITY SALES BY CUSTOMER CATEGORY



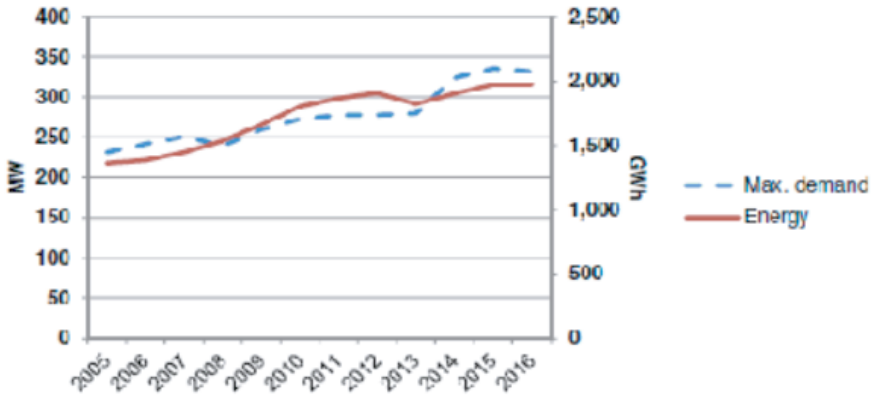
Source: ESCOM

7.2.2 Electricity Demand Analysis and Planned Projects

The Government is targeting to increase access to electricity to 30 percent by 2030. To attain this, the Government through the Ministry of Natural Resources, Energy and Mining (MoNREM) in collaboration with ESCOM, developed an Integrated Resource Plan (IRP) for power development (generation and transmission facilities). This is a stopgap strategic blueprint for Malawi’s electricity sector requirements between 2017 and 2037. The IRP essentially sets out a road map for optimal expansion and development of the electricity sector in Malawi traversing over 20 years from 2017 to 2037.

In terms of load growth, maximum demand has been growing at an annual rate of 4 percent, from 230 MW in 2005 to 330 MW in 2016. Energy exports increased from 1,360 GWh in 2015 to 1,854.82 GWh in 2016, representing an annual growth rate of 3.4 percent. In the 2016/17 FY, there was significant load shedding as a result of low rainfall and lowering of water levels in Lake Malawi. The system maximum demand was severely constrained due to generation capacity challenges. Load shedding also occurred throughout this period due to problems with the transmission and distribution network. The historical load growth for the ESCOM network is shown in Figure 7.2

FIGURE 7.2: HISTORICAL LOAD GROWTH FOR ESCOM, 2005-2016

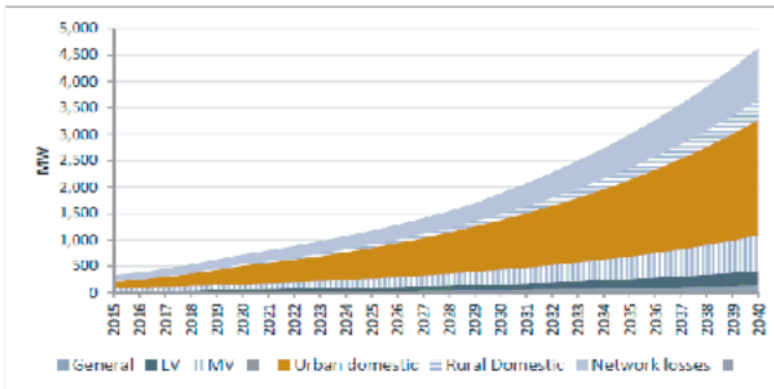


Source: ESCOM

The IRP estimates that maximum demand will reach 719 MW by 2020, 1,873 MW by 2030 and 4,620 MW by 2040. The annual average growth rates are 17.5 percent through to 2020 (reflecting suppressed demand in its various forms) and 10 percent per annum from 2020 to 2030. This compares with annual average growth rates of maximum demand over the fiscal years 2010/11 to 2014/15. However, during the 2015/16 FY there was load shedding of 4.2 percent per annum.

For 2040, the aforementioned assumptions indicate a forecasted maximum demand of 4,620 MW and an annual average growth rate of 9.4 percent per annum over the period 2030-2040. This forecast is consistent with the type of growth rates in electricity demand experienced in countries transitioning to a middle income status. This information is summarized in Figure 7.3 below.

FIGURE 7.3: BASE ELECTRICITY DEMAND FORECAST (MAXIMUM DEMAND, MW, SENT OUT)



Source: Department of Energy

According to the IRP, using a constrained scenario optimal expansion of the generation capacity entails undertaking the following generation investments: Kam'mwamba coal power plant phase 1 and 2 (to generate 300MW by 2021), Tedzani IV hydro power plant (to generate 18MW by 2021) and Kapichira III hydropower plant (to generate 804GWh by 2020). A full picture is as given in Table 7.2 below and shows all possible options for power generation up to 2035.

TABLE 7.2: CONSTRAINED ANNUAL GENERATION (GWH)

Generation (GWh)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Existing hydro	1902	2057	2057	1629	1624	1634	1575	1562	15 80	1579	1575	157 5	1575	1575	1604	1596	1614	1610
Genesco Solar	26	79	97	132	167	1 85	185	203	242	220	220	23 8	237	255	255	273	273	280
Kanengo	80	170	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lilongwe	48	51	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mtatu	26	51	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Majanga	85	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Genesco Wind		30	30	30	60	60	60	60	60	90	90	90	90	120	120	120	120	120
Genesco Biomass		79	52	42	75	8	64	96	96	97	159	23 3	399	375	133	94	15 6	122
Kamwamba	320	1089	1596	1739	1417	1763	1923	1923	1923	1921	192 8	1923	1923	1923	1923	1963	1724	1233
Tedzani IV	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
MSD (LFO)	45	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
SSD (HFO)	89	4	4	5	0	3	4	6	4	3	51	9	4	3	4	3	4	5
Kapichira III		804	810	792	903	862	8 83	903	902	903	903	903	903	948	878	829	837	
Mpatawanga						1379	1375	13 60	1361	1376	137 5	1376	1376	1376	1376	1375	137 6	1376
Hamilton Falls									424	420	42 2	420	420	420	422	420	420	
Fulu Ng'heri									905	909	905	905	905	905	905	905	905	
Khokombidzo											749	746	746	746	749	746	746	
Pamodzi													694	694	696	694	694	
Genesco Coal															2034	4080	4068	6103
Lower Songwe																325	325	
Total generation	2081	2433	2517	3004	4437	4654	5679	6104	62 72	6780	7730	809 0	8780	9609	11420	12 933	13613	1 3140
Demand	2021	2006	3444	3671	4396	4367	5382	5643	60 56	7205	7361	874 4	9607	10567	11845	12 791	14214	1 4390
Net interchange	0	0	-517	-67	41	-213	397	162	-2 84	-436	321	-154	-622	-936	-225	152	-401	-305
Unmet energy	419.9	443.3	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Malawi IRP, 2017

On the transmission front, the IRP recommends the following projects: constructing a (400kV) Mozambique – Malawi interconnector to enable both exports and imports of power, and a new double circuit 132kV overhead line from Nkhoma substation in Lilongwe and via Nanjoka substation in Salima, to Chintcheche in Nkhata Bay. Other projects include, energy efficiency projects, which are initiatives aimed at managing demand and reducing losses on the system. These efforts are planned to be undertaken during the IRP implementation period, which is expected to take course in the 2017/18 FY. Demand Side Management (DSM) and loss reduction initiatives are expected to save about 40MW.

7.2.3 Electricity Tariff Developments

ESCOM's applied for a tariff review from the Malawi Energy Regulatory Authority (MERA), which was approved and is to be implemented over a four year period beginning 4th April 2014. Recently, there has been a review of the tariff to take into account the cost of running the diesel generators which have been installed to address the current reduced generation capacity due to low water levels in Lake Malawi and low flows in the Shire River.

In recognition that renewable energy sources have the potential to enhance the country’s electricity supply capacity, the Government through MERA, developed the Malawi Feed-In-Tariff policy, specifically for small hydro, wind, solar, biomass, biogas and municipal waste, which will encourage and boost the development of renewable energy sources.

7.3 Malawi Rural Electrification Programme (MAREP)

The Government has been implementing this Programme in phases since 1980. The aim is to increase access to electricity for people living in peri-urban and rural areas, as part of Government’s effort to reduce poverty, transform rural economies, improve productivity and improve the quality of social services.

The Department of Energy Affairs (DEA), under the MoNREM, is currently implementing the Malawi Rural Electrification Programme (MAREP) Phase 8 Project. The project will electrify a total of 336 centres by engaging private local the contractors for construction works in order to build their capacity to tally with Government’s objective of liberalising the energy sector. The DEA has already implemented MAREP Phases 4 to 7. In Phase 4 a total of 98 centres were electrified, in Phase 5 a total of 27 centres were electrified, in Phase 6 a total of 89 centres were electrified, while in Phase 7 a total of 133 centres were electrified.

TABLE 7.3: MAREP PHASE EIGHT TRADING CENTERS

NO	DISTRICT	TARGET TC	BENEFICIARIES	NO	DISTRICT	TARGET TC	BENEFICIARIES
<u>NORTHERN REGION</u>				13	Ntcheu	Gowa Mission	Chikapa
1	Chitipa	Mibanga	Mahowe			Salima T-off	Masamba
		Namatubi	Mibanga CDSS			Kandeu	Mphepozinai
		Nkhanga	Udonda,				Chimatu
			Mahowe				Manjawira
							HC
			Mbilima				Kapeni HC
			Mumba				Mtumba
			Ilomba				Pesa
			Navitengo				K a d a m b w e
							Solar Village
			Mwamkumbwa II	<u>SOUTHERN REGION</u>			
			Titi	14	Balaka	Shire North	Liwiza
			Ipenza			Sawali	Chimatiro
2	Karonga	Kawale	Lwezya			Kumtiyani	Mwaye
		Mwangulukulu	Malopa				Nyanyala
		Ngana	Kafulu School				Toleza CDSS
			Gulayi				Ngomwa
							Primary
							School
		Jeremani					Mchenga
		Kafulu					Ngomwa
		Kasantha		15	Mangochi	Kwisimba	Ibrahim

		Lusako Lusako CDSS Kalowe Ngisi Vua				Binali Mvumba		Bolera Tsanya Chamtulo Namalaka Masanje (Lidunde) Chingwenya Chapola Nsomba Nkhumba
3	Rumphi	Luviri Phoka Bowe Thete	Bembe Nkhozho Chanyoli					Michiru Sudala Kabweza Garafa Chilimbondo II Nkhombe
			Kawaza Lubagha Betere Cholulu	16	Mwanza	Sanjika Nthache Njolomola		Lirangwe T-off Chigamba Gawanani Ntholow Dalabani Nanyumbu T.A. Kawinga Hdquarters Mkwakwata
			Kasenga Kabeska Chikwina 2 CDSS	17	Neno	Chilimbondo Kasamba Kundembo		Matiya Chigoti Maleta Maera Chimwawa 2 Nyalugwe Masuku Hanayi Namalamba Nalanda Masuku
4	Nkhatabay	Chituka Nthungwa Chisu	Chiweta Dankhanyo Nthembo Bwelero Lwazi Mafundeya	18	Machinga	Nayuchi Mangamba Msosa		
5	Mzimba	Emfeni						
		Khosolo Bulala	Makhuwira Matala Majiga Kavinkhama Chizani Manyete Kaundi Endindeni Chafisi Kaufipa Msazi Ntchawaka Dwambazi Cattle Farm Kacheche Chololo Kapopo Embangweni 2	19	Chiradzulu	Chiperere Chikaonda Chikwakwata		
				20	Phalombe	Dzenje Namba Mpata		Matawa 1 Mambala Matawa 2 Msema Mankhanamba Namachete Mpasa II Nabiti Manyamba Thundu Misuli Songwe Maveya
CENTRAL REGION								
6	Kasungu	Chambwe Ndonda Mthabuwu	Chitenje Vilemba Sopani Kalenga Ngwata Khuza Chenjewazi	21	Mulanje	Nakamba Milonde Nogwe		

7	Dowa	Mkukula Chankhungu Kachigamba	Kapirimyanga	22	Chikwawa	Dolo Thendo Border Post Changoima	Mtepuwa
			Kapelula				Tambala
			Kawaza				Masitala
			Nyambo				Msuka
			Kapopo				Mangwana
			Nkomadzi				Wasi
			Chatewa				Nanthombozi
			Chimukoka				Ngolowera
			Chimungu				Flood Shelter
			Chinkhwiri				Phimbi
8	Nkhotakota	Mpondagaga Katimbira Chalunda	Niyagala	23	Nsanje	Ngabu Chibuli Kanyimbi	Chikweu
			Nyongani				Wolewole
			Photola				Savala
			Kasamba				Gaga
			Chipando				Mbangu
			Malowa				Chekere CDSS
			Chikwale				Chibuli
			Chilumba				Kalulu
			Kasipa				Chikhawo
			Kapiri				Fargo
9	Lilongwe	Thumbwi Chadza Malembo	Matamangwe	24	Blantyre	Mitsidi Domwe Mtenje	Msiyankhuni
			Chongole				Muyang'anira
			Mtemang'ombe				Msambe
			Kapinga				Madziabango 2
			Nyande				Namwanje
			Chikudzulire				Chinkhandwe
			Mngwangwa				Khobwe
			Lisoko				Chuma
			Nyanga				Dzunga
			Chiputu				Michiru
10	Mchinji	Kabuthu Kalulu Kazyozyo	Milindi	25	Thyolo	Chipho Sandama Mphuka	Mchere
			Mawenje				Ngongomwa
			Dzalanyama Farm				Chilangoma
			Phirilanjudzi				Mkwate
			Kalolo				Ganet Primary School
			Ntchafu				Kambo
			Dzalanyama Sub-Office				Didi,
			Chiwe				Mankhamba
			Dzalanyama School				Kalintulo
			Mkonkha				Makamphwa
			Kalulu II	26	Zomba	Ulumba Gologota Nachuma	Naphiyo
			Chawala				Chibwana
			Masumba				Chisoka
			Msampha				Mphuka
							Primary School
			Kamphata				Lambulira
			Kambuwe				Chingondo
			Chimwamkango				Chisuzi

11 Salima	Chikombe Chinguluwe Michulu	Faniwelo	Chinkhwangwa
		Chikombe II	Havala
		Chikumba	Sunuzi
		Nakudze	Makawa
		Michulu T-off	M'mina
		Namachete	Chamba HC
		Mnesi	Chawe
		Khombedza	Sakata
		Chikwawa	Nankhunda
		Levi	
12 Ntchisi	Mawiri Malambo Bumphula	Mpalo	
		Nkanire	
		Ching'amba	
		Vikura	
		Kwezani	
		Vikura	
		Kwezani	

Source: ESCOM Ltd

7.4 Petroleum

7.4.1 Fuel Importation

During the year under review, overall imports of petroleum products increased by 15.1 percent. The importation of petrol, diesel, Jet A-1 and Avgas increased by 11.2 percent, 19.0 percent, 9.2 percent and 0.3 percent, respectively. One of the reasons for the the increased demand of imported fuel is the stable fuel prices that prevailed in the period under review. Paraffin imports decreased by 25.7 percent, as shown in Table 7.4 below. The decline in paraffin importation demonstrates the noted observation that paraffin has been substituted by other forms of energy for lighting, for example rechargeable lamps that have proliferated in the local market.

TABLE 7.4: FUEL IMPORTS (LITRES)

Year	Petrol	Diesel	Jet a-1	Paraffin	Avgas	Total
1999	91,797,272	130,545,103	1,639,326	46,413,088	-	270,394,789
2000	84,896,135	124,905,868	7,238,749	31,397,224	107,269	248,545,245
2001	81,039,387	125,106,968	8,800,186	18,921,235	356,926	234,224,702
2002	88,329,685	127,157,516	6,417,316	20,955,949	201,917	243,062,383
2003	92,976,658	136,408,597	11,911,286	23,652,991	213,898	253,038,246
2004	94,186,321	147,922,241	10,862,036	24,762,093	284,286	266,870,655
2005	84,023,978	152,664,646	9,267,805	21,838,787	235,537	258,527,411
2006	88,330,024	153,235,938	11,764,101	20,310,207	224,682	259,158,172
2007	91,289,689	167,120,445	13,001,437	18,232,957	259,393	289,903,921
2008	103,003,788	199,251,252	13,261,288	17,957,471	268,978	333,742,777
2009	112,236,705	203,302,459	9,758,855	13,916,949	254,470	339,469,438
2010	101,173,574	186,539,556	11,710,626	10,639,538	318,087.5	310,381,382
2011	104,825,891	189,983,124	12,838,968	10,254,955	126,422	318,029,360
2012	99,593,583	205,213,866	7,525,000	6,565,312	261,700	319,159,461
2013	108,885,428	212,460,625	9,896,951	1,749,159	223,686	333,215,849
2014	108,885,190.	159,798,758	7,785,520	1,533,155	133,067	278,135,690
2015	133,103,655	166,402,223	8,766,307	506,304	176,058	308,954,547
2016	166,190,150	190,395,240	8,841,768	851,795	176,206	366,455,159
2017	184,831,438	226,596,033	9,653,413	632,559	176,714	421,890,157

Source: MERA

7.4.2 Fuel Import per Route

Over the past two years, Malawi has been capitalising on Beira, Nacala and Dar-es-Salaam routes for haulage of fuel. Due to civil unrest in Mozambique, which interrupted flow of petroleum products into the country, the imports through Beira decreased from 76 percent last year to 55 percent, while imports through Dar-es-Salaam and Nacala increased from 22 percent to 38 percent and 2 percent to 3 percent, respectively. Malawi lifted part of its contracted volumes from Msasa depot in Zimbabwe by 4 percent, which were transported into the country when avoiding the conflict affected areas of Mozambique. Based on the figures provided in Table 7.5, around 55 percent of fuel imports were procured through Beira, 38 percent through Dar-es-Salaam, 4 percent through Msasa and 3 percent through Nacala.

TABLE 7.5: MALAWI FUEL IMPORTS PER ROUTE

Year	ROUTES						Total
	Beira	Nacala	Dar-es-Salaam	Mbeya	Gweru	Msasa	
2000	126,761,107	42,149,779	51,806,647	20,481,694	-		41,199,227
2001	130,585,831	16,134,199	66,135,812	21,368,860	-		234,224,702
2002	130,763,489	10,140,307	77,013,269	28,879,927	-		246,796,992
2003	158,652,734	35,988,318	39,857,111	31,998,208	1,065,575	-	267,561,946
2004	160,122,393	37,361,892	37,361,892	32,024,478	-		266,870,655
2005	182,861,911	6,862,335	43,545,416	25,257,749	-		258,527,411
2006	88,508,579	2,717,997	53,336,864	14,594,732	-		59,158,172
2007	197,009,678	1,164,019	60,113,735	18,355,659	-		276,643,091
2008	214,596,975	20,687,513	56,618,685	28,309,338			320,212,511
2009	198,528,097	43,640,049	86,011,524	1,276,443	-		329,456,113
2010	211,143,990	21,708,391	42,803,344	22,296,943	-		298,352,668
2011	167,765,872	17,240,701	50,845,869	13,343,270	0		249,195,712
2012	258,442,871	7,552,721	35,918,180	-	9,458,989		311,372,761
2013	268,560,053	10,715,210	43,819,950	-	-		323,095,212
2014	225,767,402	11,367,566	41,000,722				278,135,690
2015	233,479,738	6,250,367	69,224,442				308,954,547
2016	213,462,494	15,172,473	104,462,494			32,967,457	366,455,159
2017	232,769,004	12,343,079	158,285,510			17,788,779	421,890,157

Source: MERA

7.4.3 Petroleum Pricing

Since the establishment of MERA in December 2007, all energy pricing activities are handled by Energy Pricing Committee of MERA, as per the requirement in the Energy Laws. For petroleum pricing, the Automatic Pricing Mechanism (APM) continues to be the main principle behind fuel pricing. This system links pump prices to procurement costs and exchange rate movements, with a 5 percent trigger band. The formula is managed under a multi-sector Energy Pricing Committee (EPC), which meets once every month to assess changes in the agreed parameters that constitute the In-Bond Landed Cost (IBLC) and the value of the Malawi Kwacha against the US Dollar. In the period under review, there has been no price adjustments effected due to the stability in the exchange rate movement.

TABLE 7.6: PUMP PRICE REVISIONS FROM 2013-2017 (MK/LITRE)

Product	Nov. 2013	Feb. 2014	Nov. 2014	Jan. 2015	Dec. 2015	Jan 2016	Dec. 2016	Jan. 2017	March. 2017
Petrol	760.00	839.00	856.70	760.40	711.90	711.90	824.70	824.70	824.70
Diesel	770.20	853.40	865.90	785.40	732.70	732.70	815.80	815.80	815.80
Paraffin	638.90	719.30	756.10	678.80	573.10	573.10	648.70	648.70	648.70

Source: MERA

7.6 National Clean Cook Stove Project

The National Cook Stoves Project which was launched in 2013 with funding from the ENDEV, Irish Aid and DFID has managed to disseminate over 382,100 portable cook stoves with the intention of saving energy and reducing smoke emissions for healthy and improved cooking environments in the household. The project is geared to facilitate the uptake of 2 million cook stoves by 2020.

7.7 Feasibility Studies on Potential Hydropower Sites

The Government, with support from the World Bank, is implementing the Energy Sector Support Project in an effort to increase the reliability and quality of electricity supply in the major load centres in the country. Through these projects, the Government is conducting feasibility studies on two potential hydropower sites, Fufu and Mpatamanga. Through assistance from the African Development Bank, the Government also conducted feasibility studies for the Kholombidzo Hydropower Project.

7.7.1 Fufu Hydropower Feasibility Study

The site is on the South Rukulu River in Rumphi and has potential to generate between 100 and 261MW. In the period under review, the consultant completed the feasibility studies. However, geotechnical investigations, tender documents and Environmental and Social Impact studies for the development of the project financing have not yet been recognised. Nevertheless, the Government would like to develop the project under the PPP arrangement.

7.7.2 Mpatamanga Hydropower Feasibility Study

The site is on the Shire River, and has potential to generate up to 309MW. Feasibility studies including geotechnical investigations and an Environmental and Social Impact Assessment are expected to be completed by August 2018. The consultant is now preparing the tender documents for this project alongside conducting the model tests for the spillway.

7.7.3 Kholombidzo Hydropower Site Feasibility Studies

The Kholombidzo Falls are located in the the middle of the Shire River, upstream of Nkula Falls and is the first falls downstream of Liwonde Barrage. The site has a potential to generate up to 210MW. Feasibility studies on this site were completed earlier than the period under review. Tender documents for the project are yet to be prepared since the studies only ended at Feasibility Study stage.

7.8 Renewable Energy Resource Assessments

The Government is exploring the possibility of generating electricity from other resources. Consideration is being made for wind, geothermal and solar resources. In view of this, resource assessments on wind power, geothermal power and solar power generation are underway. These are also being done with funding from the World Bank under ESSP and ESMAP.

7.8.1 Wind Resource Assessment

In the period under review, data collection and analysis continued in four 80 metre high wind masts which have been installed in Chitipa, Lilongwe, Dedza and Zomba. The Pre-feasibility Studies Report was finalised in April 2018. From the analysis, results show that a total capacity of 100MW can be installed at Chitipa and Dedza and 36MW at Zomba.

7.8.2 Geothermal Resource Assessment

In the period under review, geological mapping, remote sensing, geochemical and geophysical studies were conducted. Assessments were undertaken in the following six sites: Chiweta in Rumphu; Kanunkha and Kasanama in Nkhata Bay; Mawira and Kasitu in Nkhotakota; and Chipunzi in Chikwawa. Chiweta and Kasitu have been selected for further assessment, which will include the pre-feasibility studies for the prospects.

7.8.3 Solar Resource Mapping

Automatic Weather Stations were installed at Chileka International Airport, Kasungu Air-wing and Mzuzu University and a solar resource map for the country has been produced. The map will be used to guide investors in solar resources for power generation.

7.8.4 Bagasse Co-generation

Studies were conducted in 2016 to explore the possibility of increasing power generation using bagasse (a by-product of sugar production) at the two sugar mills at Dwangwa in Nkhotakota and Nchalo in Chikwawa. Illovo Sugar Company has adopted the recommendations of the study and is planning to initially implement the upgrading of the Dwanga Plant, which will generate about 9MW. Out of this, Illovo will use about 3MW for their Dwangwa Factory and the remaining 6MW will be sold to ESCOM through the national grid.

7.9 Kam'mwamba Coal Fired Power Plant

Negotiations for the Coal Supply Agreement for the development of the 300MW Kam'mwamba Coal Fired Power Plant are underway. Finalisation of this Agreement is crucial since it is one of the conditions for an application to the identified financiers of the project. After signing of this Agreement, the Government will finalise the process of a loan application to the EXIM Bank of China.

7.10 Increasing Access to Clean and Affordable Decentralised Energy Services in Selected Vulnerable Areas

The Government is implementing this project with funding from the Global Environmental Facility (GEF) with the aim of expanding the existing Min-Grid at Mulanje Energy Generation Agency (MEGA). This will be done by replicating the MEGA Min-Grid Model to other sites, piloting new Min-grid Models and capacity building in the Min-grid subsector. In the period under review, feasibility studies, technical designs, an Environmental and Social Impact Assessment for new additional 80KW micro-hydro and mini-grid scheme were completed. The expansion of MEGA will enable the system to connect 4 new villages, with each having a population of up to 1000 households. Materials for electricity transmission and distribution systems were also procured.

Chapter 8

TRADE AND PRIVATE SECTOR DEVELOPMENT

8.0 Overview

Trade is a powerful engine for economic growth and poverty reduction, though harnessing its power is difficult where there is a lack of capacity in terms of policies, procedures, institutions, and infrastructure to integrate and compete effectively in global markets. This chapter describes Malawi's performance in the trade sector during the 2017/18 fiscal year. It also presents the achievements in industry and private sector development during the period under review.

8.1 Overall Trade Performance

Malawi continues to register a negative trade balance. The main challenge is, while the country strives to grow its exports, the value of imports increases or is maintained, therefore expanding the trade deficit. In 2017, total exports grew from MWK792 billion to MWK807 billion. This is projected to grow to MWK847 billion in 2018 and MWK860 billion in 2019. Similarly, imports have shown an increasing trend from MWK1,499 million in 2016 to MWK1,566 million in 2017. Whilst this growth continues in 2018, with imports expected at MWK1,768 million, in 2019 imports are projected to fall to MWK1,705 million. This will result in an improvement in the trade balance in 2019 to a deficit of MWK844.6 million, after several years of it worsening.

**TABLE 8.1: TOTAL EXPORTS AND IMPORTS
(MILLIONS OF KWACHA)**

<u>Year</u>	<u>2016</u>	<u>2017*</u>	<u>2018**</u>	<u>2019**</u>
Total Exports	791 919.8	807 445.4	847 070.6	860 291.8
Total Imports	1 498 806.0	1 565 618.2	1 767 588.1	1 704 917.1
Trade Balance	(706 886.2)	(758 172.8)	(920 517.4)	(844 625.3)

Source: National Statistical Office

*Estimates **Projections

8.1.1 Malawi's Main Export and Import Products

Malawi is an agricultural based economy, as such, agricultural products continue to dominate Malawi's export basket, accounting almost 80 percent. Most sectors remain in infancy as tobacco, sugar, coffee and tea constitute the largest export sectors of the economy. The closing of Kayelekera mine in 2014 has greatly

affected the export of ores. Tobacco alone accounts for more than 40 percent of the exports, making Malawi vulnerable to external shocks. According to the World Bank's Malawi Economic Monitor report (March, 2015), this situation is attributable to a similar concentration of firms involved in exports. The World Bank estimated that the five largest firms export more than 60 percent of total exports.

8.1.2 Merchandise Goods Balance in 2017 and Projections for 2018 and 2019

In 2017, the merchandise trade deficit increased to USD925.3m. Whilst the value of tobacco exports grew, there were decreases in the exports of most other commodities, including sugar, cotton and tea. Furthermore, there was an increase in all imports. It is projected that the goods balance will deteriorate further in 2018 and 2019, with the country registering a merchandise trade deficit of USD1010.8m and USD1107.9m, respectively.

8.2.2.1 Export of Merchandise Goods

In 2017, exports are estimated to have increased by 0.4 percent to USD1,020.0 million. The increase in exports was partly driven by an increase in the value of exported tobacco by 0.8 percent to USD478.0m. The volume of tobacco exports increased by 3.1 percent, this offset the 2.2 percent export price decrease in the commodity. Other commodities fared worse with sugar, tea, and pulses all declining in value by 42.9 percent, 7.2 percent and 69.6 percent, respectively. The fall in the value of sugar exports is largely down to a 42.5 percent drop in export volumes; specifically to the US, the region and of EU-DC bagged specials. For 2017, Illovo stated that dry conditions in the early part of the year, poor electricity supply, and volatile exchange rates and interest rates affected their operations. In addition, there was a 0.7 percent drop in the price of sugar. The significant reduction in the value of pulses is due to Malawi's target market, namely India, producing enough pulses to satisfy their own demand. The volume of pulses exported declined by 69.2 percent and the price by 1.4 percent.

The outlook for exports in 2018 is better, with projected growth of total exports of 3.3 percent to USD1053.7m. There is an expected rebound in exports of sugar, tea and pulses. Furthermore, exports of edible nuts will show continued growth. However, the value of tobacco exported is expected to decrease by 1.9 percent to USD468.9m because of the slowing global demand, as well as supply problems in Malawi. Sugar volumes are projected to increase by 30.9 percent due to Illovo expecting normal weather conditions, an improvement in the levels of Lake Malawi and the installation of more efficient irrigation systems. The export value of pulses is expected to increase by 243.0 percent as market conditions return to normal. In 2019, total export value is projected to increase slightly by 0.3 percent to USD1057.0m.

Table 8.2 below gives the export values of traditional commodities from 2016 to 2019.

**TABLE 8.2: EXPORT VALUES OF TRADITIONAL COMMODITIES
(USD MILLION)**

<u>Year</u>	<u>2016</u>	<u>2017*</u>	<u>2018**</u>	<u>2019**</u>
Tobacco	474.3	478.0	468.9	456.8
Sugar	109.4	62.5	76.0	75.4
Tea	64.7	60.1	79.3	84.3
Edible Nuts	30.0	43.1	44.9	46.0
Pulses	11.9	3.6	12.5	12.3

Source: National Statistical Office and Department of Economic Planning and Development

*Estimates

**Projections

8.2.2.2 Import of Merchandise Goods

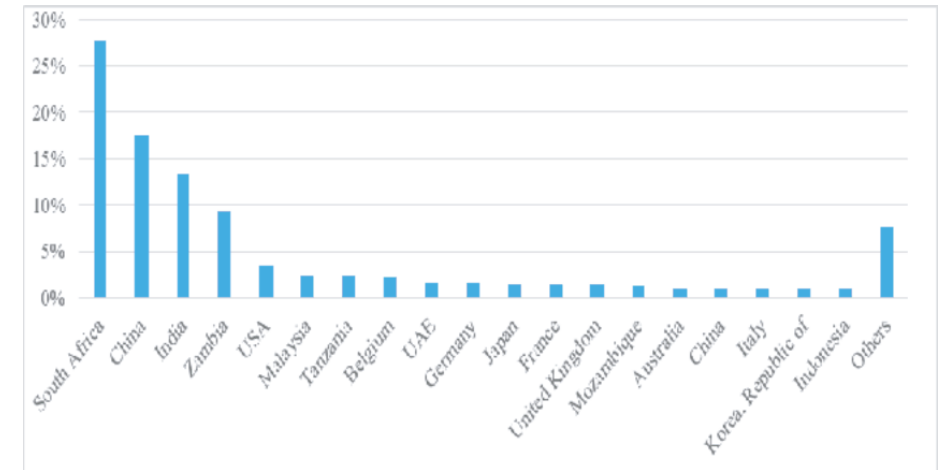
Imports are estimated to have grown by 2.9 percent in 2017 to USD1945.3, with both an increase in the value of petroleum products and fertilizer of 26.9 percent and 77.8 percent, respectively. Petroleum products registered a price increase of 14.4 percent and volume growth of 11.1 percent. In particular, diesel import volumes increased by 16.7 percent as both Government and private companies and individuals imported diesel to use in generators. The volume of fertilizer rebounded in 2017 by 64.0 percent to 334m kilograms; this is still lower than the 2015 volume of 375 kilograms. As the Government has continued to reduce FISP, this must represent a private increase in the importation of fertilizer. In 2018, the total value of imports is projected to grow by 6.1 percent to USD2064.4m. The value of petroleum products imported is expected to increase by 11.9 percent, with volumes of petroleum products expected to grow by 12.9 percent. Diesel volumes, specifically, are expected to grow by 15.0 percent, as the power situation is not expected to drastically improve. Prices for petroleum products are expected to slightly decrease by 0.8 percent in 2018. In 2019, the total value of merchandise imports is projected to increase by 4.9 percent to USD2165.0m.

8.3 Malawi's Major Trading Partners

Malawi has historically had the same trading partners. In particular in 2016, the Southern Africa Development Community (SADC) was Malawi's biggest exporter, having exported products worth USD545 million to Malawi. This was followed by Asia at USD525 million, Common Market for Eastern and Southern

Africa (COMESA) at USD140 million and the European Union at USD134 million. South Africa, China, India, Zambia and USA, are the five major sources of imports for Malawi. The graph below shows major sources of import products to Malawi in 2016. In 2017, it is assumed that that the major trading partners have been maintained.

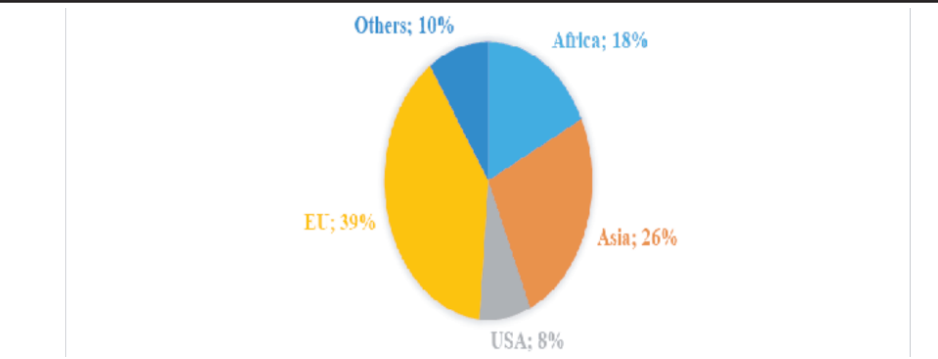
FIGURE 8.1: MAJOR SOURCES OF IMPORTS FOR MALAWI



Source: Ministry of Industry, Trade and Tourism based on ITC Trade map data

In terms of exports, Malawi exported most to the European Union (EU) in 2016. The EU imported 39 percent of Malawi’s exports, about USD382 million followed by Asia with USD251 million. Malawi exported goods worth USD153 million to the SADC region.

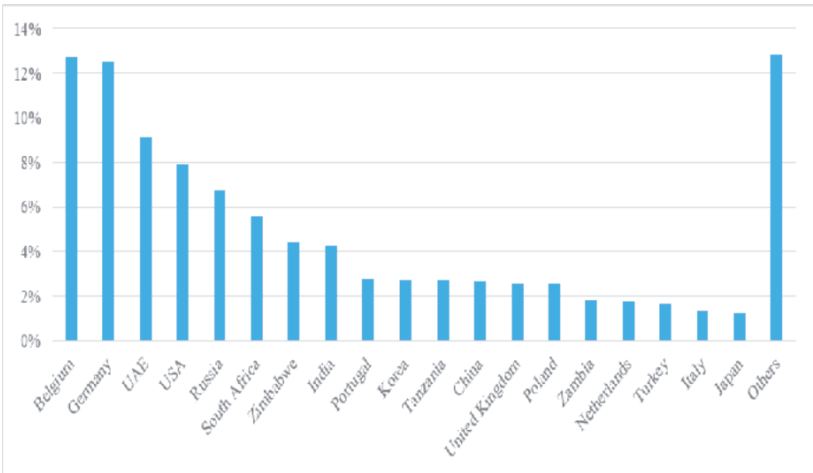
FIGURE 8.2: MAJOR REGIONAL MARKETS FOR MALAWI’S PRODUCTS IN 2016



Source: Ministry of Industry, Trade and Tourism based on ITC Trade map data

Africa is Malawi’s real potential market within the context of export diversification from tobacco. This is because markets outside of the continent, especially Europe, imports mostly tobacco, tea and coffee. For instance, exports to Europe excluding tobacco account for a mere 11 percent of total Malawi exports between 2011 and 2016. The SADC region offers a much more significant opportunity for export diversification than the EU, which has more stringent access requirements. Additionally, as Malawi is land-locked, it is cheaper to export to the region than to destinations outside Africa. The recently signed Africa Continental Free Trade Area (AfTA) and the Tripartite Free Trade Area (TFTA) between SADC, COMESA and the East African Community (EAC), present a promising market for Malawi. The tripartite arrangement is, among others, envisaged to harmonise customs procedures, promote free movement of business persons, and foster cooperation among Regional Economic Communities (RECs), with the ultimate objective of creating one large single market.

FIGURE 8.3: EXPORT MARKET SHARE FOR MALAWIAN PRODUCTS IN 2016



Source: Ministry of Industry, Trade and Tourism based on ITC Trademap data

In 2016, Belgium and Germany were Malawi’s major importers, accounting for 13 percent of Malawi’s exports for each country. Other countries each imported less than 10 percent of Malawi’s exports. This represents efforts to diversify export markets for Malawi’s products, despite Belgium continuing to be the largest export destination due to its demand for tobacco.

8.4 Trade Agreements

The Government recognises the role trade plays in the development of the country. As such, Malawi continues to participate in the regional, continental and multilateral trade agreements, including the World Trade Organization (WTO), the Common Market for Eastern and Southern Africa (COMESA) and the Southern Africa Development Community (SADC). The Government also has bilateral regimes with China, South Africa, Zimbabwe, Mozambique, and Botswana. As a Least Developed Country (LDC), Malawi also benefits from pro-LDC trade agreements with the EU and USA, such as Everything But Arms (EBA) and the African Growth and Opportunity Act (AGOA), respectively.

8.5 Review of the Trade Policy in 2017/18

In the 2017/18 financial year, the Ministry conducted a review of the Control of Goods Bill which is currently awaiting approval by the Cabinet. The Control of Goods Act (COGA) ensures legitimate control on imports and exports. It also assists in improving certainty, brings incentives to the private sector, as well as ensuring adherence to trade procedures, thereby ensuring transparency and predictability to business practices.

In order to support export-led growth, the Ministry developed the AGOA National Response Strategy. The overall objective of the strategy is to enable Malawi to take full advantage of the preferential market access under AGOA and enhance the growth and competitiveness of her exports.

The Ministry also developed a Warehouse Receipt Bill which was successfully passed in Parliament in December 2017. The objective of the Warehouse Receipt Act is to protect buyers of warehouse receipts and make investment in agriculture less risky. The Act gives the Minister of Industry, Trade and Tourism the authority to appoint a regulator of warehouse receipt systems.

The Ministry also reviewed two Investment Promotion and Protection Agreements (IPPAs) between Botswana and India as part of the ongoing trade negotiations with these countries. In addition, the Ministry developed a model IPPA that will be used to negotiate new trade deals with other countries. In recent years, some unscrupulous foreign investors have been taking advantage of weak IPPAs to trick host governments.

8.6 Industrial Promotion and Export Enhancement

8.6.1 National Industrial Policy

The Government of Malawi through the Ministry of Industry, Trade and Tourism (MoITT) is implementing the National Industrial Policy (NIP) from 2016 to 2020. This policy provides direction on how Malawi can develop and industrialise its

economy. It focuses on the improvement of a number of prioritised areas, one of which is skills and technology. An improvement in this area will ensure that the economy has an adequate supply of skilled workers to meet the demands of its industrial and non-traditional sectors. Skills gaps have been identified in various fields in the manufacturing, oil seeds and sugar sectors.

The NIP also focuses on other areas such as the business environment for the manufacturing sector; access to key business services; participation of MSMEs in manufacturing; social and environmental sustainability of industrialisation and support infrastructure (enablers). It also focuses on export clusters that are priorities in the National Export Strategy (NES), namely sugar and sugarcane products, oilseeds and products from oilseeds and manufactures (agro-processing, beverages, assembly, plastics and packaging). To support these clusters, the NIP aims at improving factors that are affecting exports of the country's products to foreign markets. The NIP finally focuses on textiles and clothing, leather and leather products and pharmaceuticals, which were identified for import substitution.

Successful implementation of this policy is essential to maintain the rapid long-term growth in order to raise per capita income, create sufficient rural and urban jobs, widen the tax base to finance Malawi's welfare requirements and to address the unsustainable trade deficit.

8.6.2 Development of an Industrial Database

In addition to the NIP, the MoITT, is in the process of developing an Industrial Database with assistance from UNDP so that it has up to date data on the Industrial Sector. The database will provide a good source of information for evidence based policy decisions and interventions. It will further form a baseline for different sectors against which future performance will be assessed. At the sectoral level the database will further enable MoITT to undertake tailor-made interventions that meet the specific needs of the clusters identified in the National Export Strategy.

8.6.3 Development of Economic Zones

With support from the World Bank, the Ministry established Special Economic Zones in order to enhance industrial development. During the period under review, the Ministry in conjunction with Mota Engil and China National Complete Engineering Cooperation (CNCEC) identified 300 hectares of land in Liwonde for the development of Agro-processing Special Economic Zones. The two companies signed a Memorandum of Understanding with the Government, through Malawi Investment and Trade Centre (MITC), to establish an Agro-Industry Park in Liwonde. CNCEC will be processing maize, rice, soya,

meat, sunflower and potato crisps, among others exports. Furthermore, the Ministry, in conjunction with COMESA Leather and Leather Products Institute, conducted a value chain analysis for the development of a leather tannery.

Following the establishment of the Export Processing Zones (EPZs) in the country, MoITT has been according EPZ status to firms (foreign and domestic) that produce exclusively for exports. As a way of improving the performance of firms issued with licences to operate under EPZ, a regulatory framework for the EPZs have been developed and reviewed and have been submitted to Ministry of Justice and Constitutional Affairs (MoJCA) for vetting.

8.6.4 Development of the Malawi National Quality Strategy

The MoITT also developed and launched the Malawi National Quality Strategy (NQS). This strategy is being championed by the Malawi Bureau of Standards (MBS). It provides a framework for strengthening the national quality infrastructure and for technical regulations in accordance with international and regional principles and practices. In the long term, the NQS will benefit Malawian enterprises, through improved business service delivery, and ensure protection of the rights of consumers.

8.7 Private Sector Development

The Ministry of Industry, Trade and Tourism continues to undertake several reforms to facilitate an enabling environment for investments. As a result of these reforms, in 2017/18, Malawi moved 23 places from 133 to 110 on the World Bank Doing Business index. According to the 2017 Doing Business Survey, starting a business and getting credit is now easier in Malawi. This has, among others, been achieved by eliminating the requirement for a company seal during business registration. In addition, the Registrar General launched the Malawi Business Registration System, to allow businesses to go through registration procedures online. The launch of the collateral registry has also facilitated access to credit. This reform is providing an alternative avenue for small and medium enterprises that do not have fixed assets to access loans easily.

Access to finance remains a priority of the Government. In the period under review, the Credit Reference Bureau (amendment) Act also came into force. This provides Credit Reference Bureaus with the right to collect client information from banks. The Act is expected to reduce the risk a bank takes when providing loans to new customers, thereby lowering the cost of borrowing and making it easier to get credit. Moreover, a Financial Literacy Strategy was launched by the Reserve Bank of the Malawi, with the objective to provide the population with basic skills with regards to loan applications.

In terms of communication of reforms, the Ministry is actively sensitising the public and private sector stakeholders on doing business in the country and reforms being made to improve the investment climate. The Public Private Dialogue (PPD) and Doing Business Forums provide opportunities to stakeholders to discuss challenges facing investors.

8.8 Foreign Direct Investments

Within Africa, Malawi continues to attract the lowest levels of foreign investment. This can be explained by several challenges that the economy is facing, including high transportation costs, unreliable supply of water and electricity, high import duties and high corruption.

However, FDI inflows in Malawi are expected to increase due to efforts being made to address the binding constraints previously mentioned. In addition, the Government is currently developing legislation aimed at empowering the MITC to effectively promote and facilitate investment and export trade.

8.9 Micro, Small and Medium Enterprises Promotion and Cooperative Development

To ensure that the Micro, Small and Medium Enterprises (MSMEs) operate in a conducive environment, the Government developed the MSME Policy. This policy aims at guiding the development of profitable, competitive and sustainable MSMEs. During the period under review, the Ministry, in collaboration with the International Labour Organisation (ILO), developed an MSME Electronic database to improve planning of MSME programmes. It also developed the National Economic Empowerment Policy with the aim of creating an enabling environment for increased participation of Indigenous Malawians in economic activities. The Ministry has also been in a process of developing the MSME Bill aimed at improving the business environment in the country. The bill classifies and regulates MSMEs and seeks to increase formalisation of informal businesses through simplification of procedures on business registrations, access to credit and facilitation of investments. Through the Competitiveness and Job Creation Support Project (CJCSP), the Ministry is providing matching grants to MSMEs under the Business Linkage Matching Fund (BLMF) component of the project. So far, 64 MSMEs have benefited from the Fund.

In order to economically empower Malawians and stimulate economic growth, the Government continues to strengthen and promote the development of cooperative societies. The Ministry, with support from FAO, reviewed the Cooperative Development Policy, which aims at developing cooperatives in the country. In the period under review, the Ministry trained 1,654 cooperative members in pre-cooperative training, cooperative training and business

management skills. It also facilitated product development, market linkage, linkage to financial institutions and identification of potential areas of cooperative development. The Ministry also assisted cooperatives to construct mini factory shells in some districts across the country.

8.10 Competition and Fair Trading Practices

Competition among private sector players is critical in establishing efficient markets and in ensuring that consumers are served better. Therefore, the Government, through the Competition and Fair Trading Commission (CFTC), remains committed to maintaining a pro-competitive and fair-trading business environment. The CFTC undertakes public sensitisation, and detection and remedying of anti-competitive and unfair business practices, in order to foster voluntary compliance and increase restraint against anti-competitive and unfair business practices.

In the period under review, the Commission reached out to major trading centres in all districts with messages on the Competition and Fair Trading Act (1998). In addition to the monitoring and advisory visits to major trading centres, the Commission used the media, both print and electronic, to spread messages on competition and fair trading. The objective of these activities was to sensitise the private and public sectors, and the consumers on their rights and obligations under the Competition and Fair Trading Act and the Consumer Protection Act. As a result of the sensitisation and advisory services provided to traders incidences of unfair business practices, such as display of disclaimers, non-display of prices, selling of expired products and misleading information declined as compared to the previous years.

Chapter 9

EDUCATION

9.1 Overview

The Ministry of Education, Science & Technology (MoEST) is the policy bearer in the provision of education in the country and provides education in collaboration with faith-based organizations (FBOs), as well as the private sector. Other ministries, including those responsible for youth, gender and labour, complement the MoEST in the provision of both formal and non-formal education. The Ministry of Gender, Children, Disability and Social Welfare (MoGCDSW) maintain the lead in the provision of Early Childhood Development (ECD), and the Ministry of Labour, Sports, Youth and Manpower Development leads in the provision of sports and other services targeting out-of-school youths, and the provision of technical education and vocational training.

Programming in the education sector is guided by the National Education Sector Plan (NESP), which has been extended to cover 2008-2020, as well as the Education Act (2013), the National Education Policy (NEP), and the National Education Standards. The annual Education Joint Sector Review (JSR), held in January 2018, aimed at looking back at past performance to inform the sector's goals for the future. The implementation of the NESP is guided by two successive five year plans, the Education Sector Implementation Plan (ESIP). In addition, ESIP III is being prepared to coincide with the adoption of the new NESP. All plans are in line with the third Malawi Growth and Development Strategy (MGDS III).

9.2 Key Sector Achievements

9.2.1 Primary Education Subsector

The NESP identifies access to education as one of its central tenets. Table 9.1 indicates some of the key indicators used by the Ministry to gauge the progress of its initiatives. Access to education continues to grow; year-over-year growth in enrolment in public and religious schools is up by 3 percent from last year's 4.81 million learners to 4.96 million this year. The gender parity index remains near equity in our public schools, at 1.02, with the number of female learners greater than the number of male.

The Net Intake Rate (NIR) measures the proportion of six year-old learners entering into, or enrolled in, primary education. Using population estimates from the NSO, the NIR for both boys and girls is approximately 100 percent, though it should be noted that the 2014 Welfare Monitoring Survey (WMS) has estimated that these figures were closer to 87 percent, but are rising.

Similarly, the Net Enrolment Rate (NER) estimates the number of school-aged children (6-13 years-old) enrolled in school. Using NSO projections from the last census, and data gathered from schools, the NER is approximately 100 percent, but it is thought that this figure may be somewhat inflated. The same

aforementioned WMS also estimated this figure at approximately 87 percent in 2014, but it has shown an increasing trend.

There are 146,075 learners with special needs, which is approximately 2.9 percent of the entire basic education population. This number has increased by 22 percent from last year's figure of 120,017. This could be caused by a greater understanding, sensitivity for identification, and mainstreaming of these learners with disabilities in public schools. It also shows that, while the Ministry is attempting to expand access to Malawian learners, Government funding needs to keep up with the extra burden of providing quality teaching and learning to students with special needs. The Ministry has, therefore, dedicated MWK105, million to special needs education, including the procurement of assistive devices and adapted teaching-and-learning materials. Students with learning difficulties make up approximately 43 percent of all students with disabilities, while students who have impaired sight or are hard of hearing make up another 24 percent and 22 percent, respectively.

**TABLE 9.1: PERFORMANCE INDICATORS FOR ACCESS TO
PRIMARY EDUCATION**

Indicator	2017	2016	GrowthRate(%agechange)
Enrolment (public)	4,964,457	4,813,883	3.1%
Special Needs Enrolment	146,075	120,017	21.7%
Pupil-Classroom Ratio	105.4	105	-0.4%
Pupil-Permanent-Classroom Ratio	121.5	116	-4.7%
Repetition Rate	23.9%	23.4%	-0.5%
Dropout Rate	3.97%	3.82%	-0.15%

Source: MoEST Calculations, EMIS database

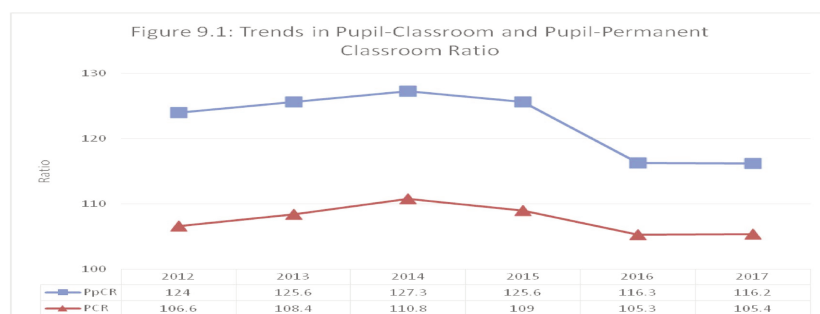
With a growing population of young people and growing enrolment rates throughout the country, the need to increase schools' capacity and infrastructure in order to keep up with demand is paramount if the quality of teaching is to keep pace. The Ministry's quest to reduce congestion in classrooms and improve sanitation continues.

The Malawi Education Sector Improvement Project (MESIP) has built 778 learning shelters, as well as 69 changing rooms for girls, and additionally has turned 177 of the 778 shelters into full classrooms. MESIP is generously funded by the Global Partnership for Education (MPE) and the Royal Norwegian Embassy (RNE) and facilitated through the World Bank and the MoEST. Furthermore, 504 additional classrooms blocks are slated for construction in the current fiscal year.

DfID funded projects are also aiding the Ministry in tackling overcrowding in school classrooms. This fiscal year, DfID has funded the construction of 158 classroom blocks, and 52 teachers' houses, as well as latrines in many schools throughout the country. The Ministry also continues to build new schools,

classrooms, and latrines through its Other Recurrent Transaction (ORT) funded activities. This initiative has just been able to keep up with growing enrolments, hence these ratios have remained more-or-less steady after three years of rather marked improvement. Continued investment from the Government and donors will target school infrastructure, and attempt to keep up with the growing demand for adequate classrooms. In this fiscal year, the Ministry has spent nearly MWK1.2 billion of procurement on desks and chairs for learners, to ensure that classrooms are properly furnished to facilitate high quality learning. Figure 9.1 below illustrates the trends in Pupil-Classroom and Pupil-Permanent Classroom Ratio.

FIGURE 9.1: TRENDS IN PUPIL-CLASSROOM AND PUPIL-PERMANENT CLASSROOM RATIO



Source: MoEST Calculations, EMIS database

Internal efficiency is a key concept in understanding how the Ministry operates in an environment of constrained resources and limited time. Primarily, the Ministry uses three key indicators to measure progress: repetition, completion, and dropout rates.

Repetition rates, which measure the number of repeaters in a given standard in a given year, as a proportion of last year's enrolment, have increased for both genders from last year. For girls, the figure is 23.3 percent, which is worse than the 22.7 percent registered last year. Similarly, for boys, the rate is 24.5 percent up from 24.1 percent. Overall, the dropout rate is at 23.9 percent which is up from 23.4 percent last year. Repeaters tend to put a large strain on schools, by using up more public resource than otherwise would be required. The Ministry is, therefore, working on a new promotion policy to reduce the burden of repeaters on the system, and the drain on resources.

The overall completion rate in Malawi, which measures the proportion of 17-19 year-olds in the country who have completed at least their Primary School Leaving Certificate (PSLC), is approximately 36.6 percent (35.6 percent for boys, 37.7 percent for girls), as calculated from this year's Integrated Household Survey IV (IHS4) data set. The IHS3 conducted in 2010-2011 reported 32.2 percent

overall completion rates, with both genders approximately registering the same rate. Whilst this figure shows a small increase of about 4 percent in 6 years, it remains an extremely low proportion of the population, and represents a large leakage in the primary school system.

Similarly, dropout rates have increased, however, only to a small degree. The dropout rate in this past school year was 3.97 percent up from 3.82 percent last year. The dropout rate continues to be lower for female learners at 3.88 percent compared with 4.06 percent for male learners in this past school year. Dropouts, though not a direct drain on government resources, do represent an unnecessary drain on labour productivity. These young people have effectively no training, and are barely literate. Therefore, in general they cannot be effective members of the workforce.

Furthermore, many adolescent girls drop out due to pregnancy, which puts a further burden on young families. The Ministry and its development partners have therefore, committed major resources to deal with this issue. The Ministry's policies recommend that all schools establish parent committees and mothers' groups, in order to keep a much closer eye on young pupils in the community, and their wellbeing. The Ministry's readmission policy explicitly advocates for the rights of young mothers to return to school, or where full time education is not a viable solution, enrolment in Complementary Basic Education is advocated. A jointly implemented project between the Ministry and several United Nations (UN) organizations has a strict focus on keeping young women in schools. The Directorate of Basic Education, in the Ministry, has strengthened capacity building for School Management Committees, Mothers' Groups, and Parent Teacher Associations nationwide. Furthermore, many of our donor funded projects focus on the education of adolescent youths, especially girls, as well as effective school management, in order to help correct these inefficiencies, which put undue strain on the education system.

Decentralization within the primary subsector also took hold fully in this fiscal year. It is predicted that the devolvement of key activities from the central Ministry into the hands of local councils, school councils, and District Education Managers will help the overall efficiency and efficacy of the primary education system. This devolvement should also increase the capabilities of districts and schools to correct inefficiencies as they see fit and in a more timely manner.

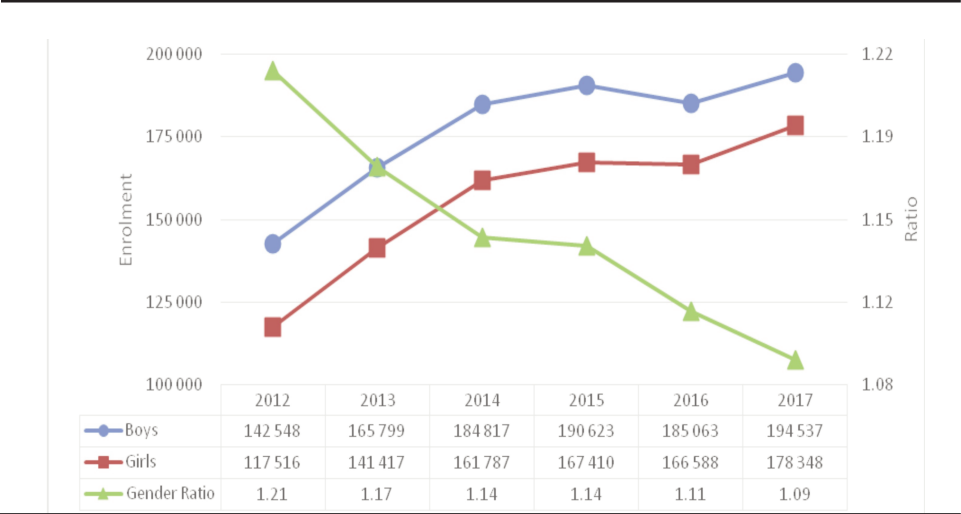
Activities which have been devolved include management of day-to-day school activities, procurement of teaching and learning materials (including textbooks), construction and maintenance of school infrastructure, management of complementary basic education (CBE) learning centres, utilisation of ORT resources, and perhaps most importantly, management of teachers and teaching resources, including recruitment, deployment, placement, promotion, appointment of head teachers, and teacher discipline. The devolvement of these activities from the Ministry to councils and schools will make them much more effective and agile in reacting and correcting issues as they see necessary.

9.2.2 Secondary Education Subsector

The secondary subsector has continued to show year-over-year improvement, in spite of recent funding challenges. The number of public secondary schools has grown from 836 last year to 849 this year, with the establishment of 13 new Community Day Secondary Schools (CDSSs). Furthermore, construction of two more secondary schools in Thumbwe and Machinga has already begun and 10 additional schools are slated for construction in the districts of Machinga and Balaka, with the help of USAID. In addition, 23 new Open Secondary Programs have begun this fiscal year.

Total enrolment in the secondary subsector has grown by approximately 6 percent, from 351,651 pupils last year, to 372,885 pupils this year. The gender gap in the subsector has also improved. The ratio of male to female learners has come down to 1.09 this year from 1.11 in the previous school year. While the expansion of enrolment should be celebrated, it has put additional strain on our teachers and our classroom sizes. Efforts are being made subsector wide to ensure the quality of education is maintained.

FIGURE 9.2: TRENDS IN SECONDARY ENROLMENT BY GENDER



Source: MOEST Calculations, EMIS database

The Government is working hard to expand access to secondary education for learners in need. In this school year, the Government has provided bursaries to 14,499 learners, and cash transfers to a further 4,343. The same number of beneficiaries was targeted in the previous school year. Donors in the subsector also continued their own efforts in financial aid for students and youths, which helps bolster and expand the number of students who are reached. Privately funded bursaries and financial aid were disbursed to 27,296 students, 69.5 percent of whom are female. Efforts will continue to close the gender gap in the secondary

subsector, however a lack of capacity to achieve gender parity in District Boarding Schools remains a key challenge in this area.

Further efforts in the subsector are aimed at improving the overall quality of secondary public education. The Government is currently in the process of constructing science laboratories and libraries in 28 of the CDSSs, and has recruited and deployed 1,200 teachers to these schools. In this school year, the Government has stocked the inventories of science labs with chemicals and equipment in 480 CDSSs. Traditionally, the CDSSs have been incapacitated by a lack of resources, and overcrowding, but the Government is committed to ensuring that all secondary school learners receive a quality education, regardless of which school students are selected into. In addition, in this fiscal year there has been a procurement drive to supply 27,450 additional desks for students, and over one million textbooks for secondary learners. The Government is also committed to improving the quality of teachers. This year, the Ministry has invested in ‘upgrading’ 80 unqualified secondary school teachers through a one-year professional development scheme called the University Certificate of Education.

In other public schools, the MoEST is also committed to improving the quality of infrastructure and teaching. In four National Secondary Schools, rehabilitation efforts are ongoing in order to keep the schools modernised and operating at their peak performance.

There are more projects in the planning stages, with the support of donors in the subsector, and they are aimed at expanding capacity of our public schools to reach a greater number of primary-school graduates, and improving the quality of teaching and learning in order to make a secondary-education a viable option, and a prudent investment for learners and their families.

9.2.2.1 Teachers for Secondary Education

In the 2017/18 school year, 11,393 teachers have been employed in both public and religious schools. This figure is down by around 1 percent from last year, when 11,481 teachers were employed. Furthermore, the pupil-teacher-ratio has increased from 24.8 last year to 26.0 this year. Only 25.6 percent of the teachers in public and religious secondary schools are female.

The outlook becomes worse when considering ‘Qualified Teachers’. Many of the teachers in public secondary schools have been temporarily moved from nearby primary schools, or have degrees which are not directly related to education. While these ‘unqualified’ teachers are better than nothing, they have not been adequately trained on the current secondary schools curricula, nor have they gone to teachers’ college to learn how to teach more advanced students. Only an estimated 61 percent of teachers in secondary schools are qualified, and the estimated pupil-to-qualified-teacher ratio (PTR) is 42.3:1. Of all qualified teachers, 69.9 percent are male. Therefore, the Ministry has developed a Continuous Professional Development (CPD) policy to give unqualified teachers

a path to expanding their own abilities and upgrading themselves to become fully qualified secondary school teachers.

The Ministry has devoted a large proportion of funding towards building new Teacher Training Colleges and expanding enrolment across all Teacher Training Institutions. Efforts have been focused in mathematics and science subjects, to bring down particularly high PTRs in these subjects. Nevertheless, expansion is happening in all subject areas in order to keep up with growing enrolment, and to improve the overall quality of education.

9.2.3 Higher Education Subsector

The mission of the Directorate of Higher Education is to develop highly knowledgeable and skilled citizens capable of performing in a competitive, diverse and knowledge-led global economy. The vision for the Directorate is to create an inclusive higher education system, that contributes to sustainable socio-economic growth. The Higher Education subsector is comprised of four public universities: the University of Malawi (UNIMA), Mzuzu University (MZUNI), Lilongwe University of Agriculture and Natural Resources (LUANAR), and Malawi University of Science and Technology (MUST).

Student enrolment in the higher education subsector has increased to nearly double the target set to be achieved in 2017. Target enrolment for this period was 14,000 students, but in June-December, 2017 the higher education cumulative student population had increased to slightly above 25,000, when adding both private and public universities populations. The growth of the student population is attributed to increased enrolment in generic programmes in most of the universities.

In addition, some universities, such as LUANAR, MZUNI, and UNIMA, have embarked on enrolling students in Open and Distance Learning (ODL). LUANAR, for instance, now has an estimated 929 students enrolled in its various programmes under ODL. In addition, there are more than 21 private universities under the higher education subsector, out of which 10 have been registered and accredited with the National Council for Higher Education (NCHE); 9 others have been registered, but failed their accreditations, and 2 others are awaiting inspections.

In the 2017/18 academic year, the Higher Education Students Loans and Grants Board (HESLGB) received applications from 12,186 university students, of whom 9,346, or 77 percent benefited from the loans. Last year, the HESLGB was able to provide loans for 7,626 students, representing a 23 percent growth in 2017/18. The Board screens applications to identify eligibility based on need and merit through a systematic process in collaboration with administrators in both public and private institutions of higher learning. Total tuition, upkeep, and book loan applications in the 2017/18 school year amounted to MWK8.705 billion, with MWK6.999 billion to students from public universities and MWK1.706 billion to students from private universities. However, only MWK3.346 billion, or just 38 percent of loans promised, was disbursed to the applicants due to underfunding of the Loans Board.

There are efforts to improve infrastructure in the higher education subsector. Under the Higher Education Science and Technology (HEST) Project, there have been infrastructure improvements in various public universities: Mzuzu University, University of Malawi (Chancellor College and Polytechnic), as well as the four Technical Colleges (Lilongwe, Salima, Soche, and Nasawa). This project will ensure that there is a quality environment which is conducive to teaching and learning, in addition to an improved and more equitable access to higher education through expanding e-learning and ODL services, in order to increase enrolment. At Chancellor College, construction work for laboratories and the ICT Centre have been completed. However, at the Polytechnic, whilst the infrastructure for laboratories and classrooms have been completed and construction in the second phase has begun, progress remains slow. Construction of laboratories and an Open and Distance E-Learning Centre has been completed at Mzuzu University. The project is being funded by the African Development Bank (AfDB), the Nigerian Trust Fund, and the Government, to a total budget of USD46 million.

In this sector, the establishment of Africa Centres of Excellence for Eastern and Southern Africa (ACEESA) in Malawi, should be noted. LUANAR has established the ACEESA for Aquaculture and Fisheries Science (AquaFish) Centre. The centre aims to expand the production of highly skilled, fit-for-purpose agricultural scientists, as well as foster their innovativeness and entrepreneurship. These scientists, supported by the centre, will help improve aquaculture and fisheries management, in order to enhance food production, nutrition, and economic security in Eastern and Southern Africa. The target set by the AquaFish Centre is to recruit 40 Masters and PhD students over the five-year period from 2016 to 2021, of which 25 have so far been enrolled, of which 7 are international students.

Additionally, the College of Medicine (CoM) has established the ACEESA for Public Health and Herbal Medicine, which will be conducting research in public health and in the identification of commonly used medicinal plants, as well as quality assurance of herbal medicines used for the treatment of malaria, maternal health, HIV and AIDS, and non-communicable diseases. This research will benefit not only Malawi but the whole of the Eastern and Southern Africa. So far 4 PhD students have been recruited, 3 of whom are international. The centre has attracted a few international students to pursue Master and PhD degrees. The aim is to attract 12 international students over the five-year period from 2016 to 2021.

9.3 2016/17 Education Budget Achievements

9.3.1 2016/17 Education Budget

The overall budget for the MoEST was MWK76.84 billion, of which MWK38.14 was for the recurrent budget and MWK38.70 billion was for the development budget. By the end of the third quarter, under recurrent budget, 70 percent of the approved personal emolument (PE) budget was spent and 53.3 percent of the approved ORT was utilised. The budget provision amounting to MWK1.86 billion

for teaching and learning materials for primary and secondary schools had not yet been paid; once this has been paid the budget utilisation for ORT will improve. Overall for the recurrent budget, a total of 68 percent has been funded and utilisation was at 62.7 percent by the end of third quarter. Figures for expenditure and funding under Development Budget Part 1 are not available for publishing at this time. Under Development Budget Part 2 budget utilisation was at 20.7 percent by the end of third quarter. Treasury managed to fund MWK4.28 billion of the approved provision of MWK20 billion. The low budget funding for development projects is affecting the progress of most construction works for individual projects in the sector.

9.3.2 Financial Performance for the Quarters and Year-to-Date

Table 9.2 below is a summary of funding and expenditure for the three quarters of the 2017/18 fiscal year.

TABLE 9.2: MoEST EXPENDITURE ANALYSIS AS OF 31ST MARCH, 2018 (IN MK '000,000)

	Approved	Revised	Funding	Expenditure	%Budget Funded	%Funding Spent	%Budget Spent
Personal Emolument (PE)							
MoEST: HQ & Depts.	1,044	1,044	717	714	69%	100%	68%
Divisions	19,090	19,090	13,689	13,467	72%	98%	71%
Teacher Training Colleges	1,829	1,829	1,105	1,105	60%	100%	60%
Total PE	21,963	21,963	15,510	15,287	71%	99%	70%
Other Recurrent							
Transactions (ORT)							
MoEST: HQ & Depts	5,408	5,408	2,658	2,175	49%	81.8%	40.2%
Divisions	5,428	5,428	4,036	3,549	74%	87.9%	65.4%
Teacher Training Colleges	5,338	5,338	3,690	2,904	69%	78.7%	54.4%
Total ORT	16,174	16,174	10,384	8,627	64%	83.1%	53.3%
Total Recurrent for MoEST	38,137	38,137	25,894	23,913	68%	92.4%	62.7%
Development							
Dev. Part 1 MoEST	18,000	18,000	-	-	0%	Not Available	0.0%
Dev. Part 2 MoEST	20,700	20,700	4,276	4,276	21%	100.0%	20.7%
Total MoEST	76,837	76,837	30,170	28,189	39%	93.4%	36.7%
Total MoEST not including Dev Part 1	58,837	58,837	30,170	28,189	51%	93.4%	47.9%

Source: MoEST

9.3.4 Discrete Development Projects

There are several development partners who are financing various programmes and projects in the education sector, such as the World Bank, the German Development Bank (KfW), the European Union (EU), the United States Agency for International Development (USAID), the Japanese International Cooperation Agency (JICA), the African Development Bank (AfDB), and the United Nations

International Children's Fund (UNICEF), among others. The following is a selection of some of the projects being funded by development partners.

With support from the African Development Bank (AfDB) and the Government, the Ministry is carrying out an expansion of infrastructures in seven beneficiary institutions. The cost of expansion is USD23 Million. The beneficiary institutions are Mzuzu University in Mzimba, Chancellor College in Zomba, the Polytechnic and Soche Technical College in Blantyre, Nasawa Technical College in Zomba, Lilongwe Technical College in Lilongwe, and Salima Technical College in Salima. The works in the seven beneficiary institutions involve construction of lecture theatres, laboratories, workshops, administration blocks, Open Distance Learning (ODL) Centres and ICT libraries. The progress of works at Mzuzu University is at 100 percent, Chancellor College is at 99 percent, Polytechnic Lot 1 is at 99 percent, Polytechnic Lot 2 is at 45 percent, Soche Technical College is at 98 percent, Nasawa Technical College is at 95 percent, Lilongwe Technical College is at 85 percent, and Salima Technical College is at 85 percent. Progress is slow at Polytechnic Lot 2 due to inadequate funding, as this lot is wholly funded by the Government.

Furthermore, the Global Partnership for Education (GPE), through the World Bank is financing the Malawi Education Sector Improvement Programme (MESIP) with a total of USD44.9 million for four years. In the current fiscal year, a total of 750 learning shelters have been constructed in eight education districts namely Chikwawa, Dedza, Kasungu, Lilongwe, Machinga, Mangochi, Mzimba, and Thyolo. In addition to this, there is also construction and rehabilitation of classrooms nationwide. In total, 500 classroom blocks which will be constructed. Meanwhile, evaluation tenders have been done and 22 contracts for 300 classroom blocks have been awarded.

With support from USAID, the Ministry has rolled out the National Reading Programme for pupils from standards 1 to 4 in all primary schools in all 34 education districts. All learners in these standards have been provided with English and Chichewa textbooks on a one-to-one pupil-textbook ratio.

9.4 Key Implementation Challenges

Some of the key challenges faced by the sector in this year under review are as follows:

1. High repetition rates in primary education, combined with enrolment of under-aged learners, continues to put undue strain on classrooms, school infrastructure, and teachers. Pupil-Teacher ratios in primary have come down from last year, but remain well above Ministry targets;
2. The transition rate from Primary into Secondary remains low, and capacity for new students, while growing, remains well below required levels. As of now, conventional schools can only absorb about 35 percent of primary school leavers. This leaves primary schools with the burden of high repetition rates in Standard 8, as well as large numbers of young

people who finish their education at a primary school level, and enter the labour force with very low levels of education. In addition, the low the low transition rate further strains secondary school infrastructure. It leads to increased demand for Open Secondary Schools (OSS), these are quasi-private schools which tend to operate within the premises of existing public schools and with their teachers. It also can lead to an overall worsening of teaching and learning quality in the secondary subsector. OSS schools occasionally gain Ministry approval out of necessity, and possibly without meeting minimum standards. OSSs also approximately double the workload of the teachers in these schools;

3. Delays and general underfunding in ORT activities continues to cripple initiatives and hinder the Ministry's effectiveness. For example, cash flow towards procurement of teaching-and-learning materials for the secondary subsector is less than 50 percent of the budgeted amount to date. The Higher Education Loan Board could only afford to disburse 38 percent of approved loans during this school year. This leads to delayed timelines of activities, underachievement of goals, compromised quality of education, and continued strain on all subsectors and actors within the education sector;
4. This problem is not unique to ORT funded activities; communication breakdowns and delays happen in donor-funded projects as well. This leads to, on occasion, amended project activities which have not received the consent of Ministry officials, and which may not adhere to Ministry regulations or guidelines; and
5. General understaffing in key directorates leads to a lack of capacity to undertake more ambitious activities, and a reduced capacity to keep up with existing activities.

9.5 Science and Technology

Malawi continues to make strides in science and technology across all sectors of the economy. Although projections show that Government expenditures on research and development (R&D) remains less than 1 percent of Gross Domestic Products (GDP), Malawi continues to witness a boom, with the establishment of new IT hubs, an increased number of crops being tested using modern biotechnology methods, and improved enrolment in science subjects at secondary and tertiary school levels. Highlighted below are some of the major projects undertaken in the science and technology sub-sector in the 2017/18 fiscal year that are creating significant impact in different sectors of the economy.

9.5.1 Programme for Biosafety Systems (PBS)

The Government recognises the important role biotechnology plays in economic growth and poverty reduction, hence it has been committed to creating a conducive environment for testing and adoption of safe Genetically Modified (GM) technology in Malawi. To achieve this, the Parliament enacted the

Biosafety Act in 2002 and the Government approved the Biotechnology Biosafety Policy in 2008. The Act and the Policy were supported financially and technically by the Programme for Biosafety Systems (PBS), to provide an enabling framework for promoting and regulating the development, acquisition, and dissemination of relevant biotechnology in the sectors of agriculture, nutrition, health, environment, industry and trade.

The objectives of PBS include the development of a fully functional regulatory biosafety framework for managing Genetically Modified Organism (GMO) applications; reviewing procedures for environmental releases in field trials and in farmers' fields; strengthening capacity and skills of biosafety agencies and institutions; and increasing understanding of modern biotechnology and biosafety.

Table 9.3 shows some of the biotechnology crops under experimentation, the traits being investigated, developer of the technology, national collaborating institutes, regulatory status of the crop and estimated commercial release.

**TABLE 9.3: BIOTECHNOLOGY CROPS
UNDER EXPERIMENTATION**

Name of Crop	Trait	Developer	National Collaborating Institute	Regulatory Status	Remarks	Estimated Year of Commercial Release
Bt cotton	Insect resistance	Monsanto	Department of Agricultural Research Services (DARS)	Variety Registration trials)	Encouraging first year result disseminated Second year National Performance trial submitted to Biosafety Registrar	2019
Bt cowpea	Maruca pod-borer resistance	African Agricultural Technology Foundation (AATF)	University of Agriculture and Natural Resources (LUANAR)	Confined Field Trials	Application Multi-location confined field trials submitted to Biosafety Registrar	Presently not known
Virus Resistant (VR) Banana	Bunchy top virus resistance	Queensland University of Technology	DARS	Confined Field Trials	Second year confined field trials on-going	Presently not known
VR plantain	Bunchy top virus resistance	Queensland University of Technology	DARS	Confined Field Trials	First year confined field trials	Presently not known

Source: Department of Science and Technology

9.5.1.1 Medium Term Achievements during the Year 2017/18

Notable milestones achieved during the reporting period are summarized as follows:

1. Insect resistant Bollgard II cotton variety registration trials are being conducted by DARS in eight of its research stations. First year results of the trials indicate potential for increasing yield from the current production of 800 kg per hectare to around 4000 kg per hectare and reducing the number of sprays from the current average of 6 to 2 times per growing season;
2. Bt cowpea which is the first GM food crop to undergo trials in Malawi has completed the second year of confined field trials at LUANAR, Bunda College. Results indicate that the gene is conferring resistance to Maruca pod borer infestation. As these results have been positive, Bunda College has submitted application for multi-location confined field trials in traditional cowpea growing areas. The Environmental Affairs Department (EAD) recently convened a meeting of the National Biosafety Regulatory Committee (NBRC) to deliberate on the application. Results of the meeting are yet to be communicated;
3. GM banana has just completed the first year of its three years of testing to evaluate resistance against bunchy top virus, a serious pathogen which has wiped out 90 percent of banana plantations in the country. The results of the first year of trials were affected by the loss of vector aphids due to heavy rains that washed the insects away; and
4. A trial application for GM plantains which is resistant to bunchy top virus was approved and is being conducted at the banana trial site.

9.5.2 Skills Development Project

The Skills Development Project was set up in response to Malawi's low enrolment rates in skills development institutions and programmes, which are among the lowest in the world. Malawi's school education sector is marked by poor primary completion rates (around 35 percent), low secondary school enrolment rates (Gross Enrolment Ratio of less than 20 percent), and poor learning outcomes. Improving access to tertiary education and skills programs in Malawi will require an approach beyond the traditional strategy. Without scientific and technological capacity, Malawi will miss out on opportunities to diversify its economy and improve growth. The Skills Development Project attempts to address this shortfall.

9.5.2.1 Achievements in 2017/18 Fiscal Year

The Project has managed to make strides in increasing enrolment levels in higher education and tertiary institutions. Relevant programmes are being introduced through review of curriculum and by building the capacity of staff members. Research in the relevance of curriculum has been done through "Tracer Studies".

These studies have been conducted by accredited institutions, however, not all of them have been able to complete the exercise. Some of the institutions which have increased enrolment are Mzuzu University (MZUNI), Chancellor College, LUANAR, the Polytechnic, Malawi University of Science and Technology (MUST), and Technical Entrepreneurial Vocational Education and Training Authority (TEVETA).

This year the project has also focussed on building infrastructure, so far some laboratories have been refurbished and new ones have been set up. In addition, new equipment has been procured for various public colleges.

9.5.2.2 Plans for 2018/19

The NCHE is planning to undertake a national Tracer Study by the end of the year 2018/19 in order to appraise the relevance of the programmes being offered by the registered and the accredited higher learning institutions. It plans to work in collaboration with other relevant institutions such as the National Commission for Science and Technology (NCST) and accredited institutions.

9.5.2.3 Challenges

1. Fluctuations in the Kwacha. Since the original budget was in Kwacha, the depreciation of the Kwacha has affected the budget provisions, making it difficult to implement some of the plans;
2. The construction of the city campus for LUANAR in Area 47 has been slow due to some procurement challenges; and
3. Very low enrolment of girls in science and technology fields at the Polytechnic was experienced, although there are reforms which are aimed at improving female enrolment.

9.5.3 The Agricultural Productivity Program for Southern Africa (APPSA)

The Agricultural Productivity Program for Southern Africa (APPSA) is a project supported by the World Bank, seeking to promote a regional approach to agricultural technology generation and dissemination. This has been done by supporting the strengthening and scaling up of regional centres of research leadership on commodities of regional importance. This approach is currently being pursued by the International Development Assistance (IDA) in other regions of Africa, through the West Africa Agricultural Productivity Program (WAAPP) and the East Africa Agricultural Productivity Program (EAAPP), in the form of adaption program loans.

9.5.3.1 Achievements in 2017/18 Fiscal Year

APPSA is supporting 22 R&D projects led by Malawians and collaborating in around 43 projects in Mozambique and Zambia. Malawi is leading in seven R&D projects in each of the 1st, 2nd and 3rd calls and one project in the 4th call. The financial absorption for the program is at 58 percent, after spending USD15

million over the implementation period. Component 1 has utilised 47 percent (USD4.6 million) of the budgeted USD8.8 million. Component 2 utilized 51 percent (USD5.6 million) of the planned USD11 million.

1. So far, the programme has recommended two rice varieties, three maize varieties and one agronomic practice, (irrigation scheduling technology), to the national extension service through the Agricultural Technology Clearing Committee (ATCC). Three R&D Projects, that Malawi has been collaborating in with Zambia and Mozambique, have released five maize varieties, six bean varieties and four rice agronomic practices;
2. The programme has reached out to 840,403 direct beneficiaries against a target of 1,200,000, of which Lead Farmers (LF) constitute 6,216 (1,260 females). The R&D projects are using LF and smallholder farmers (SHF) in the process of research and dissemination. The programme has also supported an estimated 763 field days, including the National Field Day that was held at Chitedze Research Agricultural Station in Lilongwe;
3. The programme supported two R&D projects on germ-plasm collection that collected 668 cultivars (158 rice and 500 maize) against 700 accessions that were planned for the period. About 350 accessions have been characterized at phenotypic level against a target of 438;
4. Currently, infrastructure development has commenced at Bvumbwe and Kasinthula Research Stations in Thyolo and Chikwawa districts, progress is at 40 percent and 30 percent, respectively. Furthermore, bids for Chitedza Research Station in Lilongwe were opened on 23rd November, 2017. The programme procured 18 vehicles, 4 tractors and associated equipment that were allocated to the five satellite research stations and the Department of Agricultural Extension Services (DAES) in the MoAIWD; and
5. A total of 39 scholarships were awarded, of which three recipients have successfully completed their studies. The awardees are from Department of Agriculture Research Services (DARS), DAES, Department of Crop Production (DCP), Department of Land Resources and Conservation Development (DLRCD), and LUANAR.

Table 9.4 shows some of the technologies that have been promoted through APPSA project since its inception and the characteristics of the crops varieties.

**TABLE 9.4: FACTSHEET FOR SEED VARIETIES
RELEASED BY APPSA**

<u>Variety Name</u>	<u>Crop</u>	<u>Category</u>	<u>Yield (Kg/Ha)</u>	<u>Days to Maturity</u>	<u>Characteristics</u>
CAL 96	Bean	Red Mottled	3,000	75	Drought tolerant, high yield, tolerant to CBB, BCMV and ALS
DRK 47	Bean	Red Mottled	2,200	75	Drought tolerant, high yield, tolerant to CBB, BCMV and ALS
G 738	Bean	Red Kidney	2,500	75	Drought tolerant, tolerant to CBB, BCMV and ALS
G 1939	Bean	Sugar bean	2,700	80	Drought tolerant, high yield, tolerant to CBB, BCMV and ALS
G 11982	Bean	Sugar bean	2,500	80	Drought tolerant, high yield, tolerant to CBB, BCMV and ALS
SAA 20	Bean	arge white	2,500	75	Drought tolerant, high yield, tolerant to CBB, BCMV and ALS
APPSA03	Orange Maize	Pro Vit A	2,700	130	It has Vitamin A level of 5.5 µg/g It has Zeaxanthin level of 8.7 µg/g DW Carotene colour intensity score of 2.1
APPSA06	Orange Maize	Pro Vit A	8,000	128	It has a Vitamin A level of 6.5 µg/g It has Xanthin level of 8.9 µg/g DW Carotene colour intensity score of 1.8
APPSA08	Orange Maize	Pro Vit A	7,000	130	It has a Vitamin A level of 4.8 µg/g It has Zeaxanthin level of 7.5µg/g DW Carotene colour intensity score of 2.8
APPSA09	Orange Maize	Pro Vit A	7,000	130	It has a Vitamin A level of 5.6 µg/g It has Zeaxanthin level of 5.6 µg/g DW Carotene colour intensity score of 2.4
APPSA13	Orange Maize	Pro Vit A	6,000	132	It has a Vitamin A level of 3.4µg/g It has Zeaxanthin level of 9.3 µg/g DW Carotene colour intensity score of 2.1
MH50STR (0501-2 STR)	White Maize	Striga tolerant,	7,000	120	Striga resistance, 3 Way Cross Medium maturity, Flint grain texture, Disease tolerant
MH51STR (STR) Maize	White tolerant	Striga	6,200	125	3 Way Cross, Striga resistance, (1113-1 Medium maturity, Flint grain texture, Disease tolerant
MH52STR (1113-5 STR)	White Maize	Striga tolerant	6,000	130	Striga resistance, Medium maturity, Flint grain texture, Disease tolerant, 3 Way Cross
Katete	Rice	Aromatic	2,400	94	Resistant to rice blast and brown spot diseases, aromatic
Kayanjamalo	Rice	Aromatic	6,500	110	Resistant to rice blast and brown spot diseases, moderately aromatic
Mpatsa	Rice	Aromatic	5,800	100	Resistant to rice blast and brown spot diseases, slightly aromatic

Note: CBB = Common Bacterial Blight, BCMV= Bean Mosaic Common Virus, ALS= Angular Leaf Spot, and DW= Dry Weight

Source: Department of Science and Technology

9.5.3.2 Challenges Faced

The slow absorption of resources was due to the delayed commencement of infrastructure development and procurement of scientific and laboratory equipment. Component 3 utilised 89 percent (USD4 million) of the planned USD4.6 million.

9.5.4 Establishment of Public and Private Innovation Hubs

There has been rapid growth of innovation hubs, innovation parks and innovation clusters in African countries, including Malawi, in the recent past. Many technology analysts and policy makers view Public and Private Innovation Hubs as additional instruments for promoting science, technology and innovation, for advancing techno-entrepreneurship agenda and as entities for creating new jobs. ‘Innovation Spaces’ have been gradually appearing in Malawi since 2014, namely the Global Centre for Food Systems Innovation at LUANAR, the Polytechnic Innovation Hub in Blantyre and Lilongwe mHub.

In early 2014, the Global Centre for Food Systems Innovation at Michigan State University, established a regional innovation hub in partnership with the LUANAR, with financial support from USAID. The innovation hub has focused on agricultural and food systems innovation, starting with developing and introducing multi-purpose legumes, which are produced for both human and animal consumption.

In May 2015, UNICEF collaborated with the University of Malawi to establish the Polytechnic Innovation Hub, focused on engaging with youth, academia, the Government, private sector and development partners. The hub is hosted within the Chichiri Campus of the Polytechnic, with operational funding from UNICEF.

In 2015, Lilongwe mHub was set up as a pre-incubator and co-working space, with funding from Hivos Southern Africa, by one successful techno-entrepreneur, Rachel Sibande. It specifically targets young technology entrepreneurs, students and graduates who wish to leverage their technical skills to set up start-ups. It aims to support software development, mentoring and community building. It has signed a cooperation agreement with the UNICEF Innovation Hub hosted at the Polytechnic.

The following are some of the achievements of Public and Private Innovation Spaces in 2017/18 in Malawi.

9.5.4.1 Global Centre for Food Systems Innovation (GCFSI) achievements in 2017/18

1. LUANAR has enhanced capacity in teaching, research and developing technologies geared towards dealing with food production and food security in an age of climate change;
2. Research is contributing to a body of knowledge and skills regarding food production, understanding of value-chains and food security. This knowledge will then become available to the nation’s farmers;

3. The program has two tracks tailored to the different needs of the university staff. Firstly, there is the academic track for faculty staff. On this track, faculty members learn techniques for bringing innovative thinking into the classroom and academic research. Each scholar proposes a research project aimed at solving a particular food security problem, and forms a design team composed of relevant partners from within, as well as outside LUANAR;
4. The second track is aimed at administrative leaders such as Deans and Department Heads. The aim of this track is to build the capacity of university leaders to embrace a culture of innovation and find new ways to accomplish processes and tasks such as faculty assessments;
5. The Innovation Scholars Programme (ISP) had 20 programme fellows; 10 of whom developed innovative agricultural projects to practice novel problem solving approaches; and
6. During the session, two of Programme fellows were brought in to share their stories of transformation through their participation in the ISP. Dr Sera Gondwe, a member of the Agribusiness Department at LUANAR, and a faculty scholar, highlighted her innovation project that aimed to solve youth unemployment.

9.5.4.2 Lilongwe mHub achievements in 2017/18

1. Developed a citizen engagement technology platform called Mzinda, which can be found at www.mzinda.com, where over 600 reports on service delivery were collected from Blantyre, Lilongwe and Mzuzu and shared with providers, action was taken on 72 percent of the reports. In addition 62 councillors and 80 community block leaders from the 3 cities were trained on the use of ICT for citizen engagement;
2. Partnered with Development Alternatives Incorporated (DAI), a USAID funded organisation to incorporate the use of technology in their Local Government Accountability Program (LGAP). Currently, the developed system allows market vendors from 64 markets in 8 districts to receive up to date reports on market revenue collection and usage. They are also able to report on the issues they face in their markets via SMS and get feedback from the targeted officials at their local councils
3. Developed and deployed an election monitoring system for elections in Southern Africa called Election Situation Room (ESR), which can be found at www.esrsahub.org. The platform has resources and a toolkit for development of ESR platforms by stakeholders involved in election processes in Southern African countries. mHub also trained stakeholders involved in monitoring elections from seven Southern African countries on how to deploy and use the ESR platform during election periods;
4. Developed and maintain a portal that allows people, who have had their rights violated, to connect with organisations working in the human rights space. The victims connect with the stakeholder via SMS through the

developed platform in real time. It can be accessed on www.ufuluwanga.com;

5. Developed commercial IT platforms for companies and organisations like Girl Effect, UNDP, the National Youth Council, a DRC based Taxi Sharing app, and a youth engagement app for the Department of Youth supported by UNFPA; and
6. mHub founder, Rachel Sibande won USD25,000 at the Next Einstein Forum to kickstart the implementation of a climate smart energy generation project. The aim of the project is to generate power from maize husks and distribute via pay as you go in Malawi.

Digital Skills

7. Partnered with Google Local Guides team from London and the World Bank to train over 200 mapping enthusiasts to contribute to the state of maps in Malawi. The trainings targeted youths from Blantyre, Zomba, Lilongwe and Thyolo districts;
8. Equipped over 50 children aged 7 to 17 with digital skills, over 100 girls with digital and entrepreneurship skills through the various programmes mHub runs, including the Girls4Code and Africa Science Week; and
9. mHub, in partnership with DMI St. John the Baptist University and Cape Town Science Centre, trained 120 primary school teachers from Mangochi, Machinga, Salima, Balaka and Dedza with programming skills to enable them to train learners in coding during Africa Science Week;

Entrepreneurship

10. Provided more than USD30,000 investment to an emerging entrepreneur seeking to set up a fruit and vegetable processing factory to deal with the challenge of food waste. The money was sourced from Standard Bank, National Bank and the European Investment Bank. The winning entrepreneur was identified through a national entrepreneurship challenge called, What Will You Do With 20 Million Kwacha?;
11. Provided start-up capital to three student teams with practical business ideas through a pitching competition for universities and colleges called, Graduate Pitch Challenge;
12. Incubated up to 17 start-ups at the mHub, training the developers with entrepreneurship skills that have helped them model their businesses, develop business plans and learn how to pitch to potential investors and clients; and
13. Selected by the Southern Africa Biosciences Network (SANBio) to coordinate the FemBioBiz Acceleration Program which seeks to identify and support women entrepreneurs in biosciences with special focus on health and nutrition.

Chapter 10

TOURISM

10.1 Tourism Performance in Malawi

The tourism sector is currently registering global success, therefore Malawi has great opportunities and potential to benefit from this growth. The World Travel and Tourism Council (WTTC) reports that its direct contribution to Malawi's GDP in 2017 was MWK158 billion, 3.5 percent of total GDP. The sector is forecast to rise by 2.8 percent in 2018, contributing MWK345 billion, 7.7 percent of total GDP. In 2017, tourism directly supported 3 percent of employment, around 233,000 jobs. The expectation is that this will rise by 1.5 percent in 2018. The total contribution of tourism to employment, including jobs indirectly supported by the industry in 2017, was 6.7 percent of the total employment. Visitor exports generated MWK25 billion, 2.0 percent of total exports in 2017. Investment in the sector was MWK25 billion, representing 4.7 percent of total investment.

10.2 Tourism Marketing Initiatives

In order to attract foreign tourists, the Government is intensifying tourism marketing and promotion of Malawi as a tourist destination by creating awareness in both domestic and international markets. Currently, the Government is implementing the Tourism Marketing Strategy which is a five-year strategy (2016 – 2021) for marketing Malawi locally, regionally and internationally. The strategy aims at increasing international tourism arrivals from the current 804,000 to 1,200,000. This will increase utilisation of tourism products and services by, among others, increasing the average hotel room occupancy rate from 54.9 percent to 70.0 percent, which would increase the sectoral employment contribution to total employment from 6.2 percent to 8.0 percent and visitor exports from 2.5 percent to 5.0 percent by 2021.

As part of the efforts to achieve this, the Government hosted the first Takulandirani Malawi International Tourism Expo (MITE) from 30th August to 1st September, 2017 where 80 local and international businesses exhibited and 17 international buyers participated. As a result of this, Malawi received recognition from several international print and electronic media such as Vogue, Forbes, Rough Guides and Sawubona as the top 3 travel destinations to visit in 2018. As such, it is expected that the country will experience a substantial increase in the number of visitors. Due to the success of the first expo, the 2nd edition of Takulandirani Malawi International Tourism Expo, was held from 26th to 28th April, 2018 at the Bing'u Wa Mutharika International Convention Center (BICC) in Lilongwe.

10.3 Tourism Policy Development and Planning

In the period under review, the Ministry of Industry, Trade and Tourism finalised development of the National Tourism Policy and submitted it to Cabinet for approval. The Policy is expected to create an enabling environment for the development of the tourism sector, thereby enhancing tourist experiences and satisfaction. This presents an opportunity for the sector to transform into a major source of economic growth, job creation and a tool for poverty reduction.

Furthermore, the Government, through support from the African Development Bank (AfDB) will in 2018 implement a four-year project, Promoting Investment and Competitiveness in the Tourism Sector (PICTS), aimed at promoting investment and competitiveness in the tourism sector. The project's broad development objective is to create an enabling environment for investment in the tourism sector through enhanced capacity in planning and business management and improved governance in management of natural resources. The Project will focus on five areas namely: (a) development of a Tourism Investment Master Plan for ensuring that the sector is well planned and monitored; (b) capacity building for tourism statistics, so that data on tourism is readily available and the economic contribution of the sector is clearly known or quantified; (c) development of touristic products, with a focus on ecotourism; (d) strengthening capacity in management of touristic products, enterprises, and related businesses, with a view to increase the economic performance of the sector; and (e) strengthening collaboration between the Government, the private sector and communities in conservation and product development, with an aim to create employment opportunities and generate revenue. It is envisaged that once implemented, the project will assist to transform the tourism sector.

10.4 Quality Assurance

In order to ensure quality service delivery, the Government is implementing the Star Grading system, in addition to the annual inspection and licensing of accommodation units. The system uses internationally recommended standards, as such, it is expected that it will help Malawi to be competitive in the region. In 2017, a total of 30 units were assessed and graded for star rating. In addition, the Government is also promoting universal accessibility of tourism facilities. In this initiative, tourism operators are encouraged to ensure that their facilities are accessible by everyone, including people with disabilities and children, in line with the tourism regulations, star grading criteria and the Disability Act. This is expected to improve patronage of tourist attraction sites and facilities and promote inclusive enjoyment of such for all.

10.5 Major Challenges and Constraints to Development and Promotion of Tourism

Despite having enormous potential for growth, the tourism sector in Malawi continues to face a number of challenges that are frustrating its efforts to become one of the leading tourism and investment destinations in the region and the world at large. Some of the major challenges are as follows:

10.5.1 Lack of Land for Tourism Investment and Limited Tourism Investment Incentives

One of the core functions of the Ministry is to promote investment in the tourism sector. Despite an increasing the number of investors willing to invest in Malawi, especially in districts along the Lakeshore, there is lack of land to cater for such investments. This calls for the need to properly zone the land in collaboration with the Ministry of Lands, Housing and Urban Development and district councils. In addition, fluctuating, inconsistent, unclear and uncompetitive investment incentives discourage local and foreign direct investment. Moreover, the current incentives structure is quantitative rather than qualitative and disadvantages the Micro, Small and Medium Enterprises (MSMEs) that represent the majority of operators in Malawi. It is envisaged that the PICTS project, that the Government intends to implement with support from the African Development Bank, will address this challenge through mapping and zoning of all areas with potential for tourism development.

10.5.2 Underdeveloped Tourism Products

Malawi's diversity of natural, cultural and man-made attractions is generally underdeveloped. These include sites and events linked to cultural, colonial and religious heritage. They also include the lakeshore, mountains and protected areas. Further, the wildlife population is low due to poaching, encroachment, inadequate funding for wildlife conservation and enforcement and environmental degradation of areas with outstanding natural beauty.

In the area of wildlife conservation, the Parliament passed the National Parks & Wildlife Act (2016) that will curb poaching by, among other things, imposing stiffer penalties for wildlife crimes. Further, several partners are supporting the Government in transfrontier conservation through joint management on protection of wildlife in national parks and wildlife reserves. For example, the World Bank and Norway are promoting the protection of wildlife in Nyika Malawi and Nyika Zambia, Vwaza Wildlife Reserve and Lundazi Forest Reserve in Zambia. GIZ and the International Fund for Animal Welfare (IFAW) are also funding a similar programme in Kasungu National Park and Lukusuzi Wildlife Reserve in Zambia.

Within the principles of Public Private Partnerships (PPPs) and for effective management in a bid to increase wildlife populations, the Government has concessioned out the Liwonde National Park, Majete Wildlife Reserve and Nkhotakota Wildlife Reserve to a private operator, African Parks. This initiative has resulted into a tremendous increase in animal numbers, in the areas under concession, through restocking and translocation of animals, resulting into a remarkable growth in visitors to these areas.

10.5.3 Inadequate Tourism Information

Currently, the tourism sector in Malawi, faces a huge challenge in terms of limitations in data gathering and analytical and storage capacity to support and inform decision-making in the sector. This negatively affects policy and investment decisions. In order to address this, one component of the PICTS project is to build capacity for tourism statistics, so that data on tourism is readily available and the economic contribution of the sector is properly quantified.

10.5.4 Low Tourism Service Quality

Tourism services quality is low due to a number of reasons, such as the limited supply of skilled labour, lack of high quality training institutions, the out-dated curriculum, limited number of specialist investors, and unattractive conditions of service. Low quality of services adversely affects the competitiveness of Malawi as an attractive tourist destination.

As part of efforts to address this, the World Bank is supporting the Government, through the Skills Development Project at Mzuzu University (MZUNI) aimed at increasing access, market relevance, sustainability and cost efficiency of hospitality and tourism courses. The focus of the project at MZUNI is to establish a Skills Development Centre, supply equipment and upgrade staff skills. Additionally, GIZ, through the More Income and Employment in Rural Areas (MIERA) programme, is also supporting the Government to strengthen vocational education and training at the Malawi Institute of Tourism. Moreover, the Government intends to increase the capacity of the Malawi Institute of Tourism by building a modern tourism training school at Lingadzi Inn in Lilongwe.

10.5.4 Inadequate supporting infrastructure and services

The lack of adequate supporting infrastructure negatively impacts the tourism sector. Some roads are below internationally acceptable standards. Air and railway transport is costly and limited. There is lack of seamless flights from regional hubs. Domestic air connectivity is very limited and costly. In addition, ground facilities for transfers, including shuttles, taxis, luxury coaches, ships and water vessels are costly and unreliable. Gaps in service delivery in other sectors such as health, ICT and financial sectors also affect tourism growth.

To address these challenges the Government is undertaking a number of efforts including upgrading access roads to tourism attraction sites, through the “Improvement of Access Roads to Resort Areas” project under PSIP. The project is currently upgrading 4.1 km of access road in Senga Bay, Salima. Roads that have already been completed through the project include a 3.3km road from Mulunguzi Dam to Kuchawe Inn in Zomba, 3.1km road from Nkhata Bay port to Chikale beach in Nkhata Bay and a 7.8km in Mangochi. This is to address accessibility challenges, especially during the rainy season, to reach these sites. Specifically, in the air transport sub-sector, Malawi has recently witnessed an increased frequency of flights from regional hubs into the country’s airports. Likoma Island is now a designated port of entry and exit for international flights. In addition, JICA is supporting the Government to expand Kamuzu International Airport (KIA) and provide modern facilities for handling more passengers and aircrafts. The Government is also upgrading facilities at Chileka International Airport (CIA). The European Investment Bank (EIB), in partnership with the European Aviation Safety Agency (EASA) and the International Civil Aviation Organization (ICAO), is supporting the Government to strengthen the civil aviation sector, by creating a semi-autonomous authority aimed at improvement of safety oversight.

INTERGATED RURAL DEVELOPMENT

11.1 Overview of Integrated Rural Development and Decentralization Sector

The National Development Agenda, Malawi Growth and Development Strategy III (MGDS III) recognizes that inclusive and Integrated Rural Development (IRD) requires that all stakeholders are involved regardless of sex, age, race religion and ethnicity. The Government put in place a decentralization policy to devolve functions from the central government to local councils. Upon effective decentralization, the country will realize participatory planning, implementation, monitoring and evaluation of policies and programmes; and increased impact of development interventions at the local level. MGDS III implementation will emphasize devolution of the functions that are currently handled by central government. It is expected that local councils will take an active role in development programmes that help the country attain sustainable national development.

Nevertheless, involving all stakeholders in rural development will promote synergies in resource mobilization, planning, coordination, implementation, monitoring and evaluation. This is opposed to the previous fragmented, piecemeal and uncoordinated approach that characterized development interventions in rural areas. Development of rural growth centres will be at the centre of the integrated rural development.

The Government, therefore, has adopted the implementation of Rural Growth Centres (RGCs) development approach, which involves the construction of RGCs, urban and rural market centres and other rural infrastructures in both rural and semi-urban centres as critical development components within the realm of IRD. In order to achieve these important milestones and aspirations, the Ministry of Local Government and Rural Development (MoLGRD) and Local Authorities, continued implementing various development programmes during the 2017/18 fiscal year and plans to further roll out the implementation of these development endeavors in the 2018/19 fiscal year and beyond. This report, therefore cumulatively highlights the activities that have been implemented during the 2017/18 fiscal year in tandem with the strategic focus areas of the Ministry as stipulated in the Integrated Rural Development Strategy (IRDS, 2016), Program Support Document (PSD, 2017) for IRDs and the Sustainable Development Goals (SDGs).

The main objective of the IRDs is to enhance coordination in planning, implementation, Monitoring and Evaluation (M&E) of rural development programmes by the stakeholders across the country.

11.2 Major Achievements during the 2017/18 Fiscal Year

The major achievements for the period under review include continued construction of RGCs, urban and rural market centres and other infrastructures including mini stadia, District Commissioners offices, bus depots and rural roads. In the 2017/18 fiscal year, one RGC was handed over to Neno District Council. The achievements occurred throughout the key priority outputs are outlined below.

11.2.1 Local Economic Development and Investments

The Local Economic Development intervention's objective is to improve the economic wellbeing of the population in the impact area. Evidence shows that the interventions have achieved its development objective as confirmed by the Beneficiary Assessment that 92 percent of beneficiaries expressed satisfaction with project interventions. The interventions, specifically sought to:

1. Increase incomes of households;
2. Support sub projects geared towards spurring the local economies and development of the growth centres;
3. Support provision of technological and business skills training to local entrepreneurs;
4. Support beneficiaries to engage in savings and acquire business skills; and
5. Facilitate provision of business advisory services.

11.2.2 Rural Growth Centre's (RGCs) Development Programme

IRDs is at the centre of poverty reduction in rural areas. According to recent studies, the RGCs have proven to have the potential to generate economic gains which can lead to improvements in rural livelihoods in both the medium and long term.

Over the period under review, a total of five medium to large scale project investments have been implemented in the following areas: Chitekesa in Phalombe, Neno Boma, Nambuma in Lilongwe, Nthalire in Chitipa, Chapananga in Chikhwawa, and Mkanda in Mchinji district. Table 11.1 indicates progress achieved during the implementation of the RGCs in the fiscal year under review.

TABLE 11.1: PROGRESS ON RURAL GROWTH CENTRES

Name of the RGC	Completed Structures	Outstanding works	Remarks
1. Nthalire	1. Community hall 2. Bus depot 3. Library 4. Police unit and staff houses 5. Community Ground	Arbitration settled after getting the determination of the adjudicator	The contractor was not comfortable with the final account by the Project manager
3. Nambuma	1. Community hall 2. Bus depot 3. Library 4. Community ground 5. Police Unit 6. Health Centre	Contractors working on the Health Centre and the solar powered water supply have remobilised. The works are at 5% completion rate	The works commenced after getting legal opinion on how to forge ahead on the stalled works where by the contractor was suspended in October, 2013. The works will be completed by June 2018
4. Chitekesa	1. Market kiosks 2. Market sheds 3. Bus depot	The contractor has remobilised on the construction of the market and the bus depot after the revision of rates	It is planned that the market and bus depot will be ready for use by mid June 2018
5. Chapananga	1. Market kiosks 2. Market sheds 3. Bus depot	The contractor is on site working on the construction of the market and the bus depot. Chapananga works are at 25% completion rate	The works commenced after getting legal opinion on how to forge ahead on the stalled works. The first contractor was suspended in October, 2013. The works will be completed by June 2018
6. Mkanda	1. Market kiosks 2. Market sheds 3. Bus depot	The contractors are on site working on the construction of the market, the bus depot and the solar powered water supply. The Mkanda works are at 20% completion rate	The works commenced after getting legal opinion on how to forge ahead on the stalled works. The first contractor was suspended in October, 2013. The works will be completed by June 2018

7. Neno	1. Community Hall	None	The structures are in use and were officially opened by the State President
	2. Community Stadium		
	3. Library		
	4. Bus Depot		
	5. Guardian Shelter		
	6. Kitchen and Toilets		
8. Malomo	1. Community Hall	None	It was completed in 2017 and the structures are in use
	2. Community Stadium		
	3. Library		
	4. Bus Depot		
	5. Guardian Shelter		
	6. Kitchen and Toilets		

Source: MoLG&RD, 2018

In the 2017/18 fiscal year, the Government has managed to provide water at Nambuma Health Centre and Police Unit. The Police unit is now functional. Beside this, the direction has been given on the way forward of the long-stalled project so that the contractors are on the site now.

Although the development of these RGCs have potential to generate economic gains which can lead to improvements in rural livelihoods. Access to these hubs of rural development has remained a challenge due to poor road networks. For instance, Nthalire in Chitipa and Neno boast of having luxurious RGCs but cannot easily be accessed by road. It should therefore, be indicated that lack of such requisite infrastructure (good road network) has the potential to scare and discourage local and national investors and traders, hence turning these RGC infrastructures into white elephant projects.

During the previous period, phase 1 construction works at Mkanda in Mchinji and Chapananga in Chikhwawa RGCs reached 92 percent completion rate. However, progress stalled as the Contractors' accounts had been frozen due to ongoing investigations on fiscal mismanagement.

For some projects like Chitekesa RGC, Phase I has been completed and Phase II of the implementation process has commenced. However, construction works stalled when the site was occupied by floods victims who used the site as a shelter camp. Following the evacuation of the flood victims, the contractor requested for a revision of the contract to accommodate the inflation and depreciation of the local currency, which has rendered building materials expensive. The contractor resumed construction of the market and the bus depot after the rates were revised. Despite these challenges, the Government is committed to achieve successful completion of these projects, because of their catalytic role to rural development and also the potential to curb rural-urban migration. It is envisaged that the investments that will be made in RGCs will create a conducive environment for rural economic development.

11.2.3 Markets Development Programme (Urban and Rural Markets)

During the 2017/18 fiscal year, a total of 13 market buildings have been constructed in seven districts namely: Mzimba; Zomba; Kasungu; Mulanje; Nkhatakota; Nsanje; Blantyre and Nkhata Bay. Table 11.2 presents the progress on the urban and rural markets.

TABLE 11.2: PROGRESS ON URBAN AND RURAL MARKET CONSTRUCTION

Name	Structures	Outstanding works	Remarks
1. Matawale	1. Market kiosks 2. Market sheds 3. Ablution block 4. Butchery 5. Fence 6. Market pavements	None	Ready for use and the power has been connected
2. Ekwendeni	1. Market kiosks 2. Market sheds 3. Ablution block 4. Butchery 5. Bus depot	None	Ready for use and the power has been connected
3. Enukweni	1. Market kiosks 2. Market sheds 3. Bus depot 4. Slaughter house 5. Water pump 6. Butchery	None	Vandalized structures have been replaced and currently the council is doing landscaping before the vendors use the facilities
4. Dwangwa	1. Market kiosks 2. Market sheds 3. Ablution block 4. Bus depot 5. Fence 6. Restaurant 7. Butchery	1. Connection of electricity to bus depot which is waiting re-routing of Escom facilities. 2. Two more additional structures which were not from initial design (restaurant and butchery).	1. Re-routing of Escom facilities have been impeded because the vendor refused to relocate. He demanded compensation but the council has been advised to force the vendor from the site. 2. The two additional structures (restaurant and butchery) were being constructed with funding from Development Fund for Local Authorities (DFLA) has been completed

5. Nkhamenya	1. Market sheds 2. Slaughter house 3. Market kiosks 4. Butchery	1. Power connection by ESCOM 2. Water connection	1. Payment has been made to install the transformer and awaiting for connection of power 2. Borehole has been drilled to ease the problems of water supply
6. Limbuli	1. Market sheds 2. Slaughter house 3. Market kiosks 4. Bus terminal	Access road and additional shops. The works are in progress.	There is need to pump more funds to have better access to the market.
7. Chinakanaka Market	1. Market sheds 2. Slaughter house 3. Market kiosks 4. Butchery 5. Perimeter fence	Fence grills, some kiosks, slaughter house and finishes on the existing facilities.	The works recommenced after settling the dispute that arose between the contractor and project manager and the works are rated at 60% completion. The works are planned to be completed by June 2018
8. Mulanje Mission	1. Market sheds 2. Slaughter house 3. Market kiosks 4. Butchery 5. Perimeter fence	Grills, landscaping and other external works. The works are in progress at the finishing stage	The works are rated at 80% completion rate. The works are planned to be completed before end June 2018.
9. Nsanje Boma Market	1. Market kiosks 2. Market sheds 3. Bus depot 4. Slaughter house 5. Water pump 6. Butchery	The works have just recommenced after resolving the compensation wrangle. The works are at foundation and brick work stages	The works will overflow into the 2018/19 budget
10. Tengani Market	1. Market kiosks 2. Market sheds 3. Bus depot 4. Slaughter house 5. Water pump 6. Butchery	The contractors are on site and the overall works are rated at 75% completion rate. The works are at finishing stage except for the water pump	The works will be completed by June, 2018
11. Zomba City Sadzi	Market buildings	None	Handed over in 2017 and facilities in use
12. Blantyre Lunzu	Market buildings	None	Handed over, facilities not yet in use, awaiting handover from council to communities
13. Nkhata Bay (main market)	Nkhata Bay main market	None	Handed over in 2017 and facilities in use

Source: MoLGRD, 2018

The analysis in the table above reveals that although construction of most of the markets are complete, traders continue to shun the facilities due to outstanding basic amenities such as access roads. This shows the importance of integrating key stakeholders during the planning stages of such huge investments such as Ministry of Transport and Public Works (MoTPW) to curb such challenges. This implies that under Public Sector Investment Programmes (PSIP), there should be standalone projects on the upgrading and opening up of access roads to such development facilities. In this regard, the notion of IRDs can generate quick gains if completion of such projects would be fully fledged without outstanding obstacles and issues.

11.2.4 Construction of Mini Stadia

With the battle for stadia funding heating up in both rural and urban settings, the role of sports in the local economy cannot be over-emphasised. The use of sports stadia in economic development has gained increasing credibility in recent years, both academically and in terms of rural and urban policy development. Table 11.3 shows progress made on construction of Mini Stadia.

TABLE 11.3: PROGRESS ON THE CONSTRUCTION OF MINI STADIA

Name of the Council	Structures	Outstanding works	Progress/Remarks
1. Karonga	1. Construction of perimeter fence 2. Construction dressing rooms 3. Pitch improvement 4. Elevation of stands	None	Handed over the facility to the District Council in 2017 and the Structure is in use
2. Rumphi	1. Construction of perimeter fence 2. Construction dressing rooms 3. Pitch improvement 4. Elevation of stands	None	Completed but not in use
3. Kasungu	1. Construction of perimeter fence 2. Construction dressing rooms 3. Pitch improvement 4. Elevation of stands	None	Handed over the facility to the District Council and the Structure is in use

4. Mangochi	<ul style="list-style-type: none"> 1. Construction of perimeter fence 2. Construction dressing rooms 3. Pitch improvement 4. Elevation of stands 	None	Handed over the facility to the District Council in 2017 and the Structure is in use
5. Mulanje	<ul style="list-style-type: none"> 1. Construction of perimeter fence 2. Construction dressing rooms 3. Pitch improvement 4. Elevation of stands 	None	Handed over the facility to the District Council in 2017 and the Structure is in use
6. Nkhotakota	<ul style="list-style-type: none"> 1. Construction of perimeter fence 2. Construction dressing rooms 3. Pitch improvement 4. Elevation of stands 	None	Completed
7. Zomba	<ul style="list-style-type: none"> 1. Construction of perimeter fence 2. Construction dressing rooms 3. Pitch improvement 4. Elevation of stands 	<ul style="list-style-type: none"> 1. Elevation of stands 2. Pitch improvement 	Phase 1 Works in progress. The works include reconstruction of the hall, construction of VIP stand, wash rooms, dressing rooms, ticket offices and perimeter fence. Progress is at 40% completion rate
8. Thyolo	<ul style="list-style-type: none"> 1. Construction of perimeter fence 2. Construction dressing rooms 3. Pitch improvement 4. Elevation of stands 	The contractor is on site and has been mobilised	Construction works have just commenced but the contractor is on site
9. Ntcheu	<ul style="list-style-type: none"> 1. Construction of the stadium 	Not yet started	Excavation and production of cement blocks is in progress

Source: MoLGRD, 2018

11.2.5 Construction of Council Offices

During the year under review, the Ministry has also embarked on the construction of council office buildings. The office buildings project has been developed out of the realization of the various challenges, which include dilapidated offices and serious shortage of office space. This has led to Government offices being

dispersed across the district or the city, instead of being under one roof. These challenges have affected the quality of service delivery by the councils to the communities. The office complex project has therefore been identified as a facility capable of delivering multiple benefits to the district council, by providing a conducive environment for better service delivery. Table 11.4 shows the progress that has been made so far.

TABLE 11.4: PROGRESS ON THE CONSTRUCTION OF COUNCIL OFFICES

Name	Structures	Oustanding works	Progress & Remarks
Thyolo DCs Office	Office Block	Construction works have just commenced.	The contractor has mobilised and excavations have commenced. There is a need to settle the advance requested.
Ntcheu DCs Office	Office Block	Procurement of works is in progress.	
Mzimba DCs Office	Office Block	Construction works have just commenced.	The contractor has mobilised and excavations have commenced. There is a need to settle the advance payment requested
Mzuzu Civic Office	Office Complex	No yet started	Continued facilitation of architectural design of Mzuzu Civic Offices by I-DEV Consultant. The detailed designs are at a completion stage.

Source: MoLGRD, 2018

The analysis in the table above shows that there has not been much progress registered on the construction of the office buildings complex. This is attributed to downward adjustment of the development budget cash flow for the period under review that has negatively affected the implementation of these activities.

11.2.6 Construction of Bus Depots

Good public transport facilities such as bus depots and a good road network particularly in productive rural areas is a pre-requisite for rural development. During the 2017/18 fiscal year, four bus depots have been under construction in Ntcheu, Nkhotakota, Nkhata Bay and Nsanje districts. Table 11.5 shows details on progress attained.

TABLE 11.5: PROGRESS ON THE CONSTRUCTION OF BUS DEPOTS

Name of the Council	Progress
Ntcheu	Handed over the facility to the District Council and the structure is in use
Nkhotakota	Completed but the council is still processing allocation of spaces for kiosks.
Nkhata Bay	Handed over the facility to the District Council and the structure is in use
Nsanje	70% completed

Source: MoLGRD, 2018

The table above shows that three out of four bus depots are complete and the facilities are in use. The councils have started collecting revenues from these structures. The revenues generated will help to supplement the councils to increase their revenue base.

11.2.7 Construction of Rural Roads

Transportation and access to services is generally considered to be a fundamental determinant of economic growth and a significant factor in an individual's health, schooling, and economic status. Isolation is thought to limit opportunities in rural areas due to restricted access to goods, higher costs to transport crops and agricultural inputs, and the lack of demand for non-agricultural services. As a result, there has been a large push in the development community to increase investment in rural roads. In the period under review, five rural roads were under construction as depicted in the Table 11.6 below.

TABLE 11.6: PROGRESS ON CONSTRUCTION OF RURAL ROADS

Name	Structures	Outstanding works	Status /Progress	Remarks/challenges
1. Balaka-Bilila via Khwisa (Phase 1)	The upgrading of the road to asphalt standard (13.5 km)	Final finishes, in terms of drainage systems and road signs	The road is substantially completed	There is need to settle outstanding certificates to avoid accrued interests
2. Khwisa – Bilila) Phase 2	The upgrading of the road to asphalt standard (10 km)	Works are still in progress, 2 km out 10 km has being completed	The works are 10% complete and has been designed to asphalt standard which is expensive and there will be spill over to 2018/19 FY	There is need to honour the advance payment that has been submitted for the contractor to accelerate
3. Thyolo-Goliati-Mangunda Turn Off Road (16.5) km	The upgrading of the road to asphalt standard (16.5 km)	The works are progressing well. So far 9.9 km has been completed and remaining with 6.6 km	Works are at 60% completion rate	There is need to settle the two outstanding certificates to progress
4. Mulanje-Selected roads (13.3 km)	1. Chinakanaka Turn Off to Nasomba CDSS (6.22 km)	The works are progressing well. So far 9.9 km has been completed and remaining with 4.5 km	Works are at 68.5% completion rate.	There is need to settle the two outstanding certificates to progress
	2. Thunguzi to Sikoya Road (2.5 km)			
	3. Nkhonya to Thabwa Road (5.48 km)			
5. Chiweta-Mlowe (11 km)	Upgrading of the road to asphalt standard	The works are at procurement stage	None in terms of actual constructions	Down ward revision of the resources allocated has affected the progress and the works to commence in 2018/19 Fiscal year

Source: MoLGRD, 2018

From the analysis in the above table, an average of over 70 percent of completion rate has been registered in the construction of these roads during the period under review, despite having cash flow problems. The utilization rate of 101 percent was achieved by December 2017 for this budget line item. The Ministry was hopeful

that during the mid-year budget review additional resources would be made available by revising the budget upwards in order to facilitate completion of the running projects within this fiscal of 2017/18. At the time of reporting, there are three unpaid construction work certificates and if payments will be honoured, it will enable the contractors to accelerate the construction works and complete the activities by June 2018.

11.2.8 Strengthening Safety Net Systems

The Safety Nets Systems objectives are intended to be achieved through different components, such as (a) Productive Safety Nets, comprising of three subcomponents: Productive Public Works Programme (PPWP); Livelihoods and Skills Development; and Social Cash Transfer; and (b) Systems and Capacity Building.

The Productive Safety Nets component is largely made up of the Productive Public Works Programme (PPWP). During the period under review, a total of 985,635 households have been reached with PPWP cash transfers, with an additional 225,000 households reached under emergency response. Regarding the Livelihoods and Skills Development, 799 new groups were formed and supported under the Community Savings and Investment Promotion (COMSIP), thereby increasing the number of COMSIP supported groups from 5,254 to 6,053 groups, with 164,138 members of which 69 percent are women. Of these members, 123,003 have been trained in financial literacy and business management while 28,263 have undergone various value addition skills training, such as poultry farming, bakery and training in nutrition and health. A gender disaggregated skills development is presented in Table 11.7 below.

TABLE 11.7: GENDER DISAGGREGATED SKILLS DEVELOPMENT

	Group Dynamics <i>Stage 1&2</i>	Financial Literacy <i>Stage 3</i>	Business Management <i>Stage 4</i>	Value chain Production Legumes		Social Enterprise (Nutrition)	Cooperative Management <i>Stage 5</i>
Male	55,193	38,528	38,528	1,113	3,508	3,252	1,430
Female	98,977	84,475	84,475	2,365	9,281	8,744	5,083
Total	144,176	123,003	123,003	3,478	12,789	11,996	6,509

Source: Local Development Fund, 2018

Savings mobilization: COMSIP groups have cumulatively mobilised a total of MWK4.236 billion (USD5.803 million) translating into an average member savings of MWK25,808 (USD35.35).

Investments: A total of 137 cooperatives and clusters have been supported with investment grants, cumulatively increasing the number supported under COMSIP to 393 cooperatives and clusters. These investments generate revenues for the groups and their members, which is reinvested and also supports member's livelihoods.

For Social Cash Transfer programme, 21,612 households have been enrolled and are receiving cash transfers in Dedza and Nkhata Bay district councils, with resources amounting to US\$9.8million (MWK7.3billion) transferred to the councils for the transfers to beneficiary households; case management and administration). Beneficiary enrolment process for 125,840 beneficiaries was underway.

In the year under review, the MASAF IV Project supported coordination, Unified Beneficiary Registry (UBR) system development and data collection for the UBRs in nine district councils, namely: Karonga, Rumphi, Nkhotakota, Kasungu, Dowa, Ntchisi, Lilongwe, Chiradzulu, and Blantyre. In addition, it has provided technical support to Ntcheu district council (under Irish Aid financial support). The UBRs has so far registered about 571,513 households from the ten councils, representing 82 percent of the targeted population in the respective district councils.

11.3 National Decentralization Program II (NDPII)

The Government is committed to decentralise functions to Local Authorities as a means of promoting Local Governance and accelerating participatory democracy. Under this programme, seventeen sectors have devolved to local authorities and these include: Agriculture, Health, Education, Environment, Forestry, Fisheries, Housing, Water, Lands, Transport and Infrastructure Development, Gender and Community Services, National Registration Bureau, Trade, Labour, Youth and Sports, Irrigation and Immigration. Funds for these devolved sectors are disbursed directly to the local authorities.

In conformity with the Public Service Reforms Programme (PSRP), the Ministry has registered significant progress in the devolution of the development budget and the devolution of human resources to the Local Authorities. The Ministry in collaboration with the Accountant General in the Ministry of Finance, Economic Planning and Development (MoFEPD) and Department of Human Resources Management and Development (DHRMD) in the OPC is working on modalities of devolving the Integrated Financial Management Information Systems (IFMIS) and Human Resources Management Information Systems (HRMIS). The Ministry is also working on preparing of decentralisation and devolution plans for the remaining sectors such as transport, water and also the Ministry's functions. The Ministry, also continued to build the capacity of councillors and other

members of the Council, especially Members of Parliament (MPs) and Chiefs to enable them provide their oversight function in the operation of the Local Authorities. Table 11.8 below outlines the achievements and the status of the devolution implementation.

TABLE 11.8: SHOWS ACHIEVEMENT AND CURRENT STATUS ON COMPLETE DEVOLUTION OF FUNCTIONS TO COUNCILS

Output	Currents Status	Remarks
Sectors devolved	<ol style="list-style-type: none"> 1. 17 Sectors have devolved their functions to Local Authorities 2. Developed the full devolution Plan for District Health System in collaboration with Ministry of Health 3. Continued with the facilitation of the development of Devolution Plans and Management Guidelines for two sub-sectors namely; E-Government and Information and Communication. The Devolution Plans and Management Guidelines for these two sub-sectors are almost completed 	The Ministry has planned to continue supporting the devolution process of the remaining sectors during the FY under review. The Ministry itself hasn't devolved some of its functions hence it is planning to finalize devolution of some of its functions in 2018/19 FY. The Ministry has also planned to finalize the devolution of Transport and Disaster Reduction Management sectors, respectively
Enhanced Participation 1. and ownership of Local Level Development Programmes.	<ol style="list-style-type: none"> 1. At the time of reporting, 20 councils were sensitized on the alignment of their plans to MGDS III and SGDs 2. Conducted consultative meetings on the development of M&E Plan for the councils. Seven councils were consulted; Mulanje, Kasungu, Balaka, M'mbelwa and Zomba District Councils, Luncheonza Municipal, and Lilongwe City Council. The engaged consultant was supposed to consult some selected devolved sectors 3. Conducted supervisory visits to six councils to follow up on the integration of HIV and AIDS issues in local capital projects. Most councils are lagging behind due to absence of clear guidelines and budget allocations 	<p>Provided input for the finalization of MGDS III on Integrated Rural Development and Decentralization sector</p> <p>Conducted review of the Ministry's Strategic Plan which phased out in 2016</p>

Output	Currents Status	Remarks
IFMIS rolled out	1. 28 Councils with operational IFMIS	Frequent monitoring visits are undertaken to assess the performance of IFMIS in Councils.
Enhanced Governance in Local Council (Transparency & Accountability)	1. Local Authority Performance Assessment (LAPA) 2. Decentralization Roadmap developed	Commenced rolling out establishment of a baseline for Local Authority Performance Assessment (LAPA) in all 35 Local Authorities and is being facilitated by an independent consultant. The LAPA is expected to assist the Ministry to track the performance of local councils in service delivery and public financial management Developed a Roadmap (5-year Mid-term Plan) on Decentralization, which is in draft form
HRMIS rolled out	1. 28 Councils devolved HR	Monitoring visits are undertaken to assess the performance of HRMIS in Councils Human Resource Management Guidelines for the Ministry has been developed

Source: MoLGRD, 2018

11.3 Challenges

The construction of RGCs, Urban and Rural Markets and other infrastructure during the fiscal year under review experienced the following challenges and risks:

1. Delays in electricity connections to project facilities: Delays in the supply of electricity to the project facilities has been a major detriment to the beneficiaries to utilise the completed facilities;
2. Poor contractor and local consultants performance: Some implementation delays have been due to poor contractor performance, and poor local consultants' performance in adherence to enforcements on the contractors' performances. This is specifically related to the lack of capacity to deliver within specified contractual periods;
3. Council and beneficiary contribution for project implementation: The requirement that councils make local cash contribution of up to 1.5 percent of the total project cost proved challenging for some councils. This is a requirement that some Councils failed to comply with, given the limited resource mobilisation capacity existing in some of the councils;

4. Limited funding: Overall funding was inadequate for councils to implement meaningful social infrastructure. In addition, funding provided in small amounts to finance more councils at a time also affected the progress of these projects. The main challenge has been inadequate budgetary allocation and low funding. A typical RGC and market are supposed to have a network of access roads to various social infrastructures constructed at a centre/market. These access roads are not provided for in the budget. This has been evidenced at Ekwendeni and Enuikweni, where vendors are refusing to occupy the markets due to poor road network;
5. Delays on the legal direction on the way forward on the freezing of accounts of contractors due to cashgate scandal has derailed the completion of the construction works at Chapanaga and Mkanda Rural Growth Centres in Chikwawa and Mchinji districts;
6. Change in the design of infrastructure to accommodate emerging needs of additional facilities is not easy to achieve. This is a problem when it comes to construction of additional infrastructures at a particular centre and tends to delay execution of works by the contractors;
7. There have been cost escalations for project construction materials, which exert pressure on the already lower budget provision. This has directly delayed the project implementation duration;
8. Delays in compensation in most sites has affected progress of some of the construction works, resulting into delayed execution of works by the contractor; and
9. Slow pace of decentralization due to inadequate skills and erratic resources.

11.4 Lessons Learnt

The following lessons have been learnt from the implementation of the RGCs, markets and other infrastructure in the councils:

1. Splitting of project lots to different contractors and delegating the responsibility of water supply to the councils has assisted in detecting low performing contractors;
2. The need for timely funding for construction, supervision and review meetings should be encouraged to facilitate monitoring and evaluation exercises to assess progress;
3. Most local authorities, especially the district councils, are still in their infancy. It has been discovered that most of the council secretariats have

capacity gaps in terms of the key local governance aspects as laid in the strategic documents;

4. Decentralization of payrolls to the council has reduced ghost workers and other irregularities;
5. Most of the central ministries are reluctant to fully devolve their functions to councils, hence affecting implementation of some of their functions;
6. The arbitrary determination of the budget affects the timely completion of the programme as some activities are forced to be implemented over many years. Limited budget affects maintenance of access roads at the growth centres (RGC);
7. The approved budget is too small to meet the corresponding values of the current scope of works; and
8. Coordination needs to be enhanced amongst all relevant stakeholders and there is need to concentrate on the current projects and complete them by July, 2019.

11.5 Major Plans for the 2018/19 Fiscal Year

During the 2018/19 FY, the Ministry has planned to undertake the following activities:

1. Under the RGC Development Programme, continue construction works at Chitekesa in Phalombe, Chapananga in Chikwawa and Mkanda in Mchinji district, which also includes profiling of RGC new sites;
2. The Ministry will embark on the construction of uncompleted markets. Funds permitting the plans include: completion of Nsanje Market, and construction of Ntcheu, Chitipa, Mwanza and Mzimba Markets;
3. The Ministry plans to complete some of the roads and also plan to embark the construction of some Boma roads and these include; Mangochi, Mzimba, Ntchisi, Mulanje;
4. There is need to strengthen M&E in the councils;
5. There is need to build capacity of Councils on IFMIS and HR systems and procedures; and
6. There is need to continue implementing unfinished interventions in the PSRM. Furthermore, the Ministry will continue to facilitate devolution of functions to Local Authorities. In line with the MGDS III and the SDG's, the Ministry intends to update and align the Social Economic Profiles (SEP's) and the District Development Plans (DDP's) to the MGDS III and to localise the SDGs.

11.6 Conclusion and Recommendations

Overall, the demand for rural infrastructure is increasing in line with population growth in the country. Consequently, there is need for increased rural investment. Additionally, the provision of these services has a potential to reduce the rural–urban migration.

It is also worth noting that most of the challenges the Ministry has been experiencing in the implementation of these projects can be alleviated by an upward adjustment of the total estimated costs under which these projects are operating. In addition to this, there is need for timely and adequate funding for effective execution of the projects, including supervision and monitoring and for conducting timely and regular review meetings with stakeholders for the success of the projects.

Regarding the compensation of the displaced and other affected citizens, it is recommended that the issue of delayed compensation should be addressed by incorporating the compensation budget as a component in both the project design and in the initial project budget.

Chapter 12

PUBLIC HEALTH, NUTRITION, HIV AND AIDS MANAGEMENT

12.1 Overview

This chapter reviews the performance of the health sector and highlights some of the major developments in public health, nutrition and HIV and AIDS management. The 2017/2018 Fiscal Year is the first year of implementing the Health Sector Strategic Plan II (HSSPII) which runs up to 2022.

12.2 Public Health

According to the World Health Organization (WHO), health is a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity.

12.2.1 Major Developments on Health Indicators

As of March 2018, the Out-patient Department (OPD) utilisation rate was 940 visits per 1,000 people, a decrease from 1,046 in 2016/17 Financial Year. In addition, a total of 13,448,728 OPD attendances was recorded for the first three quarters of 2017/2018 Financial Year.

The Government is progressively winning the fight against malaria. Notably, Malaria incidence rate has decreased from 337 cases per 1,000 people in 2015/2016 to 256 cases per 1,000 people in 2016/2017 and to 251 cases per 1,000 people in the first three quarters of 2017/2018. Despite this stride, the progress is slow as some districts are still recording high incidence rate. For instance, Kasungu, Nkhonkhotakota, Nkhatabay, Salima, Likoma, Mwanza and Neno districts recorded incidence rates of more than 400 cases per 1,000 people during the reporting period. To achieve considerable gains, a focused approach may be necessary to address the high incidence rates of malaria in the districts with the highest rates of malaria.

12.2.2 Finances

The health sector is still facing financial challenges. In the 2017/2018 fiscal year, the GoM and donors committed approximately US\$565 million which is lower than the amount committed in 2016/2017 of US\$607 million. The health sector resource mapping projections show that the 2018/2019 commitments, will be even lower, at US\$423 million. Figure 12.1 shows the deficit between Health Sector Strategic Plan II requirements and the sectors projected resources.

**FIGURE 12.1: HEALTH SECTOR STRATEGIC PLAN II
REQUIREMENTS AND PROJECTED RESOURCES**



Source: Health Sector Strategic Plan II (2017-2022)

12.2.3 Improving Access and Coverage of Services

In the year under review, Government approved a budget of MK6.23 billion for health infrastructure development and on-going infrastructure projects. These projects include construction of the National Cancer Centre, Domasi Community Hospital, Phalombe District Hospital staff houses and other health facilities.

12.2.4 Progress in Main Construction Works

The health infrastructure projects being implemented by the Ministry of Health and Population (MoHP) under the Public Sector Investment Programme (PSIP) registered remarkable progress. The Ministry is constructing the National Cancer Treatment Centre at Kamuzu Central Hospital in Lilongwe. Once this is completed, the Centre will be the first dedicated cancer treatment facility in Malawi and will serve as a referral centre for all other facilities. As of March 2018, the progress was at 45 percent to completion and is expected to be complete in September 2018.

The Ministry is also constructing Phalombe District Hospital which will have 250 beds. As of March 2018, completion was at 22 percent and the hospital is earmarked for completion in September 2019. Government also planned to construct new community hospitals in Domasi, Mponela and Edingeni. The construction of Domasi Community Hospital is under way and as of March 2018, the progress was at 40 percent completion. The Ministry is yet to commence construction of Mponela and Edingeni Community hospitals.

Under the World Bank funded Malawi Floods Emergency Recovery Project (MFERP), the Ministry is constructing health centres at Osiyana in Nsanje, district and Thuchira in Thyolo district. The Ministry is also rehabilitating health facilities at Chimaliro in Thyolo, Chambe in Mulanje, Migowi in Phalombe, Mchacha James in Nsanje, and Chikande in Ntcheu. Meanwhile, the rehabilitation for Mchacha James in Nsanje has been completed.

Since 2012, the Ministry has been implementing the Umoyo staff housing program which is aimed at ensuring decent accommodation for health workers in hard to reach areas across the country. The Umoyo Program is currently constructing 140 houses in rural areas and 60 flats for doctors at Mzuzu, Zomba, Kamuzu and Queen Elizabeth Central Hospitals. In addition, houses are being constructed in Mchinji and Kasungu districts in the central region, in Nkhatabay, Mzimba and Karonga districts in the northern region and in Phalombe, Chikwawa and Mwanza districts in the southern region. The program has faced funding challenges hence completion has been delayed. However, some of the houses have been roofed, while others are at window and ring beam levels, representing 55 percent completion. The project has been earmarked for completion under the Health Sector Joint Fund (HSJF) and one contractor is back on site following contract renegotiations. Renegotiations for some contracts are underway and the Ministry is awaiting a “No Objection” for some of the contracts.

The Ministry is also constructing fifteen (15) health centres across the country to ease the congestion of patients in existing health facilities and to also bring services closer to the people. The project activities, however, stalled due to funding problems which the Ministry has been facing following the withdrawal of budget support by Development Partners. The project activities have been taken over by the HSJF and four contracts have been successfully renegotiated and contractors are back on site.

During the year under review, the Ministry also completed the construction of the CT Scan Complex at Queen Elizabeth Hospital in Blantyre. The Construction of a CT scan Complex in Mzuzu has stalled and the Ministry, through the Department of Buildings, is currently negotiating with the contractor.

In partnership with the Ministry of Gender, Community and Social Welfare (MoGCSW), the Ministry, with funding from the UNICEF, completed the construction of the One Stop Centres at Kamuzu Central Hospital in Lilongwe and Mulanje District Hospital. The objective of the One Stop Centres is to prevent gender based violence and ensure that survivors of gender based violence (GBV) receive assistance under one roof, such as from Police, Social Welfare and the Hospital.

The Ministry also received funding from the World Bank to construct Ebola treatment shelters in all the border districts and Central Hospitals. The Ministry, through the National Aids Commission (NAC), procured a contractor from the Republic of South Africa to prefabricate and assemble the structures in the proposed sites. Construction is currently in progress with 85 percent of works completed at each project site. The structures are being constructed at Kameza in Blantyre, Mzuzu Central Hospital, Mchinji, Dedza and Karonga District Hospital.

In order to decongest Queen Elizabeth and Kamuzu Central Hospitals, the Government has planned to construct new district hospitals in Lilongwe and Blantyre. Currently, the Ministry is working on the feasibility studies and architectural designs for the two hospitals.

The Ministry is also constructing a malaria research conference centre/ library and Extended Project for Immunization office block at the community health sciences unit in Lilongwe. The project has faced delays due to lack of funding. The project is now on completion under Global Fund for Vaccines and Immunization (GAVI).

12.2.5 Medicines and Medical Supplies

The major challenge the health sector is facing is shortage of drugs and medical supplies. Despite the improvement in supply of medicines, there are setbacks, which include inadequate storage facilities, drug pilferage and general financing for essential medicines and supplies.

A drug quantification exercise, that was conducted in 2017, established that US\$72,902,479 including a six months buffer, would be needed for Essential Medicines and Health Supplies (drugs that satisfy the health needs of most of the population, essential medicines are just one of the eight requirements of primary health care). In addition, The HSSP II costing estimated that for the 2017/2018 fiscal year, US\$241,844,552 would be committed by the Government (US\$5,062,222) and Development Partners (US\$206,782,330). However, the HSSP II costing does not include health interventions that fall outside essential requirements and also the actual expenditures for development partners may be lower than planned budgets.

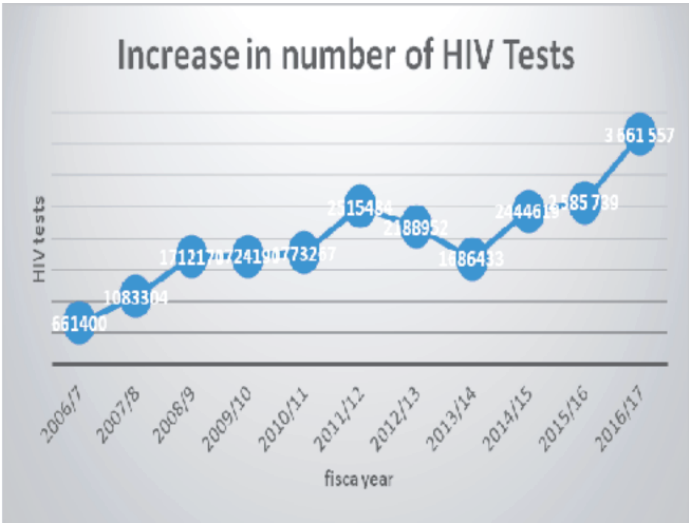
12.2.6 Human Resources for Health (HRH)

Human resources for Health (HRH) remains one of the major challenge the sector is facing. Malawi is still below the WHO recommendation of having the minimum threshold of 23 doctors, nurses, and midwives per 10,000 population which is necessary to deliver essential maternal and child health services.

12.2.6 HIV Testing and Counselling

In the year under review, a total of 3,661,557 HIV tests were done. This was a great improvement from the previous reporting period which recorded 2,585,739 tests. This represent a 41 percent increase in a period of one year. Roughly, 915,000 tests were made in each quarter of the reporting period as shown in Figure 12.2 below.

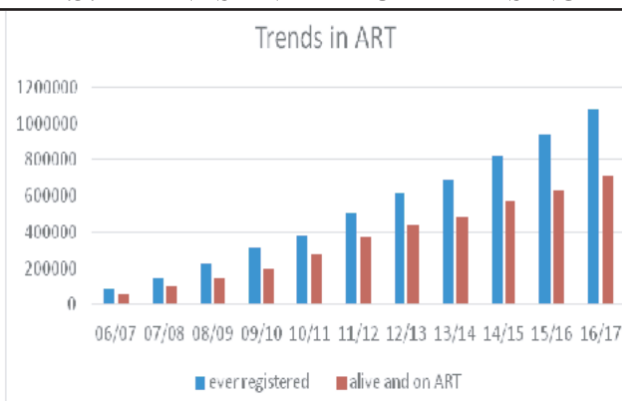
FIGURE 12.2: INCREASE IN NUMBER OF HIV TESTS



Source: Department of Health

12.2.7 Anti-retroviral Therapy (ART)

During the 2017/2018 FY, there were a cumulative total of 1,341,653 ART clinic registrations, of which 1,075,802 (80 percent) were patients newly initiated on ART and 220,362 (19 percent) were patients who transferred between clinics. In addition, 19,187 (1 percent) out of all clinic registrations were patients who reinitiated ART after treatment interruption. About 714,691 patients were alive and on ART as of end June 2017. This means that 69 percent of the estimated 1,035,000 HIV positive population was on ART. Figure 12.3 shows trends in ART uptake since the 2006/2007 fiscal year.

FIGURE 12.3: TRENDS IN ART UPTAKE SINCE 2006/2007

Sources: 1. National AIDS Commission Annual Progress Technical Reports, 2016
2. Malawi integrated HIV Program Reports 2017

The ART coverage was 71 percent (54,573 out of 102,000) for children and 65 percent (660,117 out of 932,000) for adults.

12.2.8 Prevention of Mother to Child Transmission (PMTCT) of HIV

The implementation of the Prevention of Mother to Child Transmission (PMTCT) Option B+5 has effectively integrated PMTCT and ART services. This program aims to initiate lifelong ART for all HIV infected women as early as possible in pregnancy. Between July 2016 and June 2017, 614,707 women attended an antenatal clinic (ANC) for their first visit. This is 92 percent of the estimated 667,000 pregnant women during the 12 month period. Additionally, 584,180 (95 percent) of women in the reporting period had their HIV status ascertained at the first visit. A total of 44,068 (8 percent) of women were found HIV positive, 42,470 (97 percent) of all women who tested positive for HIV were on ART.

12.2.9 Tuberculosis (TB) and HIV Interventions

The WHO estimates that TB accounts for about 33 percent of all deaths among HIV infected people. Effective management of TB and HIV is therefore important to reduce HIV fatality rates. Significant progress has been made in the national response with regard to TB/HIV management. During the 2017/2018 fiscal year, 2,649,225 (98 percent) of all patients retained on ART were tested for TB at their last visit, and 96 percent of TB patients were screened for HIV. Less than 1 percent of those tested for TB were confirmed to have the disease (clinical or lab based) and 6,474 (77 percent) of these were on TB treatment.

12.2.10 Exposed Children Follow-up

The number of newly exposed children enrolled in follow-up during the 2016/2017 fiscal year was at 49,524. Almost 34,219 (72 percent) of the enrolled children were under the age of 2 months. The number of newly exposed children enrolled in follow-up represents a 7 percent increase from the 46,082 recorded in the previous reporting period of 2015/2016 FY.

12.3 HIV and AIDS Achievements

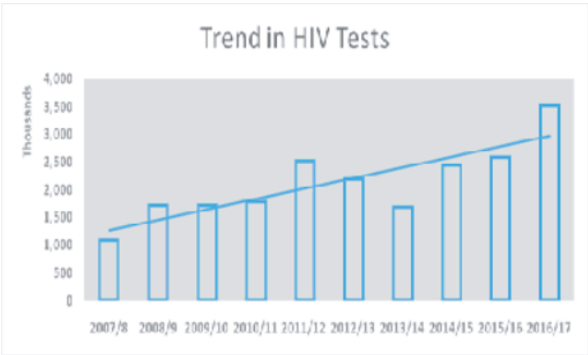
In the 2015/2016 FY, the Government rolled out a new HIV and AIDS Strategic Plan for the period 2015-2020. This strategy incorporates the UNAIDS 90:90:90 targets which emphasize on 90 percent of People Living with HIV in the country to know their status; 90 percent of those who live with the virus to be initiated on treatment and 90 percent of those on treatment should have their viral load suppressed. According to the strategic plan, HIV and AIDS programs in the country are categorised into four thematic areas; (a) Prevention, (b) Treatment, Care and Support, (c) Impact Mitigation and (d) Program Management and Coordination. In the 2016/2017 FY, the achievements in each thematic area were as follows:

12.3.1 Prevention

All initiatives in the HIV and AIDS national response aimed at controlling the spread of the epidemic fall under this thematic area. These include condom use, HIV testing and counselling, prevention of mother to child transmission, voluntary male circumcision, blood safety and services for key populations. During the period, these were the achievements under preventive initiatives.

Between April, 2016 and March, 2017, a total of 3,519,566 HIV tests were conducted, representing an achievement rate of 133 percent of the annual target of 2,641,390. The Figure 12.4 below depicts the trend of HIV tests for the past decade:

FIGURE 12.4: TRENDS IN HIV TESTS



Source: Department of Health

It is clear that the number of HIV tests conducted annually has been increasing for the past decade, albeit inconsistently. The number of HIV tests dropped between 2012/13 and 2013/16 fiscal years, but picked up again in 2014/15.

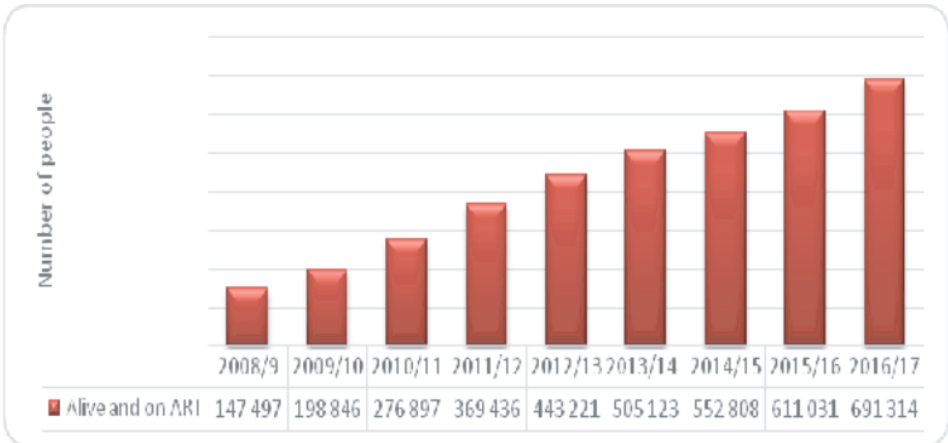
Other achievements included conducting of voluntary circumcision of 218,586 males of aged 10-34 of which 88 percent received at least one postoperative follow-up visit; distribution of 27,458,188 free condoms to the general public representing 90 percent of the annual target of 30,240,000; distribution of 27,437,256 socially marketed condoms of which 27,381,892 were male condoms and 55,364 were female; and collection of 91,303 units of blood representing 114 percent of the annual target of 80,000 units.

12.3.2 Treatment, Care and Support

This theme is about programs that are aimed at providing treatment and support to people living with the virus. The initiatives for the program include provision of Anti-retroviral Therapy, Laboratory Testing and Viral Load Monitoring and Tuberculosis (TB)/HIV Co-management.

By end of March, 2017, a total of 691,314 people alive were on ART. This represents 67 percent ART coverage of the total population living with HIV in Malawi. Of these, 37,195 were adults and 54,119, were children. These patients are receiving services from 731 static ART sites spread across the country. Figure 12.4 below illustrates the rapid expansion of the ART program in the recent decade.

FIGURE 12.4: TRENDS IN ART PROGRAM



Source: Department of Health

The ART retention after 12 months of initiation was 75 percent amongst adults and 78 percent for children. The retentions are far below the recommended WHO and UNAIDS targets of 85 percent and 90 percent respectively.

In addition, the routine viral load results for the reported period indicated that viral suppression is estimated at 86 percent, almost attaining the UNAIDS recommended viral load suppression rate of 90 percent. For TB patients, 99 percent were tested for HIV and AIDS and the status was made known to them. Further, 97 percent of HIV positive patients on ART were screened for TB.

12.3.3 Impact Mitigation

Impact Mitigation interventions are aimed at reducing the vulnerability of groups affected by the HIV and AIDS epidemic. These vulnerable groups include orphans and other vulnerable children (OVCs). During the reporting period, a total of 17,091 OVCs received educational bursaries and 84,483 individuals received support (psychological, material, medical) to care for the OVCs. Furthermore, there are over 2,500 children corner centres spread across the country. These corners are aimed at supporting and rehabilitating children that are psychologically affected.

12.4 Nutrition Achievements

The nutrition status of the people is very key to labour productivity of a country. Recognizing this, Government has mainstreamed nutrition across the third Malawi Growth and Development Strategy (MGDS III). The Department of Nutrition, HIV and AIDS (DNHA) with support from development partners undertakes a number of nutrition interventions across the country. The 2015 Demographic Health Survey (DHS) report shows that stunting levels in the country were reduced from 42 percent in 2010 to 37 percent in 2015. This is an indication that nutrition interventions in the country are yielding positive results.

The SMART survey of 2018 and Micronutrient Survey of 2017 also show positive results for the national nutrition response. This is due to various additional interventions the Government is undertaking. For instance, the Government with support from UNICEF is administering supplementary feeding powder to children aged 6-24 months. The powder is called Ndisakanizeni. So far, out of 28 districts in the country, Ndisakanizeni program has been rolled out to 10 districts. The program is expected to roll-out in all districts during the 2018/2019 fiscal year.

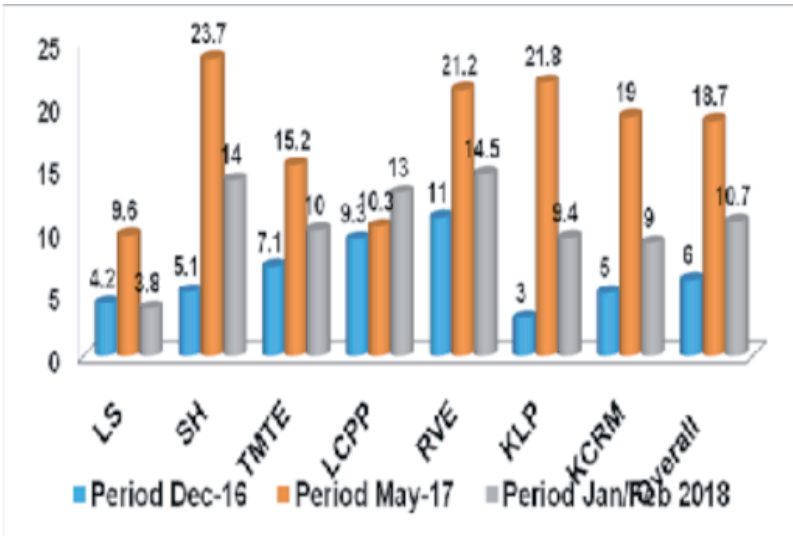
Other achievements for the Nutrition Sub-Sector included formation of 3,366 Nutrition Care groups which provide technical support to child caregivers in the villages across the country; 65.5 percent of mothers attended monthly group nutrition education; 11.3 percent of pregnant women attended ANC visit during the first trimester of their pregnancy; and 58.1 percent of children aged between 6-59 months with severe acute malnutrition were successfully treated.

The Malawi Vulnerability Assessment Committee (MVAC) Nutrition SMART Surveys show positive results in the national nutrition response. According to preliminary results of the study, health seeking behaviour among Malawians has increased from 67.1 percent in 2016 to 75.3 percent in 2017. Additionally, Vitamin A coverage amongst children has also increased from 73.5 percent in 2016 to 82.7 percent in 2017.

Although the survey shows positive trends in national nutrition indicators, morbidity for children under five years remains high in some livelihood zones of the country. In other areas, morbidity rates were reported to be as high as 55 percent. This rate shows that more efforts are required in order to save the lives of under five children in the country.

The percentage of children receiving minimum acceptable diet still remains low in the country. In 2017, 13.3 percent of children received minimum acceptable diet while 43.9 percent of the children met minimum meal frequency. Figure 12.5 below shows how children received minimum acceptable diets in all the seven livelihood zones of the country;

FIGURE 12.5: TREND IN MINIMUM ACCEPTABLE DIET



Source: Department of Health

From Figure 12.5 children received the minimum acceptable diets during the periods of May, this was attributed to food availability. May is the harvesting period in the country, therefore, households have food in abundance. From Table 12.1 below, it can also be noted that cereals, roots and tubers are the most consumed food stuffs amongst children aged 6-23 months seconded by fruits and vegetables. Meat products are the least consumed food stuffs in this age group.

TABLE 12.1: CONSUMED FOOD STUFFS AMONGST CHILDREN AGED 6-23 MONTHS

Food type	LS	SH	TMTE	LCPP	RVE	KLP	KCR M	Overall weighted
	n=169	n=159	n=172	n=150	n=131	n=222	n=223	n=1346
Cereals, roots and tubers	69.2	89.9	89.5	88.0	85.5	56.3	55.6	68.6
Legumes, nuts and seeds	21.9	37.7	39.0	29.3	35.9	19.8	15.7	23.8
Milk and milk products	5.3	2.5	5.8	4.0	5.3	4.1	3.6	4.3
Flesh products	8.9	10.1	22.1	10.7	17.6	8.6	5.8	10.2
Eggs	6.5	0.6	1.2	1.3	6.9	6.3	4.0	4.2
Vitamin A rich fruits and vegetables	39.6	30.2	48.8	54.0	37.4	24.8	30.5	35.8
Other fruits and vegetables	33.7	17.6	48.0	37.3	56.5	32.0	31.8	36.2

Source: Department of Health

12.5 Conclusion

There have been many successes in the health sector such as; the reduction in the stunting levels of children, increase in the HIV tests conducted and the increase in the number of HIV positive population on ART. However, the sector continues to be underfunded and this has affected the scope of its reach.

LABOUR, YOUTH, SPORTS AND MANPOWER DEVELOPMENT

13.1 Overview

This section reflects on developments in the labour, youth, sports and manpower development sectors for the period July 2017 to June 2018 and projections for 2019.

13.2 Skills Development

During the 2017/18 fiscal (FY) year, the Government followed its strategy to reduce youth unemployment by establishing 28 community colleges in all the 28 districts of the country. So far 12 community colleges have been established and are operational, one has been completed and is expected to open soon and one is expected to be completed by the end of the financial year. However, the quality of the community colleges is not the same across the country and this needs to be improved.

Students acquire various skills ranging from bricklaying, motor vehicle mechanics, carpentry and joinery, plumbing, welding and fabrication, among others. An estimated 690 students (468 males and 222 females) have completed their studies and 1,180 (826 males and 354 females) started their training in January, 2017. The enrolment rate increased in 2018 to 1228.

The Government further recognises that increased access to skills is critical for improved productivity, trade performance and employability and has, therefore, engaged the People's Republic of China to support the construction of five Community Technical Colleges and the European Union to support construction of ten Community Technical Colleges, ten Skills Development Centres and rehabilitation of four National Technical Colleges and three Trade Testing Centres. In addition, the EU support will assist to change the landscape for skills development in the country.

The Government is also expanding and rehabilitating the existing National Technical Colleges, with funds from both the national budget and development partners such as the African Development Bank (AfDB). These seven National Technical Colleges were constructed over forty years ago. The expansion will increase access to technical and vocational training.

A significant mismatch between skills demanded and supplied continued to be a challenge during the period under review. As such, the Government sought support from the International Labour Organisation (ILO) to develop the National Skills and Competences Strategy for the country. The strategy will enable the TEVET sector to provide relevant training that is demanded by industry.

13.3 Trade Testing Services

The Ministry, among others, is responsible for conducting skills testing and certification. In the 2017/18 FY, 7,618 candidates in different prescribed trades were trade tested; these assessments were conducted in 46 Technical Training Institutions across the country. In ensuring that these results are credible, the Ministry is in the process of developing a Unified Assessment Body.

13.4 Labour Services

Malawi has a total workforce of 5.5 million people and this represents an employment rate of 79.6 percent. Males have a higher employment rate than females at 86 percent and 74 percent, respectively. A majority of employed persons work in agriculture, forestry and fishing (64 percent). However, out of the 79.6 percent employment rate, 11 percent represents formal employment while 89 percent is informal employment. Informal employees are workers whose work is not regulated by labour legislations and are without provisions for social security benefits, such as compensation services, pension scheme and sick leave. One of the drivers of the growth of the informal employment is the low capacity of the formal economy to create jobs and a lack of a clear framework to link economic growth to job creation. It has become apparent that economic growth may not necessarily translate into an increase in the number of jobs being created. For instance, the country registered an impressive economic growth between 2005 and 2011 but without a corresponding increase in employment. In this regard, during the period under review, the Ministry has put in place an enabling policy environment to address employment creation. The Government has intensified the implementation of the National Employment and Labour Policy. The policy offers an opportunity for the Government to take a more holistic and focused approach in addressing the challenges of unemployment and underemployment. Furthermore, the Ministry has finalised the development of the second generation Decent Work Country Programme, which will augment the National Employment and Labour Policy. The Ministry will continue sensitising all sectors about creating decent and productive employment within the framework of the programme.

There is a need for broadening job opportunities for the youth that have been trained through community technical colleges. In this regard, the Government will expand opportunities by exploring the possibility of exporting surplus labour. With technical and financial assistance from the International Organization for Migration, the Government drafted guidelines for a Bilateral Labour Agreement (BLA) and a Labour Exporting Framework, which will ensure the protection of fundamental human, labour, and social rights of our migrant workers, their families and associated communities of destination countries. In addition, a legal framework is being developed to regulate private employment agencies, to ensure that those youths who secure employment through these agents have their rights safeguarded.

13.4.2 Labour Relations

The Ministry is determined to further improve the welfare of the workers in Malawi and it recognises that the minimum wage is below the international poverty line of USD1.90. Therefore, the Government revised the minimum wage from MWK687 per day to MWK962 per day. Despite the increment, the minimum wage itself is still inadequate to sustain a decent living in the cities, let alone enough to promote savings. For instance, the minimum wage of MWK25,012 per month is far below the minimum cost of basic needs basket in the cities which is at an average of MWK100,000 per month.

During the period under review, the Government is also taking serious steps towards ensuring that tenant labourers are treated as employees. This is in consideration that most of the tenant labourers are not fairly compensated for their work and have largely remained in poverty. Therefore, the Government, with the assistance of the ILO, commissioned a study looking at both the legal and economic aspects of tenancy labour. The study revealed, amongst other things, that most tenant labourers are exploited. Due to this, the Government is in the process of scrapping the tenancy system and rolling out social security measures to tenant labourers affected by the abolition of tenancy labour. Following this, the Employment Act (2000) will be amended to adequately regulate employment in tobacco estates and other agricultural undertakings, to recognise and provide protection to tenants as employees who deserve decent working conditions.

In addition, the Government recognises there is a need for Temporary Employment Permit (TEP) holders whose expertise is not available in the country. However, there have been incidences where expatriates work in areas where Malawians have local expertise. This has repercussions on the provision of job opportunities for Malawians, the youth in particular. In this regard, the Government is in the process of tightening the issuing of TEPs, to ensure that they are only issued when expatriates have skills which are not available in the country.

13.4.3 Occupational Safety, Health and Welfare

The Occupational Safety, Health and Welfare Act, No. 21 (1997) has been in operation for almost twenty years, therefore the Government has begun reviewing the act to ensure it effectively addresses modern day employment conditions. As such, the review started in 2017 and should be completed in 2018.

Furthermore, the Government is committed to adopting International Conventions, Recommendations and Codes of Practice, in the field of occupational safety and health, in sectors such as manufacturing, agriculture and mining. The Government is also committed to provide more support to the Directorate of Occupational Safety, Health and Welfare in the Ministry of Labour,

Youth, Sports and Manpower Development, for it to intensify inspection of workplaces to better secure the health, safety and welfare of persons at work.

13.4.4 Employment Injury and Workers' Compensation

In order to speed up workers' compensation payments and to guarantee availability of funds, the Ministry is in the process of developing the Workers' Compensation Fund (WCF). This will reduce the financial burden of the Government and private sector. During the period under review, the Government facilitated payment of MWK1,399,145,099 as compensation for 883 out of 2050 registered cases. It is therefore clear, from the scale of the remaining cases that the establishment of the workers' compensation fund will be crucial in ensuring that compensation cases are cleared as quickly as possible.

13.4.5 Child Labour

Child labour still remains a challenge, according to the 2015 National Child Labour Survey, the child labour prevalence rate is at 38 percent, showing an increase as compared to the 2002 Child Labour Survey, in which the prevalence rate was at 37 percent. The Government with the support from cooperating partners, such as the ILO, Eliminating Tobacco in Child Labour Growing (ECLT) and Japanese Tobacco International (JTI), will continue to vigorously fight child labour until it is completely eliminated.

In an effort to tackle child labour in a more systematic, focused and coordinated manner, the Ministry has developed a child labour policy for Cabinet's consideration and approval. Furthermore, the Government has enacted the List of Hazardous Work, which is a domain for eliminating the worst forms of child labour in response to the ILO Convention 182 on the Worst Forms of Child Labour.

13.4.6 Labour Market Information System

The Government is in the process of developing a labour market information system which will increase access to and availability of labour market information in the country. So far, the labour market information system prototype has been developed and user acceptance training has been successfully conducted.

13.5 Youth Development

Malawi is a youthful nation, with 13 million people under the age of 35, out of total population of 17 million. The youth could contribute positively to national development if properly nurtured. Some of the problems which the youth face include high youth unemployment and under-employment, high illiteracy levels,

HIV and Aids. They also have limited access to sexual and reproductive health services, limited access to technical and vocational training and limited scientific and technological knowledge.

In the financial year under review, the Ministry achieved the following to address some issues highlighted above:

1. Carried out a country level assessment on the situation of youth as related to education, health, employment, civic participation and youth entrepreneurship. The assessment led to the publication of the “Youth Wellbeing Policy Review for Malawi”. The policy review provided useful insights for policy and program development to drive and guide youth development agenda in the spirit of leaving no one behind;
2. The Ministry has graduated 43 young people in music and dance and have formed 4 bands including the famous Mibawa band. The Ministry has also supported 30 existing music groups to record their music albums;
3. Operationalised a functional literacy program to offer a second chance education to out of school youth. Both the MGDS II and III recognise that to achieve socioeconomic development, Malawi requires an educated and skilled population. The out of school functional literacy programme responds to challenges in the formal education system. There are 5,000 adolescent girls who are currently enrolled in functional literacy classes; and
4. In an effort to promote job creation among the youth, with support from African Development Bank, the Government has embarked on the implementation of the Jobs for Youth Project which is anticipated to create about 17,000 jobs by 2022. During the period under review, the Government also continued running Neno Youth Development Centre under the Integrated Youth Development Project. The Centre’s core focus is to impart practical agricultural skills to the youth who would like to take up farming as a business and form of self employment.

13.6 Sports Development

During the financial year under review, the Sports Department has trained 41 sports personnel in advanced sports business management and introduced the inaugural National Sports Awards, which were launched in March 2018. The Ministry has also begun rehabilitation works at Civo Stadium, Kamuzu Institute of Sports and Kamuzu Stadium. It also identified land at Njamba Freedom Park for the construction of a new stadium in Blantyre.

13.7 Challenges

Achievement of labour, skills development, youth and sports sector aspirations in Malawi has been affected by a number of factors such as: inadequate labour inspectors, lack of resources such as funds and equipment, skilled labour shortages, inadequate numbers of professional technical staff, an ineffective monitoring and evaluation system and a lack of an appropriate infrastructure and institutional framework.

Chapter 14

CLIMATE CHANGE AND THE ENVIRONMENT

14.1 Climate Change and Meteorological Services

14.1.1 Overview

In recent years, Malawi has experienced an increase in the population, leading to an extension of human settlements and activities into vulnerable areas that are impacted by weather and climate-related disasters. The increase in the frequency and intensity of natural hazards, such as floods, drought, prolonged dry spells and heavy rains, pest and diseases, due to climate variability and change poses critical challenges for the country. In this respect, the Department of Climate Change and Meteorological Services (DoCCMS) plays an important role in supporting vital economic functions of the Government. Inadequate meteorological observations and forecasting infrastructure and limited human resources are among the factors that limit the Department's capacity to improve its service delivery.

The observations and data on weather and climate gathered by the Department is used for monitoring and predicting weather and climate patterns. In addition, it is used for climate change projections that are used in issuing early warnings and alerts on extreme weather and climate events, such as heavy rainfall, strong winds, and Mwera winds over the lake, floods and drought. These observations are collected from 21 main meteorological stations, 53 automatic weather stations and over 200 rain-gauge stations run by volunteer institutions and individuals. However, these weather and climate observation station networks are sparsely distributed, whilst they do represent the weather and climate conditions affecting the country, they do not meet international standards.

Telecommunication networks both locally, regionally and globally are also used for the exchange of data as part of the country's obligations under the World Meteorological Organization (WMO) on data exchange. In the period under review, however, some activities were not implemented due to inadequate and delayed funding. Lack of adequate equipment, adequate human resources and instruments hindered smooth operations and execution of some activities. In addition, slow internet services hampered smooth delivery of services since the Department is beginning to use state of art equipment that requires high internet speeds. The meteorological equipment and instruments available are inadequate and some are obsolete and out of date, this hampers the efficient flow of observational data, information processing, products generation and dissemination of information, including multi-hazard early warnings.

The Department sends its daily weather information through radios on a daily basis and once a week to the print media. In addition, it has its own television weather studio where weather information for television is developed on a daily basis. It uploads daily weather information on its website, ten-rainfall and agro-meteorological bulletins, among many other weather and climate information products for various users to download. This information can be applied in daily operations and planning of events, programmes, projects and other activities. In addition, the Department sends various weather forecasts and warnings via email to many users in its database.

During the 2017/18 fiscal year, the Department planned to continue with its initiatives to improve the monitoring infrastructure, analysis and prediction of weather, climate and climate change. It also kept up with trends in the world meteorological community. In this regard, the Department envisaged improving its human and institutional capacity through training and infrastructural development and implementation of the Quality Management System (QMS) for aviation weather services. The Department also planned to continue with service provision to stakeholders in support of crop weather insurance, both at micro and macro levels. In addition, it continued with its negotiations role in the United Nations Framework Convention on Climate Change (UNFCCC) by providing technical advice to the Government delegation during climate change negotiations. In order to improve the accuracy of weather forecasts, monitoring of extreme weather and climatic events and issuing of early warnings and alerts, the Department is fully utilising the available state of the art equipment at the local scale.

As a member of the WMO, Malawi is recognised internationally for its success stories related to the improvement in the delivery of weather and climate services to the nation and region at large. As a consequence, it has now started implementing the Green Climate Fund project entitled 'Scaling up the Use of Modernized Climate Information and Early Warning Systems'. The project will expand the Department's climate data networks, improve forecasting capabilities, dissemination of tailored climate information and products, and strengthen communities' capacities for flood-response and climate resilience, as well as strengthening agricultural weather and climate advisories. Under the project, the Department is in the process of procuring a lightning detection system for enhancing the issuance of accurate lightning warnings to reduce number of fatalities by accurate warning and tracking of severe thunderstorms that are associated with lightning. It has also planned to procure for the first time in Malawi two lake-based buoys which are hydro-meteorological lake data collection platforms with both hydrological and meteorological sensors on board. With installation of these buoys, the Department expects improved Mweru winds

warnings and this should save many lives of fishermen and lake users that are lost as a result of strong winds on the lake. The buoys will also provide data for research on Lake Malawi ecosystems.

14.1.2 Achievements for the 2017/18 Financial Year

14.1.2.1 Weather and Climate Monitoring and Forecasts

In the period under review, the Department continued to monitor daily weather observations from its 21 meteorological conventional stations, 63 automatic weather stations and over 200 volunteer weather stations. It then transmits the observations to the national meteorological centre for analysis and production of forecasts. In addition, it carried out quality control of the collected climate data and stored it safely in the CLIMSOFT Database Management System for future use. Using the collected ten-day climate data, the Department produced a ten-day rainfall and agro-meteorological bulletin every ten days and distributed them to various users. Furthermore, the Department continued contributing to the regional and global initiatives of data exchange on a daily basis in order to enhance regional and global climate models and forecast products. In addition, the Department produced and issued daily and five-day weather forecasts, advisories and severe weather warnings for tropical cyclones and Mwera warnings from observed weather information. These were used in various economic activities in agriculture, fishing, tourism, transport and insurance, such as crop weather insurance. The seasonal rainfall forecast was produced and issued for the 2017/18 rainfall season. In addition, regular rainfall advisories and updates on the onset, progress and cessation of the season were produced. The Department continued to disseminate seasonal rainfall forecasts in all districts. The dissemination involved engagement with chiefs and all key stakeholders at the district and community level.

14.1.2.2 Aviation Weather Services

Malawi is a signatory of several international conventions including that of International Civil Aviation Organisation (ICAO) and the WMO. ICAO in collaboration with WMO recommends and regulates standards and best practices of safe air navigation to ensure efficiency and regularity of air travel. The Department is a key implementing entity of the ICAO convention and assists the Government in keeping its international commitment.

The Department has continuously been collecting and providing weather information at Kamuzu and Chileka International Airports and also at Mzuzu and Karonga aerodromes for safe and smooth non-interrupted operation of aircrafts. In order to ensure that quality meteorological information is shared in good time internationally, ICAO and WMO recommend that Quality Management Systems

(QMS) should be practiced in all National Meteorological Services (NMSs). These systems are expected to pursue International Standards (ISO) 9001:2008 certification of their Aviation Weather Services. Member countries also have to show proof that the implementation process of the QMS for aviation weather services meet a certain predefined international standard (ISO 9000). Training is currently being conducted on this and so far all-weather observers and forecasters, as well as internal auditors, have been trained on QMS. Currently, manuals and standard operational procedures have been prepared and are yet to be printed in readiness for the full implementation of QMS. The only step remaining for Malawi to be ISO certified for aviation meteorological services is the engagement of services of an external auditor to verify that all systems are in place and functional.

14.1.2.3 Climate and Climate Change Services

Climate change is among the priorities in the MGDS III. The Department, therefore, continued to carry out various functions in areas such as climate data management and collection, improvement and maintenance of a reliable network of stations, climate change projections, scientific research on climate trends and indicators and public awareness activities on understanding of climate change information. This has resulted in an increase in use of climate data and information.

The Department, also, retrieved the stored and quality controlled climate data from its archives, analysed it into usable formats and disseminated it to users.

The Department has continued rendering its services in support of the crop weather insurance initiative at both micro and macro levels. It has improved its communication mechanism to and from stations, as well as to external stakeholders, to ensure smooth flow of data and information on a daily basis. The programme is aimed at contributing to the adaptation strategy of small and medium scale farmers to the adverse effects of climate change. The 2017/18 rainfall season has been affected by Neutral phase of El Niño Southern Oscillation (ENSO) that was expected to drive the 2017/18 rainfall pattern in Malawi between October 2017 and March 2018. As such, the greater part of Malawi was likely to receive normal seasonal rainfall amounts. However, episodes of extreme weather events, such as prolonged dry spells, strong winds and floods, occurred in some areas. As such, the Department carried out awareness campaigns to various communities to sensitise the population on the impacts of the weak neutral phase of ENSO on Malawi's weather.

On climate change initiatives, the Department continued to provide technical support in the development of the NAP process, third national communications to the United Nations Framework Convention on Climate Change (UNFCCC) and

mitigation actions. It also played a key role in representing Malawi and providing technical advice at the ongoing UNFCCC negotiations, including participation at UNFCCC conference of parties in Bonn Germany in November 2017. The Department plays a technical role in the development of third national communications, it developed climate change projections for Malawi, and the results show that the minimum temperature will rise more as compared to maximum temperature. Projections show that changes in rainfall regime are not that clear, there are a lot of variations. However, in 2050, January is projected to be wetter by 8 percent than normal, while most months during the summer will be drier by 3-5 percent. According to the projections, winter will be extremely drier than normal ranging from 25-50 percent during mid-century and 18-58 percent during the end century (2080-2100).

The Department also contributed to the work of the Intergovernmental Panel on Climate Change (IPCC) on reviewing and disseminating its fifth assessment report. The Department is also implementing activities under the multi-sectoral Climate Change Programme, where different initiatives are being implemented to assist Malawi's adaptation to climate change. Currently, the Department continues to run seven district climate information centres in Nsanje, Chikwawa, Mulanje, Zomba, Salima, Kasungu and Karonga. These are serving as Climate Change Information Centres (CCIC) for communities at the district level, which are also conduits for early warning messages in addition to Climate Change Adaptation Learning Centres (CCALC). Communication with stakeholders for the provision of customer-specific weather and climate services was initiated in accordance with the WMO's Climate Services Delivery strategy. The Common Alert Protocol (CAP), the WMO's initiative for information dissemination using the internet, was operationalised. The Department continued to participate at the Africa Risk Capacity programme of the African Union (AU) that aims to provide African governments with immediate resources in the case of a natural disaster as an adaptation mechanism to climate change. Through the active involvement of the Department, the African Risk Capacity insurance program paid out some resources, amounting to USD7 million, to subvert the shortage of food that occurred as a result of prolonged dry spells due to El Nino that occurred in the 2015/16 rainfall season.

Under the Global Framework for Climate Services Adaptation Programme in Africa, the Department has provided training to the members of the Network of Climate Journalists to improve their understanding and reporting of weather and climate issues. The Department also collaborated with other institutions to train agricultural extension workers and Malawi Red Cross volunteers on how to share with farmers the scientific weather information in a simplified manner so that farmers can make their own informed decisions regarding agriculture management. The Department also undertook several capacity building initiatives on understanding the seasonal forecast, it updated climate products such as agrometeorological bulletins and climate summaries for 1981 to 2010.

14.1.2.4 Public Weather Services

The Department embarked on a public awareness campaigns on weather, climate and climate change in some districts by using electronic media. It also celebrated the World Meteorological Day on 23rd March 2018 under the theme “Weather-ready, climate-smart”. During the event, several awareness activities, including public lectures were done to schools around Blantyre and on the commemoration day at the Department headquarters in Blantyre.

14.1.2.5 Infrastructural Development

The Department continued to procure, install and/or upgrade meteorological equipment in all stations across the country. With funding from Trans-Africa Hydro-Meteorological Observatory (TAHMO) Project 30, automatic weather stations were acquired and installed at various locations. In addition, 30 rainfall logging systems were installed and the Department also maintained 53 Automatic Weather Stations, of which 35 were upgraded with modern communications technology. It also maintained 21 manned stations.

The Department uses the state of art equipment for forecasting, modelling and prediction of weather and climate services, high spatial resolution technology has been procured. The Department has also made significant steps in the procurement of a weather radar to be installed at Mdeka Hill in Blantyre. The installation of the radar will enhance observation and tracking of severe weather systems. The department developed and operationalised an android based ‘ZANYEGO’ application, as well as linking various community radios with the department server, that will enhance weather and climate dissemination flows among various users.

In addition, the Department refurbished the national meteorological Library and Archives to improve maintenance of books and journals containing historical meteorological data. The library is located at the Department’s headquarters in Blantyre.

14.1.2.6 Human Resource Development

The Department, which always requires very rare skilled personnel to produce and deliver its services, continued with efforts to develop its human resources. Currently, three officers are pursuing Bachelor of Science in Meteorology in China and Russia with the assistance of WMO.

14.1.2.7 International Relations and Cooperation

The Department is affiliated with a number of international organizations such as WMO and African Centre for Meteorological Applications for Development

(ACMAD). The WMO is funding Global Framework for Climate Services Adaptation Program. The Department also participated in the Meteorological Association of Southern Africa (MASA) 2017 Annual General Meeting.

14.1.3 Challenges

The Department faced several challenges which impacts the implementation of some activities. These challenges include inadequate and delayed funding, inadequate equipment as well as human resource and inadequate instruments and slow internet services.

14.2 Environment and Natural Resources Management

14.2.1 Overview

The Department of Environmental Affairs (DEA) is mandated to provide cross-sectoral coordination in Environment and Natural Resources Management (ENRM) through monitoring, overseeing compliance, and provision of technical and information services. This sub-chapter provides the performance of environmental programmes in the 2017/18 fiscal year.

14.2.2 Environmental and Natural Resources Policy and Regulatory Framework

In the period under review, the Government continued implementing various pieces of legislation in order to improve environmental management in the country. For example, to improve waste and chemical management in the country, the Government has embarked on reviewing regulations on Chemicals and Waste Management. In particular, regulations on the management of chemicals that deplete the ozone layer have been reviewed and incorporated other control measures.

Furthermore, the Government developed a National Strategy on Waste Management. Effective implementation of this strategy should improve waste management in the country. To achieve this, waste transfer stations were constructed and commissioned in Areas 24 and 25 in Lilongwe. In addition, the Government also developed a strategy for identification of mercury contaminated sites in Malawi. Moreover, challenges, needs and opportunities for the implementation of the Minamata Convention on mercury were identified and have been included in the strategy.

14.2.3 Mainstreaming of ENRM issues into development policies and programmes

The Government has continued to promote the integration of environmental considerations into development projects through the implementation of Environmental and Social Impact Assessments (ESIA), Environmental and Social Management Plans (ESMPs) and Environmental Audit processes. During the last fiscal year, 28 ESIA's and 17 ESMPs were reviewed and approved to ensure environmental sustainability. These include health centres in the Northern Region (Mzuzu, Katowo, Bwengu and Luzi); filling stations (Linthipe, Mpamba, Nantipwili, Sengabay, Ngomano, Paul and Moses, Dunduzu, Chingeni); the Malawi National Fibre Optic (Phase 2) Project; the Mpondasoni Borrow pit; learning centres under the Skills and Technical Development Program; and the disposal of obsolete pesticides by the Pesticides Control Board.

Furthermore, the Government continued monitoring development projects to ensure compliance to ENRM legislations. In this regard, 14 inspections were conducted on potentially polluted sites. The sites and facilities inspected include Press Cane in Chikhwawa, Area 18 in Lilongwe on contaminated drinking water, CSH Investments, Nutricon Limited, RIM Industries, Hong Sheng Packaging Limited, Hippo View Lodge, Shire Lodge and Sun 'n' Sand Hotel. All companies that were found non-compliant were ordered to conduct Environmental Audits and to adhere to the principles of good environmental management. Furthermore, the following institutions and projects were inspected for compliance to ENRM legislations: Chancellor College in Zomba (construction of the ODL centre), Mzedi quarry, a solar energy project for rural communities in Nsanje, Chombe coal mine, Energem fuel storage at Chirimba, Lafarge Cement Company in Blantyre and Afrisian cotton ginnery in Lunzu.

14.2.4 Strategic Management of Climate Change and Ozone Depleting Substances

To address the impacts of climate change in the country, the Government prioritised its adaptation and mitigation options as documented in the Nationally Appropriate Mitigation Actions (NAMAs), Intended Nationally Determined Contributions (INDCs) and National Adaptation Programmes of Action (NAPA). In addition, it is implementing several other programmes targeted at vulnerable communities, which are aimed at improving food security, increasing climate resilience, reducing carbon emissions into the atmosphere, and increasing adaptive capacity of the people and ecosystems. Furthermore, the Government has initiated the process of establishing a National Climate Change Fund.

The Government continued implementing activities on the phase-out of Ozone Depleting Substances (ODS) in the country in accordance with the requirements of the Montreal Protocol on the protection of the ozone layer. A major source of the ODS in Malawi is the refrigeration sector. In this regard, 80 refrigeration technicians were trained on good refrigeration practices. The training strengthened the capacity of refrigeration technicians on improved operations, service and maintenance of refrigeration facilities, with the aim of reducing emissions of ODS into the atmosphere. Furthermore, the Department continued monitoring compliance with regulations on the management of ODS in the country.

14.2.4 Biodiversity Conservation

The Government continued undertaking compliance monitoring on confined field trials of genetically modified cowpea and banana. The trials are being done to test the efficacy of genetically modified cowpea in controlling maruca pod borer, which is a common pest in cowpea, and genetically modified banana in controlling banana bunchy top virus.

In addition, the Government sensitised stakeholders on the available options for financing of biodiversity conservation programmes under the BIOFIN initiative. BIOFIN is a UNDP managed global collaborative partnership that promotes the development and implementation of evidence based financing solutions for biodiversity conservation.

14.2.5 Environmental Information, Education and Public Awareness

In 2017/18 fiscal year, the Government supported three district councils, Salima, Mulanje and Mwanza, in the preparation of District State of Environment and Outlook Reports. These reports inform development plans at the district level.

The Government has also been implementing various initiatives to raise awareness of environmental issues, such as production and dissemination of environmental thematic messages, including issues on phase-out of the ODS, phase-out of thin plastics, waste management and climate change. The messages have been disseminated through various avenues, including airing of jingles, road shows, targeted sensitisation meetings, and documentaries.

Chapter 15

GENDER, CHILDREN, DISABILITY AND SOCIAL WELFARE

15.1 Overview

This report highlights some of the key achievements in the areas of Gender Equality and Women's Empowerment and Child Protection and Development in the 2017/18 financial year.

15.2 Gender Equality and Women's Empowerment

The Government is committed to promoting gender mainstreaming in the process of economic development in Malawi. During the year under review, the Department of Gender Affairs achieved the following;

1. Developed and launched the Strategy for Ending Child Marriages;
2. Carried out a 6 month campaign on ending child marriages in collaboration with the media and CSOs;
3. Developed regulations for gender related laws including the Gender Equality Act; and the Marriage, Divorce and Family Relations Act;
4. Conducted a National Rural Women Conference, which solicited solutions on the problems around women's economic empowerment, land ownership and governance;
5. Trained the National Audit Office's (NAO) senior and junior staff on Gender Mainstreaming;
6. Commemorated the 16 days of Activism against Gender Based Violence;
7. Disseminated Gender Related Laws to 64 Traditional Authorities to facilitate the harmonisation of their by-laws into one by-law; and
8. Deployed Gender Officers to District Councils following the recruitment of 52 Gender officers.

15.3 Child Protection and Development

In an attempt to build capacity of families and households to contribute to community child protection and development programmes, the Government achieved the following in the year under review:

15.3.1 Early Childhood Development

1. Facilitated access to Early Childhood Development (ECD) services for 2,203,431 children (1,114,250 girls and 1,089,181 boys), representing 46.55 percent of the 3-5 age group, through approximately 12,288 ECD centres countrywide. Out of these children, 24,317 were orphans and vulnerable children and 66,103 were children with special needs;
2. Constructed 53 ECD centres country wide and supervised 37 centres constructed by NGOs;
3. Procured and distributed ECD care and stimulation materials for 2,500 ECD centres serving for 43,500 children;
4. Trained 87 ECD Trainer of Trainers, 8 of whom qualified as National ECD Trainers, 5 qualified as ECD Supervisors. There are now 34 National Trainers and 82 Supervisors for ECD;
5. Trained 94 Care for Child Development (CCD) Trainers;
6. Trained 14,381 ECD caregivers, through the Basic ECD program and also trained 235 Home Visitors for Inclusive ECD Service Provision and 355 CCD Facilitators;
7. Finalised development of the National ECD Policy, which was approved by Cabinet on 9th November, 2017;
8. Developed the Chichewa and mini versions of the National ECD Policy for advocacy and popularisation;
9. Developed the National ECD Strategic Plan based on the new National ECD Policy;
10. Developed ECD Instructional Materials (ECD Centre Registers, Children Workbooks, a Songs Stories and Game Book, as well as Supervision Tools and a Standard Set of ECD materials), Care for Child Development (CCD) Guide, Transition Guide, Parenting Education and Support Guide, Inclusive ECD Guide and ECD Capacity Building Strategy;
11. Compiled study reports on Indigenous Child Care Practices, Child Protection in ECD centres, and Capacity Building and Training Needs;
12. Facilitated development of a project concept and framework for the Investing in Early Years (IEY) project, which is to be funded by the World Bank from 2018 to 2022, with funds of USD60 million;
13. Developed position papers on ECD legislation and ECD Research Agenda; and

14. Mobilised resources for ECD implementation from Open Society Initiative for Southern Africa (OSISA) - USD80,000, UNICEF - USD250,000 and other stakeholders that are implementing ECD directly at the community level.

15.3.2 Primary Child Protection Services

1. Concluded the consultative processes and submitted the National Children's Policy to the Cabinet Office;
2. Secured a Toll Free line through the Malawi Communications Regulatory Authority (MACRA) enabling children to access the helpline service by dialling 116 on TNM, Airtel, Access and MTL lines for free. The Ministry concluded a Memorandum of Understanding for the operation of the national child helpline, it was signed by the Ministry, Youth Net and Counselling (YONECO), Centre for Education, Youth and Children Affairs (CEYCA) and Youth Watch Society (YOWSO);
3. Facilitated the participation of 103 children aged 10-13 years in the First Children's Parliament Session for Neno and Mwanza;
4. Mapped Children's Corners and reviewed the Children's Corner Model;
5. Facilitated the participation of 100 refugee children aged 10-17 years in the First Children's Parliament session for refugee children at Dzaleka Refugee Camp and 200 children from Neno and Mwanza in the Second Children's Parliament session;
6. Finalised the development of the Children's Corner Facilitator's Guide;
7. Facilitated the training of District Child Protection Committees from Neno and Mwanza on ending child marriages and trafficking;
8. Supervised the implementation of minimum service standards for vulnerable children in Balaka and Mangochi; and
9. Trained 240 facilitators of Children's Corners from Mangochi, Machinga, Blantyre, Dedza, Mchinji, Nkhata Bay and Mzimba districts.

15.4 Social Protection and Development

During the year under review, the Ministry implemented various programmes aimed at promoting access to social justice and improving social wellbeing of the vulnerable and disadvantaged through the social welfare services delivery system. Under the Social Protection and Development Programme, the key achievements include the following:

15.4.1 Social Cash Transfer Programme

1. Delivered transfers to 176,407 beneficiary households (129,873 female headed and 46,534 male headed) from 18 districts: Chitipa, Mzimba, Likoma Island, and Nkhatabay in the northern region; Salima, Mchinji and Dedza in the central region; Mangochi, Machinga, Zomba, Balaka, Phalombe, Neno, Mulanje, Chikwawa, Nsanje, Thyolo and Mwanza in the southern region, benefiting 800,690 members (447,330 females and 353,360 males);
2. The Ministry completed targeting of 114,302 beneficiary households in nine World Bank Supported Districts of Lilongwe, Dowa, Ntchisi, Kasungu, Blantyre, Chiradzulu, Rumphi, Karonga and Nkhatakota and one Irish Aid supported district of Ntcheu ;
3. Commenced the rolling out of an accounting system, the Serenic Navigator in EU and KfW supported districts; and
4. Rolled out the Social Cash Transfer Programme, “Linkages and Referrals”, in six districts of Balaka, Nsanje, Mulanje, Salima, Mzimba North and Chitipa.

15.4.2 Rehabilitation of Juvenile Offenders and Family Services

1. The Ministry, through UNICEF, recruited Social Welfare Interns to help in the integration of children from Child Care Institutions (CCIs) for a period of 2 years. In addition, the Ministry reintegrated 401 children from Childcare Institutions to communities;
2. The Ministry conducted a Feasibility Study on Reintegration of Street Children and developed a reintegration model for street children;
3. The Ministry successfully reintegrated 35 children from the streets of Lilongwe to their communities and 22 children were placed under rehabilitation. In addition, the Ministry is conducting interface meetings with 85 street children to commence the reintegration process;
4. Facilitated reviews by the Child Case Review Board. 76 cases were reviewed and among those, 31 children have been released from Mpemba and Chilwa Reformatory Centres and were sent back to their communities;
5. The Ministry facilitated the repatriation of 81 destitutes to Malawi and 758 destitutes from Malawi to different countries, such as Uganda, South Africa and Ethiopia;

6. 40 Social Workers completed the Social Work Degree Course at Magomero College; and
7. Facilitated the construction of two hostels for girls in conflict with the law at Mpemba and Chilwa Reformatory Centres. The girls' hostel at Chilwa has been completed.

15.4.3 Disability and Elderly Affairs

1. Commenced the review of the Disability Act of 2012;
2. Developed and launched the National Disability Mainstreaming Strategy and the Disability Communication Strategy;
3. Coordinated 5 meetings of National Technical Committee on Abuse of Persons with Albinism and reviewed and launched the National Response Plan on Albinism;
4. Developed the National Action Plan on Albinism;
5. Held a National Conference for the media on Disability and Elderly Issues;
6. Launched and disseminated a report on the Feasibility Study on the Universal Old Age Pension Scheme;
7. Commenced the review of the Witchcraft Act (1911) with the Malawi Law Commission;
8. Commemorated the 2017, International Day of Older Persons under the theme "Stepping Into the Future: Tapping the Talents, Contributions and Participation of Older Persons in Society", on 10th October in Chitipa District;
9. Facilitated the engagement of 300 older persons in a livestock pass-on program in Namitete, Lilongwe District with support from the Malawi Network of Older Persons Organisation; and
10. Finalised the National Report on the Multiple-Indicator Survey on Ageing, which was conducted in Mzimba, Lilongwe, Mangochi and Nsanje Districts.

15.4.4 NGO Coordination

1. Facilitated registration of 680 NGOs;
2. Collected Annual Reports from 167 NGOs in 2017/18 against 25 NGOs in 2016/17;
3. Completed the consultative process of the draft National NGO Policy;

4. Reviewed the NGO Annual Fees, in line with the NGO Board Act;
5. Monitored NGO programs in 9 districts; and
6. Commenced mapping of NGOs in Dowa District.

15.5 Key Challenges

1. In the juvenile reformatory centres there are no vehicles to facilitate transportation of children, especially when they fall ill, conduct home visits, and procure necessities for the institutions;
2. The institutions are poorly resourced. In terms of infrastructure, there are no teaching and learning materials, especially those required for vocational skills as part of the rehabilitation programmes. The institutions also lack beds, desks and chairs which they cannot afford due to limited budgets;
3. The Ministry and institutions have a high vacancy rate, for example at Mpemba there is no matron, stores clerk, accounts clerk or driver;
4. Feeding of both children in conflict and in contact with the law at Mpemba, Chilwa and Lilongwe Social Rehabilitation Centres, is inadequate to the extent that at times children are fed once a day. The situation is worsened by procurement procedures, which require suppliers to be registered, and as such the institutions cannot buy foodstuffs from the markets;
5. Actual funding to the Ministry for the year under review remained low at approximately 60 percent of the funds required. This made it hard to implement most of the planned activities;
6. Reintegration of street children has been a challenge due to low income status of their parents or guardians;
7. Continued killings and abduction of persons with disabilities, especially those with albinism, and increased cases of violence against older persons;
8. Fewer goods and services procured than planned due to price increases;
9. Lack of capacity, both human and capital, at the district level to champion disability programmes and programmes for the elderly;
10. Increased demand for welfare support by older persons due to unavailability of specific social protection programmes for the elderly;
11. Increased cases of Gender Based Violence that made it hard for the Ministry to sufficiently assist GBV victims; and
12. Unable to conduct M&E, thereby compromising outputs and standards.

Chapter 16

SOCIAL SUPPORT AND POVERTY REDUCTION PROGRAMMES

16.1 Overview

The Government is in the process of finalising the development of the Malawi National Social Support Programme II (MNSSP II). The programme will continue to focus on the National Social Support Policy (NSSP) whose goal is to reduce poverty and enable the poor to move out of poverty and vulnerability. The MNSSP II will provide and promote productivity-enhancing interventions and welfare support for the poor and vulnerable.

16.2 Social Cash Transfer Programme

The Social Cash Transfer Programme (SCTP) provides cash entitlements to the ultra-poor and labour constrained households. The average cash transfer is MWK7,000.00 per household per month. The programme has been operating in 18 districts and is currently being scaled up to 28 districts, to cover the whole country. The SCTP is implemented by MoGCDSW with support from the Government, the EU, KfW, Irish Aid and the World Bank, through MASAF IV.

16.3 Village Savings and Loans

The Government, through the Ministry of Civic Education, Culture and Community Development (MoCECCD) in collaboration with development partners, is implementing the Village Savings and Loans (VSL) programme. This is aimed at providing affordable and reliable financial services to the majority of rural and peri-urban communities. So far, there are approximately 1.1 million people in VSLs with cumulative savings of MWK3 billion. The VSLs enable communities to develop a savings culture and improve access to small loans, which enable them to establish small-scale businesses. Therefore, the Government developed and successfully piloted the VSL/COMSIP best practice guidelines that are being incorporated into the Social Protection Certificate Course being developed by Magomero College.

16.4 Public Works Programme

The Public Works Programme (PWP) is implemented by a number of partners with the Local Development Fund (LDF) under MASAF IV as the main implementing agency, covering all the 35 city, municipality, town and district councils across the country. As of March, 2018, the LDF covered 451,000 households (HHs). Other important implementers are the World Food Programme (WFP) covering 131,596 HHs, Project Concern International's (PCI) NJIRA

Project covering 9,050 HHs, Malawi Floods Emergency Recovery Project (MFERP) covering 153,000 HHs, and United in Building and Advancing Life Expectations (UBALE) Project. The Malawi National Social Support Programme (NSSSC) has just approved the PWP wage rate to MWK900.00 from the previous MWK600.00 per HH per day. Using the Integrated Watershed Management (IWM) approach, the PWP is proving to be an effective instrument in restoring degraded catchment areas and reducing poverty among vulnerable and poor households across the country. The PWP has helped to smoothen household consumption. In addition, it has provided means to households to purchase other basic necessities, including productive assets such as farm inputs. Furthermore, the PWP has built community assets by improving access to markets, health facilities and water reservoirs for fish farming and small scale irrigation. In addition, the PWP has also led to a reduction in deforestation and run-off.

16.5 School Meals Programme

The School Meals Programme (SMP) has an overreaching goal to reduce and prevent all forms of malnutrition and improve school performance of vulnerable children in the targeted schools. Implementation of the programme is coordinated by the MoEST with WFP, Mary Meals, Foundation for Irrigation and Sustainable Development (FISD), Seibo Maria, GIZ-NAPE (Afikepo) and Welthungerhilfe as the main implementing partners. As of March 2018, the programme is operating in 2,665 schools across the country.

16.6 Microfinance Programme

The Government, through the Reserve Bank of Malawi (RBM) has licensed/registered 42 microfinance institutions and has launched the Microfinance Transactions Processing Hub. These microfinance programmes target low income clients through pro-poor inclusive microfinance services. Together, serving up to 233,394 clients, out of which 3,753 had access to micro-insurance products. Currently, a Microfinance Policy was finalised and sent to OPC for cabinet approval. This Microfinance Programme is being coordinated by the MoFEPD.

16.7 Strengthening of Social Support Systems

The existence of weak systems and structures have limited the ability of the MNSSP to achieve its goals and this brings inefficiencies. To ensure that MNSSP II achieves its intended objectives, the Department of Economic Planning and Development (EP&D) is strengthening the social support delivery systems at the national, district and community level. This programme will therefore, ensure that social support interventions share common administrative sub-systems and work together to synchronise the long term goal, vision and mission of the MNSSP II.

So far, the Department has harmonized all committees into the District Social Support Committee (DSSC) and the Community Social Support Committee (CSSC) which will be responsible for all social support and humanitarian interventions. The Department has also developed a common targeting platform, the Unified Beneficiary Registry (UBR) and has developed a Harmonised Data Collection Tool (HDCT) for data collection, which covers a range of social interventions.

16.7 Linkages and Referrals

Although the MNSSP's consumption support instruments such as SCTP have expanded and shown positive impact in achieving their objectives, consumption support in terms of cash alone is not adequate to deal with the multi-dimensional poverty that most of the MNSSP beneficiaries face. That is, connecting households with pre-existing services provided by NGOs, public facilities, or private companies can make the difference between just receiving cash transfers and maximizing the impact of the transfers. Establishment of a Linkages and Referrals System, is therefore, an additional component of the MNSSP II. The Linkages and Referrals system was successfully piloted in Dedza and Mangochi districts and has been scaled up to six more districts.

Chapter 17

PUBLIC ENTERPRISES

17.1 Overview

This chapter highlights the performance of selected commercial statutory bodies during the 2016/17 financial year, as well as providing a brief overview of the mid-year unaudited results up to December 2017 and outlook to June 2018.

Although the economy experienced a recovery in 2017 following the rebound in agricultural production and easing of inflation to an annual average of 11.5 percent, performance of most statutory bodies still remained subdued largely due to slow economic growth and the unfavourable market environment for various products and services. Furthermore, intermittent power supply due to the reduction in hydroelectricity generation impacted economic activities. On the monetary side, the lack of affordable financing, due to high interest rates, continued to impact the level of new investments and the level of indebtedness of statutory bodies. However, the stability of the Kwacha against major trading partners contributed positively to those statutory bodies doing international transactions. In addition, stability of fuel prices on the domestic market assisted in containing operational expenditures for various statutory bodies. Overall, these developments led to a downward revision of the turnover, and thus profit, for statutory bodies in 2016/17.

As at mid-year December 2017, the statutory bodies managed to generate 46 percent, of the overall approved revenues while expenditure was at 33 percent on average. As a direct result of reduced profitability, expected returns in the form of dividends to the Government were also reduced downwards at mid-year, with only 36 percent of the budgeted dividends remitted to the Government. In terms of investments, only 21 percent of the capital expenditure budget was utilized, mostly because of cash flow challenges due to an increase in trade debtors.

The liquidity position for most parastatals worsened due to the buildup of trade debtors, thereby eroding the working capital. As a result, some parastatals resorted to obtaining bank overdrafts to cushion their cash flows. Other parastatals resorted to deferring payment of tax obligations and other trade payables. Borrowing among commercial parastatals also increased, leading to a high gearing position.

Looking ahead to the close of the financial year in June 2018, the prospects among the commercial parastatals suggests improved profitability. Many parastatals have postponed some projects to 2018/19, whilst completing existing ones. Going forward, the Government will strengthen monitoring of the statutory bodies through the shareholder's letters of expectations in order to increase compliance to prudent financial management.

17.1 Financial performance

17.1.1 Water Portfolio

17.1.1.1 Blantyre Water Board

The Blantyre Water Board continued to report losses in 2017. The 2016/17 audited accounts recorded a loss of MWK4.1 billion, worse than the MWK3.5 billion recorded in 2015/16. As at 31st December 2017, the Board made a loss after tax of MWK699 million. Though efforts were being made in reducing non-revenue water and debt collection, high electricity bills continue to pose a big challenge to the Board, taking up almost 46 percent of the Board's monthly operating expenses. This affected both profitability and the liquidity position because funds have been largely committed to the settling of electricity bill arrears. To reduce the backlog of electricity bill arrears the Board agreed with ESCOM to pay MWK500 million every week while remaining current on new bills.

Non-revenue water was still high, although the Board has managed to contain it at 37 percent as at December 2017, from 43 percent in June 2017. The Board has since intensified efforts to reduce non-revenue water further by undertaking major pipe replacement, installing ball valves in reservoirs, replacing faulty meters, conducting meter validation, disconnecting illegal connections and activating lost connections.

The Board's profitability was still poor as indicated by the operating profit margin which stood at -11.7 percent in June 2017 but improved to 25.9 percent in December 2017. However, the continued negative working capital position of the Board puts the Board at a disadvantage; resulting in lower creditability in banks, as well as creating a poor supplier relationship.

The liquidity position of BWB continued to be weak and below the desired level of above 2:1. With a liquidity ratio of 0.25:1 as at 31st December 2017 the Board is still unable to cover its current liabilities as they fall due. Furthermore, the debt ratio stood at 106 percent in 2016/17, meaning the Board was still fully financed by debt rather than owner's equity. However, as at 31st December 2017, the position has slightly improved to 96 percent, reflecting efforts taken by the Board to generate more sales, both through the reduction of non-revenue water, as well as collection of old arrears to avoid unnecessary provisions and write offs.

The Board has a very weak financial leverage position and this is vulnerable to downturns, revealed by its high debt/equity ratio. The Board was still struggling with its receivables management, as the debt receivables days were high at 132 days as at 31st December, 2017. This adverse performance was largely a result of non-payment of outstanding bills by both public and private customers. However, the Board has intensified debt collection by conducting periodic mass

disconnection campaigns and cleaning up of the customer database through customer verification exercises. As a result, the Board intends to reduce debt receivable days to 73 days by close of the financial year.

Table 17.1 shows the financial performance of the Board as at 31st December, 2017.

TABLE 17.1: SELECTED PERFORMANCE STATISTICS FOR BWB

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	17,816,689	7,208,774	13,017,961	9,630,573	8,649,755	7,392,400
Change in revenue, %	-	-45%	35%	11%	17%	44%
Total expenditure	(13,997,600)	(6,527,983)	(14,361,071)	(12,062,648)	(8,812,886)	6,056,925)
Change in expenditures, %	-	-55%	19%	37%	46%	24%
Gross Profit margin, %	21.73	9.59	(11.07)	(27.44)	(2.12)	21.72
Profit/(Loss) after Tax, MWK	684,880.00	(698,992.00)	(4,111,849)	(3,490,048)	(893,780)	(424,613)
Current liabilities, MWK	14,581,739	14,587,169	17,605,575	7,932,935	4,143,212	2,475,009
Current Assets, MWK	4,596,555	4,611,639	4,565,429	3,105,128	3,433,452	2,195,842
Working Capital, MWK	(9,985,184)	(9,975,530)	13,040,146)	(4,827,807)	(709,760)	(279,167)
Liquid ratio	0.25	0.26	0.21	0.32	0.83	0.89
Debt ratio	88%	96%	106%	97%	433%	251%
Trade receivable days	73	132	52	95.19	59	56

Source: Audited Accounts BWB

17.1.1.2 Southern Region Water Board

The Southern Region Water Board registered a profit after tax of MWK596.7 million in the 2016/17 financial year, a further improvement on the previous year's profit after tax of MWK439.4 million. However, as at 31st December 2017, profitability had been reduced, with a profit after tax of only MWK69.7 million realised. Looking ahead to June 2017, the Board projects a profit after tax of MWK193.8 million.

The liquidity position of the Board was good at 1.60:1 in December 2017, which means that the Board is able meet its debt obligations as they fall due. The Board anticipates closing at a very high liquidity level of 4.0:1. The Board demonstrated efficiency in generating revenue through its assets, registering a working capital turnover ratio of 3.3:1. Furthermore, the SRWB maintained its solvency with a

positive working capital of MWK 2.5 billion as at December 2017, indicating its effectiveness in using its working capital.

However, the Board missed on its target to contain non-revenue water at 25 percent. Due to an increased number of stuck meters, it registered a non-revenue water level of 28.5 percent as at 31st December 2017. Trade debtors continued to be another big challenge for the Board. The Board is owed MWK6.6 billion, of which MWK5.8 billion is owed by public debtors, who comprise well over 60 percent of the SWRB customer base. To solve this problem, the Board is piloting an installation of 500 prepaid meters in Zomba. These efforts will enable the Board to reduce the overall debtor days position to 92 days by the end of the 2017/18 financial year.

Table 17.2 shows the financial performance of the Board as at 31st December, 2017.

**TABLE 17.2: SELECTED PERFORMANCE STATISTICS
FOR SRWB**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	8,444,698	3,498,195	7,005,597	4,438,344	2,841,091	2,142,726
<i>Change in revenue, %</i>	<i>141%</i>	<i>-50%</i>	<i>58%</i>	<i>56%</i>	<i>33%</i>	<i>21%</i>
Total expenditure, MWK	(6,867,148)	(3,040,892)	(4,372,698)	(2,763,812)	(2,121,062)	(1,739,257)
<i>Change in expenditures, %</i>	<i>126%</i>	<i>-30%</i>	<i>58%</i>	<i>30%</i>	<i>22%</i>	<i>33%</i>
<i>Gross Profit Margin, %</i>	<i>21%</i>	<i>14%</i>	<i>38%</i>	<i>38%</i>	<i>26.84</i>	<i>19.85</i>
Profit after Tax, MWK	193,766	69,735	596,710	439,383	(54,977)	220,770
Current Assets, MWK	2,675,593	6,885,961	6,124,018	3,191,017	1,937,315	1,666,375
Current liabilities, MWK	669,410	4,381,287	4,024,559	2,001,578	925,426	672,297
Working Capital, MWK	2,006,183	2,504,674	2,099,459	1,189,439	1,011,889	994,078
Current ratio	4.0	1.6	1.5	1.6	2.09	2.48
<i>Debt/Equity, %</i>	<i>3%</i>	<i>19%</i>	<i>48%</i>	<i>38%</i>	<i>36%</i>	<i>24%</i>
Trade receivable days	92		295	231	167.31	203.67

Source: SRWB Audited Accounts

17.1.1.3 Central Region Water Board

The Central Region Water Board registered a profit of MWK163.2 million in the 2016/17 financial year, an improvement from MWK5.7 million in 2015/16. As at 31st December 2017, the Board registered a significant improvement in profit after tax, with a value of MWK186.1 million. However, a lower return of

MWK40 million at 30th June 2018 is projected. This is largely due to the reversal in the average tariff of 33 percent applied at the beginning of the financial year against a new average tariff of 17.5 percent applied from February 2018.

Non-revenue water averaged 29 percent during the current period, an increase from 23 percent in 2016/17. However, looking forward to the close of the financial year, the Board plans to contain non-revenue water at 23 percent through repairs of burst pipes, replacement of old pipe networks, and replacement of old and unserviceable water meters.

The liquidity position slightly improved from 1.10 in 2016/17 to 1.17 as at 31st December 2017. Debt by public institutions remained a major cause of cash flow challenges faced by the Board. Debt currently stands at MWK2.4 billion, of which public institution debt is MWK1.9 billion. To solve this challenge, the Board plans to install 146 prepaid meters in selected institutional and commercial customers and to intensify revenue collection.

Similarly, the Board continues to have a very weak financial leverage with a debt/equity ratio of 177 percent as at 31st December 2017. This shows that the Board's activities are to a greater extent financed by creditor's funds as compared to owner's equity.

Table 17.3 shows the financial performance of the Board as at 31st December, 2017.

**TABLE 17.3: SELECTED PERFORMANCE STATISTICS
FOR CRWB**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	3,702,987	2,064,400	3,103,876	2,535,307	2,016,109	1,405,091
<i>Change in revenue, %</i>	-	-33.49%	0	25.75%	43.49%	6.37%
Total expenditure, MWK	(2,917,774)	(1,469,411)	(2,464,200)	(2,153,632)	(1,875,672)	(1,324,642)
<i>Change in expenditures, %</i>	-	-40.37%	0	14.82%	41.60%	5.20%
Gross Profit Margin,%	21.20	28.82	20.61	15.05	7.42	5.79
Profit after Tax, MWK	40,455	186,061	163,164	5,682	(166,291)	62,201
Current Assets, MWK	1,833,010	2,791,125	2,397,856	1,638,716	909,796	770,154
Current liabilities, MWK	1,405,737	2,382,234	2,185,913	1,863,886	866,964	790,021
Working Capital, MWK	427,273	408,891	211,943	(225,170)	42,832	(19,867)
Current ratio	1.30	1.17	1.10	0.88	1.05	0.97
<i>Debt/Equity, %</i>	146%	177%	183%	185%	200%	113%
Trade receivable days	160	434	246	193	94	141

Source: CRWB Audited accounts

17.1.1.4 Lilongwe Water Board

17.1.1.4 Lilongwe Water Board

The Lilongwe Water Board (LWB) continued to maintain its profitability in 2016/17, with a profit after tax of MWK3.6 billion up from MWK2.5 billion in 2015/16. At mid-year 2017/18, the Board realised MWK3.4 and by the close of the financial year, the Board is expected to realise a net profit after tax of MWK3.3 billion.

However, relative to previous year, the growth in revenue slowed down to 24 percent in 2017/18 compared to 33 percent growth recorded in 2016/17. Water sales volume improved in 2017/18 compared to 2016/17, owing to implementation of a water rationing programme. However, sales revenue was affected by the Government's reversal of the previously approved average tariff adjustment of 30 percent back to 2016/17 tariffs in the months of November and December, 2017.

Non-revenue water averaged 38.9 percent against an annual average target of 33 percent. To attain this target by the close of this financial year, the Board has intensified implementation of the operationalisation of the District Metered Areas, the automation of tank monitoring mechanisms, the replacement of stuck meters and the introduction of tip-off anonymous schemes on illegal connections.

The liquidity position for LWB improved in 2016/17 to 3.39:1, from 2.06:1 in 2015/16. This position was similar at mid-year 2017/18, but it is projected to reduce significantly to 1.72:1 at the close of the 2017/18 financial year. Though the liquidity ratio has reduced, it still shows LWB's ability to cover their current liabilities when they fall due.

As at mid-year the Board continued to have a challenge with high trade debtors owing MWK9.5 billion, of which MWK3 billion is owed by public institutions. The debt/equity ratio was very low at 7 percent as at December 2017, which signifies efforts by management to finance their operations by equity rather than debt. The debt collection days remained high at 340 days as at 31st December 2017, but this is projected to improve to 50 days by the end of the financial year.

Going forward, the Board will continue with the implementation of the Kamuzu Dam water raising, the Lake Malawi Water Source Project and other development projects, which should improve water supply to the city in view of increasing demand.

Table 17.4 shows the financial performance of the Board as at 31st December, 2017.

TABLE 17.4: SELECTED PERFORMANCE STATISTICS FOR LWB

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	20,196,897	10,260,360	16,294,332	12,215,791	9,163,490	5,077,389
Change in revenue, %	24%	-37%	33%	33%	80%	55%
Total expenditure, MWK	(12,886,021)	(4,659,895)	(8,723,910)	8,851,452)	(6,005,811)	(4,439,092)
Change in expenditures, %	48%	-47%	-1%	47%	35%	58%
Gross Profit Margin, %	38%	56%	46%	35%	37%	13%
Profit after Tax, MWK	3,255,259	3,415,932	3,553,253	2,517,478	1,914,680	321,687
Current Assets, MWK	4,238,653	13,253,263	10,812,010	7,190,169	5,200,300	2,707,472
Current liabilities, MWK	2,466,105	3,548,717	3,184,870	3,495,051	1,933,676	2,565,911
Working Capital, MWK	1,772,549	9,704,547	7,627,140	3,695,118	3,266,624	141,561
Current ratio	1.72	3.73	3.39	2.06	2.69	1.06
Debt/Equity, %	6%	7%	7%	108%	100%	130%
Trade receivable days	50	340	164	133	132	

Source: LWB Audited Accounts

17.1.1.5 Northern Region Water Board

Despite reduced sales volume, which was a result of the intermittent power supply, the financial performance of the Northern Region Water Board was better in the first half 2017/18. NRW earned revenues of MWK6.6 billion compared to MWK5.2 billion in 2016/17. This improvement was largely due to the water tariff increase. Overall, the NRW improved its profitability with a profit after tax of MWK66.5 million in 2016/17 compared to a loss after tax of MWK264.8 million in 2015/16. At mid-year 2017/18, the Board realised a profit after tax of MWK182.9 million and looking ahead to June 2018, the Board expects a profit after tax of MWK84.6 billion.

Non-revenue water averaged 34 percent in December 2017, which was an improvement from the June 2016 position of 24 percent.

The debt position for NRW stagnated with debtor days increasing to 326 days as at December 2017. This has become worse, it is mainly due to delays in payment by trade debtors amounting to MWK3.2 billion, up from MWK2.5 billion in 2016/17. Of this amount, MWK1.8 billion is from outstanding water bills by Public Institutions. As a result, the liquidity position further worsened, this can be seen by the reduction in current ratio to 1.2:1 in 2016/17 to 0.9:1 in December 2017. Nevertheless, looking forward to June 2017 the Board expects to improve the debtor days position to 76 days.

Table 17.5 shows the financial performance of the Board as at 31st December, 2017.

**TABLE 17.5: SELECTED PERFORMANCE STATISTICS
FOR NRW**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	3,711,581	6,630,794	5,212,029	4,024,110	2,649,967	3,711,581
Change in revenue, %	(44%)	65%	30%	52%	39%	-44%
Total expenditure, MWK	(2,536,339)	(4,996,639)	(4,446,205)	(3,529,468)	(2,147,221)	(2,536,339)
Change in expenditures, %	(49%)	42%	26%	64%	29%	-49%
Gross Profit Margin, %	33%	27%	16%	15%	21%	33%
Profit after Tax, MWK	84,592	182,900	66,477	(264,786)	700,136	218,163
Current Assets, MWK	(417,206)	1,101,255	(622,407)	405,168	59,106	(417,206)
Current liabilities, MWK	808,221	3,547,163	4,502,707	2,813,854	1,026,189	1,361,414
Working Capital, MWK	24,517	(417,206)	1,101,255	(622,407)	405,168	59,106
Current ratio	2.1	0.9	1.2	0.8	1.4	1.0
Debt/Equity, %	316%	151%	266%	195%	80%	97%
Trade receivable days	72	326	277	132	95	114

Source: NRW Audited Accounts

17.1.2 Property Development and Management

17.1.2.1 Malawi Housing Corporation

The Malawi Housing Corporation financial performance improved in 2016/17. Revenues grew to MWK4.1 billion from MWK3.3 billion in 2015/16 financial year, representing 24 percent growth. Furthermore, the Corporation realised a profit after tax of MWK183.7 million in 2016/17, an improvement from MWK55.2 million in 2015/16. As at December 2017, the Corporation posted a profit after tax of MWK148.7 million. This positive performance largely comes from plot sales during the first half of the year.

However, this good performance was unexpected as the Government had reversed the approved average house rent adjustment of 48 percent to an average house rent adjustment of 43 percent. Moreover, there were continued challenges arising from large unpaid rentals from public institutions, which occupy 85 percent of the Corporation's houses. Currently, the Government owes the MHC MWK1.324 billion, for which the Government was preparing to settle through issuance of a promissory note.

The liquidity position of the Corporation remained low at a current ratio of 0.88:1 as at December 2017. This makes it difficult for the Corporation to meet its short term obligations. The working capital remained negative at MWK634.4 million as at December 2017. Nevertheless, prospects for the position at 30th June 2018

are better. There should be a significant increase in current assets because of a bank loan of MWK6 billion. This loan is to be used for the construction of 200 houses. However, the debt/equity ratio is still very low at 7 percent at December 2017, with prospects of it increasing to 23 percent as at 30th June 2018. This signifies that the Corporation is to a large extent financed by owner's equity compared to debt.

Table 17.6 shows the financial performance of the Board as at 31st December, 2017.

TABLE 17.6: SELECTED PERFORMANCE STATISTICS FOR MHC

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	6,142,306	2,195,920	4,097,794	3,298,131	2,572,279	7,129,456
Change in revenue, %	180%	-46%	24%	28%	-64%	-32%
Total expenditure, MWK	(4,483,674)	(1,864,390)	(3,600,716)	(2,955,344)	(2,654,616)	(2,019,867)
Change in expenditures, %	140%	-48%	22%	11%	31%	19%
Gross Profit Margin, %	50%	21%	13%	11%	-5%	316%
Profit after Tax, MWK	925,565	148,622	183,655	55,198	(110,795)	5,106,251
Current Assets, MWK	19,424,199	4,684,198	4,105,437	3,788,942	3,073,519	2,911,116
Current liabilities, MWK	3,031,806	5,318,585	4,663,164	4,385,667	3,506,920	3,058,480
Working Capital, MWK	16,392,393	(634,387)	(557,727)	(596,725)	(433,401)	(147,364)
Current ratio	6.41	0.88	0.88	0.86	0.88	0.95
Debt/Equity, %	23%	7%	6%	7%	7%	5%
Trade receivable days	22	449	136	173	190	184

Source: MHC Audited Accounts

17.1.2.2 National Construction Industry Council

The performance of the NCIC continued to improve in 2016/17 with revenues increasing to MWK1.5 billion from MWK1.2 billion in 2015/16, representing 30 percent growth. The increase in revenue is mostly due to an increase in registration and subscription fees earned, as a result of the publication of reminders, and verification and compliance exercises conducted by the Council. This resulted in a profit after tax of MWK4.4 million in 2016/17, a rebound compared to a loss after tax of MWK231.5 million realised in 2015/16. Despite realising a loss of MWK61.9 million at mid-year, prospects to the end of the 2017/18 financial year indicate that the Council expects a profit after tax of MWK242.8 million.

The liquidity position of the Council continued to be positive, with the current ratio at 3.8:1 as at 31st December 2017. The working capital remained positive at MWK262.5 million as at mid-year, from MWK319.7 million in June 2017. Debt collection days improved to 83 days in 2016/17, compared to 117 days in 2015/16, with prospects to June 2018 indicating a further improvement to 49 days.

Table 17.7 shows the financial performance of NCIC as at 31st December, 2017.

**TABLE 17.7: SELECTED PERFORMANCE STATISTICS
FOR NCIC**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	2,104,968	848,595	1,511,734	1,161,096	919,703	677,471
<i>Change in revenue, %</i>	<i>148%</i>	<i>-44%</i>	<i>30%</i>	<i>26%</i>	<i>36%</i>	<i>-29%</i>
Total expenditure, MWK	(1,849,929)	(927,702)	(1,542,976)	(1,248,639)	(947,754)	(720,508)
<i>Change in expenditures, %</i>	<i>99%</i>	<i>-40%</i>	<i>24%</i>	<i>32%</i>	<i>32%</i>	<i>42%</i>
<i>Gross Profit Margin, %</i>	<i>13%</i>	<i>-7%</i>	<i>0%</i>	<i>-20%</i>	<i>8%</i>	<i>0%</i>
Profit after Tax, MWK	242,863	(61,920)	4,360	(231,545)	69,365	1,379
Current Assets, MWK	450,262	356,301	430,020	432,051	459,654	388,883
Current liabilities, MWK	147,295	93,830	110,286	127,114	79,547	87,970
Working Capital, MWK	302,967	262,471	319,734	304,937	380,107	300,914
Current ratio	3.06	3.80	3.90	3.40	5.78	4.42
<i>Debt/Equity, %</i>	<i>30%</i>	<i>16%</i>	<i>12%</i>	<i>14%</i>	<i>8%</i>	<i>11%</i>
Trade receivable days	49	96	83	117	109	109

Source: NCIC Audited Accounts

17.1.3 Power Portfolio

17.1.3.1 Electricity Supply Commission of Malawi

The performance of the Electricity Supply Commission of Malawi (ESCOM) in 2016/17 declined as compared to 2015/16. Revenues increased by 13 percent to MWK84.7 billion. In 2015/16 revenues increased by 33 percent to MWK71.8 billion revenues. Profit after tax fell by 7 percent to MWK6.0billion in 2016/17 from MWK7.9billion in 2015/16. This is largely attributed to the drop in the level of energy units received for transmission, 1,749.44 megawatts in 2016/17 compared to 1,973.84 megawatts in 2015/16. This decline was as a result of low water levels in Lake Malawi and the Shire River experienced in 2016/17, which resulted in reduced levels of energy generation.

As at 31st December 2017, ESCOM's financial performance worsened further, with the Corporation registering a loss after tax of MWK6.3 billion. Prospects to end of the financial year indicate that ESCOM will register a profit after tax of only MWK149.1 million. This poor performance is largely attributed to the deferred 6.72 percent tariff adjustment which was supposed to be effected in November 2016, the increase in tariff by EGENCO from MWK19/Kwh to MWK25/KWh and the cost of hiring of diesel gensets from Aggreko Projects International Limited, which were purchased at an average MWK191.88 million.

Following these developments, the current liabilities of ESCOM have been increasing higher than the current assets, thereby resulting in a liquidity squeeze for ESCOM, as shown by the current ratio which went down to 1.88:1 in 2016/17 from 2.5:1 reported in 2015/16. This position is projected to further go down to 1.46:1 at the close of the 2017/18 financial year. Consequently, the working capital for the Corporation also declined to MWK21.4 billion in 2016/17 from MWK34.8 billion in 2015/16 and prospects indicate that it will further decline to MWK16.4 billion by the close of 2017/18 financial year.

Nevertheless, ESCOM recorded a decrease in the trade receivable days to 98 days in 2016/17 from 110 days in 2015/16 and a further decline to 86 day is expected by June 2018. This is largely attributed to the installation of prepaid meters. However, the debt/equity position worsened to 298 percent as at December 2017 from 181 percent in June 2017 and 107 percent in June 2016, implying that ESCOM is employing more debt to finance its operations than equity. This is not sustainable and dangerous as the equity base has completely been consumed with debt. Table 17.8 shows the financial performance of ESCOM as at 31st December, 2017.

**TABLE 17.8: SELECTED PERFORMANCE STATISTICS
FOR ESCOM**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	98,601,321	39,291,354	84,695,310	71,819,253	53,806,516	46,807,343
Change in revenue, %	151%	-54%	13%	33%	15%	36%
Total expenditure, MWK	(101,764,614)	(46,863,853)	(78,151,745)	(62,488,251)	(43,025,996)	(31,885,562)
Change in expenditures, %	117%	-53%	25%	45%	35%	48%
Gross Profit Margin, %	0.1%	-17%	8%	17%	-80%	-70%
Profit after Tax, MWK	149,146	(6,253,760)	6,026,934	7,903,365	(42,757,144)	(36,848,163)
Current Assets, MWK	51,969,197	49,489,190	45,717,877	57,234,228	44,139,810	31,849,838
Current liabilities, MWK	35,547,140	38,043,981	24,295,154	22,425,155	7,487,155	5,835,771
Working Capital, MWK	16,422,057	11,445,209	21,422,723	34,809,073	36,652,655	26,014,067
Current ratio	1.46	1.30	1.88	2.55	5.90	5.46
Debt/Equity, %	269%	298%	181%	107%	68%	74%
Trade receivable days	86	119	98	110	90	68

Source: ESCOM Audited Accounts

17.1.3.2 National Oil Company of Malawi (NOCMA)

The National Oil Company of Malawi's performance in the 2016/17 financial year was significantly affected by a period of trading inactivity, between October 2016 and June 2017. During this period, negotiations on NOCMA's fuel market

share were taking place. As such, NOCMA only traded between 1st July and 1st October 2016, with only 7,766 litres of fuel sold because Petroleum Importers Limited (PIL) stopped buying fuel products from NOCMA. With this development, only MWK620 million was generated as revenues as compared to MWK1,499 million generated in 2015/16. This resulted into a loss after tax of MWK893.4 million in 2016/17, a position which was maintained as at mid-year of 2017/18 where only MWK562.8 million was generated with a loss after tax of MWK825.1 million. However, prospects to the end of the financial year indicate a profit after tax of MWK11.0 million, largely due to the commencement of trading operations in July 2017, pending the signing of the 50-50 importation agreement with PIL. However, profitability was still adversely affected by NOCMA holding fuel stocks in its depots for strategic purposes.

The liquidity position for NOCMA slightly improved with a current ratio of 1.45:1 in 2016/17 up from 1.23:1 in 2015/16 financial year, but looking forward to close of the financial year, the current ratio is projected to further deteriorate to 1.25:1, which shows that NOCMA needs to be cautious and work on improving its cash flow position. However, the working capital for NOCMA is good and growing.

Looking ahead, NOCMA has good prospects for future growth and profitability, with the 50-50 fuel import arrangement, as well as the USD75 million PTA Bank Trade finance facility. Table 17.9 shows the financial performance of NOCMA as at 31st December, 2017.

**TABLE 17.9: SELECTED PERFORMANCE STATISTICS
FOR NOCMA**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	3,026,425	562,843	620,018	1,498,522	973,189	338,425
Change in revenue, %	388%	-9%	-59%	54%	188%	-56%
Total expenditure, MWK	(3,015,413)	(1,387,969)	(1,513,449)	(1,248,909)	(580,675)	(336,475)
Change in expenditures, %	99%	-8%	21%	115%	73%	-170%
Gross Profit Margin, %	-100%	-573%	-586%	115%	272%	9%
Profit after Tax, MWK	11,012	(825,126)	(893,431)	159,565	269,004	(7,087)
Current Assets, MWK	32,879,141	31,850,246	12,012,803	11,495,479	15,182,280	33,447,578
Current liabilities, MWK	25,881,523	26,089,347	8,294,568	9,322,562	14,255,105	32,766,592
Working Capital, MWK	6,997,618	5,760,899	3,718,235	2,172,917	927,175	680,986
Current ratio	1.27	1.22	1.45	1.23	1.07	1.02
Debt ratio %	78%	83%	50%	69%	92%	97%
Trade Receivable days						

Source: NOCMA Audited Accounts

17.1.3.3 Malawi Energy Regulatory Authority (MERA)

The performance of the Malawi Energy Regulatory Authority (MERA) achieved a remarkable growth in both revenues and expenditures in 2016/17. The revenue for the Authority grew by 39 percent to MWK5.5 billion in 2016/17 from MWK3.9 billion in 2015/16. There was an increase in expenses by 37 percent to MWK3.2 billion in 2016/17 from MWK2.4 billion in 2015/16. Thus, profit after tax for the Authority of MWK2.2 billion was realised in the 2016/17 financial year. The Authority used most of the surplus to invest in construction of an office complex, which is still under way during the 2017/18 financial year.

The liquidity position for the Authority was good with its current ratio at 1.8:1 in the 2016/17 financial year, though slightly declining from 2.2:1 in 2015/16, owing to a significant decline current assets to MWK11.8 billion compared to MWK20.2 billion in 2016/17. Consequently, the working capital also declined to MWK5.2 billion in 2017 from MWK11.0 billion in 2015/16. Table 17.10 shows the financial performance of MERA as at 31st December, 2017.

**TABLE 17.10: SELECTED PERFORMANCE STATISTICS
FOR MERA**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	6,121,261	3,317,795	5,464,484	3,927,739	2,547,020	1,704,968
<i>Change in revenue, %</i>	<i>12%</i>	<i>-39%</i>	<i>39%</i>	<i>54%</i>	<i>49%</i>	<i>56%</i>
Total expenditure, MWK	(3,472,360)	(1,736,180)	(3,248,484)	(2,377,350)	(1,393,112)	(1,074,043)
<i>Change in expenditures, %</i>	<i>7%</i>	<i>-47%</i>	<i>37%</i>	<i>71%</i>	<i>30%</i>	<i>48%</i>
<i>Gross Profit Margin, %</i>	<i>47%</i>	<i>52%</i>	<i>47%</i>	<i>40%</i>	<i>46%</i>	<i>37%</i>
Profit after Tax, MWK	2,648,901	1,581,615	2,216,000	1,930,993	1,373,348	743,145
Current Assets, MWK	22,379,261	24,902,851	11,808,318	20,212,259	22,411,048	26,823,189
Current liabilities, MWK	16,894,913	10,874,966	6,636,726	9,228,193	6,806,489	21,655,747
Working Capital, MWK	5,484,348	14,027,885	5,171,592	10,984,066	15,604,559	5,167,442
Current ratio	1.32	2.29	1.78	2.19	3.29	1.24
<i>Debt ratio %</i>	<i>63%</i>	<i>42%</i>	<i>40%</i>	<i>45%</i>	<i>30%</i>	<i>81%</i>

Source: MERA Audited Accounts

17.1.3.4 Electricity Generation Company (Malawi) Limited (EGENCO)

The performance of the Electricity Generation Company (Malawi) Limited (EGENCO) in 2016/17 was only for the six months from January to July 2017 after ESCOM was unbundled. During this period, the two companies agreed on a revenue sharing arrangement of MWK19/KWh of energy. This resulted in

realisation of revenues amounting to MWK14.9 billion, with expenditures amounting to MWK9.9 billion and profit after tax of MWK2.8 billion. In the 2017/18 financial year, the company maintained profitability with a profit after tax of MWK6.8 billion realised at mid-year, while at the close of the financial year, the Company expects to close with a profit after tax of MWK6.3 billion. The company has used these profits, in addition to the loan facility, to invest in solar power plants and diesel generators, in order to increase energy generation.

Debt collection days has deteriorated to 336 day at mid-year from 196 days in June 2017, largely due to huge liabilities, with ESCOM alone owing MWK21 billion as at 31st December. The liquidity position for EGENCO was strong, with a current ratio of 7.56:1 at the mid-year. This is mainly down to a loan facility for investments in generators and a bank overdraft that had just been obtained with local banks, but had not yet been utilised, as at the time of reporting. Thus, looking ahead, the current ratio is projected to close at a moderate level of 2.6:1, which is a good indication of the ability of the Company to meet its obligations as they fall due. Table 17.11 shows the financial performance of EGENCO as at 31st December, 2017.

**TABLE 17.11: SELECTED PERFORMANCE STATISTICS
FOR EGENCO**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000
Total revenue, MWK	45,144,629	18,600,857	14,875,904
<i>Change in revenue, %</i>	<i>203%</i>		
Total expenditure, MWK	(34,299,928)	(9,130,933)	(9,859,157)
<i>Change in expenditures, %</i>	<i>248%</i>		
<i>Gross Profit Margin, %</i>	<i>24%</i>	<i>51%</i>	<i>34%</i>
Profit after Tax, MWK	6,331,291	6,813,073	2,824,643
Current Assets, MWK	17,347,213	25,022,053	18,548,355
Current liabilities, MWK	6,800,756	3,311,397	9,324,970
Working Capital, MWK	10,546,457	21,710,656	9,223,385
Current ratio	2.6	7.56	1.99
<i>Debt ratio %</i>	<i>138%</i>	<i>20%</i>	<i>27%</i>
Trade Receivable days	30.4	336	195

Source: EGENCO Audited Accounts

17.1.4 Telecommunication Portfolio

17.1.4.1 Malawi Posts Corporation

The revenue performance of the Malawi Posts Corporation (MPC) improved in 2016/17 compared with its position reported in 2015/16. Revenues grew by 30 percent to MWK4.5 billion from MWK3.4 billion. However, expenses grew more than revenues by 24 percent, to MWK4.8 billion from MWK4.1 billion during the same period. This resulted into a worsening of the loss after tax to MWK292.3 million, compared to MWK1.4 billion profit after tax reported in 2015/16. However, as at December 2017, the Corporation posted a profit after tax of MWK684.1 million largely as a result of profit of MWK575 million realised from the sale of warehouses.

However, at the mid-year, the MPC's liquidity position was very weak with a current ratio of 0.54:1 a decline from the 2016/17 position of 0.66:1. This signifies that MPC still has inadequate resources to meet its current debt obligations as they fall due. Furthermore, the working Capital was still in negative signifying that it had inadequate working capital to finance its day-to-day operations.

The current liabilities for the Corporation increased to MWK3.97 billion in 2016/17 from MWK3.68 billion reported in 2015/16. However, this has decreased to MWK3.10 at mid-year 2017/18. The Corporation reported trade receivable days position of 156 days in December 2017, with prospects of reducing this position to 48 days by close of the 2017/18 financial year. The debt-to-equity position had worsened to 80 percent in 2016/17 from 61 percent in 2015/16, with prospects for an improvement to 34 percent by the close of the 2017/18 financial year.

Table 17.11 shows the financial performance of MPC as at 31st December, 2017.

**TABLE 17.12: SELECTED PERFORMANCE STATISTICS
FOR MPC**

Performance targets	Outlook to 30th June <u>2018</u>	2017/18 (half year) <u>K'000</u>	2016/17 (Audited) <u>K'000</u>	2015/16 (Audited) <u>K'000</u>	2014/15 (Audited) <u>K'000</u>	2013/14 (Audited) <u>K'000</u>
Total revenue, MWK	4,737,247	2,914,030	4,463,236	3,424,041	3,283,013	3,239,819
Change in revenue, %	6%	-15%	30%	4%	1%	24%
Total expenditure, MWK	(4,443,955)	(2,229,881)	(4,755,543)	(3,820,333)	(3,580,328)	(3,273,184)
Change in expenditures, %	-7%	-42%	24%	7%	9%	55%
Gross Profit Margin, %	6%	24%	-7%	-12%	-10%	-1%
Profit after Tax, MWK	293,292	684,149	(292,307)	1,447,473	1,056,577	(171,100)
Current Assets, MWK	1,828,491	1,685,233	2,601,073	2,264,171	2,164,866	1,731,556
Current liabilities, MWK	3,147,118	3,097,556	3,970,784	3,677,012	3,355,279	2,479,689
Working Capital, MWK	(1,318,627)	(1,412,323)	(1,369,711)	(1,412,841)	(1,190,413)	(748,133)
Current ratio	0.6	0.54	0.66	0.62	0.65	0.70
Debt/Equity, %	34%	31%	80%	61%	78%	109%
Trade Receivable days	48	156	126	151	122	142

Source: MPC Audited Accounts

17.1.5. Agriculture portfolio

17.1.5.1 National Food Reserve Agency (NFRA)

The performance of the National Food Reserve Agency (NFRA) remained poor in 2015/16 with a net loss of MWK233.9 million as compared to a net loss of MWK1.5 billion in 2014/15. However, as of December 2016, the Agency registered a net surplus of MWK8.13 billion. This performance was largely due to the subvention of MWK8.31 billion received was higher than the budget of MWK625 million and that total expenditure was less than the budget by 39 percent.

During the first half of 2016/17, the NFRA handled a total tonnage of 163,615 metric tonnes comprising 22,217 metric tonnes of carryover stocks, 91,398 metric tonnes of Strategic Grain Reserves receipts, and 49,432 metric tonnes Strategic Grain Reserves drawdowns. Furthermore, the NFRA released 49,432 metric tonnes for humanitarian response.

The liquidity position of the NFRA improved to 3.29 in December 2016, from 1.85:1 at the end of 2015/16. This implies that the Agency's current assets were 3.29 times more than its current liabilities. The debt-to-equity position also improved to 37 percent at December 2016, from 155 percent at the end of 2015/16, indicating that the Agency was being financed to a large extent through owner's equity. Table 17.13 shows the financial performance of NFRA as at 31st December, 2016.

**TABLE 17.13: SELECTED PERFORMANCE STATISTICS
FOR NFRA**

Performance targets	Outlook to 30th June 2017	2016/17 (half year) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000	2012/13 (Audited) K'000
Total revenue	8,837,801	918,349	1,888,646	1,677,560	1,629,786	677,061
Change in revenue, %		-51%	13%	3%	141%	-74%
Total expenditure	(702,963)	(1,152,247)	(3,471,124)	(1,922,732)	(3,070,540)	(733,264)
Change in expenditures, %		-67%	81%	-37%	319%	-58%
Profit after Tax	8,134,838	(233,898)	(1,582,478)	(245,172)	(1,377,622)	(32,509)
Current Assets	27,470,994	23,608,917	11,378,718	12,929,646	5,353,816	7,946,247
Current liabilities	8,350,690	12,740,847	143,114	996,005	1,690,993	3,270,462
Working Capital	19,120,304	10,868,070	11,235,604	11,933,641	3,662,823	4,675,785
Current ratio	3.29	1.85	79.51	12.98	3.17	2.43
Debt/Equity, %	37%	155%	37%	38%	132%	1
Trade Receivable Days	155	214	41	37	138	620

Source: NFRA Audited Accounts

17.1.6 Health Portfolio

17.1.6.1 Pharmacy, Medicines and Poisons Board (PMPB)

The Pharmacy, Medicines and Poisons Board (PMPB) maintained a good revenue performance during the 2016/17 financial year even though total revenues declined by 3 percent to MWK1.28 billion from MWK1.33 billion in 2015/16. However, expenditures increased by 61 percent, from MWK564.8 million in 2015/16 to MWK907.4 million in 2016/17.

In terms of the Board's liquidity, it remained very strong with a current ratio of 4.4:1 in 2016/17, meaning that the PMPB is capable of meeting its current liabilities as they fall due with its existing current assets. The Board has maintained a low debt-to-equity position over the years and it further lowered to 10 percent in 2016/17. The institution was able to collect outstanding customer invoices in an average of 49 days in 2016/17. Table 17.14 shows the financial performance of the Board as at 31st December, 2017.

**TABLE 17.14: SELECTED PERFORMANCE STATISTICS
FOR PMPB**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	1,759,735	1,742,137	1,283,675	1,327,862	657,561	454,194
Change in revenue, %	1%	36%	-3%	102%	45%	35%
Total expenditure, MWK	(1,302,231)	(482,199)	(907,431)	(564,803)	(461,632)	(383,222)
Change in expenditures, %	170%	-47%	61%	22%	20%	34%
Gross Profit Margin, %	16%	22%	23%	123%	36%	20%
Profit after Tax, MWK	250,456	138,875	306,171	787,025	199,151	73,565
Current Assets, MWK	247,857.2	482,129.0	805,891	759,258	429,069	263,368
Current liabilities, MWK	136,489.1	178,272.0	181,598	158,146	102,577	116,336
Working Capital, MWK	122,150	304,706	624,293	601,112	326,492	147,031
Current ratio	2.0	2.7	4.4	4.8	4.2	2.3
Debt /equity ratio %	7%	9%	10%	10%	154%	230%
Trade Receivable Days	31	74	49	34	30	52

Source: PMPB Audited Accounts

17.1.7 Labour and Manpower Development

17.1.7.1 Technical Education and Vocational Training Authority (TEVETA)

TEVETA continued to perform well, in terms of revenue, in the 2016/17 financial year, with revenues registering a slight decline by 3 percent to MWK6.04 billion from MWK6.21 billion reported in 2015/16. However, expenditure during the same period grew by 48 percent to MWK6.4 in 2016/17 from MWK4.3 billion reported in 2015/16, resulting into a loss after tax of MWK392 million in 2016/17

compared to a surplus of MWK1.9 billion reported in 2015/16. The increase in expenditure is largely attributed to the Community College Programme which has put pressure on the available resources. However, at mid-year of the 2017/18 financial year, the Authority posted a profit after tax of MWK670.7 million and the prospects to the close of the financial year indicates a profit after tax of MWK120.3 million

The current ratio was maintained at 2.7:1 in the 2016/17 financial year. As at mid-year 2017/18 the current ratio had increased to 4.7:1, but it is projected to close the year at a moderate position of 1.69:1, which still indicates the ability of the Authority to meet its short-term obligations. The Authority's working capital also improved to MWK2.5 billion at mid-year 2017/18 from MWK2.2 in June 2017.

Table 17.15 shows the financial performance of TEVETA as at 31st December, 2017.

**TABLE 17.15: SELECTED PERFORMANCE STATISTICS
FOR TEVETA**

Performance targets	Outlook to 30th June <u>2018</u>	2017/18 (half year) <u>K'000</u>	2016/17 (Audited) <u>K'000</u>	2015/16 (Audited) <u>K'000</u>	2014/15 (Audited) <u>K'000</u>	2013/14 (Audited) <u>K'000</u>
Total revenue, MWK	5,907,300	3,111,230	6,035,815	6,211,657	3,984,553	2,646,599
Change in revenue, %	-2%		-3%	56%	51%	44%
Total expenditure, MWK	(5,787,005)	(2,440,579)	(6,427,791)	(4,336,723)	(3,784,165)	(2,205,350)
Change in expenditures, %	-10%		48%	15%	72%	22%
Gross Profit Margin, %	2%	23%	-7%	42%	5%	18%
Profit after Tax, MWK	120,295	670,651	(391,976)	1,874,934	200,388	441,249
Current Assets, MWK	3,365,800	3,229,952	3,621,215	3,932,638	1,622,905	904,509
Current liabilities, MWK	2,257,319	687,169	1,342,092	1,458,337	963,312	242,358
Working Capital, MWK	1,108,481	2,542,783	2,279,123	2,474,301	659,593	662,151
Current ratio	1.49	4.70	2.70	2.70	1.68	3.73
Debt /equity ratio %	83%	22%	49%	42%	53%	15%
Trade Receivable Days	206	231	168	305	141	76

Source: TEVETA Audited Accounts

17.1.7.2 Malawi Institute of Management (MIM)

The Malawi Institute of Management's (MIM) performance continued to worsen during the 2016/17 financial year, and it was the sixth year of losses experienced by the MIM. In year under review, MIM reported a loss after tax of MWK354.3 million against a loss of MWK58.2 million reported in 2015/16. As at mid-year, a further loss of MWK39.9 million was reported and prospects to the close of the 2017/18 financial year indicates another loss of MWK309 million. This is

largely due to MIM incurring increased expenditures annually against dwindling revenue generation, owing to low patronage of MIM short courses and academic programmes, as well as a failure to attract high value consultancies as clients who currently prefer to hire individual consultants.

In terms of the Institute's liquidity, it remained very weak with a current ratio of 0.4:1 in 2016/17. This position means that MIM is not capable of meeting its current liabilities as they fall due with existing current assets. Furthermore, the Institute has maintained a high debt-to-equity position over the years. In addition, the debt collection days are also high as most of its resources are tied up in unpaid bills with its customers.

Going forward, the Management of MIM developed strategies to turn around the situation which includes operationalising the Malawi School of Government through incorporation of the Malawi Institute of Management and the Staff Development Institute. In addition, MIM has also introduced its own degree programmes at both undergraduate and postgraduate levels. Table 17.16 shows the financial performance of MIM as at 31st December, 2017.

**TABLE 17.16: SELECTED PERFORMANCE STATISTICS
FOR MIM**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	1,175,309	420,396	1,032,418	1,070,667	1,029,031	946,891
<i>Change in revenue, %</i>	<i>180%</i>	<i>-59%</i>	<i>-4%</i>	<i>4%</i>	<i>9%</i>	<i>24%</i>
Total expenditure, MWK	(1,426,566)	(434,723)	(1,390,684)	(1,132,180)	(1,084,114)	(999,284)
<i>Change in expenditures, %</i>	<i>228%</i>	<i>-69%</i>	<i>23%</i>	<i>4%</i>	<i>8%</i>	<i>10%</i>
<i>Gross Profit Margin, %</i>	<i>-22%</i>	<i>-4%</i>	<i>-37%</i>	<i>-6%</i>	<i>-108%</i>	<i>-106%</i>
Profit after Tax, MWK	(309,013)	(39,775)	(354,273)	(58,208)	(1,087,756)	(981,607)
Current Assets, MWK	2,392,250	2,068,128	424,385	805,389	780,660	543,303
Current liabilities, MWK	730,382	1,103,074	1,059,150	1,065,153	999,846	735,197
Working Capital, MWK	1,661,868	965,054	(634,765)	(259,764)	(219,186)	(191,894)
Current ratio	3.28	1.87	0.40	0.76	0.78	0.74
<i>Debt /equity ratio %</i>	<i>167%</i>	<i>402%</i>	<i>174%</i>	<i>129%</i>	<i>119%</i>	<i>93%</i>
Trade Receivable Days	296	296	107	212	194	157

Source: MIM Audited Accounts

17.1.8 Industry and Trade

17.1.8.1 Malawi Bureau of Standards (MBS)

The Malawi Bureau of Standards (MBS) continued to perform well in the 2016/17 financial year with total revenues increasing to MWK3.7 billion from MWK2.4 billion in 2015/16, representing 56 percent growth. Concurrently, expenditures grew by 28 percent to MWK2.7 billion from MWK2.1 billion in 2015/16. This resulted in the Bureau realising a profit after tax of MWK1.1 billion in 2016/17. The Bureau invested a significant portion of the surplus in the construction of new MBS offices and a modern laboratory, but it was also able to remit part of the surplus to the Government.

The Bureau's liquidity remained very strong with a current ratio of 5.5:1 in 2016/17 up from 4.8:1 in 2015/16, implying that MBS is capable of meeting its current liabilities as they fall due with existing current assets. The Bureau was able to collect outstanding customer invoices in an average of 21 days in December 2017.

Looking forward, to June 2018, the Bureau anticipates continued positive performance with a profit after tax of MWK832 million.

Table 17.17 shows the financial performance of the Bureau as at 31st December, 2017.

**TABLE 17.17: SELECTED PERFORMANCE STATISTICS
FOR MBS**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	4,142,415	2,056,076	3,720,337	2,390,963	2,229,250	1,921,840
<i>Change in revenue, %</i>	101%	-45%	56%	7%	16%	57%
Total expenditure, MWK	(3,310,460)	(1,380,448)	(2,664,757)	(2,085,305)	(1,943,627)	(1,565,014)
<i>Change in expenditures, %</i>	140%	-48%	28%	7%	24%	68%
<i>Gross Profit Margin, %</i>	20%	33%	28%	13%	13%	20%
Profit after Tax, MWK	831,955	675,628	1,055,580	397,574	368,621	409,076
Current Assets, MWK	1,974,723	2,752,295	2,450,612	1,488,303	1,217,366	1,044,902
Current liabilities, MWK	375,213	605,572	438,619.00	132,448	66,440	103,992
Working Capital, MWK	1,599,510	2,146,723	2,011,993	1,355,855	1,150,926	940,910
Current ratio	5.26	4.54	5.59	11.24	18.32	10.05
<i>Debt /equity ratio %</i>	6%	10%	10%	5%	3%	6%
Trade Receivable Days	31	21	13	44	30	38

Source: MBS Audited Accounts

17.1.9 Tourism

17.1.9.1 Malawi Gaming Board (MGB)

The Malawi Gaming Board (MGB) continued to perform well in the 2016/17 financial year with total revenues increasing by 24 percent to MWK674.4 million from MWK544.5 million registered in 2015/16. Expenditures also increased by 24 percent to MWK540.5 million from MWK435.6 million in the same period. As a result, the Board realised a profit after tax of MWK78.8 million in 2016/17, a slight increase from MWK72.2 million reported in the 2015/16 financial year. The main challenge faced by the Board is getting operators to roll out their gaming operations in time once licensed, this affects revenue generation. In addition, the penalties meted out are not as easy to collect as anticipated.

The Board's liquidity remained very strong with a current ratio of 4.1:1 in 2016/17, with prospects to close the financial year 2017/18 at 18.98:1. This implies that the MGB is capable of meeting its current liabilities as they fall due with existing current assets. The Board continued to maintain a low debt-to-equity position over the years

Table 17.18 shows the financial performance of the MGB as at 31st December, 2017.

**TABLE 17.18: SELECTED PERFORMARNE STATISTICS
FOR MGB**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	852,424	405,005	674,393	544,477	301,313	259,941
Change in revenue, %	110%	-40%	24%	81%	16%	3%
Total expenditure, MWK	(737,553)	(302,392)	(540,536)	(435,590)	(255,618)	(181,821)
Change in expenditures, %	144%	-44%	24%	70%	41%	45%
Gross Profit Margin, %	31%	28%	22%	23%	16%	31%
Profit after Tax, MWK	114,872	102,613	78,711	72,177	88,334	120,759
Current Assets, MWK	351,162	359,914	420,885	422,544	346,217	393,272
Current liabilities, MWK	18,498	33,245	102,609	25,508	7,068	9,867
Working Capital, MWK	332,664	326,670	318,275	397,036	339,149	383,406
Current ratio	18.98	10.83	4.10	16.57	48.98	39.86
Debt /equity ratio %	2%	4%	15%	4%	1%	2%
Trade Receivable Days	124	123	104	96	118	81

Source: MGB Audited Accounts

17.1.10 Transport Portfolio

17.1.10.1 Airport Development Limited (ADL)

Airport Development Limited (ADL) continued to be profitable in the 2016/17 financial year. Total revenues increased by 19 percent to MWK1.95 billion compared to MWK1.6 billion reported in the 2015/16 financial year. This translated into a profit after tax of MWK474.4 in 2016/17. As at December 2017, profitability of ADL was maintained with a profit after tax of MWK123.7 and prospects to 30 June 2017 indicate that the Company will close with a profit after tax of MWK233 million. Though profitability is expected to decline from 2016/17 to 2017/18, long term prospects are positive due to refurbishments at Kamuzu International Airport terminal and the modernisation of the navigation aid equipment.

ADL's liquidity remains steady with a current ratio of 1.47 in 2016/17, from 1.37:1 in 2015/16. As at mid-year, the current ratio declined to 0.87:1, implying that the company is struggling to meet its current liabilities as they fall due with existing current assets. This is worsened by the long debt collection days, signifying that the resources are tied up with the debtors. Table 17.19 shows the financial performance of ADL as at 31st December, 2017.

**TABLE 17.19: SELECTED PERFORMANCE STATISTICS
FOR ADL**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	2,075,240	1,037,620	1,946,269	1,634,714	1,022,113	978,559
Change in revenue, %	100%	-47%	19%	60%	4%	11%
Total expenditure, MWK	(1,842,256)	(913,953)	(1,446,301)	(1,493,928)	(898,351)	(825,671)
Change in expenditures, %	102%	-37%	-3%	66%	9%	0%
Gross Profit Margin, %	12%	12%	29%	11%	12%	16%
Profit after Tax, MWK	232,984	123,667	74,415	127,972	123,762	152,888
Current Assets, MWK	1,032,946	565,642	1,092,340	767,025	475,413	455,643
Current liabilities, MWK	735,858	668,557	743,434	560,613	356,154	407,280
Working Capital, MWK	297,088	(102,915)	348,906	206,412	119,259	48,363
Current ratio	1.40	0.85	1.47	1.37	1.33	1.12
Debt /equity ratio %	5%	3%	3%	3%	2%	5%
Trade Receivable Days	103	313	178	196	146	145

Source: ADL Audited Accounts

17.1.10.2 Lilongwe Handling Company (LIHACO)

The Lilongwe Handling Company (LIHACO) maintained a positive performance in 2016/17 with total revenues increasing by 26 percent to MWK3.0 billion from MWK2.4 billion in 2015/16. Growth in expenditures was slower by 15 percent to MWK2.4 billion from MWK2.1 billion, thereby giving an increased level of profit after tax of MWK548.6 million in 2016/17 from MWK108.2 million in 2015/16. As at December 2017, a profit after tax of MWK41.5 million was reported and prospects to the end of the 2017/18 financial year indicates profit after tax of MWK528.6 million.

LIHACO's liquidity slightly improved in 2016/17 with a current ratio of 1.13:1 compared to 0.96:1 in 2015/16. However, the situation worsened at mid-year 2017/18, with a current ratio of 0.56:1. There are prospects of a slight improvement to 0.80:1 by the close 2017/18. This implies that the Company is not capable of meeting its current liabilities as they fall due with existing current assets. The Company was able to collect outstanding customer invoices in an average of 71 days as at December 2017.

Looking ahead, the LIHACO plans to increase its revenue base by providing additional services within the transport and tourism sector, as the current trends in the airline industry have not been favourable, with most airlines preferring to operate smaller aircrafts into Malawi based on demand for air travel. This trend has negatively affected the revenues for LIHACO, hence the need for new revenue streams. Table 17.20 shows the financial performance of the LIHACO as at 31st December, 2017.

**TABLE 17.20: SELECTED PERFORMANCE STATISTICS
FOR LIHACO**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	3,033,986	1,530,628	3,035,632	2,408,635	1,839,275	1,384,607
Change in revenue, %	98%	-50%	26%	31%	33%	65%
Total expenditure, MWK	(2,594,739)	(1,430,161)	(2,393,773)	(2,078,890)	(1,809,097)	(1,190,901)
Change in expenditures, %	81%	-40%	15%	15%	52%	51%
Gross Profit Margin, %	-17%	-7%	-27%	-16%	-2%	-16%
Profit after Tax, MWK	528,632	41,506	548,631	269,812	10,890	168,397
Current Assets, MWK	783,194	553,065	816,367	846,267	512,826	481,179
Current liabilities, MWK	973,793	1,085,649	723,348	879,065	772,108	336,216
Working Capital, MWK	(190,599)	(532,584)	93,019	(32,798)	(259,282)	144,963
Current ratio	0.80	0.51	1.13	0.96	0.66	1.43
Debt ratio %	58%	61%	58%	86%	92%	63%
Trade Receivable Days	51	73	71	82	32	74

Source: LIHACO Audited Accounts

17.1.11 Finance

17.1.11.1 Malawi Enterprise Development Fund (MEDF)

The Malawi Enterprise Development Fund (MEDF) continued to report a negative financial performance. In the 2016/17 financial year total revenues reduced by 26 percent to MWK197.6 million from MWK1.5 billion in 2015/16. However, expenditures also reduced to MWK1.2 billion in 2016/17 from MWK1.6 billion recorded in 2015/16. This resulted in loss after tax of MWK962.0 million compared to a loss after tax of MWK114.6 in 2015/16. As at December 2017, the MEDF continued to report losses with a loss after tax of MWK196.8 million. These deficits were a result of a number of poor loan recoveries arising from loan recipients viewing the loans as grants and therefore not repaying them.

The liquidity of the Fund was also a challenge, a current ratio of 1.5:1 was reported at mid-year 2017/18. The Fund's debt-to-equity was at 61 percent in June 2017.

Looking ahead to June 2018, the Fund anticipates a rebound with positive performance, owing to the issuance of a MWK3.8 billion promissory note by the Treasury, which will enable the Fund to issue new agricultural loans. With this outlook the Fund anticipates to close the year with a profit after tax of MWK2.7 billion. Table 17.21 shows the financial performance of the MEDF as at 31st December, 2017.

**TABLE 17.21: SELECTED PERFORMANCE STATISTICS
FOR MEDF**

Performance targets	Outlook to 30th June 2018	2017/18 (half year) K'000	2016/17 (Audited) K'000	2015/16 (Audited) K'000	2014/15 (Audited) K'000	2013/14 (Audited) K'000
Total revenue, MWK	4,911,541	519,225	197,609	1,488,816	1,944,853	2,988,002
Change in revenue, %	846%	163%	-87%	-23%	-35%	524%
Total expenditure, MWK	(1,984,742)	(675,623)	(1,159,599)	(1,566,715)	(10,127,298)	(2,880,200)
Change in expenditures, %	194%	-42%	-26%	-85%	252%	104%
Gross Profit Margin, %	378%	-99%	-544%	-16%	-1480%	-29%
Profit after Tax, MWK	2,701,799	(196,840)	(961,990)	(114,609)	(8,606,293)	107,802
Current Assets, MWK	3,646,831	2,196,300	1,395,212	2,782,753	3,886,914	29,689,207
Current liabilities, MWK	430,891	1,436,728	739,276	770,690	675,628	2,329,329
Working Capital, MWK	3,215,940	759,571	655,936	2,012,063	3,211,286	27,359,878
Current ratio	8.46	1.53	1.89	3.61	5.75	12.75
Debt/equity ratio %	11%	142%	61%	31%	19%	8%
Trade Receivable Days	153	787	2,379	888	141	1,917

Source: MEDF Audited Accounts

CHAPTER 18

BANKING AND FINANCE

18.1 Overview

The main objective of monetary policy is to achieve low and stable prices that preserve the value of the Kwacha, and encourage investment needed for sustainable macroeconomic development. Currently, the RBM sets monetary policy to meet the medium-term inflation target of 5 percent. Furthermore, monetary policy focuses on achieving official international reserves of above the minimum coverage of three months of imports, in order to manage exchange rate movements in a more credible manner and better cushion the market from shocks and ultimately anchor inflationary expectations in the economy.

During the first half of the 2017/18 fiscal year, the RBM pursued a tight monetary policy stance aimed at maintaining inflation on the declining path observed since August 2016. Emphasis was placed on achieving single digit inflation by December 2017. This objective was necessary because inflation had been in double digits since 2012. In line with the tight monetary policy stance, the annual growth rate of broad money supply (M2) decelerated to 20.7 percent as at end-December 2017 from 30.0 percent as at the end of the 2016/17 fiscal year. Following these developments, headline inflation decelerated in the first half of the 2016/17 fiscal year to 7.1 percent, with inflation reaching the single digit benchmark in August 2017 at 9.3 percent, from 11.3 percent at the end of the 2016/17 fiscal year.

18.2 The Banking System

Broad money supply registered a growth of MWK77.8 billion (7.8 percent) in the first half of 2017/18 compared to an increase of MWK60.2 billion (6.7 percent) recorded during the corresponding period in the 2016/17 fiscal year. The growth in broad money was anchored by both quasi money (QM) and narrow money (M1). Specifically, QM grew by MWK54.5 billion to MWK571.7 billion as at end December 2017 compared to a growth of MWK47.0 billion recorded in the first half of the 2016/17 fiscal year. The higher growth in QM was mainly a result of an increase in term deposits (Time and Savings deposits) of MWK49.7 billion to MWK338.1 billion as at end December 2017, compared to a growth of MWK25.6 billion during the first half of the 2016/17 fiscal year. Meanwhile, foreign currency denominated deposits increased by MWK4.9 billion and closed the first half of the 2017/18 fiscal year at MWK233.6 billion.

Similarly, M1 picked up in the first two quarters of the 2017/18 fiscal year, registering an increase of MWK23.3 billion to MWK502.7 billion, compared to a growth of MWK13.2 billion during the same period in the 2016/17 fiscal year. The outturn reflected an expansion in demand deposits amounting to MWK26.7

billion to MWK337.3 billion, compared to an increase of MWK10.1 billion recorded in first two quarters of the 2016/17 fiscal year. Meanwhile, currency in circulation decreased by MWK3.4 billion to MWK165.4 billion as at end December 2017.

On the asset side, pressure on monetary aggregates mainly emanated from creation of Net Foreign Assets (NFA) amounting to MWK82.6 billion which increased the stock of NFA to MWK455.7 billion at the end of the first half of the 2017/18 fiscal year. The accumulation of foreign reserves, especially by the monetary authorities, was in line with the monetary policy objective of building foreign exchange reserves in order to manage exchange rate volatility and ultimately anchor inflation expectations. Total bank reserves increased by MWK94.3 billion in the first half of the fiscal year to MWK618.6 billion, mainly consisting of World Bank funds for budgetary support, other donor funds for specific developments projects and tobacco export proceeds.

In contrast, Net Domestic Assets (NDA) of the banking system decreased by MWK4.8 billion to MWK618.6 billion in the first half of the fiscal year. During the same period in the 2016/17 fiscal year, NDA rose by MWK50.1 billion to MWK544.6 billion. The decrease mainly reflected the pursuance of a tight monetary stance by the monetary authorities that saw MWK69.0 billion mopped from the banking system in the first half of the 2017/18 fiscal year. Domestic credit, however, grew by MWK61.7 billion to MWK937.8 billion as at end December 2017, anchored mainly by expansionary fiscal policy, which resulted in an increase in net credit to the Government of MWK76.5 billion in the first half of the fiscal year. Meanwhile, credit to the private sector and statutory bodies decreased by MWK9.5 billion and MWK5.2 billion, respectively.

TABLE 18.1: MONETARY SURVEY (K' MILLION)

	End-period balances		Changes during periods					
	<u>Jun-2016</u>	<u>Dec-2016</u>	<u>Jun-2017</u>	<u>Dec-2017</u>	<u>Jun-2016</u>	<u>Dec-2016</u>	<u>Jun-2017</u>	<u>Dec-2017</u>
A. Net Domestic Credit								
1. Credit to government (i+ii)	274,976.1	336,786.2	443,412.9	519,888.8	73,518.9	61,810.10	106,626.70	76,475.90
i. Monetary Authorities	166,546.7	257,969.6	338,267.0	407,742.0	69,230.9	91,422.90	80,297.40	69,475.00
ii. Commercial Bank	108,429.4	78,816.6	105,145.9	112,146.8	4,288.0	-29,612.80	26,329.30	7,000.90
2. Credit to statutory bodies	7,227.3	9,214.8	13,365.6	8,102.0	2,151.2	1,987.50	4,150.80	-5,263.60
3. Credit to private sector (gross).....	387,983.4	408,305.0	419,353.9	409,812.3	-2,341.7	20,321.60	11,048.90-	9,541.60
B. Narrow Money (M1)	382,644.2	395,866.9	479,404.6	502,660.4	64,854.7	13,222.70	83,537.70	23,255.80
4. Currency outside banks	142,930.2	146,005.4	168,764.7	165,365.9	32,354.9	3,075.20	22,759.30	-3,398.80
5. Private sector demand deposits....	239,714.0	249,861.5	310,639.9	337,294.5	32,499.8	10,147.50	60,778.40	26,654.60
C. Quasi-money	454,424.9	501,398.8	517,176.3	571,699.7	-6,593.4	46,973.90	15,777.50	54,523.40
D. Money Supply (M2)1 (B+C).....	837,069.2	897,265.7	996,580.9	1,074,360.1	58,261.4	60,196.50	99,315.20	77,779.20
E. Net Foreign Assets	345,640.4	355,773.6	373,188.3	455,748.4	6,179.7	10,133.20	17,414.70	82,560.10
6. Monetary Authorities	230,752.5	224,553.0	263,190.2	319,224.6	-45,616.2	-6,199.50	38,637.20	56,034.40
7. Commercial banks	114,888.0	131,220.6	109,998.1	136,523.8	51,796.0	16,332.60	-21,222.50	26,525.70

Source: Reserve Bank of Malawi

18.2.1 Commercial Banks: Sources and Uses of Funds

During the first half of the 2017/18 fiscal year, commercial banks resources expanded by MWK199.5 billion to MWK1,568.3 billion compared to an increase of MWK111.2 billion observed during the same period in the 2016/17 fiscal year. The increase in the current fiscal year partly reflects the increase in economic activities in 2017, following subdued growth in 2016. Private sector deposits constituted the main source of funds for the banks, they accounted for MWK72.7 billion of the generated resources. Further, official sector deposits, liabilities to non-residents, capital accounts of commercial banks and uncategorised liabilities increased by MWK15.1 billion, MWK8.2 billion and MWK75.6 billion in the fiscal year, respectively.

In terms of usage, commercial banks utilised MWK121.2 billion of the accumulated resources to boost their investments in unsectored assets, mainly composed of money market deposits and commercial papers. The banks further used MWK41.4 billion to increase their foreign investments, MWK26.4 billion to lend to the central government and MWK25.1 billion to increase their deposits with the RBM. Meanwhile, the private sector and parastatals repaid MWK9.5 billion and MWK1.1 billion to the commercial banks, respectively.

18.2.2 Reserve Bank of Malawi: Sources and Uses of Funds

The resource envelope of the RBM expanded by MWK115.6 billion to MWK1,301.4 billion in the first half of the 2017/18 fiscal year compared to a growth of MWK48.9 billion during the corresponding period in the 2016/17 fiscal year. Unsectored liabilities were the major source of funds as they contributed MWK106.0 billion to the accumulated resources. This mainly reflected growth in repurchase agreements, in line with the tight monetary policy stance pursued by the RBM. This was complemented by deposits of commercial banks which grew by MWK19.0 billion. Meanwhile, currency in circulation, foreign sector deposits and deposits of the official sector declined by MWK3.4 billion, MWK3.3 billion and MWK2.6 billion, respectively.

On the usage side, the RBM utilised the accumulated resources by lending MWK66.8 billion to the central government and investing MWK52.7 billion in foreign assets. Meanwhile, investment in unsectored assets declined by MWK4.0 billion during the year.

Chapter 19

PUBLIC FINANCE

19.1 Introduction

This chapter illustrates and compares performance of Budgetary Central Government operations for the 2016/17 and 2017/18 fiscal years, as well as estimates for the 2018/19 fiscal year. It also presents functional classification of expenditure for the three fiscal years. The chapter is structured as follows: Section 19.2 presents Performance Summary of Budgetary Central Government Operations; Sections 19.3 and 19.4 illustrates Performance of Revenue, Expenditure and Financing; and Section 19.5 presents Performance of Expenditure using Functional Classification.

19.2 Performance Summary of Budgetary Central Government Operations

The 2017/18 Budget was formulated to provide a framework for supporting medium term policies aimed at attaining macro-economic stability, especially sustainable economic growth and low inflation. Despite the economy facing shocks in the form of dry spells and fall army worms, economic activity progressed fairly well and the economy attained single-digit inflation.

With poor disbursements of grants, together with the slight underperformance in domestic revenue, resulting from the performance of the economy, the overall performance of revenues was slightly lower than anticipated. Table 19.1 presents summary of performance of Budgetary Central Government Operations for 2016/17 to 2018/19.

Whereas revenue collections totalled to 23.3 percent of GDP in 2016/17 fiscal year, collections in 2017/18 fiscal year are likely to fall short of last year's collections at 22.4 percent of GDP, comprising taxes totalling to 18.6 percent of GDP, grants totalling to 2.4 percent of GDP and other revenue collections amounting to 1.4 percent of GDP. The momentum is expected to slightly pick up in the 2018/19 fiscal year with revenue collections anticipated to register a total of 22.8 percent of GDP.

TABLE 19.1: BUDGETARY CENTRAL GOVERNMENT OPERATIONS
(MWK million)

	2016/17 Outturn	2017/18 Approved Estimates	2017/18 Likely Outturn	2018/19 Proposed Estimates
Revenue	982,927.4	1,127,744.8	1,096,798.3	1,261,655.5
Taxes	778,254.2	932,023.6	910,000.1	975,678.2
Grants	147,705.5	147,585.7	118,025.1	209,405.4
Other revenue	56,967.6	48,135.5	68,773.1	76,571.9
Expense	845,561.5	965,739.1	1,028,523.0	1,104,508.9
o/w Interest	185,141.4	177,318.7	190,446.0	182,904.3
Net Operating Balance	137,365.8	162,005.7	68,275.3	157,146.6
NANA	273,830.6	353,574.0	294,536.5	411,226.3
Domestically financed	28,032.0	135,435.0	80,592.0	158,049.5
Foreign financed	245,798.6	218,139.0	213,944.5	253,176.8
Lending	3,460.0	4,000.0	4,000.0	8,000.0
Expenditure	1,122,852.2	1,323,313.1	1,327,059.5	1,523,735.2
Net lending/Borrowing	(139,924.8)	(195,568.3)	(230,261.2)	(262,079.7)
Primary balance	45,216.6	(18,249.6)	(39,815.2)	(79,175.4)
Financing	141,859.9	195,568.3	230,261.2	262,070.1
Foreign	104,632.0	167,761.4	154,056.9	65,526.6
Domestic	37,227.9	27,806.9	76,204.2	196,543.5
Percent of GDP				
Revenue	23.3	23.1	22.4	22.8
Taxes	18.4	19.1	18.6	17.6
Grants	3.5	3.0	2.4	3.8
Other revenue	1.3	1.0	1.4	1.4
Expense	20.0	19.7	21.0	20.0
o/w Interest	4.4	3.6	3.9	3.3
Net operating balance	3.3	3.3	1.4	2.8
NANA	6.5	7.2	6.0	7.4
Domestically financed	0.7	2.8	1.6	2.9
Foreign financed	5.8	4.5	4.4	4.6
Lending	0.1	0.1	0.1	0.1
Expenditure	26.6	27.1	27.1	27.5
Net lending/Borrowing	(3.3)	(4.0)	(4.7)	(4.7)
Primary balance	1.1	(0.4)	(0.8)	(1.4)
Financing	3.4	4.0	4.7	4.7
Foreign	2.5	3.4	3.1	1.2
Domestic	0.9	0.6	1.6	3.6

Source: Ministry of Finance, Economic Planning and Development

With this performance of the resource envelope, expenditure was contained amidst extra-budgetary pressures from shocks in the macro-economy. As shown in Table 19.1 above, expenditure slightly increased from 26.6 percent of GDP recorded in the 2016/17 fiscal year to 27.1 percent of GDP in the 2017/18 fiscal year. Subdued performance of grants affected performance of corresponding project expenditure and thus slowed down the performance from an anticipated 7.2 percent of GDP to 6.0 percent of GDP in 2017/18. It is expected that with the

implementation of flagship projects as stated in the MGDS III, performance will improve to 7.4 percent of GDP in 2018/19.

Developments in revenues and expenditures in 2017/18 financial year resulted into a fiscal deficit equivalent to minus 4.7 percent of GDP. It is anticipated that a similar performance will be recorded for 2018/19 fiscal year.

19.3 Revenue Performance

Whereas taxes on goods and services maintained their momentum in the 2017/18 fiscal year, taxes on income, profits and capital gains did not perform as anticipated owing to a slowdown in economic activity. Nonetheless, taxes recorded a slight increase from 18.4 percent of GDP reported in 2016/17 to 18.6 percent in 2017/18. All categories of tax revenue maintained their levels as a percent of GDP, except taxes on goods and services which slightly increased from 7.6 percent of GDP to 7.8 percent of GDP. The Government will work towards maintaining this momentum for the 2018/19.

Performance of grants has been less satisfactory in recent years, with disbursements slowing down from 3.5 percent of GDP recorded in 2016/17 to 2.4 percent of GDP in 2017/18. Nonetheless, with the measures the Government has taken to improve fiscal management, it is anticipated that performance in this regard will improve in the medium term. A total of 3.8 percent of GDP is expected to be disbursed in 2018/19.

Owing to improved departmental collections, as well as remittance of dividends, other revenue has improved over recent years. For 2017/18, other revenue has improved from 1.3 percent of GDP recorded in 2016/17 to 1.4 percent of GDP. It is anticipated that the same performance will be recorded for 2018/19.

TABLE 19.2: BUDGETARY CENTRAL GOVERNMENT REVENUE
(MWK million)

	2016/17 Outturn	2017/18 Approved Estimates	2017/18 Likely Outturn	2018/19 Proposed Estimates
Revenue	982,927.4	1,127,744.8	1,096,798.3	1,261,655.5
Taxes	778,254.2	932,023.6	910,000.1	975,678.2
Taxes on Income, profits and capital gains	386,078.2	479,774.3	446,158.4	483,043.9
Individual	224,333.9	280,141.3	265,194.0	287,543.7
Corporations and other enterprises	149,821.0	199,633.0	180,964.4	195,500.2
Other taxes on income profits and capital gains	11,923.2	-	-	-
Taxes on goods and services	320,689.9	372,667.0	379,915.7	410,557.3
General taxes on goods and services	220,278.3	258,825.7	265,765.0	285,472.6
VAT	220,265.5	258,797.9	265,740.0	285,439.8
Turnover and other general taxes on goods and services	12.8	27.9	25.0	32.8
Excise	95,695.0	108,358.8	108,606.4	119,144.7
Taxes on use of goods and on permission to use goods or perform activities	4,716.6	5,482.5	5,544.3	5,940.0
Motor vehicle taxes	4,716.6	5,482.5	5,544.3	5,940.0
Taxes on international trade and transactions	69,829.9	78,760.7	82,335.0	78,078.7
Other taxes	1,656.2	821.6	1,591.0	3,998.2
Grants	147,705.5	147,585.7	118,025.1	209,405.4
From Foreign Governments	14,451.7	26,370.3	25,160.7	45,620.4
From International Organisations	133,253.8	121,215.4	92,864.4	163,785.0
Other revenue	56,967.6	48,135.5	68,773.1	76,571.9
PERCENT OF GDP				
Revenue	23.3	23.1	22.4	22.8
Taxes	18.4	19.1	18.6	17.6
Taxes on Income, profits and capital gains	9.1	9.8	9.1	8.7
Individual	5.3	5.7	5.4	5.2
Corporations and other enterprises	3.5	4.1	3.7	3.5
Other taxes on income profits and capital gains	0.3	-	-	-
Taxes on goods and services	7.6	7.6	7.8	7.4
General taxes on goods and services	5.2	5.3	5.4	5.2
VAT	5.2	5.3	5.4	5.2
Turnover and other general taxes on goods and services	0.0	0.0	0.0	0.0
Excise	2.3	2.2	2.2	2.2
Taxes on use of goods and on permission to use goods or perform activities	0.1	0.1	0.1	0.1
Motor vehicle taxes	0.1	0.1	0.1	0.1
Taxes on international trade and transactions	1.7	1.6	1.7	1.4
Other taxes	0.0	0.0	0.0	0.1
Grants	3.5	3.0	2.4	3.8
From Foreign Governments	0.3	0.5	0.5	0.8
From International Organisations	3.2	2.5	1.9	3.0
Other revenue	1.3	1.0	1.4	1.4

Source: Ministry of Finance, Economic Planning and Development

19.4 Expenditure Performance by Economic Classification

As shown in Table 19.3, expenditure slightly increased from 26.6 percent of GDP recorded in the 2016/17 fiscal year to 27.1 percent of GDP in the 2017/18 fiscal year. However, despite the budgetary pressures faced, the Government managed to contain expenditure within planned levels. While expenditure was maintained at the planned level of 27.1 percent of GDP for 2017/18, the composition differed.

Expense performed beyond the planned level of 19.7 percent of GDP by 1.3 percent. This is largely on account of increased grants to other levels of general Government, which increased from 2.4 to 3.3 percent of GDP. A similar trend, albeit slightly lower, was observed in all the categories of expense, except in use of goods and services which improved to 5.1 percent of GDP and subsidies which were maintained at 0.7 percent of GDP. Despite recording this performance, use of goods and services increased from 4.8 percent of GDP recorded in 2016/17. Interest expense increased from the anticipated level of 3.6 percent of GDP to 3.9 percent of GDP in 2017/18. Nonetheless, this is an improvement from 4.4 percent of GDP that was recorded in the 2016/17 fiscal year. With the Government putting in place measures to contain expense, it is expected that the performance will improve in the medium term. Expense is expected to amount to 20.0 percent of GDP in the 2018/19 fiscal year.

Poor absorption of resources, as well as poor performance of project grants affected performance of net acquisition of non-financial assets. Domestically financed capital expenditure improved from 0.7 percent of GDP reported in 2016/17 to 1.6 percent of GDP in 2017/18. Nonetheless, this is a slowdown from the anticipated performance of 2.8 percent of GDP that was intended for the fiscal year. Foreign financed capital expenditure slowed down from 5.8 percent of GDP reported in 2016/17 to 4.4 percent of GDP in 2017/18. Both components are expected to improve in the 2017/18 fiscal year, with net acquisition of non-financial assets expected to total to 7.4 percent of GDP. It is anticipated that this performance will be sustained in the medium term.

**TABLE 19.3: EXPENDITURE PERFORMANCE BY ECONOMIC
CLASSIFICATION**

	2016/17 Outturn	2017/18 Approved Estimates	2017/18 Likely Outturn	2018/19 Proposed Estimates
Expenditure	1,122,852.2	1,323,313.1	1,327,059.5	1,523,735.2
Expense	845,561.5	965,739.1	1,028,523.0	1,104,508.9
Compensation of employees	265,128.1	317,191.0	323,838.1	404,301.0
Wages and salaries	265,128.1	309,575.9	316,223.0	392,939.0
Employers social contributions	-	7,615.1	7,615.1	11,362.0
Use of goods and services	201,906.3	255,998.2	251,509.8	260,154.4
Interest	185,141.4	177,318.7	190,446.0	182,904.3
Foreign Interest	12,438.9	13,880.0	14,215.0	14,341.4
Domestic Interest	172,702.5	163,438.7	176,231.0	168,562.9
Subsidies	29,400.0	33,150.0	33,150.0	41,250.0
Grants	106,322.4	119,095.1	159,092.9	145,122.5
To other general government units	148,879.4	299,054.3	357,562.3	364,201.7
Social benefits	52,246.7	60,986.2	68,486.2	69,276.6
Pensions and gratuities	52,246.7	60,986.2	68,486.2	69,276.6
Other expenses	5,416.6	2,000.0	2,000.0	1,500.0
Other Statutory expenditures	5,416.6	2,000.0	2,000.0	1,500.0
Net/Gross Investment in Nonfinancial Assets	273,830.6	353,574.0	294,536.5	411,226.3
Fixed Assets	273,830.6	353,574.0	294,536.5	411,226.3
Domestically financed	28,032.0	135,435.0	80,592.0	158,049.5
Foreign financed	245,798.6	218,139.0	213,944.5	253,176.8
Net lending	3,460.0	4,000.0	4,000.0	8,000.0
PERCENT OF GDP				
Expenditure	26.6	27.1	27.1	27.5
Expense	20.0	19.7	21.0	20.0
Compensation of employees	6.3	6.5	6.6	7.3
Wages and salaries	6.3	6.3	6.5	7.1
Employers social contributions	-	0.2	0.2	0.2
Use of goods and services	4.8	5.2	5.1	4.7
Interest	4.4	3.6	3.9	3.3
Foreign Interest	0.3	0.3	0.3	0.3
Domestic Interest	4.1	3.3	3.6	3.0
Subsidies	0.7	0.7	0.7	0.7
Grants	2.5	2.4	3.3	2.6
To other general government units	2.5	2.4	3.3	2.6
Social benefits	1.2	1.2	1.4	1.3
Pensions and gratuities	1.2	1.2	1.4	1.3
Other expenses	0.1	0.0	0.0	0.0
Other Statutory expenditures	0.1	0.0	0.0	0.0
Net/Gross Investment in Nonfinancial Assets	6.5	7.2	6.0	7.4
Fixed Assets	6.5	7.2	6.0	7.4
Domestically financed	0.7	2.8	1.6	2.9
Foreign financed	5.8	4.5	4.4	4.6
Net lending	0.1	0.1	0.1	0.1

Source: Ministry of Finance, Economic Planing and Development

19.5 Functional Classification of Budgetary Central Government Expenditure

Similar to the trend in expenditure outturn as a percent of GDP, allocations to key sectors as percentage of GDP have remained as planned for the 2017/18 fiscal year. Except for general public services and recreation, culture and religion, which registered slight declines from 10.5 percent of GDP to 9.7 percent of GDP and from 0.2 percent of GDP to 0.1 percent of GDP, respectively, all the other sectors maintained their allocations for the 2017/18 fiscal year, with slight increases in public order and safety, economic affairs, housing and community

amenities and health. Table 19.4 presents this classification of Budgetary Central Government expenditure by functions.

Going forward, with the implementation of projects outlined in the MGDS III, it is anticipated that allocations to key sectors of the economy will be increased in the medium term, in line with the Government's objective of attaining inclusive and sustainable economic growth. This trend is anticipated to be seen even in the 2018/19 fiscal year

**TABLE 19.4: FUNCTIONAL CLASSIFICATION OF EXPENDITURE
(MWK million)**

	2016/17 Outturn	2017/18 Approved	2017/8 Likely	2018/19 Projection
GRAND TOTAL	1,126,152.2	1,323,313.1	1,327,059.5	1,532,331.7
General Public Services	395,174.6	511,336.6	474,300.1	597,926.4
Defense	27,594.1	37,119.2	37,304.5	44,439.9
Public Order And Safety	57,039.9	59,517.2	66,320.4	78,454.0
Economic Affairs	227,183.6	265,368.1	280,702.4	300,013.1
Environmental Protection	3,799.9	5,069.6	5,877.3	6,368.4
Housing And Community Amenities	112,428.8	212,232.4	228,765.0	230,905.1
Health	90,179.1	74,956.5	77,032.9	79,988.4
Recreation, Culture, And Religion	3,102.9	7,366.8	6,287.2	6,847.0
Education	155,523.2	77,811.4	78,473.3	92,166.3
Social Protection	54,126.1	72,535.4	71,996.4	95,223.1
Percent Of GDP				
Grand Total	26.7	27.1	27.1	27.7
General Public Services	9.4	10.5	9.7	10.8
Defense	0.7	0.8	0.8	0.8
Public Order And Safety	1.4	1.2	1.4	1.4
Economic Affairs	5.4	5.4	5.7	5.4
Environmental Protection	0.1	0.1	0.1	0.1
Housing And Community Amenities	2.7	4.3	4.7	4.2
Health	2.1	1.5	1.6	1.4
Recreation, Culture, And Religion	0.1	0.2	0.1	0.1
Education	3.7	1.6	1.6	1.7
Social Protection	1.3	1.5	1.5	1.7

Source: Ministry of Finance, Economic Planing and Development

For detailed allocations within the key functions, Table 19.5 presents the allocation from the 2016/17 fiscal year to the 2018/19 fiscal year. The table shows that, for the 2017/18 fiscal year, the increase recorded in allocations for economic affairs is largely constituted by increased allocations to agriculture, forestry, fishing and hunting. This, in part, is due to the response the Government made to the shocks that faced the agriculture sector for the 2017/18 growing season. The increase in housing and community amenities, on the other hand, has been largely a contribution from allocations for community development.

**TABLE 19.5: DETAILED FUNCTIONAL CLASSIFICATION OF
EXPENDITURE (MWK million)**

	2017/18 Outturn	2017/8 Approved	2017/19 Likely	2018/19 Projection
GRAND TOTAL	1,126,152.2	1,323,313.1	1,327,059.5	1,532,331.7
GENERAL PUBLIC SERVICES	395,174.6	511,336.6	474,300.1	597,926.4
Executive and legislative organs, Financial and fiscal affairs, External affairs	107,306.5	124,343.6	126,189.1	128,189.9
General services (CS)	32,251.9	109,137.1	88,755.4	163,694.6
General public services n.e.c. (CS)	8,561.5	22,684.1	22,113.7	34,952.4
Public debt transactions (CS)	185,141.4	177,318.7	167,512.4	182,904.3
Transfers of a general character between different levels of government (CS)	61,913.4	77,853.1	69,729.6	88,185.2
DEFENSE	27,594.1	37,119.2	37,304.5	44,439.9
Military defense (CS)	27,594.1	37,119.2	37,304.5	44,439.9
PUBLIC ORDER AND SAFETY	57,039.9	59,517.2	66,320.4	78,454.0
Police Services (CS)	40,526.0	38,020.7	44,907.5	52,812.3
Law Courts (CS)	10,304.2	13,122.7	13,049.3	15,987.1
Prisons (CS)	6,042.8	8,054.8	8,086.6	9,172.6
R&D Public order and safety (CS)	138.6	295.8	258.8	310.0
Public order and safety n.e.c. (CS)	28.4	23.1	18.1	172.0
ECONOMIC AFFAIRS	227,183.6	265,368.1	280,702.4	300,013.1
General economic, commercial affairs and labor affairs (CS)	7,015.4	10,007.8	8,457.3	12,450.8
Agriculture, Forestry, Fishing and Hunting (CS)	147,241.4	121,978.6	157,139.9	136,760.7
Fuel and Energy	5,327.6	24,421.8	14,465.8	12,354.4
Mining, Manufacturing and Construction (CS)	2,834.6	730.3	622.9	1,351.0
Transport	62,470.6	95,278.4	87,529.7	92,689.8
Communication (CS)	1,784.5	11,780.4	11,799.8	43,015.2
Other Industries (CS)	412.9	1,088.8	632.3	1,361.0
Tourism (CS)	412.9	1,088.8	632.3	1,361.0
R&D Economic Affairs (CS)	96.7	82.1	54.8	30.3
ENVIRONMENTAL PROTECTION	3,799.9	5,069.6	5,877.3	6,368.4
Protection of biodiversity and landscape (CS)	356.0	1,130.2	1,130.2	1,188.4
R&D Environmental protection (CS)	81.0	119.3	37.5	549.1
Environmental protection n.e.c. (CS)	3,362.8	3,820.1	4,709.5	4,630.9
HOUSING AND COMMUNITY AMENITIES	112,428.8	212,232.4	228,765.0	230,905.1
Housing development (CS)	12,146.2	14,271.1	16,461.1	17,501.6
Community development	65,963.1	180,281.9	195,208.5	193,811.5
Water Supply (CS)	34,319.5	17,679.5	17,095.5	19,592.0
HEALTH	90,179.1	74,956.5	77,032.9	79,988.4
Medical Products, Appliances and Equipment	7,015.7	8,437.2	8,415.8	4,293.6
Outpatient services	87.0	140.7	139.7	10.3
Hospital services	16,239.4	21,238.0	21,388.6	19,487.7
Public health services	42,299.1	9,684.0	9,624.4	754.6
R&D Health	-	-	-	48.9
Health n.e.c. (CS)	24,537.9	35,456.5	37,464.4	55,393.2
RECREATION, CULTURE, AND RELIGION	3,102.9	7,366.8	6,287.2	6,847.0
Recreational and sporting services	957.9	2,352.2	1,952.2	2,251.9
Cultural services	404.6	2,861.0	2,457.4	2,527.0
Religious and other community services (CS)	910.5	701.8	651.8	781.5
Recreation, culture, and religion n.e.c. (CS)	829.9	1,451.9	1,225.8	1,286.6
EDUCATION	155,523.2	77,811.4	78,473.3	92,166.3
Pre-Primary and Primary education	94,858.7	33,785.6	34,026.3	35,118.5
Secondary education	42,704.6	33,235.3	33,370.4	39,187.9
Tertiary education	496.9	749.1	765.4	5,061.4
Education not definable by level	17,463.0	10,041.4	10,311.3	12,798.6
SOCIAL PROTECTION	54,126.1	72,535.4	71,996.4	95,223.1
Sickness and Disability	8.1	51.1	51.1	50.3
Old age	52,285.5	68,648.8	68,648.8	80,262.8
Family and children	22.1	15.1	15.1	58.7
Social exclusion n.e.c.	1,155.6	1,604.3	1,299.2	12,398.3
Social protection n.e.c.	654.8	2,216.1	1,982.3	2,453.1

Source: Ministry of Finance, Economic Planing and Development

19.6 Conclusion

The Government will continue to implement measures to create fiscal space for inclusive and sustainable economic growth. In the medium term, the Government, through automation of tax administration and widening of the tax base, anticipates that revenue performance will improve and thus create additional fiscal space. In addition, the Government continues with its effort of reducing interest expense to create space for pro-development expenditure, as evidenced by the decline in interest as a percent of GDP in the 2018/19 fiscal year.