



cutting through complexity

Infrastructure in Myanmar





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FOREWORD

Myanmar is a country in the midst of a historic transformation. History does not have a precedent of a country this size hurtling towards a market economy within a matter of mere months. As evident from the frenetic pace of economic reforms being introduced, the current administration is committed to reintegrating Myanmar into the global business community.

Late last year the government promulgated the Foreign Investment Law, and foreign investment rules came out in January this year. The Telecom Law, SEZ Law and Condominium Law are also being prepared. The Central Bank of Myanmar too has promised to come out with rules around entry of foreign banks in the next few months. It is commendable that the government has managed to come out with these laws and regulations in such a short time.

For foreign investors, upcoming opportunities for joint ventures and investments would be in the under-provided power, transport and telecommunications sectors. The Myanmar government has already announced a roadmap to develop these sectors, with procurement tenders out for development of airports and granting of telecom licenses.

Preliminary response from investors has been most encouraging. There is a great deal of interest among our clients globally to contribute to this transformation by enthusiastically responding to the emerging opportunities. Private businesses and governments around the world are equally keen to participate in the country's growth and at the same time earn an attractive return on their investments.

Investors, particularly those in long-gestation infrastructure sectors, need to be cognizant of the risks inherent in an economy such as Myanmar. The return profiles of the investment would be dictated by how effectively laws and regulations get implemented. There is also a need to strengthen the legal framework to give more confidence to investors.

KPMG in Myanmar is pleased to present a brief overview of the infrastructure sectors in the country. For each sector we have identified relevant government ministries and agencies, recent activities, and areas that would be most attractive to incoming investors. As regulations around entry of foreign companies into various sectors in Myanmar become clearer over the next few quarters, we expect to see investors committing more funds to projects in Myanmar.



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INTRODUCTION



- Myanmar is the largest country in mainland Southeast Asia. It borders Bangladesh and India in the west and northwest, China in the north and northeast, Lao PDR and Thailand in the east and southeast.
- The economy has been guided by a series of five-year plans, with annual plans for select sectors. The plans are based on the guiding principles of the government to address political, economic and social challenges.
- Myanmar's economy has been dominated by the agriculture sector with around 40-50 percent of GDP¹. Around 70 percent of its population lives in rural areas². The economy still relies on resource-based industries with the biggest contribution to the GDP coming from extractive industries, especially oil and gas, mining, and forest products. Major export items of Myanmar are mineral products such as natural gas, precious and semi-precious minerals; agricultural products including rice and rice products, pulses & bean and maize; forest products like raw rubber, teak and hard woods; and marine products.
- There are significant gaps in Myanmar's infrastructure development. According to the Logistics Performance Index (LPI)³ published by the World Bank⁴, Myanmar was ranked 133 out of 155 in 2012. This presents opportunities for private sector investment across several sectors.

¹ "Interim Country Partner Strategy: Myanmar", ADB, Oct 2012

² "Myanmar Sector Initial Assessment", ADB, Oct 2012

³ "The Logistics Performance Index and its indicators", World Bank, 2012

⁴ The Logistics Performance Index is based on a worldwide survey of operators on the ground (global freight forwarders and express carriers), providing feedback on the logistics "friendliness" of the countries in which they operate and those with which they trade. Although not a direct assessment of the level of infrastructure development in a country, it can be used as a proxy on the state of transport infrastructure and ease of getting around.

Recent Economic Developments

Since the elections in November 2010, Myanmar's government has undertaken a series of political and economic reforms as part of efforts to achieve the vision of becoming a modern, democratic and developed nation by 2030. The international community has responded positively to the reform process, with many Western governments suspending most of the economic sanctions they had previously imposed on the country. In January 2013, Myanmar signed deals with the Paris Club of sovereign lenders and multilateral lenders such as the World Bank and the Asian Development Bank (ADB) to clear or refinance a major portion of its debt. These agreements, estimated to waive up to 60% of Myanmar's outstanding debts⁵, will pave the way for fresh borrowings which can be directed towards vital infrastructure development. As the government continues its policy of re-engagement with the West, there is optimism that these sanctions could be lifted entirely by the end of 2013, further boosting foreign trade and foreign direct investment (FDI).

The IMF estimates that Myanmar's economy grew by 6.2% in 2012, bolstered by foreign investment in energy and export of commodities. According to official statistics, Myanmar attracted over US\$40 billion in foreign investments in FY2012-2013⁶. Majority of this investment has been in the Power and Oil and Gas sectors, although a substantial investment has also been committed to the special economic zones (SEZs) in Dawei, Kyaukphyu and Thilawa. If the reform momentum can be maintained in the medium term, Myanmar's economic growth is projected to accelerate to approximately 7% per annum for the next five years.

Some of the recent economic reforms introduced by the Myanmar government include:

- Unifying the country's multiple exchange rates by replacing the official peg with a managed float system using a formal interbank foreign exchange market. A new foreign exchange management law, targeted at lifting

all restrictions on current payments and transfers abroad, has also been passed and at present awaiting the necessary regulations before implementation.

- Introducing a new Central Bank law which will offer more operational autonomy to the Central Bank of Myanmar and allow it to take on the core central banking functions which currently sit with the state banks. The new law has been approved by the cabinet and is awaiting its passage through Parliament.
- Improving the investment environment by liberalising the company registration process and other regulatory processes to further encourage foreign investors. The Myanmar Investment Commission is currently undergoing reform to become an independent board with the aim of eliminating non-transparent licensing practices.
- Opening up the telecommunications sector by inviting foreign investors to register their interest in bidding for two out of four national telecommunications licences. The sector was previously monopolised by a state-owned enterprise. The government's management of the bidding process will be a test of its ability to implement further reforms.
- Establishing a new anti-corruption committee in January 2013 to focus on eliminating bribery at all levels of government. The nine-member committee will be led by one of the country's two vice-presidents, Sai Mauk Kham, and the announcement on state-run media was made by President Thein Sein, underscoring the President's commitment to tackle the problem.

Another significant development in Myanmar is the passing of the new Foreign Investment Law on 2 November 2012. The new law is expected to encourage greater foreign direct investment into Myanmar. Some of the key features of the new law include:

- 1) Permitting 100% ownership by foreign companies, except for certain activities designated as restricted or prohibited. In the case of a joint venture, foreign investors are no longer required to provide a minimum of 35% of the capital. In a recent vote, the Myanmar Parliament rejected an attempt to limit foreign ownership in joint ventures to 49%, instead confirming the limit to be 80% as specified earlier.
- 2) Allowing the lease of land on a long-term basis – for an initial 50 years, with an option to extend for another 10 + 10 years. Longer leases may be granted by the government
- 3) Greater tax incentives for investments in infrastructure development and the creation of special economic zones, such as allowing up to 5 years of tax holiday and greater flexibility on exemptions and reliefs on income tax.
- 4) Guarantees against nationalisation of foreign-invested businesses. Commercial contracts are also allowed to stipulate dispute resolution procedures.
- 5) Profits can be repatriated at the prevailing market exchange rate through authorised banks in Myanmar – a significant change from the 1988 Foreign Investment Law which required profits to be repatriated at the official exchange rate (Kt6:US\$1) instead of the free-market rate of (Kt800:US\$1).
- 6) New labour requirement specifies the use of local staff in skilled positions, including requiring Myanmar nationals to constitute at least 25%, 50% and 75% of the workforce during each of the first three years of the business. Only Myanmar citizens may fill unskilled positions.

More recently, during the 1st Myanmar Development Cooperation Forum held in January 2013, President Thein Sein announced that a National Comprehensive Development Plan (NCDP) for Myanmar was being drawn

up and would be launched in 2013. The 20-year plan is positioned as the second stage of Myanmar's reform process, the first stage being political reform and national reconciliation undertaken between 2011-2012, and will comprise of four five-year programs to increase economic development and raise living standards in Myanmar.

The Framework for Economic and Social Reform (FESR) was launched at the same forum and outlines Myanmar's policy priorities up till 2015 towards achieving the long-term goals of the NCDP⁷. The framework emphasises the importance of moving towards a market driven economy, the need to move from top-down to bottom-up planning and the development of free markets by employing direct and indirect government policy levers.

The framework is also intended to complement the goals under the

government's 5th Five Year Plan (FY2011/12 – 2015/16), which includes: (i) achieving average GDP growth of 7.7%; (ii) increasing industrial share of GDP from 26% to 32%, and reducing share of the agriculture sector; and (iii) achieving GDP per capita growth of 30-40% from 2010.

The government has identified four policy priorities under the FESR:

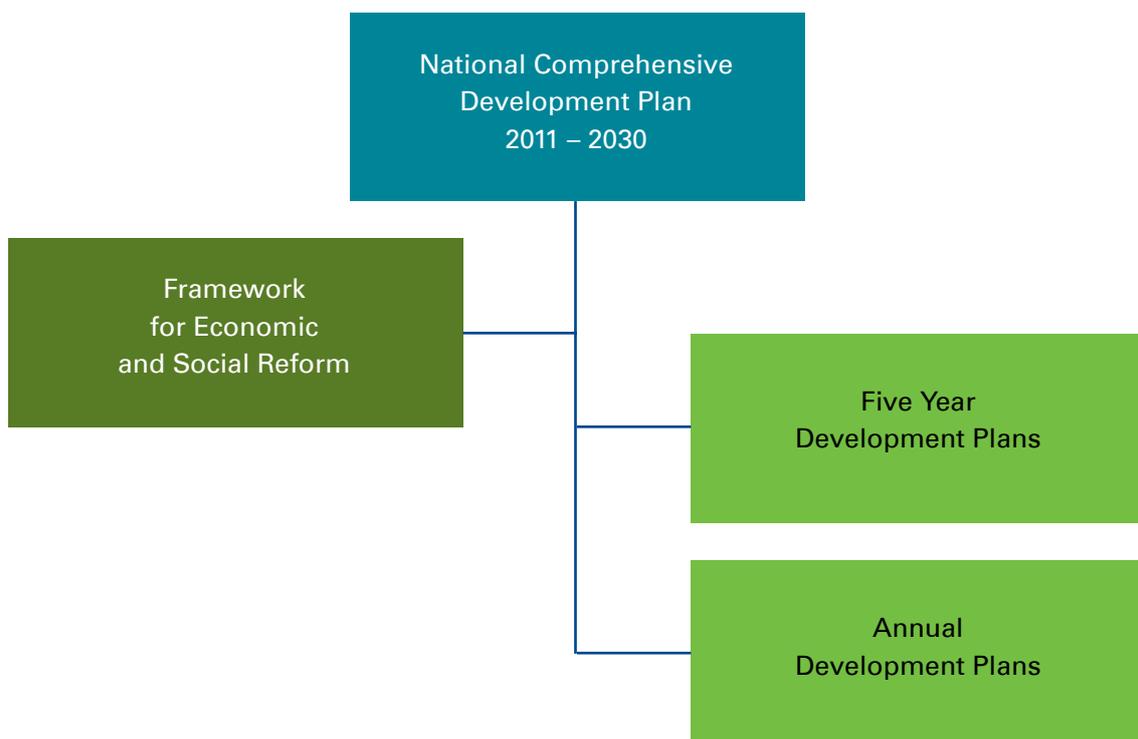
- Sustained industrial development to catch up with global economies
- Equitable sharing of resources among regions and states and promoting foreign and local investments for regional development
- Effective implementation of people-centered development to improve education, health and living standards
- Reliable and accurate gathering of statistical data and other information for better public policy decisions.

To achieve these priorities, the

government will focus on "quick wins" in ten priority areas, viz. fiscal and tax reforms, monetary and financial sector reforms, liberalisation on trade and foreign investment, development of the private sector, health and education sectors, food security and improvements in the agricultural sector, governance and transparency, the telecommunications and ICT sector, and development of basic infrastructure.

In terms of infrastructure development, the immediate term priorities are in urban transportation systems, upgrading of national airports and water utilities. The government has also committed to restructuring the relevant agencies in the transport, water and public works sectors to ensure a clear separation of responsibility between regulatory authorities and service providers and operators.

National Strategy Framework in Myanmar



⁵ "Myanmar signs deal with foreign creditors", Financial Times, 28 Jan 2013

⁶ Myanmar's fiscal year is from April to March. Ministry of National Planning and Economic Development, accessed on 24 April 2013.

⁷ "Framework for Economic and Social Reform", 1st Myanmar Development Cooperation Forum, 19-20 Jan 2013.

Roads

QUICK FACTS

Government Agencies

- Ministry of Transport (MOT) – Land transport policies
- Ministry of Rail Transportation (MORT) – Vehicle/ commercial operator registration, license, taxes, road regulations, transport planning, international and regional relations
- Ministry of Construction (MOC), Public Works Department - Design, Construction and Maintenance of Main and Secondary Roads
- Other Agencies including the Yangon, Mandalay, Nay Pyi Taw City Development Committees

Existing Operator(s)

Road Transport Agency, a state-owned company

Total Road Length

150,816 km (33,014km of paved roads)

Total number of registered road motor vehicles

- 2.33 million registered vehicles:
- Motorcycles: 1.93 million
 - Passenger Cars: 295,000
 - Trucks: 67,200
 - Buses: 20,000

Source: ASEAN-Japan Transport Platform Project, Myanmar Road Transport Administration Department

Myanmar is a large country with a land area covering over 676,000 square kilometres. It shares borders with Bangladesh, China, India, Lao PDR and Thailand, and is thus strategically located at the crossroads of China, South Asia and Southeast Asia. The country's proximity to Asia's largest and fastest growing markets offers great opportunity for Myanmar to become the land link between China, India and the ASEAN countries.

Presently, Myanmar's transport sector is considerably under-developed for a country of its size, population, and potential. In 2011, Myanmar's number of vehicles per 1000 people was about 38. In comparison, Thailand's ratio was 432 and Lao PDR's was 171. The number of vehicles in Myanmar has more than doubled from 960,000 in 2004 to 2,354,000 in 2011⁸, and the strong growth trajectory is expected to be maintained as the economy continues to expand.

The institutional structure for Myanmar's transport sector is complex as there is no single agency with clear oversight of the sector. Currently, responsibilities are shared between six ministries, various city development committees and state-owned transport enterprises, where

relevant. There is no formal coordinating platform to develop an overall strategy for the sector and no clear lines of responsibility within the fragmented institutional structure. Among the government agencies overseeing the transport sector, the Ministry of Transport (MOT), the Ministry of Rail Transportation (MORT) and the Ministry of Construction (MOC) play pivotal roles.

Private Sector Opportunities

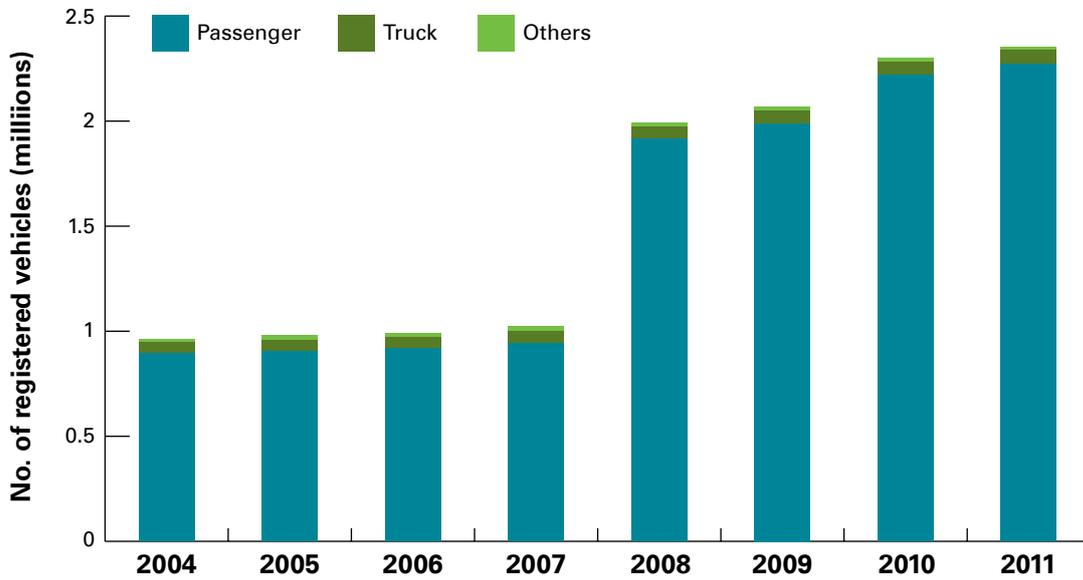
Under the Framework for Economic and Social Reforms, the Myanmar government has indicated that immediate priority will be given to infrastructure projects to improve land connectivity and transportation links with regional economies to boost economic integration and fulfil the country's commitments under the Master Plan on ASEAN Connectivity. To meet the goals of equitable development between the various regions in the country, the government will also prioritise development of rural-city connectivity and the maintenance and upgrading of existing road infrastructure. Existing cross-border road links with Myanmar's closest neighbours – China, India and Thailand – are limited and poor in quality, presenting investment opportunities in Myanmar's road infrastructure. There is strong demand

for the expansion and development of new road links with these key trading partners given the boom in Myanmar's commodities sector and growth in foreign trade. In January 2011, Chinese firms Yunnan Construction Engineering Group and Yuzana Group won a contract to build the 312km Myitkyina-Pangsau Pass (the latter in India's Arunachal Pradesh state) section of the 1,079km Stilwell Road, while Italian Thai Development recently completed a road linking the city of Dawei with Thailand's province of Kanchanaburi.

The new cross-border links will also complement existing road links, such as the Mandalay-Lashio-Muse road with China, and meet additional connectivity requirements as a result of upcoming special economic zone projects in Kyaukphyu and Dawei.

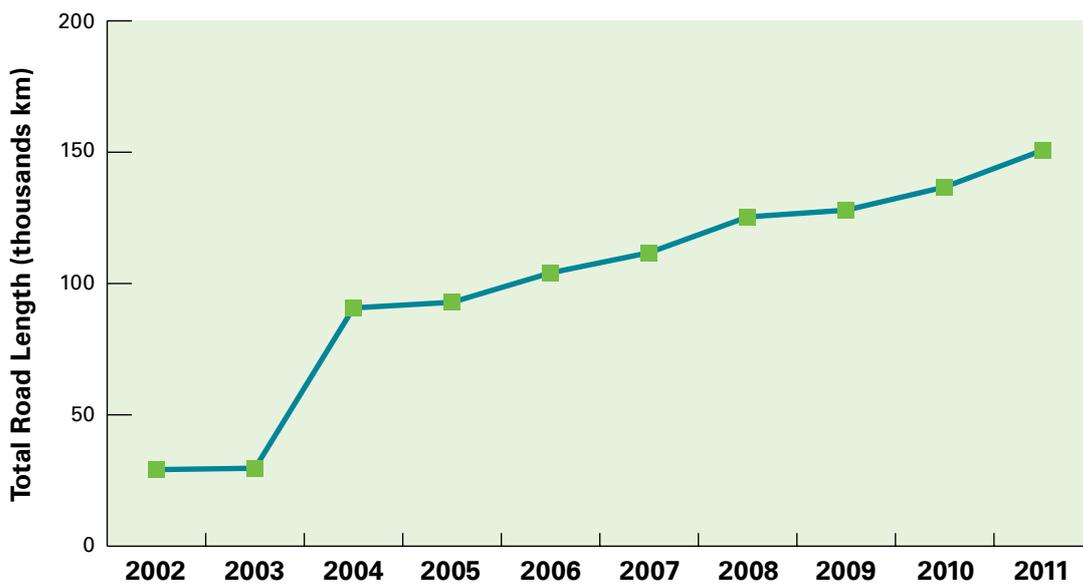
⁸ ASEAN Statistic Leaflet 2012.

Number of Registered Vehicles in Myanmar



Source: ASEAN-Japan Transport Platform Project, Myanmar Road Transport Administration Department

Growth of Roads in Myanmar



Source: ASEAN-Japan Transport Platform Project, Ministry of Construction

Ports

QUICK FACTS

Government Agencies	<ul style="list-style-type: none"> • Ministry of Transport (MOT) – Sea transport policies • Myanma Port Authority - Regulator
Existing Operator(s)	State-Owned Enterprises: <ul style="list-style-type: none"> • Inland Water Transport • Myanma Five Star Line • Myanma Shipyards
Geographical Location	Andaman Sea in the South Bay of Bengal in the Southwest
Total Sea Cargo Throughput	Estimated 21.5 million tonnes per year

Source: ASEAN-Japan Transport Platform Project, Myanmar Port Authority

Myanmar's favourable geographic location makes it an attractive location to develop port facilities. The country's 2,800km coastline runs along the eastern side of the Bay of Bengal and has the potential to become an alternative international trade route to Asia, bypassing the longer route through the Straits of Malacca. The development of its ports can see Myanmar becoming a regional trade and transport hub. The Bay of Bengal is already home to some of the biggest ports in the world - Chittagong in Bangladesh and Chennai in India, a good indicator of the strong potential of the location.

Myanmar currently has 9 ports along the western and southeastern coast of the country, namely: Yangon, Sittwe, Kyaukphyu, Thandwe, Patheingyi, Mawlamyine, Dawei, Myeik, and Kawthaung. In addition, Myanmar International Terminals Thilawa (MITT) is a private multi-purpose container terminal owned and operated by Hutchinson Port Holdings. However, with the exception of the country's principal port in Yangon, the rest are reportedly small coastal ports with limited port handling capabilities⁹. According to official statistics from the Myanmar Port Authority, Myanmar's ports handled 24 million tons of import and export freight in 2011, with the Port of Yangon handling 90% of the cargo throughput¹⁰.

Private Sector Opportunities

A long coastline and growth in volume of imports and exports as a result of increased demand for the country's agricultural commodities, minerals and natural resources will present significant

opportunities in the development of port infrastructure in Myanmar. Although currently underdeveloped, Myanmar's ports have the potential to become regional transportation hubs serving markets in China, India and the Indo-China region. The shorter international trade route from Europe would allow companies to save on transportation costs and time.

Deep water ports are currently being jointly developed at the southern city of Dawei (in association with Thailand) and Kyaukphyu in the north (in association

with China). Other recent activities in the ports sector include interests in developing ports in Thilawa and Sittwe. The government has also identified sites in Kalegawk and Bokpyin for the development of ports.

Under the new Foreign Investment Law, construction of warehousing facilities at ports can only be carried out in a joint venture with Myanmar nationals. Construction of ports will be allowed only after an environmental and social impact study has been successfully completed.

International Ports in Myanmar



⁹ "Myanmar: Transport Sector Initial Assessment", ADB, Oct 2012.

Railways

QUICK FACTS

Government Agencies	<ul style="list-style-type: none">Ministry of Rail Transportation (MORT)
Existing Operator(s)	Monopoly by state-owned Myanmar Railways
Railway Network	5,844 km

Source: ASEAN-Japan Transport Platform Project, Myanmar Railways

The railway sector in Myanmar is currently a monopoly operated by state-owned Myanmar Railways. The rail network has expanded considerably over the last twenty years, expanding by almost 78% between 1988 and 2010, although the focus had been on providing transport services and connectivity to remote areas of the country¹⁰.

According to ADB's initial assessment of the railway sector, the rail network is in poor condition and investment in basic infrastructure, such as track renewal, replacement of sleepers, and upgrading of signaling and communications systems, has been inadequate. For example, travel between Yangon and Nay Pyi Taw takes 5 hours by road and almost 9 hours by rail.

Private Sector Opportunities

Under the Framework for Economic and Social Reform, the government has committed to improve the quality of railroad sections that connect important economic centres in the country, namely the Yangon-Mandalay-Myitkyitna section and the Bago-Mawlamyine section. Emphasis will be given to core links and services that complement the existing strategy of development railroads that connect various regions of the country to the economic centre so as to promote regional equity. Hence, greater attention will be given to regional connectivity and bridging the gaps in operations and compatibility in alignment with region-wide transport strategies.

With approximately 70% of Myanmar's population currently living in rural areas, there is growing demand to develop efficient transportation networks between the rural hinterland and the urban centres - Yangon and Mandalay. This will also tie in with the government's goal of equitable development between the various regions in the country and the development of rural-city connectivity.

There are also existing plans under the Singapore-Kunming Rail Link (SKRL) project to build a high-speed railway to connect Kunming, in Southwest China, with mainland Southeast Asia. The project is a priority agenda under the ASEAN transport cooperation and three routes, going through Vietnam, Lao PDR and Myanmar respectively, have been planned for the rail link. When completed, the SKRL project will become part of the 14,080 km Trans-Asian Railway network across Europe and Asia.

Under the new Foreign Investment Law, foreign investment in construction of railways can only be effected through a joint venture with a Myanmar national. Construction of underground railway also requires the satisfactory completion of an environment and social impact study.

¹⁰ ASEAN-Japan Transport Platform Project.

Airports

Myanmar currently has a total of 69 airports, of which only 32 are operational. There are 3 international airports - in Yangon, Mandalay and Nay Pyi Taw, with 19 international airlines and 4 domestic airlines operating regular flight services between Myanmar and 17 regional destinations. In 2011, there were 1.5 million international passengers and 1.4 million domestic passengers¹¹.

The Myanmar Department of Civil Aviation (DCA) wishes to double the capacity at Yangon International Airport from 2.7 million passengers a year to 5.5 million. The government also has plans to transform some of the existing domestic airports into international airports to serve the growing number of foreign investors and tourists. The DCA has already announced plans to re-develop airports in Yangon and Mandalay and to also build a new airport at Hanthawaddy, about 80km from Yangon.

Private Sector Opportunities

In February 2012, the government announced plans to add two new international airports to meet future air

traffic demand in the country. The two airports are Hanthawaddy International Airport in central Bago region and Dawei International Airport in the Dawei special economic zone. According to officials from the DCA, the upgrading of Dawei Airport from a domestic airport to international facility is expected to cost US\$4 million.

The process for identifying a partner for developing the Hanthawaddy airport is underway. The Department for Civil Aviation intends to let the project as a PPP and there are currently 7 consortia that have pre-qualified for the project, with the Request for Proposals set to be sent to pre-qualified bidders shortly.

The Government has also released plans to re-develop Yangon and Mandalay Airports as PPP projects. 11 consortia have pre-qualified for Yangon, and 7 consortia have pre-qualified for Mandalay.

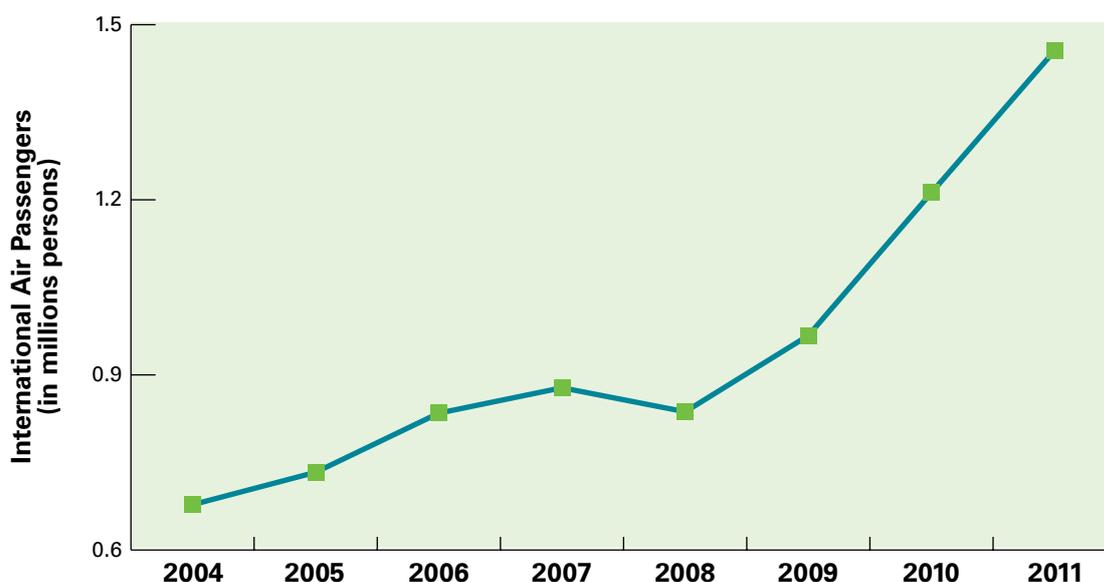
Objectives for National Air Transport Policy have been laid down, and there are plans to develop a Civil Aviation Master Plan with assistance from JICA. DCA is

planning to reform its institutional set-up into regulator & service-provider roles, with the private sector being invited to participate as a service-provider.

Under the new Foreign Investment Law, foreign investment is prohibited in air navigation services. Foreigners can invest in the domestic and international air transport services only in a joint venture with Myanmar nationals. To carry out the following activities, foreign investors would need the approval of the Union Government, and the investor would need to obtain and follow the Ministry of Transport's terms and conditions:

- Construction and operation of airports
- Aviation training
- Aircraft repair and maintenance
- Air transport services, marketing and air ticketing services
- Aircraft leasing
- Air cargo services
- Airline catering and fueling services
- Aircraft inspection and ground support services
- Airport passenger services and airport hotels

Annual International Air Passenger Traffic into Myanmar



Source: ASEAN-Japan Transport Platform Project, Myanmar Department of Civil Aviation

¹¹ ASEAN-Japan Transport Platform Project, Myanmar Department of Civil Aviation

Energy & Power

QUICK FACTS

Government Agencies

- Ministry of Energy (MOE), Energy Planning Department - exploration and production of crude oil and natural gas, refining, manufacturing of petrochemicals and transportation, and distribution of petroleum products
- Ministry of Electric Power (MOEP) – gas and hydro power sector, power distribution
- Ministry of Mines (MOM) – for coal
- Ministry of Agriculture and Irrigation (MOAI) – for biofuels
- Ministry of Science and Technology (MOST) – for renewable energy
- Ministry of Environmental Conservation and Forestry (MOECAF) - fuelwood, climate change, environmental safeguard requirements
- Ministry of Industry (MOI) - energy efficiency

Existing Operator(s)

Myanma Oil and Gas Enterprise
Myanma Petrochemical Enterprise
Myanma Petroleum Products Enterprise

Electricity Generation

- 7,346 GWh (as at 2010)
- Hydro Electric: 5,052 GWh (68.8%)
 - Conventional Thermal: 2,292 GWh (31.2%)

Source: International Energy Statistics, US Energy Information Administration (April 2013)

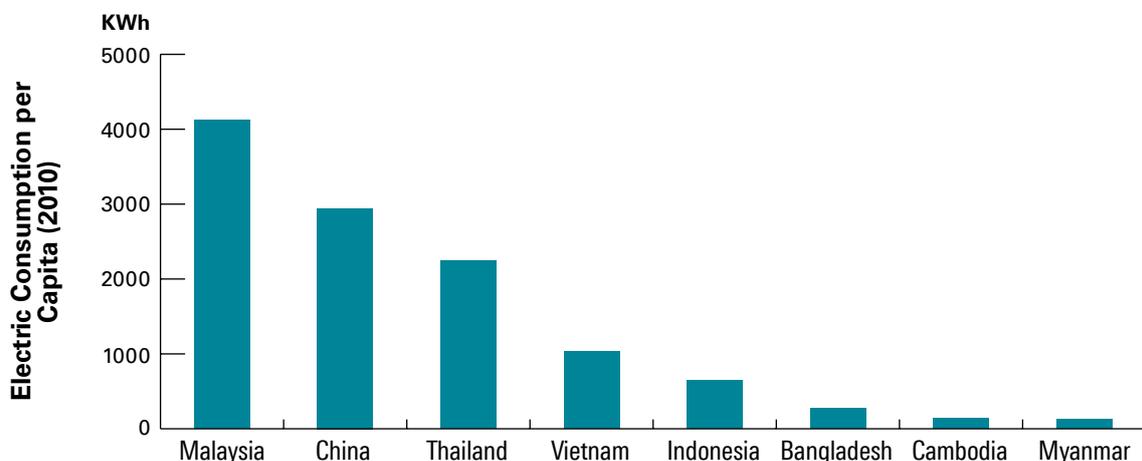
Myanmar has abundant energy resources, including renewable alternatives such as hydro, biomass, wind and solar. The country's primary energy supply includes coal, oil, gas, hydropower and biomass. Hydropower is the main source of fuel in the country and electricity from hydropower plants contribute nearly 70% of the total electricity generated in the country, followed by 22% produced from

natural gas and 8% from coal¹².

Over the last 10 years, electricity consumption in Myanmar has almost doubled from 3,303 GWh in 2000 to 6,093 GWh in 2010¹³. However, Myanmar's per capita electricity consumption still remains the lowest among the ASEAN-10 countries, at 100 KWh in 2010, compared to a consumption of around 600 KWh

in Indonesia and over 2,000 KWh in Thailand. It is estimated that only a quarter of Myanmar's population currently have access to a regular supply of electricity and even Yangon is plagued by frequent outages, limiting economic growth and development. The low national average per capita electricity consumption is due to the low electrification rate, low industrial development and lack of investment.

Electric Consumption per Capita in 2010



Source: World Bank

¹² Energy Statistics, International Energy Agency (IEA)

¹³ International Energy Statistics, US Energy Information Administration

Electricity Connectivity and Consumption (2009) in Selected Asian Nations

	Electrification Rate (%)	Millions without Power	Consumption (kWh/person)
Malaysia	99.4%	0.2	3614
China	99.4%	8	2631
Thailand	99.3%	0.5	2045
Vietnam	97.6%	2.1	918
Indonesia	64.5%	82	590
Bangladesh	41.0%	96	252
Cambodia	24.0%	11	131
Myanmar	13.0%	44	104

Source: IEA, World Bank

Myanmar's average electrification¹⁴ grew from 16% in 2006 to 26% in 2011. Big cities are relatively well electrified: 67% for Yangon, 54% for Nay Pyi Taw and 31% for Mandalay while rural areas remain poorly electrified with an electrification ratio of about 16%. Out of 62,218 villages, 2765 villages are electrified by the System and 14,195 villages via a "self help basis" (such as Biomass, Solar, Wind, Diesel, Mini Hydro, Biogas). As per the 5 year plan by Ministry of Electric Power (MOEP), the government aims to achieve the following electrification rates for the villages:

Seven ministries in Myanmar are responsible for energy matters, with the Ministry of Energy (MOE) as the focal point for overall energy policy and coordination. Myanmar's Energy Policy framework has four main goals:

- 1) maintaining energy independence;
- 2) promoting the wider use of new and renewable sources of energy;
- 3) promoting energy efficiency and conservation; and
- 4) promoting household use of alternative fuels.

Year	2013–14	2014–15	2015–16
Number of villages electrified	3,575	4,116	4,793

The Myanmar government has also indicated under the Framework for Economic and Social Reform that the sector will be further liberalised through the deregulation of prices, the adoption of appropriate taxes and elimination of across-the-board subsidies in the energy sector. Myanmar is also developing a master plan for the electricity sector that will project future electricity consumption, develop a plan to meet those consumption requirements and identify necessary regulatory reforms.

Private Sector Opportunities

There are significant investment opportunities for both foreign and domestic companies to invest in the generation, transmission and distribution of power. Myanmar's power sector is underserved and investments in hydropower and coal-powered plants, gas fields, and oil and gas pipelines are coming in rapidly.

With a population of 60 million and rapid economic growth, Myanmar has the potential to attain much higher power consumption levels over the next two decades. Provided the economic reforms in the country are sustained, the country can see a capacity uplift of up to 50GW in the timeframe. This would entail an investment of roughly US\$50 billion in the power generation sector¹⁵.

Under the Foreign Investment Law released in November 2012 and the subsequent rules that were issued in January 2013, foreign investments in production of electricity through hydropower and coal fired plants will require the approval of the Government, and can only be effected through a joint venture with the State or on a BOT basis. The investor is also required to satisfactorily complete an environmental and social impact assessment before beginning the construction of power generation or power transmission infrastructure. Foreign investment is not allowed in trading of electricity or inspection services in this sector.

¹⁴ Average electrification is measured by the number of electrified households connected to the grid over the total number of households

¹⁵ "Frost & Sullivan: Is it Time to Energize the Power Market in Myanmar?", 11 July 2012

Telecommunications

QUICK FACTS

Regulator	Posts and Telecommunications Department (PFT) Ministry of Communications and Information Technology (MCIT)
Existing Operator(s)	Monopoly by state-owned Myanmar Posts and Telecommunications (MPT)
Network Spectrums	GSM-900 (67%), CDMA-800 & CDMA-450 (20%), WCDMA-2100 (14%)
International Network Connections	SEA-ME-WE-3 submarine fibre optic cable, cross-border fibre links with China, India and Thailand, 2 international satellite earth stations (connected to Thai-com satellite)

Source: Ministry of Communications and Information Technology, Myanmar

Myanmar's telecommunications sector is significantly underserved, with exceptionally low penetration rates given the size and potential of the market. Although the mobile subscriber base has grown fivefold in the last four years, official statistics report that there are 5.4 million subscribers as at December 2012, or a penetration rate of just 9% of population.

Fixed-line subscriber numbers have been growing erratically, with an overall penetration of around 1% of the population or 0.6 million subscribers. Internet user penetration is even lower, at less than 1% of the population or 0.5 million subscribers. Yangon and Mandalay account for majority of the mobile and fixed-line subscribers.

Private Sector Opportunities

The government has identified the key barrier to telecommunication access to be high costs and limited infrastructure. To achieve the target of increasing mobile phone density to 75-80% and internet penetration by over 50% by FY2015/16, the government has committed to undertaking several reforms:

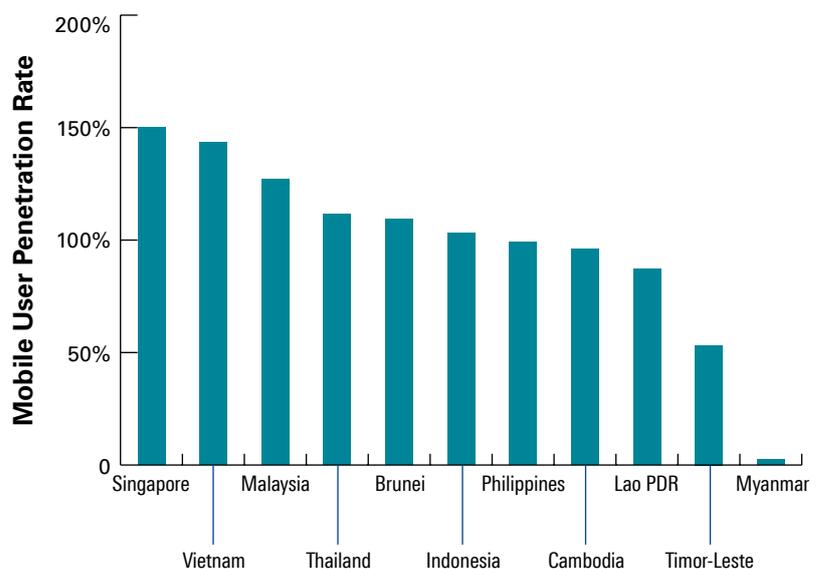
- Under the Framework for Economic and Social Reform, the government is developing an Information and Communications Technologies (ICT) Master Plan to enhance ICT adoption in the country and strengthen industrial competitiveness by promoting information technology and knowledge management. As a start, the government is developing an e-Government national portal and forming a steering committee and task force to implement these plans.

- The government is drafting the new Telecommunications Law and Cyber Law, which are expected to set out the government's plans to separate the policy, regulatory and operational roles of the government in the telecommunications sector. An independent regulator will be established to supervise the ongoing process of liberalisation and opening up of the telecommunication sector.
- State-owned Myanmar Post and Telecommunication, currently the country's sole operator, is to be privatised to form the Myanmar

Telecoms Company. It will be awarded one of the mobile phone licences with another licence awarded to local internet service provider Yataraporn Teleport.

A significant development in the sector is the move by the government in January 2013 to invite foreign investors to register their interest to bid for two of four remaining national telecommunications licences. The government is now in the final stage of preparing an international telecom tender that will invite international operators to participate in the planned expansion of mobile networks.

Mobile User Penetration Rate in Southeast Asia, 2011



Source: International Telecommunication Union (April 2013)

Special Economic Zones / Industrial Zones

There are a total of 18 private-operated industrial zones across the country, contributing about 20% of the country's gross domestic product (GDP)¹⁶. The government has been actively promoting greater public and private sector investments into the industrial zones to generate jobs and technological development. Myanmar expects to overcome infrastructure bottlenecks and promote foreign direct investment through Special Economic Zones (SEZs), which will emphasise Myanmar as a strategic location and a low-cost production base for exports to the region.

Private Sector Opportunities

Three key SEZ projects have been announced in Myanmar:

(i) Dawei Special Economic Zone in the

southern Taninthayi region, with Thai investors.

(ii) Kyaukphyu Economic and Technology Zone in the western Rakhine state, with investment from China.

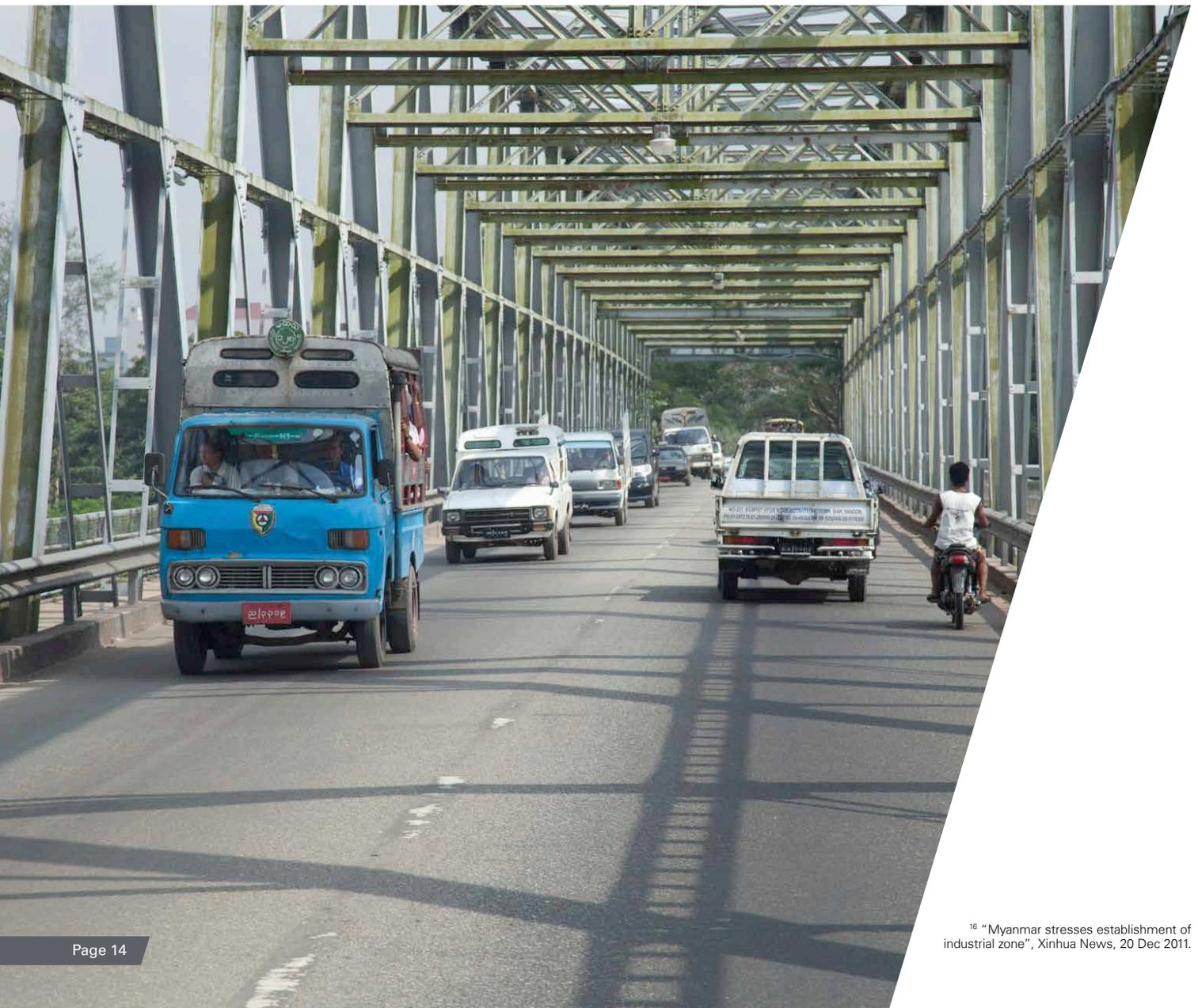
(iii) Thilawa Special Economic Zone near Yangon, with assistance from Japan.

Myanmar is also planning to set up seven local industrial zones in addition to the 18 already existing. New industrial zones have already been announced for Tatkon in Nay Pyi Taw, Yadanarbon in Mandalay, Hpa-an, Myawaddy and Phayathonzu in Kayin state, Ponnagyun in Rakhine state and Namoum in Shan state.

The SEZ law, enacted in January 2011, is already undergoing revision and is expected to be submitted to parliament

for approval soon. According to news reports, respective laws will be enacted for Thilawa, Kyaunkpyu and Dawei SEZs, while a separate common SEZ law is concurrently being drafted to streamline working procedures of all industrial zones across the country.

The draft new SEZ law is expected to streamline the existing regulations with the new Foreign Investment Law passed in November 2012, and provide additional incentives for investment in designated SEZs, including exemption and relief on import tax, commercial tax and value added tax. Investors will also be eligible for greater level of income tax exemption and relief under the new law.



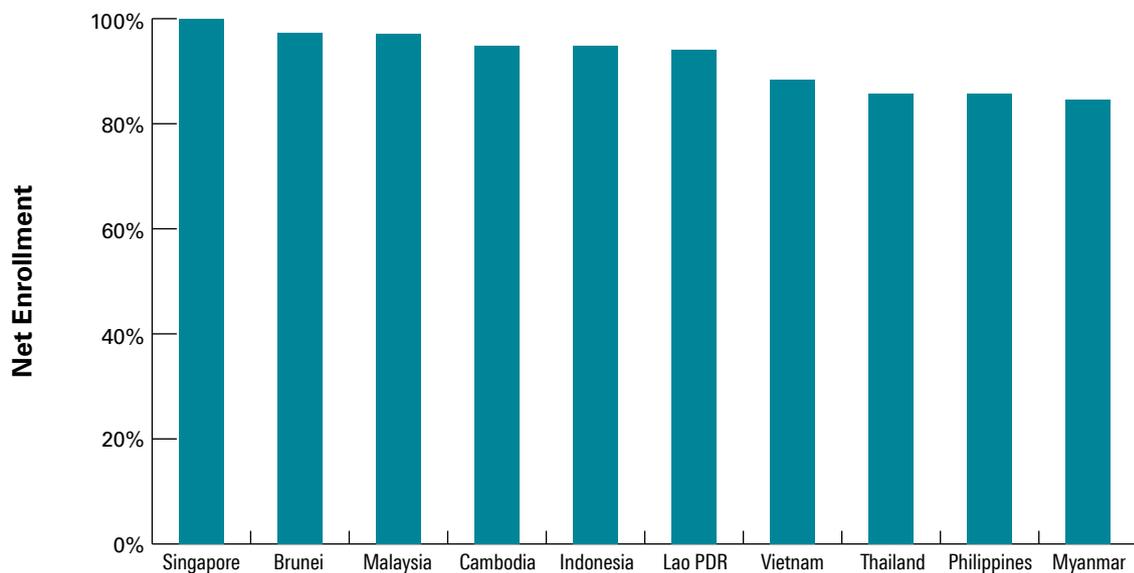
Social Infrastructure

One of the key policy priorities of the Myanmar government under the FESR is to focus on people-centric development, particularly in the areas of improving education, health and living standards. In the fiscal year 2012/2013 budget, the government has increased expenditures on education and health.

Education is a top government priority in

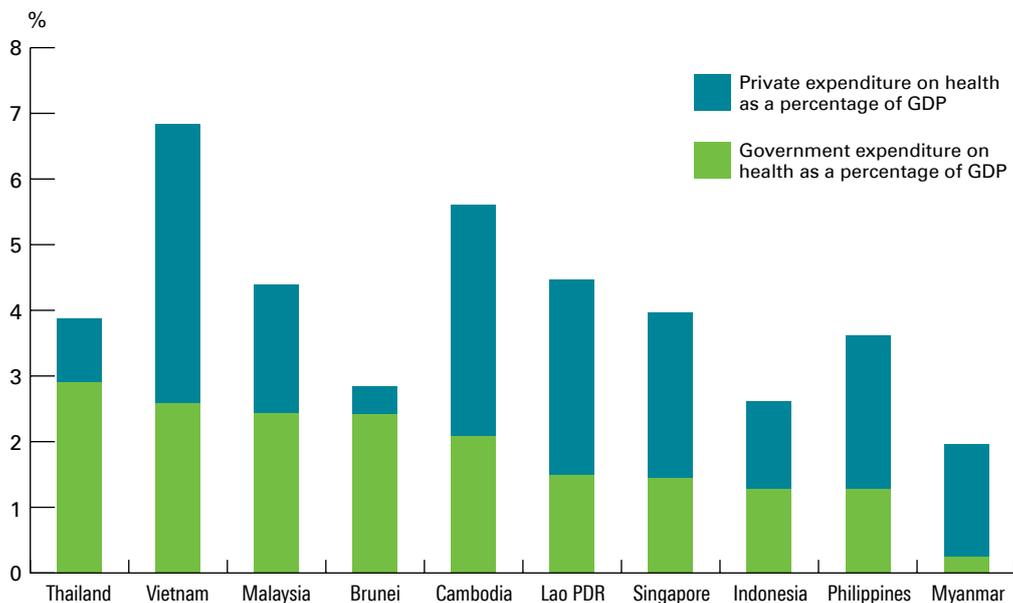
view of the low levels of provision and the importance of investment in education for inclusive growth. Net enrolment in education for Myanmar is low compared to other ASEAN countries and the quality of education at all levels is generally poor. The ratio of government expenditure on education to overall GDP is also the lowest in the region.

Net Enrollment in Primary Education, 2011



Source: ASEAN Statistical Leaflet 2012

Government Expenditure on Health as a percentage of GDP, 2010



Source: World Health Organisation (April 2013)

Health indicators in Myanmar currently compare poorly to those of neighbouring countries and the government has doubled its commitment to improving health care services and public financing in the healthcare sector.

Private Sector Opportunities

The government has committed to increasing expenditure on education in the coming years, in absolute terms as well as a proportion of the total government budget. The government is also planning to undertake overarching education sector reforms that includes expanding both the quality as well as extent of education. On

the health sector, the government has begun increasing the level of government expenditure on healthcare and will focus on a number of innovative measures to improve accessibility to healthcare among the rural population, including strengthening township-level health financing and greater cooperation with development partners.

Given the government's strong interest in rural development and improvements to social infrastructure to improve the living standards of the people, we can expect that new projects will be launched in this sector to address infrastructure gaps.

GLOSSARY

- ADB – Asian Development Bank
- ASEAN – Association of Southeast Asian Nations
- CNDP - Comprehensive National Development Plan
- FESR – Framework for Economic and Social Reforms
- SEZ – Special Economic Zone



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