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ENHANCING INDIA'S ENGAGEMENT IN HEALTHCARE SECTOR OF CLMV COUNTRIES

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EXECUTIVE SUMMARY

The CLMV region, which comprise Cambodia, Lao People's Democratic Republic (Lao PDR), Myanmar and Vietnam, forms an integral part of the Association of South East Asian Nations (ASEAN), accounting for 32 percent of ASEAN's total geographical area, 26 percent of ASEAN's population and around 12 percent of its GDP in 2017. While other countries of the ASEAN witnessed strong growth on the back of strong manufacturing sector, CLMV countries are primarily agrarian. The CLMV region has demonstrated a certain degree of macroeconomic stability in the recent years. Responding positively to economic reforms, the CLMV region has witnessed significant growth in the recent past showing vast potential for future developments. In fact, the real GDP of the CLMV region grew at an estimated average rate of 6.8 percent in 2017, as compared to ASEAN's average of 5.5 percent.

According to the International Monetary Fund (IMF), Cambodia's economy sustained a high growth of 6.9 percent in 2017, a shade lower than 7 percent growth rate recorded in the previous year. Economic growth was mainly supported by robust exports, buoyant tourism, and strong foreign direct investment (FDI) inflows. Though the economy experienced a mild slowdown in industrial sector in 2017, it was offset by faster growth in agriculture and services sectors. Similarly, Lao PDR's economic growth was sustained at 6.8 percent in 2017, in spite of a new government ban on logging exports, tighter credit, subdued international mineral prices, and lower tourist arrivals. High growth in Lao PDR was sustained by acceleration in services sector and a strong agricultural sector.

As regards Myanmar, real GDP growth accelerated to an estimated 6.7 percent in 2017, increasing from 5.9 percent in 2016, supported by higher agricultural output, stronger growth in exports, and robust private consumption. Industrial and services sectors also maintained strong growth, driven by robust

manufacturing output and strengthening domestic consumption, and buoyant tourism, respectively.

Vietnam's economic growth also picked up in 2017, to an estimated 6.8 percent, up from 6.2 percent in 2016, driven by rising FDI and export growth, resilient agricultural growth and robust domestic demand.

Foreign Trade of CLMV Countries

The importance of international trade as a growth facilitator has been recognized by CLMV countries and is evident from their growth performance in recent years. Increase in trade activity in the region was supported by rise in both exports and imports of CLMV countries.

With the growing importance of trade, the share of CLMV region in ASEAN's total trade has increased from 7.9 percent in 2007 to 20.9 percent in 2016. However, there exist wide disparities in trade among member countries. For example, Vietnam alone accounted for 18.4 percent of ASEAN's total trade in 2016, while the combined share of Cambodia, Lao PDR and Myanmar was less than 3 percent.

During 2007-2016, CLMV's global exports increased more than four-fold from US\$ 58.4 billion to US\$ 244.7 billion, with a resultant rise in its share in ASEAN's exports from 6.8 percent in 2007 to 20.7 percent in 2016. During the same period, CLMV's imports increased over three-fold from US\$ 69.8 billion in 2007 to US\$ 233.7 billion in 2016, resulting in a rise in its share in ASEAN's imports from 9.2 percent in 2007 to 21.2 percent in 2016.

Amongst CLMV countries, Vietnam is the largest exporter, with exports of US\$ 219.8 billion in 2016 (89.8 percent of CLMV's exports), followed by Myanmar (4.8 percent), Cambodia (4.1 percent) and Lao PDR (1.3 percent). CLMV as region majorly exported electrical machinery and equipment

(32.9 percent of total exports of the region in 2016); readymade garments (13.6 percent); footwear and gaiters (7.9 percent); machinery and mechanical appliances (6.3 percent); and furniture (3.3 percent).

USA was the major export destination of CLMV countries, accounting for 18.8 percent of total exports of CLMV countries in 2016. Other major export destinations include China (17.9 percent in 2016), Japan (7.3 percent), South Korea (5.3 percent), and Germany (4.5 percent). India's share in CLMV's exports in 2016 remain unchanged at 1.7 percent compared to 2007.

As regards imports, Vietnam is the largest importer in the CLMV region (accounting for 86.2 percent of CLMV's imports), followed by Myanmar (6.7 percent), Cambodia (5.3 percent), and Lao PDR (1.8 percent). The major imports of the CLMV region in 2016 include electrical machinery and equipment (20.6 percent of total imports of the region); machinery and mechanical appliances (10.2 percent); mineral fuels, mineral oils and products of distillation (4.8 percent); plastics and articles (4.6 percent); vehicles other than railway or tramway (4.6 percent); and iron and steel (4.3 percent).

China was the major import source of CLMV countries in 2016, accounting for 30.7 percent of total imports of CLMV countries, followed by South Korea (14.4 percent), Thailand (6.7 percent), Japan (6.4 percent), Singapore (6.1 percent), and USA (4.5 percent). India's share in CLMV's imports stood at 3.1 percent in 2016, up from 2.2 percent in 2007.

Healthcare Sector of CLMV Countries

According to the IMF, in the next five years (2018-2022), the CLMV region will be growing at a rate of over 6 percent, up above the global economic growth of 3.8 percent. With an increase in per capita GDP and disposable incomes, there will be an improvement in the standards of living and an increasing demand for better healthcare services, eventually transforming the region to an attractive investment destination. Further, with an increase in the ageing population,

there is a need in CLMV countries for adequate healthcare services. Looking at the current scenario, however, there is a huge gap in healthcare services in the CLMV region, and there is an urgent need to bridge the gap by developing the healthcare sector on a priority basis.

Healthcare in the CLMV region remains one of the most neglected sectors. According to the World Bank, average life expectancy at birth in the CLMV region was 69.8 years in 2016 as compared to the global average of 72 years. The region's average infant mortality rate (number of deaths per 1,000 live births) stood at 33.2 in 2016, higher than ASEAN average at 20.5 and the global average of 30.5. While maternal mortality ratio (number of deaths per 100,000 births) for the CLMV region (147) was below the global average of 216 in 2015, it was still higher than the ASEAN average of 92 in 2015.

Healthcare infrastructure in the region is also inadequate. As regards density of healthcare personnel, Vietnam had the highest density of physicians (number of physicians per 1,000 people) at 1.2 in 2013, against a global average of 1.9. However, number of physicians per 1,000 people for the country has come down to 0.8 in 2016, but it is still highest among CLMV countries. Similarly, for the total number of nurses and midwives per 1,000 people, Vietnam had the highest density at 1.2 nurses and midwives for 1,000 people in 2013, against a global average of 3.1. In 2016, the number of nurses and midwives for 1,000 people in Vietnam increased to 1.4. According to latest data available from the World Health Organization (WHO), Vietnam has the highest density in terms of hospital beds with 26 hospital beds per 10,000 persons, followed by Lao PDR with 15 beds, Myanmar with 9 beds and Cambodia with 8 beds.

CLMV region has experienced an epidemiological transition from communicable diseases to non-communicable diseases. The countries are witnessing more deaths due to cardiovascular diseases and cancer than HIV, malaria and TB which once plagued the region.

Insurance coverage is low in the region except for Vietnam. The region has been aiming at Universal Health Coverage and most of the insurance sphere is dominated by government. The health indicators and existing infrastructure are a reflection of the region's expenditure on healthcare. Total expenditure on health as a percentage of GDP has been falling in Cambodia, Lao PDR and Vietnam. Per capita health expenditure in the CLMV region has been dismal. The countries are far behind the world average of per capita health expenditure and also the ASEAN average. In 2015, Vietnam has the highest per capita health expenditure at US\$ 116.7, followed by Cambodia (US\$ 69.6), Myanmar (US\$ 59.1) and Lao PDR (US\$ 53), against the global average of US\$ 1,001.5. Out of pocket expenditures on healthcare are high in the region, implying inequities in access to healthcare.

Investments in CLMV Countries

In recent years, the CLMV region has benefited from increased FDI inflows, primarily to the infrastructure sector. According to UNCTAD, FDI inflows to the CLMV region increased by more than two-fold to US\$ 17.6 billion in 2016, as compared to US\$ 8.2 billion in 2007. Outward FDI from the region increased from US\$ 222.1 million in 2007 to US\$ 1.5 billion in 2016.

As in the case of trade, Vietnam attracted the highest investments in the region, and accounted for 71.6 percent of the region's inflows in 2016, followed by Myanmar (12.4 percent), Cambodia (10.9 percent) and Lao PDR (5.1 percent). As regards outflows, Vietnam's share in the region's FDI outflows stood much higher at 91.9 percent in 2016, followed by Cambodia (8 percent) and Lao PDR (a marginal share of 0.1 percent).

According to the ASEAN Investment Report 2017 published by ASEAN Secretariat, FDI from developing Asian economies, including intra-ASEAN, remained the major source of investment in CLMV countries. While China and ASEAN are major investors in Cambodia and Lao PDR, ASEAN countries are the lead investors in Myanmar, and South Korea dominated investment in Vietnam. While Cambodia's FDI was

concentrated in finance, light manufacturing and infrastructure activities, Lao PDR attracted strong infrastructure investment, particularly in power projects. Myanmar continued to receive investment across sectors, with growing investor interest. FDI flows in Vietnam were dominated by strong manufacturing investments from South Korea.

According to fDi Markets database, during January 2003 to March 2018 the cumulative investment in the CLMV region in greenfield and brownfield expansion projects, were US\$ 436.3 billion. Vietnam received the highest investment of US\$ 324.1 billion, followed by Myanmar (US\$ 59 billion), Cambodia (US\$ 34.1 billion) and Lao PDR (US\$ 19.2 billion). The major investors in the region were Japan (US\$ 70.9 billion), South Korea (US\$ 65.9 billion), Malaysia (US\$ 37.3 billion), Thailand (US\$ 37.2 billion) and China (US\$ 31.7 billion).

During the same period, India featured as the 14th largest investor with the size of investment amounting to US\$ 8.1 billion covering 73 projects, and generating 16,094 jobs in the CLMV region. India has majorly invested in coal, oil and natural gas (US\$ 5.2 billion), followed by metals (US\$ 567.6 million), financial services (US\$ 430.4 million), wood products (US\$ 420.8 million) and hotel and tourism (US\$ 413.8 million). Vietnam has been the largest recipient of Indian investment (US\$ 4.1 billion), followed by Myanmar (US\$ 3.1 billion), Cambodia (US\$ 498.7 million) and Lao PDR (US 441.7 million).

Investments in Healthcare Sector

The major sectors receiving investment in the CLMV region have been coal, oil and natural gas, real estate, alternative/renewable energy, financial services and metals. FDI inflows into healthcare sector, which include pharmaceuticals, is extremely low in the region. According to fDi Markets database, healthcare received an overall investment of US\$ 2.8 billion during January 2003 to March 2018. The share of healthcare sector in total FDI is observed to be highest in Myanmar, which stood at 1.3 percent during January 2003 to March 2018.

The major investors in the CLMV region in this sector during the same period include Indonesia (US\$ 644.8 million), followed by Singapore (US\$ 368.4 million), Japan (US\$ 355.5 million), China (US\$ 235.9 million) and USA (US\$ 233.8 million). India is the 13th largest investor in healthcare sector during this period, with an investment amount of US\$ 19.5 million.

Due to their lower middle income status, CLMV countries are eligible for Official Development Assistance (ODA). Therefore, the countries have been relying on external sources of finance to fund their healthcare expenditures. Once they move out of this income category, however, they will not be eligible for such kind of financial assistance. For a sustainable healthcare services, therefore, it is important to increase FDI inflows into the sector.

Enhancing India's Export Potential in CLMV Countries

With a view to boosting bilateral trade relations with CLMV countries in healthcare sector, an important endeavor could be enhanced sourcing of CLMV's imports from India in pharmaceutical goods and medical and surgical equipment, in which India has export capability and competitiveness. This would entail identification of potential items of India's exports up to the 6-digit HS commodity code, based on an analysis of CLMV countries' top imports and low share of India in their import basket, keeping in view India's global export capability in these categories.

Enhancing Presence in Healthcare Sector of CLMV Region: Broad Strategies

The gap in the healthcare sector has created lots of opportunities for investment in the CLMV region. The increasing focus of the governments on healthcare has opened up new opportunities for foreign engagement. Further, respective governments in the region also offer several financial incentives in healthcare sector related investments.

Healthcare Infrastructure: First and foremost, India could focus on providing healthcare infrastructure such as hospitals, specialist centers and clinics at the

province as well as the central level. There is a need for super-specialty hospitals and advanced healthcare technologies, owing to the epidemiological shift. A network of telemedicine facilities can be expanded throughout the geographically inaccessible areas. This can be done in cooperation with the provincial or district hospitals or the rural health centres and posts which possess more information about the area. In the regions where establishment of hospitals is tough and there is no advance healthcare technology, these facilities can help save lives and ensure improved quality of treatment at lower rates. Digitization of medical records offers another avenue for investment in the CLMV region. With increasing demand for improved healthcare services and higher internet coverage, CLMV countries are a potential market for this service.

Emergency Relief System: One of the crucial services which needs to be strengthened in the CLMV region on a priority basis is the emergency relief system. The poor quality of roads in the region is a major challenge which needs to be addressed to facilitate and enhance the coverage of the emergency relief services. The countries require more state-of-theart ambulances which could act as mobile ICUs and are equipped with advanced medical equipment. Indian investments could give a special focus on twowheeler ambulances as it could provide basic firstaid to the patients till the four-wheeler ambulance arrives to the scene. Bike ambulances can make way through traffic jams and congested roads as well as remote places where there are no proper roads for four wheeler ambulances, and hence, can reach out with the requisite emergency service.

Capacity Building in Healthcare Sector: One of potential areas for cooperation to bolster the healthcare infrastructure in the CLMV region would be cooperation in healthcare related education sector, which include establishment of campus in the region or through exchange programs and capacity building. There exist opportunities in setting up nursing schools in CLMV countries to enable skill development and

meet advance training requirements of the countries. Exchange programs and technical cooperation projects could help in strengthening the knowledge base of the medical personnel in the region. Tele-education is another form of capacity building, which would require a collaborative effort between medical institutes in India and the CLMV region.

Cooperation in Insurance Sector: Insurance companies can enter the region in the form of joint ventures or by setting up their own branches. Apart from conventional insurance products, health cards can be offered. Low-cost insurance schemes can be introduced in the region so as to increase healthcare coverage. While entering the life and health insurance market of the region, the investors need to focus on their marketing strategy. There is a need to focus on awareness campaigns, as lack of awareness about the health insurance is a major challenge for the insurance industry's expansion.

Medical Tourism: While promoting Indian investments in healthcare sector of CLMV countries, medical tourism to India could also be encouraged. Features such as low cost healthcare solutions, availability of skilled healthcare professionals, reputation for treatment in advanced healthcare segments, India's traditional wellness systems, and strengths in information technology makes India an ideal destination for patients from the CLMV region.

Medical tourism between India and CLMV countries offers a lot of potential. Nationals from the CLMV region generally sought medical treatments from neighbouring countries such as Thailand. Nationals from CLMV countries could take advantage of the region's proximity with India and visit the country for medical treatment. Since four Northeast Indian states share border with Myanmar, Myanmar nationals could come to these states for timely medical assistance.

To sum up, Government of India's intervention in healthcare can be on similar lines with its engagements with other regions such as Africa. For instance, Exim India, at the behest of and on behalf of the Government of India, has extended various LOCs to African countries for strengthening of health system, constructing health posts, upgradation of hospitals, and supply of medical equipment, furniture and other accessories to hospitals. Investors will have to place health education as their core marketing strategy, and encourage consumers in the region to buy better products. At the same time, investment agencies of CLMV countries need to address barriers regarding entry regulations while disseminating information on incentives relating to investment in the sector. India's investments in the region could also be utilized as a catalyst for accessing other markets, which will eventually help in expanding India's global presence in healthcare sector.

1. ECONOMIC OVERVIEW OF CLMV COUNTRIES

Cambodia, Lao PDR, Myanmar and Vietnam form the group of CLMV countries, which are a part of the Association of Southeast Asian Nations (ASEAN)¹. These four Southeast Asian countries are attracting greater global attention in the recent years, given their huge potential for future development. CLMV countries have been growing at an impressive rate, with high degrees of macroeconomic stability and development. The region has the advantage of lowwage labour force and abundant natural resources over the other economies in ASEAN.

The first CLMV Summit was held in November 2004 in Vientiane, Lao PDR, with the adoption of the Vientiane Declaration on enhancing economic cooperation and integration among CLMV countries. The Declaration showed strong commitment to strengthen and enhance cooperation and promote

regional integration. Accordingly, seven areas of cooperation were identified in the Declaration, which include trade and investment, agriculture, industry and energy, transport, information technology, tourism and human resource development.

The CLMV region has exhibited higher growth rates compared to the world and even the ASEAN region. While the world economy was growing at 3.8 percent and ASEAN at 5.5 percent in 2017, the CLMV region recorded a growth of 6.8 percent in the same year (Table 1.1). The region accounts for 32 percent of ASEAN's total geographical area, 26.3 percent of ASEAN's population and around 12 percent of its GDP in 2017. Responding positively to economic reforms, the CLMV economies have shown tremendous potential for growth in the region.

Table 1.1: Macroeconomic Indicators of CLMV and ASEAN Countries

| | GDP Current Prices (US\$ bn) | | | Real GDP Growth (%) | | | Population (mn) | | |
|----------------------------|---------------------------------|-------------------|-------------------|---------------------|-------------------|-------------------|-----------------|-------------------|-------------------|
| | 2016 | 2017 ^e | 2018 ^f | 2016 | 2017 ^e | 2018 ^f | 2016 | 2017 ^e | 2018 ^f |
| Brunei Darussalam | 11.4 | 12.7 | 14.4 | -2.5 | 0.5 | 1.0 | 0.4 | 0.4 | 0.4 |
| Cambodia | 20.2 | 22.3 | 24.4 | 7.0 | 6.9 | 6.9 | 15.8 | 16.0 | 16.3 |
| Indonesia | 932.4 | 1015.4 | 1075.0 | 5.0 | 5.1 | 5.3 | 258.7 | 262.0 | 265.3 |
| Lao PDR | 15.9 | 17.0 | 18.3 | 7.0 | 6.8 | 6.8 | 6.6 | 6.7 | 6.8 |
| Malaysia | 296.5 | 314.5 | 364.9 | 4.2 | 5.9 | 5.3 | 31.6 | 32.1 | 32.5 |
| Myanmar | 63.3 | 66.5 | 70.7 | 5.9 | 6.7 | 6.9 | 52.3 | 52.6 | 52.8 |
| Philippines | 304.9 | 313.4 | 332.4 | 6.9 | 6.7 | 6.7 | 103.2 | 105.3 | 107.4 |
| Singapore | 309.8 | 323.9 | 349.7 | 2.4 | 3.6 | 2.9 | 5.6 | 5.6 | 5.7 |
| Thailand | 411.8 | 455.4 | 483.7 | 3.3 | 3.9 | 3.9 | 69.0 | 69.1 | 69.2 |
| Vietnam | 201.3 | 220.4 | 240.8 | 6.2 | 6.8 | 6.6 | 92.7 | 93.6 | 94.6 |
| CLMV | 300.6 | 326.2 | 354.2 | 6.2 | 6.8 | 6.6 | 167.3 | 169.0 | 170.4 |
| ASEAN | 2,567.5 | 2,761.5 | 2,974.4 | 5.3 | 5.5 | 5.6 | 635.9 | 643.5 | 650.9 |
| Share of CLMV in ASEAN (%) | 11.7 | 11.8 | 11.9 | - | - | - | 26.3 | 26.3 | 26.2 |

Note: - Not applicable; e - estimates; f - projections Source: IMF World Economic Outlook, April 2018

¹ ASEAN is a regional grouping that promotes economic, political, and security cooperation among its ten members: Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

According to the International Monetary Fund (IMF), in the next five years (2018-2022), the CLMV region will be growing at a rate of over 6 percent, up above the global economic growth of 3.8 percent. Corresponding higher per capita GDP and disposable incomes will result in an improvement in the standards of living and higher demand.

While other countries of the ASEAN witnessed strong growth on the back of strong manufacturing sector, CLMV countries are primarily agrarian. CLMV countries are endowed with abundant natural resources and low-wage labour force, while facing challenges in developments of infrastructure, healthcare and logistics. This provides an immense potential for further development and thus growth. Except Vietnam, the other 3 member countries of the group are classified among the UN's list of Least Developed Countries (LDCs). The investment opportunities in this region have so far been tapped to a large extent by many countries that are already involved in infrastructural and other developmental projects in the region. There still exists a large potential, as the investment needs in these high growth economies are huge.

Foreign Trade of CLMV Countries

The importance of international trade as a growth facilitator has been recognized by CLMV countries and is evident from their growth performance in recent years. CLMV countries now account for one fifth of the total trade volume of ASEAN. Increase in trade activity in the region was supported by rise in both exports and imports of CLMV countries.

With growing importance of trade, the share of the CLMV region in ASEAN's total trade has increased from 7.9 percent in 2007 to 20.9 percent in 2016. However, there exist wide disparities in trade among member countries. For example, Vietnam has the largest volume of trade among CLMV countries, with total trade reaching US\$ 421.4 billion in 2016, accounting for 88 percent of total trade of the CLMV region. Vietnam alone accounted for 18.4 percent of ASEAN's total trade in 2016, while the combined share of Cambodia, Lao PDR and Myanmar was less than 3 percent. Lao PDR has the lowest trade volume, with total trade reaching US\$ 7.2 billion in 2016. Trade openness (trade/GDP ratio) is very high for Vietnam and Cambodia and is moderate for Lao PDR and Myanmar.

During 2007-2016, CLMV's global exports increased more than four-fold from US\$ 58.4 billion to US\$ 244.7 billion, with a resultant rise in its share in ASEAN's exports from 6.8 percent in 2007 to 20.7 percent in 2016. During the same period, CLMV's imports increased over three-fold from US\$ 69.8 billion in 2007 to US\$ 233.7 billion in 2016, resulting in a rise in its share in ASEAN's imports from 9.2 percent in 2007 to 21.2 percent in 2016.

CLMV region has a trade surplus of US\$ 10.9 billion in 2016, as compared to a trade deficit of US\$ 11.4 billion in 2007 (Table 1.2).

| | Exports (US\$ bn) | | Imports (US\$ bn) | | | | Trade Balance (US\$ bn) | | Trade/GDP, | |
|----------|----------------------|-------|----------------------|---------|---------|---------|----------------------------|------|------------|--|
| | 2007 | 2016 | 2007 | 2016 | 2007 | 2016 | 2007 | 2016 | 2016 (%) | |
| Cambodia | 3.5 | 10.1 | 3.6 | 12.4 | 7.1 | 22.5 | -0.1 | -2.3 | 111.1 | |
| Lao PDR | 0.4 | 3.1 | 0.7 | 4.1 | 1.1 | 7.2 | -0.3 | -1.0 | 45.2 | |
| Myanmar | 5.9 | 11.7 | 2.8 | 15.7 | 8.7 | 27.4 | 3.1 | -4.0 | 43.3 | |
| Vietnam | 48.6 | 219.8 | 62.8 | 201.6 | 111.3 | 421.4 | -14.2 | 18.2 | 209.3 | |
| CLMV | 58.4 | 244.7 | 69.8 | 233.7 | 128.2 | 478.5 | -11.4 | 10.9 | 159.1 | |
| ASEAN | 861.8 | 1183 | 759.0 | 1,105.1 | 1,620.8 | 2,288.1 | 102.8 | 78.0 | 89.1 | |

Table 1.2: Merchandise Trade of CLMV Countries

Source: ITC Trade Map, derived from UN COMTRADE

Amongst CLMV countries, Vietnam is the largest exporter, with exports of US\$ 219.8 billion in 2016 (89.8 percent of CLMV's exports), followed by Myanmar (4.8 percent), Cambodia (4.1 percent) and Lao PDR (1.3 percent). As regards imports, Vietnam is the largest importer in the CLMV region (accounting for 86.2 percent of CLMV's imports), followed by Myanmar (6.7 percent), Cambodia (5.3 percent), and Lao PDR (1.8 percent).

CLMV as a region majorly exported electrical machinery and equipment (32.9 percent of total exports of the region in 2016); readymade garments (13.6 percent); footwear and gaiters (7.9 percent); machinery and mechanical appliances (6.3 percent); and furniture (3.3 percent).

USA was the major export destination of CLMV countries, accounting for 18.8 percent of total exports of CLMV countries in 2016. Other major export destinations include China (17.9 percent), Japan (7.3 percent), South Korea (5.3 percent), and Germany (4.5 percent). India's share in CLMV's exports in 2016 remain unchanged at 1.7 percent compared to 2007.

The major imports of the CLMV region in 2016 include electrical machinery and equipment (20.6 percent of total imports of the region); machinery and mechanical appliances (10.2 percent); mineral fuels, mineral oils and products of distillation

(4.8 percent); plastics and articles (4.6 percent); vehicles other than railway or tramway (4.6 percent); and iron and steel (4.3 percent).

China was the major import source of CLMV countries in 2016, accounting for 30.7 percent of total imports of CLMV countries, followed by South Korea (14.4 percent), Thailand (6.7 percent), Japan (6.4 percent), Singapore (6.1 percent), and USA (4.5 percent). India's share in CLMV's imports stood at 3.1 percent in 2016, up from 2.2 percent in 2007.

Population Statistics of the CLMV Region

The CLMV region accounts for 26.3 percent of ASEAN's population. Vietnam is the most populous country in the CLMV region, followed by Myanmar (Table 1.3). The proportion of population living under national poverty lines is highest for Myanmar and lowest for Vietnam. Lao PDR has the highest dependent population in the region. GINI index for the region is moderate.

Cambodia

Cambodia, covering a total land area of 181,035 sq km, shares its borders with Lao PDR, Thailand and Vietnam, and is connected to the Indian Ocean through the Gulf of Thailand. Cambodia is strategically located between Thailand and Vietnam, two larger ASEAN economies, thus, enabling it to play

| | Population (mn, 2017) | Population Growth (annual average %, 2012-17) | nual average %, | | GINI Index*** | |
|----------|--------------------------|---|-----------------|------|---------------|--|
| Cambodia | 16.0 | 1.5 | 17.7 | 35.6 | 30.8 | |
| Lao PDR | 6.7 | 1.5 | 23.4 | 37.2 | 36.4 | |
| Myanmar | 52.6 | 0.8 | 32.1 | 32.9 | 38.1 | |
| Vietnam | 93.6 | 1.1 | 9.8 | 30.0 | 34.8 | |

Table 1.3: Key Population Statistics of the CLMV Region

Note: *Data for Cambodia and Lao PDR is for 2012; Myanmar for 2015; and Vietnam for 2016; ** Dependent population is the population of age groups between 0-15 years & 65 years and above; *** Data for Cambodia and Lao PDR is for 2012; Myanmar for 2015; and Vietnam for 2014

the role of an entrepot and hub. With a population of 16 million in 2017, Cambodia was the seventh most populous country in the ASEAN region.

Supported by strong economic growth, Cambodia graduated from low income economy to lower middle income economy in 2015. Cambodia is the eighth-largest economy in the ASEAN region, with an estimated nominal GDP of US\$ 22.3 billion in 2017, increasing from US\$ 20.2 billion in the previous year. Cambodia continued to be in a high growth trajectory, with real GDP growth at 6.9 percent in 2017, albeit marginally lower than 7 percent witnessed in 2016, supported by robust exports, buoyant tourism, and strong FDI inflows (Table 1.4).

The country experienced a mild slowdown in industrial sector in 2017, offset by faster growth in agriculture and services sectors. Services sector dominates the economy, accounting for 41.9 percent of Cambodia's GDP in 2017, followed by industry (32.8 percent of GDP) and agriculture (25.3 percent of GDP). Major industries in Cambodia include tourism, garments, construction, rice milling, fishing, wood and wood products, rubber, cement, gem mining and textiles.

Inflation moderated marginally to 2.9 percent in 2017, supported by good harvests recorded during the year. The current account deficit is estimated to have remained unchanged at 8.8 percent of GDP in 2017 with improvements in net services exports. Current account deficit is more than compensated for by strong official transfers and buoyant FDI, resulting in increase of foreign exchange reserves from US\$ 9.1 billion in 2016 to US\$ 12.2 billion in 2017, sufficient to cover 8 months of imports. Moreover, reserves exceed the country's external debt, which stood at US\$ 11.5 billion in 2017. The National Bank of Cambodia (NBC), the central bank, maintained a stable exchange rate of CR 4,051: US\$ 1 in 2017, appreciating from CR 4,059: US\$ 1 in 2016. The NBC has continued its policy of phased implementation of higher minimum capital requirements and a liquidity coverage ratio for banks in the country during 2017.

Cambodia's real GDP is expected to decelerate modestly during 2018-2022, as steep increase in the minimum wages might hamper the investors interest in Cambodia's key garment sector. Increased tourist arrivals and buoyant domestic demand are expected

Table 1.4: Macroeconomic Snapshot of Cambodia- Select Indicators

| Indicators | 2013 | 2014 | 2015 | 2016 | 2017 ^e | 2018 ^f |
|--|---------|---------|---------|---------|-------------------|-------------------|
| Real GDP Growth (%) | 7.4 | 7.1 | 7.2 | 7.0 | 6.9 | 6.9 |
| Nominal GDP (US\$ bn) | 15.2 | 16.7 | 18.2 | 20.2 | 22.3 | 24.4 |
| GDP Per Capita (US\$) | 1,010.8 | 1,091.5 | 1,167.7 | 1,277.7 | 1,389.6 | 1,498.8 |
| Consumer Price Inflation (avg. % change) | 3.0 | 3.9 | 1.2 | 3.0 | 2.9 | 3.3 |
| Population (mn) | 15.1 | 15.3 | 15.5 | 15.8 | 16.0 | 16.3 |
| External Debt (US\$ bn) | 7.1 | 7.9 | 9.3 | 10.2 | 11.5 | 13.6 |
| Current Account Balance (US\$ bn) | -2.0 | -1.6 | -1.7 | -1.8 | -2.0 | -2.6 |
| Current Account Balance (% of GDP) | -13.0 | -9.8 | -9.3 | -8.8 | -8.8 | -10.7 |
| International Reserves (US\$ bn) | 5.0 | 6.1 | 7.4 | 9.1 | 12.2 | 13.8 |
| Exchange Rate (CR: US\$, avg) | 4,027 | 4,038 | 4,068 | 4,059 | 4,051 | 4,075 |

Note: e - estimates; f - forecasts

Source: IMF World Economic Outlook, April 2018, and EIU Country Reports

to sustain the growth at 6.9 percent in 2018. Inflation is expected to increase to 3.3 percent in 2018, driven by continued strong GDP growth and higher international food and oil prices. The current account deficit is expected to widen to 10.7 percent of GDP in 2018, driven by higher oil prices and a continued stronger import growth.

Foreign Trade of Cambodia

With increase in both exports and imports, total trade of Cambodia increased to US\$ 22.5 billion in 2016 compared to US\$ 7.1 billion recorded in 2007. Cambodia's exports grew at a compound annual growth rate (CAGR) of 12.3 percent during 2007-2016, exceeding US\$ 10 billion in 2016, driven by rise in garment and footwear exports (Chart 1.1). During 2016, articles of apparel and clothing accessories (HS 61 and 62) accounted for 65.8 percent of Cambodia's exports in 2016, followed by footwear and gaiters (7.8 percent of exports), electrical machinery and equipment (4.3 percent), vehicles other than railway or tramway (3.5 percent), and cereals (3 percent). Benefiting from the Everything but Arms (EBA) policy under Generalized System of Preferences (GSP) from the European Union (EU) and other trade incentives from other countries, the majority of exports head towards USA and EU. Cambodia's major export destinations in 2016 mainly include USA (accounting for 21.3 percent of its global exports in 2016), UK (9.5 percent), Germany (9 percent), Japan (8.2 percent), Canada (6.5 percent), and China (6.1 percent). EU as a region accounted for 39.9 percent of Cambodia's total exports in 2016. Notably, 75.5 percent of Cambodia's exports to EU came from the textile industry in 2016, followed by footwear (9.4 percent) and vehicles (7.3 percent).

Cambodia's imports increased from US\$ 3.6 billion in 2007 to US\$ 12.4 billion in 2016, growing at a CAGR of 14.9 percent. Import growth was largely driven by strong domestic demand for capital and intermediate goods arising from a number of major infrastructure projects. Construction boom contributed to growth in construction material imports. Major items in Cambodia's import basket in 2016 included knitted or crocheted fabrics (17.8 percent of total imports in 2016), vehicles other than railway or tramway (9.2 percent), mineral fuels, mineral oils and products of their distillation (8.9 percent), manmade staple fibres (7.9 percent), machinery and

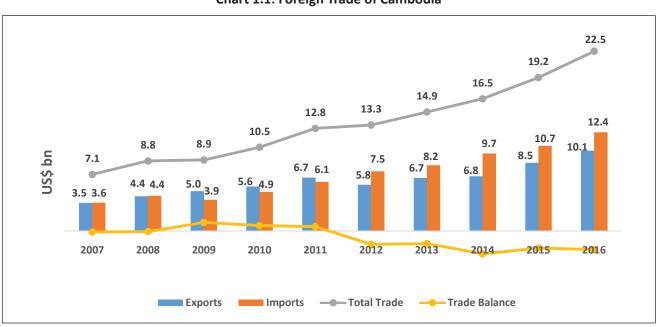


Chart 1.1: Foreign Trade of Cambodia

Source: ITC Trade Map, derived from UN COMTRADE

equipment (7.1 percent), and electrical machinery and equipment (4.9 percent). China was the major source for Cambodia's imports, accounting for 36.8 percent of Cambodia's imports in 2016. Other major import sources during the year include Thailand (15.4 percent of imports), Vietnam (11.4 percent), Taiwan (5.7 percent), Singapore (4.6 percent), and Japan (4.3 percent). The trade deficit of Cambodia increased to US\$ 2.3 billion in 2016 from US\$ 2.1 billion in the previous year, partly reflecting rise in import costs.

Cambodia is an economy primarily based on exports, with exports accounting for 50 percent of the country's GDP in 2016. Cambodia has an export-promotion strategy for economic growth, which supports economic development of the country. Exports of Cambodia are dominated by garments, footwear and agriculture sectors. Additionally, the tourism industry and the real estate market are also enjoying a dynamic expansion in the recent years, contributing to economic growth.

Lao PDR

Lao PDR is a landlocked country located in the centre of Southeast Asia, covering a land area of approximately 236,800 sq km and bordered by

China, Thailand, Vietnam, Cambodia and Myanmar. The Mekong River forms a large part of the Lao PDR's border with Thailand. The geographical location of Lao PDR enable the country to be an important hub for trade and communication in the region. With a population of about 6.7 million in 2017, Lao PDR is the third least populated country in the ASEAN region.

The economy of Lao PDR has witnessed a strong growth in the recent years. In 2018, Lao PDR has fulfilled the eligibility criteria to graduate from LDC status for the first time. If the country could sustain its development gains and meets the eligibility criteria again in 2021, Lao PDR would be formally removed from the list of LDCs in 2024.

Lao PDR's economic growth was sustained at 6.8 percent in 2017, in spite of a new government ban on logging exports, tighter credit, subdued international mineral prices, and lower tourist arrivals. An investment boom based on natural resources, fuelled by mining and exports of hydropower, has seen GDP increasing from US\$ 12 billion in 2013 to US\$ 17 billion in 2017 (Table 1.5). Service sector, which accounts for 48 percent of GDP, grew at 6.2 percent in 2017 driven by growth in wholesale and retail trade, and in

Table 1.5: Macroeconomic Snapshot of Lao PDR- Select Indicators

| Indicators | 2013 | 2014 | 2015 | 2016 | 2017 ^e | 2018 ^f |
|--|---------|---------|---------|---------|-------------------|-------------------|
| Real GDP Growth (%) | 8.0 | 7.6 | 7.3 | 7.0 | 6.8 | 6.8 |
| Nominal GDP (US\$ bn) | 12.0 | 13.3 | 14.4 | 15.9 | 17.0 | 18.3 |
| GDP Per Capita (US\$) | 1,900.0 | 2,075.1 | 2,212.4 | 2,416.9 | 2,542.5 | 2,705.9 |
| Consumer Price Inflation (avg. % change) | 6.4 | 4.1 | 1.3 | 1.6 | 0.8 | 2.3 |
| Population (mn) | 6.3 | 6.4 | 6.5 | 6.6 | 6.7 | 6.8 |
| Current Account Balance (US\$ bn) | -3.4 | -2.7 | -2.6 | -1.9 | -2.2 | -2.7 |
| Current Account Balance (% of GDP) | -28.4 | -20.0 | -18.0 | -12.0 | -13.0 | -14.9 |
| External Debt (US\$ bn) | 9.8 | 11.4 | 13.0 | 14.2 | - | - |
| International Reserves (US\$ mn) | 722.0 | 875.0 | 1,043.0 | 847.0 | 1,234.0 | - |
| Exchange Rate (K: US\$, avg) | 7,835 | 8,042 | 8,128 | 8,124 | 8,352 | 8,418 |

Note: e - estimates; f - forecasts; - not available

Source: IMF World Economic Outlook, April 2018, World Development Indicators and EIU Country Reports

information and communications. Industrial sector, which accounts for 33 percent of the GDP, witnessed a slowdown from 12 percent in 2016 to 9.5 percent in 2017, as persistently subdued global mineral prices dragged down mining and metal production. The slowdown in industry was offset by acceleration in services sector. Agriculture, the primary means of livelihood for majority of the population, accounts for 19 percent of GDP and maintained a sturdy growth rate in 2017.

As a buoyant agricultural production drove down food prices, average inflation halved to 0.8 percent in 2017 from 1.6 percent witnessed in 2016. Current account deficit widened from 12 percent of GDP in 2016 to 13 percent in 2017. Reserves increased to US\$ 1.2 billion from US\$ 847 million in 2016, sufficient to cover 3.6 months of imports.

The country is endowed with a wide range of mineral deposits including tin, lead, gravel, gypsum and salt. There are also small deposits of coal, iron ore, gold and oil and gas. Forests and rivers are the most valuable natural resource of Lao PDR; the latter have considerable potential for generating hydroelectric power.

Economic growth is expected to remain unchanged at 6.8 percent in 2018, with persisting slowdown in

industrial sector. Inflation is expected to accelerate to 2.3 percent in 2018, due to rise in international oil prices and possible depreciation of the Lao kip. The current account deficit is expected to expand to 14.9 percent of GDP in 2018, with higher inflation and international oil prices driving up the import bill.

Foreign Trade of Lao PDR

During 2007-2016, Lao PDR's exports increased eightfolds, while imports increased over nearly five-fold, taking the total trade from US\$ 1.1 billion in 2007 to US\$ 7.2 billion in 2016. Accordingly, trade deficit of the country increased from US\$ 0.3 billion in 2007 to US\$ 1 billion in 2016.

Lao PDR's exports increased to US\$ 3.1 billion in 2016, from US\$ 0.4 billion in 2007 (Chart 1.2). In 2016, Lao PDR's export basket mainly comprised ores, slag and ash (24 percent of its global exports), copper and its articles (12.1 percent), electrical and electronic equipment (10.9 percent), beverages, spirits and vinegar (5.9 percent), readymade garments (4.8 percent), natural or cultured pearls, precious or semi-precious stones (4.7 percent), and inorganic chemicals (4.5 percent). China, Thailand and Vietnam were the largest export partners for Lao PDR, together accounting for 84.6 percent of its exports in 2016. Lao PDR's major export destinations

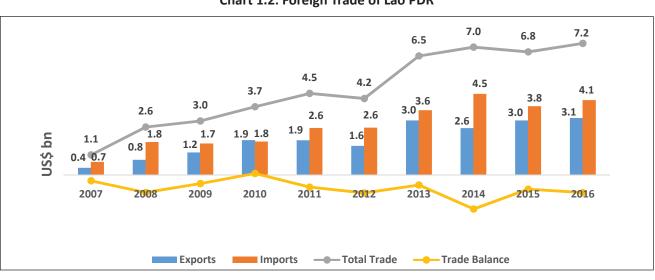


Chart 1.2: Foreign Trade of Lao PDR

Source: ITC Trade Map, derived from UN COMTRADE

in 2016 include China (accounting for 36.1 percent of its exports in 2016), Thailand (31.3 percent), Vietnam (17.2 percent), India (2.8 percent), and Japan (1.9 percent).

Lao PDR's imports also increased from US\$ 0.7 billion in 2007 to US\$ 4.1 billion in 2016, witnessing a five-fold increase. Lao PDR's major imports in 2016 include electrical and electronic equipment and vehicles other than railway (16.2 percent of total imports each), mineral fuels (15 percent), machinery and equipment (9.1 percent), beverages, spirits and vinegar (4.9 percent), and iron and steel (4.4 percent). Thailand accounted for the bulk of Lao PDR's imports during 2016, accounting for 61.9 percent of its total imports. China (18.2 percent of its total imports), Vietnam (10.1 percent), Japan (2.2 percent), and South Korea (2 percent) were the other major sources of Lao PDR's imports in the same year.

Myanmar

Myanmar is the second largest country in the ASEAN region and covers an area of 676,578 sq km, of which 653,508 sq km is land and 23,070 sq km is water. It is bounded by Bangladesh, India, China, Lao PDR and Thailand on the landward side, with 2,800 km of the coast line bounded on the west by the Bay of Bengal

and on the south by the Andaman Sea. Myanmar's strategic location provides immense opportunities and incentives for it to engage effectively in the region to advance trade, investment, and developmental goals. For India, Myanmar is strategically important, as it is the only ASEAN country with which it shares border.

According to Asian Development Bank (ADB), Myanmar could follow Asia's fast growing economies and expand at 7 to 8 percent a year, become a middle income nation, and treble its per capita income by 2030, if it can surmount substantial development challenges by further implementing across-the board reforms. Myanmar, with a nominal GDP of US\$ 66.5 billion in 2017, is the seventh-largest economy in the ASEAN region, accounting for 2.4 percent of ASEAN'S GDP in 2017. According to UN's Committee for Development Policy, Myanmar has fulfilled the eligibility criteria to graduate from LDC status for the first time in 2018, and if it could meet the eligibility criteria again in 2021, it would be removed from the list of LDCs in 2024.

Myanmar's real GDP growth was at 6.7 percent in 2017, as compared to 5.9 percent in 2016, mainly due to stronger agriculture, growth in exports, and robust private consumption (Table 1.6). Agricultural sector witnessed an estimated growth of 3.5 percent in 2017.

Table 1.6: Macroeconomic Snapshot of Myanmar - Select Indicators

| Indicators | 2013 | 2014 | 2015 | 2016 | 2017 ^e | 2018 ^f |
|--|---------|---------|---------|---------|-------------------|-------------------|
| Real GDP Growth (%) | 8.4 | 8.0 | 7.0 | 5.9 | 6.7 | 6.9 |
| Nominal GDP (US\$ bn) | 60.1 | 65.6 | 59.5 | 63.3 | 66.5 | 70.7 |
| GDP Per Capita (US\$) | 1,179.6 | 1,275.3 | 1,147.3 | 1,210.5 | 1,263.9 | 1,338.5 |
| Consumer Price Inflation (avg. % change) | 5.7 | 5.1 | 10.0 | 6.8 | 5.1 | 5.5 |
| Population (mn) | 51.0 | 51.4 | 51.8 | 52.3 | 52.6 | 52.8 |
| Current Account Balance (US\$ bn) | -2.9 | -1.4 | -3.0 | -2.5 | -3.5 | -3.8 |
| Current Account Balance (% of GDP) | -4.9 | -2.2 | -5.1 | -3.9 | -5.3 | -5.4 |
| External Debt (US\$ bn) | 7.3 | 6.3 | 6.7 | 6.5 | 7.7 | 8.4 |
| International Reserves (US\$ bn) | 8.6 | 2.0 | 3.8 | 4.6 | 4.9 | 5.5 |
| Exchange Rate (Kt: US\$, avg) | 934 | 984 | 1,163 | 1,235 | 1,360 | 1,376 |

Note: e - estimates; f – forecasts

Source: IMF World Economic Outlook, April 2018, World Development Indicators and EIU Country Reports

Services sector dominates the economy, accounting for 40 percent of Myanmar's GDP, followed by industry (35 percent of GDP) and agriculture (25 percent of GDP). Consumer price inflation moderated from 6.8 percent in 2016 to 5.1 percent in 2017, mainly reflecting lower food inflation with recovery in agriculture sector. Myanmar's current account deficit widened to US\$ 3.5 billion in 2017, as compared to US\$ 2.5 billion in 2016. Myanmar's foreign exchange reserves stood at US\$ 4.9 billion in 2017, representing an import cover of 3.5 months.

Myanmar is rich in natural resources, including natural gas, copper, timber and gemstones. Other natural resources of the region include petroleum, tin, antimony, zinc, tungsten, lead, coal, marble, limestone and hydropower. Major industries in Myanmar include agricultural processing; wood and wood products; copper, tin, tungsten, iron; cement, construction materials; pharmaceuticals; fertilizer; oil and natural gas; garments; and jade and gems.

Myanmar aims at achieving inclusive economic growth and poverty reduction, and has a strong potential for a higher growth. With its abundant natural resources, strategic location at the crossroads

of Asia, large youth population, and sizable market, Myanmar could develop into an economic hub in the ASEAN region offering a wide range of investment opportunities.

Myanmar's real GDP is forecast to grow at an average of 7.1 percent during 2018-2022, supported by strong investment and growth in all the major sectors during this period. Higher growth and an expected rise in international oil prices are expected to drive inflation to 5.5 percent in 2018. Though an improved external situation would support export growth, it is expected to be outpaced by import growth necessary to support public investments resulting in a widening of current account deficit.

Foreign Trade of Myanmar

Myanmar's exports increased to US\$ 11.7 billion during 2016 from US\$ 5.9 billion in 2007. The recent period, however, witnessed decline in exports from a peak of US\$ 12.2 billion in 2015 to US\$ 11.7 billion in 2016, mainly due to the fall in export of mineral fuels, oils and its products, vis-à-vis the previous year (Chart 1.3). Mineral fuels, oils and its products dominated Myanmar's exports in 2016, accounting

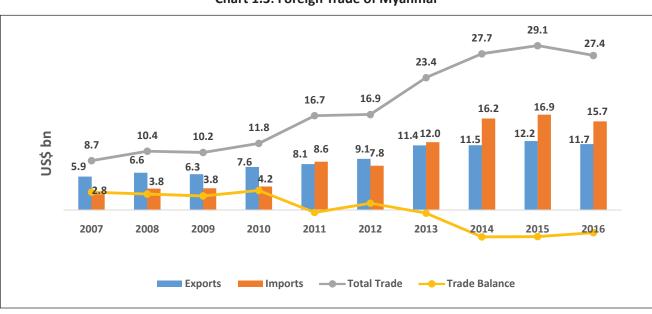


Chart 1.3: Foreign Trade of Myanmar

Source: ITC Trade Map, derived from UN COMTRADE

for 28.2 percent of Myanmar's exports. Other major export commodities during the same year include readymade garments (13.5 percent of its exports), edible vegetables and certain roots (12.2 percent), sugars and sugar confectionery (9.5 percent), cereals (5.7 percent), fish and crustaceans, and other aquatic invertebrates (4.6 percent), and natural or cultured pearls, precious or semi-precious stones (3.6 percent). Myanmar's major export destinations in 2016 include China (accounting for 40.8 percent of its global exports in 2016), Thailand (19.2 percent), India (8.9 percent), Singapore (7.6 percent), and Japan (5.7 percent).

Myanmar's imports increased over five-fold from US\$ 2.8 billion in 2007 to US\$ 15.7 billion in 2016. On year-on-year basis, imports declined from US\$ 16.9 billion in 2015 to US\$ 15.7 billion in 2016, mainly due to decline in imports of vehicles other than railway or tramway; mineral fuels; and machinery and equipment compared to previous year. Vehicles other than railway or tramway formed Myanmar's major import items in 2016, accounting for 15.5 percent of total imports. Other principal import items in the same year were mineral fuels, oils and its products (11.3 percent of total imports), machinery and equipment (10.1 percent), sugars and sugar confectionery (8.8 percent), electrical and electronic equipment (7.2 percent), and iron and steel (5.5 percent). China was the major source for Myanmar's imports, accounting for 34.4 percent of Myanmar's imports in 2016. Other major import sources during the year include Singapore (14.5 percent of its imports), Thailand (12.7 percent), Japan (8 percent), and India (7 percent).

Myanmar's trade balance turned into a deficit for a second time in the last decade in 2013. In 2016, trade deficit marginally narrowed to US\$ 4 billion compared to a deficit of US\$ 4.7 billion in the previous year Overall, across the decade, Myanmar's total trade more than trebled from US\$ 8.7 billion in 2007 to US\$ 27.4 billion in 2016, supported by a two-fold increase in exports and over five-fold increase in imports.

Vietnam

Vietnam is located in the centre of the Southeast Asia region, bordered by China, Lao PDR, Cambodia and the East Sea and Pacific, with a land area of approximately 331,231 sq km. Vietnam is the sixth-largest economy in the ASEAN region, with a GDP size of US\$ 220.4 billion (8 percent of the region's GDP) in 2017. With an estimated 93.6 million population in 2017, Vietnam is the 3rd most populous country in the ASEAN region.

Vietnam's economy continued to strengthen in 2017, with an estimated GDP growth rate of 6.8 percent, up from 6.2 percent witnessed in 2016 (Table 1.7). Growth performance in 2017 was the strongest in the past ten years, underpinned by a strong rise in exports, rise in investment, and buoyant private consumption. Industrial sector grew by 8 percent in 2017, supported by a rebound in aggregate demand. Strong domestic demand and a rise in international tourist arrivals resulted in services posting a 7.4 percent growth, whereas better weather conditions and strong export demand resulted in agriculture sector growing by 2.9 percent.

According to the World Bank, services sector accounts for 45 percent of Vietnam's GDP in 2016, followed by industry (36 percent), and agriculture (19 percent). Major industries in Vietnam include food processing, garments, shoes, machine-building, mining, coal, steel, cement, chemical fertilizer, glass, tires, oil, and mobile phones.

Strengthened aggregate demand, higher international oil prices and continued upward adjustment to government-administered fees for public education and healthcare resulted in the rise of inflation to 3.5 percent in 2017 from 2.7 percent witnessed in 2016. Supported by a large trade surplus and stable remittances, the current account surplus was estimated at 4.1 percent of GDP, increasing from 3.1 percent in 2016. According to the State Bank of Vietnam, the central bank, foreign exchange reserves increased to US\$ 49.5 billion in 2017, with an import cover of 3 months.

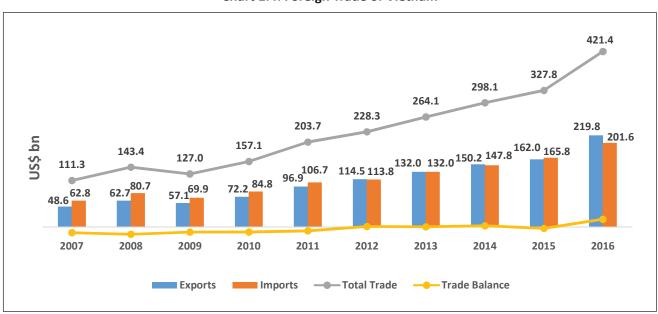
Table 1.7: Macroeconomic Snapshot of Vietnam - Select Indicators

| Indicators | 2013 | 2014 | 2015 | 2016 | 2017 ^e | 2018 ^f |
|--|---------|---------|---------|---------|-------------------|-------------------|
| Real GDP Growth (%) | 5.4 | 6.0 | 6.7 | 6.2 | 6.8 | 6.6 |
| Nominal GDP (US\$ bn) | 170.6 | 185.9 | 191.5 | 201.3 | 220.4 | 240.8 |
| GDP Per Capita (US\$) | 1,900.2 | 2,049.0 | 2,087.5 | 2,171.8 | 2,353.7 | 2,545.9 |
| Consumer Price Inflation (avg. % change) | 6.6 | 4.1 | 0.6 | 2.7 | 3.5 | 3.8 |
| Population (mn) | 89.8 | 90.7 | 91.7 | 92.7 | 93.6 | 94.6 |
| Current Account Balance (US\$ bn) | 7.7 | 9.1 | -0.1 | 6.1 | 9.1 | 7.3 |
| Current Account Balance (% of GDP) | 4.5 | 4.9 | -0.1 | 3.1 | 4.1 | 3.0 |
| External Debt (US\$ bn) | 65.5 | 72.4 | 77.8 | 87.0 | 96.5 | 108.2 |
| International Reserves (US\$ bn) | 26.3 | 34.6 | 28.6 | 36.9 | 49.5 | 48.4 |
| Exchange Rate (D: US\$, avg) | 21,017 | 21,189 | 21,909 | 22,355 | 22,705 | 23,025 |

Note: e - estimates; f – forecasts

Source: IMF World Economic Outlook, April 2018, World Development Indicators and EIU Country Reports

Chart 1.4: Foreign Trade of Vietnam



Source: ITC Trade Map, derived from UN COMTRADE

Vietnam's real GDP is expected to grow at an average of 6.6 percent in 2018 on the back of rising FDI, vigorous export growth, strengthening agriculture, and robust domestic demand. Inflation is expected to increase but remain broadly stable, averaging 3.8 percent in 2017. The current account surplus is expected to narrow to 3 percent of GDP in 2018. Imports of intermediate inputs for export orientated manufacturing are likely to increase, thus affecting the trade balance.

Foreign Trade of Vietnam

Vietnam's exports increased at a CAGR of 18.3 percent in 2016 to US\$ 219.8 billion, as compared to US\$ 48.6 billion in 2007. In 2016, exports were mainly driven by rise in electrical and electronic equipment, footwear and readymade garment exports during the year (Chart 1.4). During 2016, electrical and electronic equipment accounted for 36.2 percent of Vietnam's exports in 2016, followed by readymade

garments (11.3 percent of its exports), footwear and gaiters (8.4 percent), machinery and equipment (6.9 percent), and furniture (3.7 percent). Vietnam's major export destinations in 2016 mainly include USA (accounting for 21.8 percent of its global exports in 2016), China (12.4 percent), Japan (8.3 percent), and South Korea (6.4 percent).

Vietnam's imports increased at a CAGR of 13.8 percent to US\$ 201.6 billion in 2016 from US\$ 62.8 billion in 2007. Import growth was largely driven by a strong domestic demand for electrical and electronic equipment. Major items in Vietnam's import basket in 2016 include electrical and electronic equipment (22.7 percent of total imports in 2016), machinery and equipment (10.4 percent), plastic and its articles (4.8 percent), iron and steel (4.4 percent), and mineral oil, fuel and its products (3.9 percent). China was a major source for Vietnam's imports, accounting for 28.6 percent of Vietnam's imports in 2016. Other major import sources during the year include South Korea (18.3 percent of its imports), Japan (8.6 percent), Taiwan (6.4 percent), and Thailand (5 percent).

Vietnam's trade balance in 2016 stood at a surplus

of US\$ 18.2 billion as compared to a deficit of US\$ 14.2 billion witnessed in 2007. During 2007-2016, Vietnam's exports increased nearly five-fold, and imports increased over three-fold, resulting in an increase in the total trade from US\$ 111.3 billion in 2007 to US\$ 421.4 billion in 2016.

Macroeconomic Outlook of the CLMV Region

According to IMF, in the next five years (2018-2022), CLMV countries will be growing at a rate of over 6 percent whereas the projections for world economic growth are below 4 percent (**Table 1.8**). This is expected to result in positive spillover effects in the economy, including higher standard of living and rise in investment inflows, among others. Higher investment will enable these countries to develop essential infrastructure for private investment.

CLMV's healthcare sector offers great potential for investment, which has been realized by very few foreign investors. The study looks at the existing health indicators in the region, the existing investment, the potential investment sectors for Indian players and the strategies for venturing into the region.

Table 1.8: Projected Economic Indicators of CLMV Countries

| | Real GDP Growth (%) | | GDP Per Capita (US\$) | | Total Investment as a % of GDP | |
|----------|---------------------|------|-----------------------|---------|--------------------------------|------|
| | 2018 | 2022 | 2018 | 2022 | 2018 | 2022 |
| Cambodia | 6.9 | 6.0 | 1,498.8 | 1,985.9 | 22.0 | 21.6 |
| Lao PDR | 6.8 | 6.8 | 2,705.9 | 3,626.6 | - | - |
| Myanmar | 6.9 | 7.4 | 1,338.5 | 1,879.9 | 22.4 | 23.2 |
| Vietnam | 6.6 | 6.5 | 2,545.9 | 3,510.1 | 27.8 | 32.4 |
| CLMV | 6.6 | 6.5 | 2,022.3 | 2,750.6 | - | - |
| World | 3.9 | 3.7 | - | - | - | - |

Note: - not available

Source: IMF World Economic Outlook, April 2018

2. HEALTHCARE INDUSTRY IN CLMV REGION - CURRENT SCENARIO

According to the World Health Organisation (WHO), the CLMV region is highly vulnerable to cardiovascular diseases, diabetes, HIV AIDS, tuberculosis, lower respiratory infections and vector-prone diseases like malaria.² Healthcare in the region remains one of the most neglected sectors, though governments of these countries are in the process of improving the healthcare standards at par with other countries in the region. The following analysis of basic health indicators reflects on the present scenario of healthcare in the region.

Life Expectancy

According to the World Bank, life expectancy at birth indicates the number of years a newborn infant will live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.

Average life expectancy at birth in the CLMV region was 69.8 years in 2016 as compared to the global average of 72 years (Chart 2.1). The region falls way

behind the countries in the East Asia and Pacific and ASEAN where life expectancy stands at 75.4 years and 72.7 years, respectively. Singapore has the highest life expectancy at birth in the ASEAN region at 82.8 years.

It may, however, be noted that there is high dispersion on life expectancy across CLMV countries. While Vietnam has the highest life expectancy at birth of 76.3 years, surpassing the global average, average life expectancy is low in the case of Myanmar and Lao PDR.

Cambodia has made considerable progress over the years with its life expectancy at birth improving from 64.7 years in 2007 to 69 years in 2016. The indicator rose by 3.8 years in the same period for Lao PDR where the life expectancy in 2016 was 66.7 years. Myanmar has made the least progress with life expectancy increasing from 64.2 years to 66.6 years during the 10 year period.



Chart 2.1: Trends in Life Expectancy at Birth

²WHO Country Profiles for Cambodia, Lao PDR, Myanmar and Vietnam

Female life expectancy is higher than the male life expectancy in CLMV countries. The highest differential is in Vietnam where female life expectancy was 80.9 years in 2016 whereas the male life expectancy stood at 71.5 years. The female life expectancy in Vietnam is higher than the global average of 74.3 years and ASEAN average of 75.4 years (Chart 2.2).

Mortality Rates

Infant Mortality Rate: According to the World Bank, infant mortality rate is the number of infants dying before reaching one year of age, per 1,000 live births in a given year. CLMV region's average infant mortality

rate stood at 33.2 in 2016, higher than ASEAN average at 20.5 and the global average of 30.5 (Chart 2.3). The high average infant mortality rate in the CLMV region is mainly due to the high infant mortality rates in Lao PDR and Myanmar. Infant mortality rate is most alarming in the case of Lao PDR. For 1,000 live births in a given year, 49 infants died in the country before reaching one year of age. Infant Mortality rate in Myanmar is higher than the global average at 40.1. On the other hand, Vietnam and Cambodia have performed much better, and fared well below the global average at 17.3 and 26.3, respectively.

80.9 70.0 74.3 72.2 70.9 71.5 70.2 i 68.9 66.8 68.2 66.9 65.1 64.2 Cambodia Lao PDR Myanmar Vietnam **CLMV ASEAN** World ■ Male ■ Female

Chart 2.2: Male and Female Life Expectancy at Birth, 2016

Source: World Bank Database

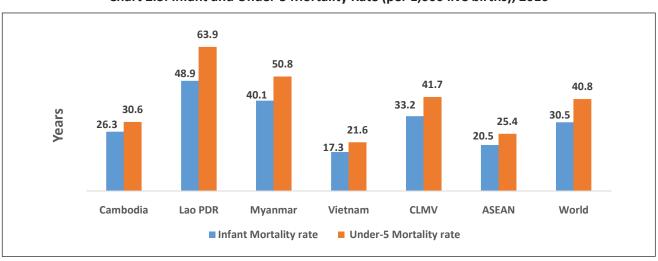


Chart 2.3: Infant and Under-5 Mortality Rate (per 1,000 live births), 2016

The high infant mortality rates in Myanmar and Lao PDR can be attributed to inadequate health infrastructure. According to the UNICEF, institutional delivery and skilled birth attendance in Myanmar were only 37 percent and 60 percent out of total delivery in 2016.3 Births attended by skilled health staff (percent of total) in Lao PDR was just 40.1 percent in 2012 (as per latest data available). Under-5 mortality rates are also high in Lao PDR and Vietnam. According to the WHO, the leading causes behind under-5 mortality rates in Lao PDR and Myanmar are prematurity, acute respiratory infections, birth asphyxia, injuries and diarrhea. According to the Myanmar Demographic and Health Survey 2015-16, only 36 percent of newborns receive the recommended postnatal check-up within the first two days after birth. The accessibility of hospitals in distant areas is extremely low.4

Maternal Mortality Ratio (per 100,000 births, modelled estimate): Maternal mortality ratio is the number of women who die from pregnancy-related causes while pregnant or within 42 days of pregnancy termination per 100,000 live births. While the maternal mortality ratio for the CLMV region at

147.5 was below the global average of 216 in 2015, it remained higher than the ASEAN average of 92.3. In fact, only Vietnam had the maternal mortality ratio lower than that of ASEAN. Lao PDR had the highest maternal mortality ratio at 197 (Chart 2.4).

Lao PDR performs the worst among CLMV countries, followed by Myanmar in the life expectancy and mortality indicators. Maternal mortality ratio remains so high since the number of institutional deliveries is very less. Bad transport and communication services and lack of health information only worsen the situation. The socio-cultural belief in rural areas is that the women should give birth by herself which obstructs community partnership in ensuring institutional deliveries.⁵

According to Myanmar Demographic and Health Survey 2015-16, in Myanmar, one-third (37 percent) of live births were delivered in a health facility and 63 percent were delivered at home. The proportion of pregnant women who receive no antenatal care stands at 13 percent in the country. According to Cambodia Demographic and Health Survey 2014, maternal deaths account for 9 percent of all deaths of women aged 15-49 in Cambodia.⁶

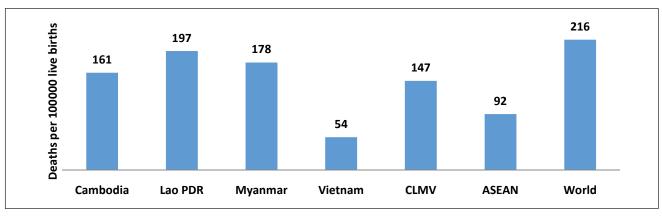


Chart 2.4: Maternal Mortality Ratio (per 100,000 births), 2015

³UNICEF, Myanmar Country Profile, 2016

⁴Myanmar Demographic and Health Survey 2015-16, Ministry of Health and Sports, Myanmar

⁵Lao PDR: How Free Births are Saving Women's Lives, World Bank, August 29, 2011

⁶Cambodia Demographic and Health Survey 2014, National Institute of Statistics (Ministry of Planning, Cambodia), Directorate General for Health (Ministry of Health, Cambodia) and the DHS Program (ICF International, USA)

Existing Healthcare Infrastructure in CLMV Countries

Number of Public Hospitals and Beds per 10,000 People

Myanmar is more populous than Lao PDR and Cambodia but the number of hospitals in the country is far lesser than the latter two. Vietnam has the highest number of beds per 10,000 people at 26 (Table 2.1).

Table 2.1: Total Number of Public Hospitals and Beds per 10,000 people

| | Total Number of Public Hospitals | No. of Beds (per 10,000 people) |
|----------|--|---------------------------------------|
| Cambodia | 1,171 (2013) | 8 (2015) |
| Lao PDR | 1,013 (2012) | 15 (2012) |
| Myanmar | 969 (2013) | 9 (2012) |
| Vietnam | 1,077 (2016) | 26 (2014) |

Sources: WHO Health System Review (2014) of Cambodia and Lao PDR; Annual Hospital Statistics Report 2013, Myanmar; Statistical Handbook of Vietnam 2016, General statistics office of Vietnam; WHO Database, and Exim India Calculations

Healthcare Personnel in CLMV Countries

A shortage of qualified medical staff is common in hospitals of CLMV countries. Medical doctors are concentrated mainly at central and provincial health facilities. According to the World Bank, Vietnam has the highest number of physicians and nurses and midwives per 1,000 people among CLMV countries (Table 2.2). Number of physicians (per 1,000 people) for Vietnam, however, has come down from 1.2 in 2013 to 0.8 in 2016. In 2013 (as per latest available data), world average of physicians (per 1,000 people) stood at 1.9. Similarly, for the total number of nurses and midwives per 1,000 people, Vietnam had the highest density at 1.2 nurses and midwives for 1,000 people in 2013, against a global average of 3.1. In 2016, the number of nurses and midwives for 1,000 people in Vietnam increased to 1.4.

Table 2.2: Number of Physicians and Nurses and Midwives (per 1,000 people)

| | Physicians (per 1,000 people) | Nurses and Midwives (per 1,000 people) | |
|-----------------|-------------------------------------|---|--|
| Cambodia (2014) | 0.1 | 1.0 | |
| Lao PDR (2014) | 0.5 | 1.0 | |
| Myanmar (2012) | 0.6 | 0.9 | |
| Vietnam (2016) | 0.8 | 1.4 | |

Note: Physicians include generalist and specialist medical practitioners; Nurses and midwives include professional nurses, professional midwives, auxiliary nurses, auxiliary midwives, enrolled nurses, enrolled midwives and other associated personnel, such as dental nurses and primary care nurses.

Source: World Bank Database

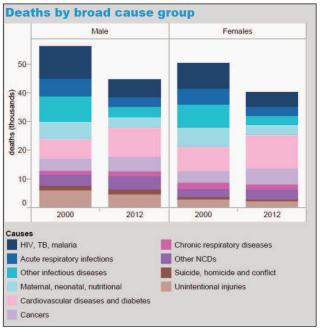
Deaths by Broad Cause Group in CLMV Countries

An analysis of the WHO country profiles indicate that the CLMV region has experienced an epidemiological transition from communicable diseases to non-communicable diseases. The countries are witnessing more deaths due to cardiovascular diseases and cancer than HIV, malaria and TB, which once plagued the region.

In Cambodia, deaths caused by communicable diseases have reduced but at the same time deaths caused cardiovascular diseases by and other non-communicable diseases have increased (Chart 2.5). Acute respiratory infections, cardiovascular diseases and diabetes, cancer and other infectious diseases are the major causes of death in Lao PDR. Deaths caused by cancer have increased among women (Chart 2.6). In Myanmar, the leading causes of morbidity and mortality are a mix of non-communicable and communicable diseases such as Tuberculosis (TB), malaria and HIV/ AIDS. Deaths caused by communicable diseases have dropped over time but remain higher in comparison to the other CLMV countries. The three diseases were identified as top three national priority diseases

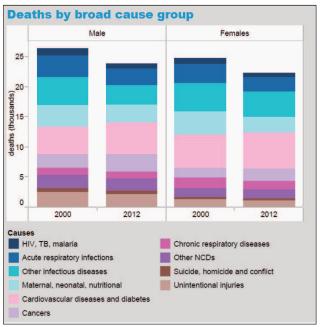
of Myanmar⁷ (Chart 2.7). In Vietnam, majority of deaths caused are on account of non-communicable

Chart 2.5: Deaths by Broad Cause Group, Cambodia



Source: WHO country Profile, Cambodia (2015)

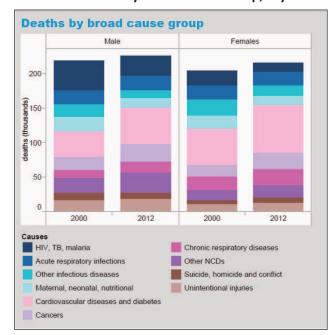
Chart 2.6: Deaths by Broad Cause Group, Lao PDR



Source: WHO country Profile, Lao PDR (2015)

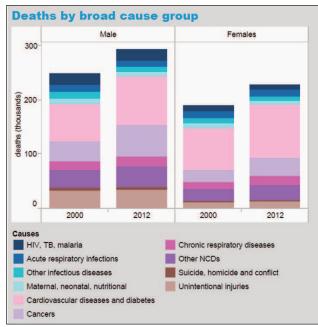
diseases, cardiovascular diseases and cancers (Chart 2.8).

Chart 2.7: Deaths by Broad Cause Group, Myanmar



Source: WHO country Profile, Myanmar (2015)

Chart 2.8: Deaths by Broad Cause Group, Vietnam



Source: WHO country Profile, Vietnam (2015)

⁷Myanmar Demographic and Health Survey 2015-16, Ministry of Health and Sports, Myanmar

Health Insurance Coverage in CLMV Countries

Low health insurance coverage can result in higher out of pocket expenditures, especially in an economy which has lower government expenditures on health. CLMV region has been aiming at Universal Health Coverage and most of the insurance sphere is dominated by government.

Cambodia

According to the World Bank, the insurance system in Cambodia has been a success story of Health Equity Funds (HEFs). HEFs are Cambodia's principal social protection scheme, providing health services access to vulnerable populations. Funded jointly by government and donors, HEFs are district and hospital-based demand side financing mechanisms used to fund user-fee exemptions for the identified poor at public health facilities. HEFs currently cover 75 percent of the target population of those living under the poverty line. There is a requirement of provision of complete range of health services required by the poor, transferring full responsibility to the government by creating a national administrative agency, and ensuring fiscal resources are adequate to maintain sustainability.8

Coverage of workers of formal private sector is executed by the National Social Security Funds (NSSF) established under the 2002 Law on Social security schemes for persons defined by the provisions of labor law. NSSF took control of the Health Insurance Project (HIP) which covered 7,733 employees in 2013.

Lao PDR

Majority of the insurance coverage in Lao PDR is provided by the government financed schemes, and the contribution of private insurance is relatively small. Following are the four government health financing schemes:

- Social Health Insurance (SHI) scheme for private and state-owned enterprises, run by the Social Security Organization (SSO);
- State Authority for Social Security (SASS) for civil servants;
- Community-based Health Insurance (CBHI) for non-poor workers in the informal sector; and
- A Health Equity Fund (HEF) for the poor.9

The State Authority for Social Security (SASS) for civil servants scheme targets approximately 5.2 percent of the population, covering approximately 98 percent of its target group. Outside the SASS scheme, coverage of other schemes is low. CBHI targets around 50 percent of the population, but covers only 2.2 percent of the population; SHI targets the formal sector, comprising around 5 percent of the population, but covers only 1.7 percent of the population; and HEFs target the poor – roughly one third of the population – but cover approximately 5 percent of the population. Thus, roughly 14 percent of the total population in Lao PDR is covered by government health financing schemes¹⁰.

Community-based Health Insurance (CBHI) for non-poor workers in the informal sector has evolved as one of the key risk-protection schemes and is expected to play an important role in helping the country move toward universal coverage in the healthcare. The scheme was started in 2002 and was extended on a pilot basis in 2005. In lieu of the payments, the members have free access to health services available at health centres and district hospitals. The uninsured of the system must pay directly and in full for services provided at both public and private healthcare facilities. The uninsured frequently resort to alternatives such as traditional medicine and self-medication. Experience of the system medication.

⁸WHO Health Review System, Cambodia 2014

⁹WHO Health Review System, Lao PDR 2014

¹⁰BMC Health Services Research (https://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-13-521)

¹¹Community-based Health Insurance in Lao Peoples Democratic Republic: Understanding Enrollment and Impacts, World Bank, November 2010

¹²WHO Health Review System, Lao PDR 2014

Myanmar

In Myanmar, social security system was established in 1956, run by the Social Security Board under Ministry of Labour, Employment and Social Security. This system covers social services including healthcare for insured workers who are employed in the private sector. The Social Security Law passed in 2012 aimed at expanding mandatory and voluntary coverage. The Ministry of Health & Sports, Myanmar is planning to implement the Universal Health Coverage program nationwide by 2030.

Before 2015, health insurance was only provided for government employees by the government, and for employees of international organizations by private health insurance. In 2015, Myanmar government introduced a new health insurance scheme for the first time under a one-year trial as of July 1, 2015¹³. State-owned Myanmar Insurance and 11 private domestic companies offer identical policies, with customers able to buy between one to five units of coverage (one unit costs approximately US\$ 45), with a single unit providing the most basic level of coverage. Myanmar citizens and foreign nationals residing in the country who are aged 6 to 65 years and in good health could buy the insurance. Insurers will be paying approximately US\$ 15 per day of hospitalization per unit. A policy holder may receive 30 days' worth of hospitalization costs per year. If a policy holder dies in hospital, their designated beneficiary will receive approximately US\$ 1,000 per unit of insurance in compensation.

Vietnam

In 1989, insurance pilots were started in some provinces of Vietnam. Health insurance schemes were initiated at the national level in 1992, and health card for the poor were issued in 1995. In 2002, the government introduced a Healthcare Fund for

the Poor (HCFP) to cover the basic health services for the poorer section of the country. These funds are intended to finance the healthcare costs of eligible users of publicly provided services, making healthcare affordable for the poor and other disadvantaged groups. The fund was later converted into voluntary insurance in 2005¹⁴. The Health Insurance Law (HIL), which was passed in 2009, makes it compulsory for all children under the age of 6, the elderly, the poor, and the near-poor to be enrolled in an insurance scheme.

The Master Plan for Universal Coverage was approved by the government in 2012, aiming to expand health insurance coverage to at least 70 percent of the population by 2015 and 80 percent by 2020¹⁵. The coverage of health insurance in Vietnam was 68 percent in 2014, ¹⁶ which has increased to 72 percent in 2015. However, even with more than 70 percent of population enrolled for insurance program, the out of pocket expenditures remain around 44 percent of the current health expenditure.

Healthcare Expenditure Allocations in CLMV Countries

The health indicators and existing infrastructure are a reflection of the country's expenditure on healthcare. Insignificant expenditures on the part of government can incapacitate the entire healthcare system of the country. High expenditure on healthcare driven by high out of pocket expenditures is also not a good indicator, since it does not ensure universal healthcare coverage.

According to the WHO, current health expenditure covers expenditures on healthcare goods and services consumed during each year, but does not include capital health expenditures such as buildings, machinery, IT and stocks of vaccines for emergency or outbreaks.

¹³Healthcare Guide 2018, EUROCHAM Myanmar

¹⁴Moving Toward Universal Coverage of Social Health Insurance in Vietnam, World Bank, September 2014

¹⁵Vietnam: Huge Progress in Expanding Social Health Insurance, But Challenges Remain in Reaching Universal Coverage, World Bank, September 2014

¹⁶What Lies Ahead in Vietnam's Path Towards Universal Health Coverage?, World Bank, September 2014

Current health expenditure as a percentage of GDP is higher in Cambodia, Myanmar and Vietnam than the ASEAN and CLMV average (Table 2.3). While Cambodia, Lao PDR and Vietnam witnessed decline in their current health expenditure in a span of five years, Myanmar recorded a sharp increase. As regards capital health expenditure, Cambodia and Lao PDR recorded a decline in the last 5 years, with a sharper fall in the case of Cambodia, from 1.2 percent of GDP to 0.1 percent of GDP. Myanmar's capital health expenditure as a percent of GDP, on the other hand, increased.

The current expenditure on healthcare sector in **Cambodia** was 6 percent in 2015 which is higher than other economies in the region. The country has a mixed health financing system with multiple sources of revenue. The revenues are collected via four broad mechanisms: national budget general taxation revenues, official development assistance, out of pocket expenditure and health insurance. Out of pocket expenditures remains the biggest source for health expenditure financing.

Lao PDR has witnessed a continuous drop in the percentage of GDP devoted to health expenditure after a transitory increase in 2009. The country fares slightly on mortality and life expectancy indicators which can be partly attributed to the low

expenditures on healthcare. Healthcare services were provided free of charge till 1996, after which the government implemented a user fee to finance its budgetary allocations.¹⁷ Now the focus has again shifted back to free provision of selected healthcare services such as maternal and child health (MCH). The government has committed to attain universal healthcare coverage by 2025. The free MCH policy was implemented in 2013 which exempts all pregnant women and children under-five from any fees related to deliveries and child health at all public hospitals. The healthcare spending is characterised by low levels of government expenditure and heavy reliance on out of pocket expenditures and external financing. 18 In the Health Sector Reform Strategy and Framework Till 2025, published in 2016, the government aimed at increasing the general government expenditure on health sector to 9 percent from 3.5 percent in 2013¹⁹.

Till 2013, **Myanmar** was among the countries in the world with lowest public spending on healthcare. The turbulent political situation of the country exacerbated the institutional neglect of healthcare. The National health Plan 2017-2021, which was recently introduced in 2016, seeks to extend access to a basic Essential Package of Health Services (EPHS) to the entire population by 2020, ensuring financial protection.²⁰ The government implemented National Health Vision 2030 to meet future challenges.

Table 2.3: Expenditure on Health as a Percent of GDP

| | Current Health Expenditure (% of GDP) | | Capital Health Expenditure (% of GDP) | | |
|----------|---------------------------------------|------|---------------------------------------|------|--|
| | 2010 | 2015 | 2010 | 2015 | |
| Cambodia | 6.9 | 6.0 | 1.2 | 0.1 | |
| Lao PDR | 3.2 | 2.8 | 0.3 | 0.2 | |
| Myanmar | 1.9 | 4.9 | 0.1 | 0.5 | |
| Vietnam | 5.9 | 5.7 | 0.5 | 0.5 | |
| CLMV | 4.5 | 4.9 | 0.5 | 0.3 | |
| ASEAN | 3.8 | 4.2 | 0.3 | 0.2 | |
| World | 6.0 | 6.3 | 0.4 | 0.4 | |

Source: WHO Database

¹⁷Impact of Out-of-Pocket Expenditures on Families and Barriers to Use of Maternal and Child Health Services in the Lao People's Democratic Republic, Asian Development Bank, December 2012

¹⁸Government Expenditure on Health in Lao PDR: Overall Trends and Findings from a Health Center Survey, World Bank, May 2016

¹⁹Health Sector Reform Strategy and Framework Till 2025, Ministry of Health, Lao PDR, 2016

²⁰Myanmar National Health Plan 2017-21, Ministry of Health and Sports, Myanmar

Inadequate government expenditure on healthcare over the past decades resulted in high out of pocket expenditures.²¹

Vietnam is the best performer in the healthcare sector among CLMV countries. It can be attributed to the fact that government expenditure on health as a percentage of total current expenditure on health is the highest in the country as compared to the others. In Vietnam, state budget plays a critical role in protecting public health and ensuring equity in healthcare.

Share of Public, Private and External Expenditures in Current Health Expenditure

According to the WHO, domestic health expenditures are composed of general government and private domestic sources. The domestic general government sources include domestic revenue as internal transfers and grants, transfers, subsidies to voluntary health insurance beneficiaries, non-profit institutions serving household (NPISH) or enterprise financing schemes as well as compulsory prepayment and social health insurance contributions. The domestic general government health expenditure (percent of current health expenditure) depicts the share of public health expenditures in the overall current health expenditure. The domestic private

expenditure on health indicates how much health expenditure is funded domestically by the private (including households, corporations and non-profit organizations) on health, either by voluntary health insurance or paid directly to healthcare providers. The health expenditure from external sources indicates how much is funded by official development aid and other external sources, composed of direct foreign transfers and foreign transfers distributed by government encompassing all financial inflows into the health system from outside the country.

Domestic general government health expenditure as a percentage of current health expenditure is extremely low in Cambodia, with majority of current health expenditure being financed by domestic private sector (Chart 2.9). Unequal incidence of health expenditure results in higher out of pocket Without sufficient government expenditures. budgetary allocations, the basic healthcare infrastructure in a country has limited chances of improving and expanding. The 2015 world average for domestic general government expenditure on health as a percentage of current health expenditure was 59.2 percent. Vietnam has the highest domestic general government expenditure as a percentage of current health expenditure among all CLMV countries at 41.8 percent.

19.2 17.0 47.5 47.8 73.9 60.0 41.8 35.2 20.9 23.0 Cambodia Lao PDR Vietnam Myanmar ■ Domestic General Government Health Expenditure (% of Current Health Expenditure) ■ Domestic Private Health Expenditure (% of Current Health Expenditure) ■ External Health Expenditure (% of Current Health Expenditure)

Chart 2.9: Public, Private and External Expenditure on Health as a Percent of Current Health Expenditure, 2015

Source: World Bank Database

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²¹Ministry of Health and Sports, Myanmar

Out of Pocket Health Expenditure in CLMV Countries

World Bank defines out of pocket expenditure as any direct outlay by households, including gratuities and in-kind payments, to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups. It is a part of private health expenditure.

Enormous out of pocket expenditure reflect a lack of the government involvement in healthcare financing. Higher out of pocket expenditures can be economically devastating to the poor whose entire life savings can vanish in case of a medical emergency. To bolster any healthcare system, government funding is the pre-requisite to create the required infrastructure. The global average for out of pocket expenditure as a percentage of current expenditure on health is 18.1 in 2015. The average for CLMV region is quite high at 55.5. The figure is alarmingly high for Cambodia and Myanmar which have a high private expenditure on health and runs its healthcare systems primarily through out of pocket expenditures (Chart 2.10).

79.4
73.9
73.9
45.4
36.0

Cambodia

Lao PDR

Myanmar

Vietnam

Chart 2.10: Out of Pocket Expenditure as a Percent of Current Health Expenditure

Current Health Expenditure Per Capita in CLMV Countries

Per capita current health expenditure in the CLMV region has been dismal. The countries are far behind the world average of per capita expenditure and the ASEAN average (Chart 2.11). In 2015, Vietnam has the highest per capita health expenditure at US\$ 116.7, followed by Cambodia (US\$ 69.6), Myanmar (US\$ 59.1)

and Lao PDR (US\$ 53), against the global average of US\$ 1,001.5. Lao PDR's per capita health expenditure (lowest in the region) has increased from 2010 to 2015. Myanmar has been able to surpass Lao PDR in the per capita health expenditure with sustained increases over the years. Vietnam and Cambodia have also been making improvements in the indicator but sharp increases are required to reach anywhere close to the world or ASEAN average.

1001.5 907.3 US\$ 423.2 316.1 45.4 74.6 59.1 54.5 69.6 35.0 53.0 Cambodia Lao PDR Vietnam **CLMV ASEAN** World Myanmar 2010 2015

Chart 2.11: Per Capita Current Health Expenditure

3. HEALTHCARE FINANCING MECHANISMS IN CLMV REGION

The CLMV countries have been extensively relying on external sources of financing and foreign direct investment (FDI) to finance health expenditures. The following section discusses the major sectors where FDI has been directed to these countries.

FDI Inflows in CLMV Countries

The CLMV region has witnessed increased FDI inflows in the recent years, supported by increased inflows primarily in the infrastructure sector. According to UNCTAD, FDI inflows to the CLMV region increased by more than two-fold to US\$ 17.6 billion in 2016, as compared to US\$ 8.2 billion in 2007. Outward FDI from the region increased from US\$ 222.1 million in 2007 to US\$ 1.5 billion in 2016 (Table 3.1). The CLMV region accounted for 17.4 percent of the total FDI inflows to ASEAN in 2016, increasing from 9.8 percent share in 2007. In case of FDI outflows, the CLMV region accounted for a marginal 4.3 percent of total FDI outflows from ASEAN in 2016, increasing from 0.4 percent share in 2007.

Vietnam attracted the highest investments in the CLMV region, accounting for 71.6 percent of the region's inflows in 2016, followed by Myanmar (12.4 percent), Cambodia (10.9 percent) and Lao PDR (5.1 percent). As regards outflows, Vietnam's share in the region's FDI outflows stood much higher at 91.9 percent in 2016, followed by Cambodia (8 percent) and Lao PDR (a marginal share of 0.1 percent).

According to the ASEAN Investment Report 2017 published by ASEAN Secretariat, FDI from developing Asian economies, including intra-ASEAN, remained the major source of investment in CLMV countries. While China and ASEAN are major investors in Cambodia and Lao PDR, ASEAN countries are the lead investors in Myanmar, and South Korea dominated investment in Vietnam. While Cambodia's FDI was concentrated in finance, light manufacturing and infrastructure activities, Lao PDR attracted strong infrastructure investment in power projects. Myanmar continued to receive investment across sectors, with growing investor interest. FDI flows in Vietnam were dominated by strong manufacturing investments from South Korea.

According to Financial Times' fDi Markets database, during January 2003 to March 2018, cumulative investment in the CLMV region in greenfield and brownfield expansion projects, were US\$ 436.3 billion, creating 1.6 million jobs in the region out of 4,615 projects. Vietnam received the highest investment of US\$ 324.1 billion, followed by Myanmar (US\$ 59 billion), Cambodia (US\$ 34.1 billion) and Lao PDR (US\$ 19.2 billion). The major investors in the region were Japan (US\$ 70.9 billion), South Korea (US\$ 65.9 billion), Malaysia (US\$ 37.3 billion), Thailand (US\$ 37.2 billion) and China (US\$ 31.7 billion).

During this period, coal, oil and natural gas is the largest sector to receive capital investment, with

Table 3.1: Investment Scenario in CLMV Region

(US\$ billion)

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--------------|------|------|------|------|------|------|------|------|------|------|
| FDI Inflows | 8.2 | 11.3 | 8.7 | 16.3 | 10.3 | 11.0 | 11.8 | 12.6 | 17.4 | 17.6 |
| FDI Outflows | 0.2 | 0.2 | 0.7 | 0.9 | 1.0 | 1.2 | 2.0 | 1.2 | 1.1 | 1.5 |

Source: World Investment Report, 2017, UNCTAD and Exim India Analysis

a share of 25.3 percent in total investment inflows into the CLMV region. Other major sectors attracting capital investment in the region include real estate (20.7 percent of total investment), alternative/renewable energy (5.6 percent), financial services (5.5 percent), and metals (5.2 percent).

During the same period, India featured as the 14th largest investor with investment amounting to US\$ 8.1 billion in 73 projects, generating 16,094 jobs in the CLMV region. India has majorly invested in coal, oil and natural gas (US\$ 5.2 billion), followed by metals (US\$ 567.6 million), financial services (US\$ 430.4 million), wood products (US\$ 420.8 million) and hotel and tourism (US\$ 413.8 million). Vietnam has been the largest recipient of Indian investment (US\$ 4.1 billion), followed by Myanmar (US\$ 3.1 billion), Cambodia (US\$ 498.7 million) and Lao PDR (US\$ 441.7 million).

Cambodia

According to UNCTAD, Cambodia received FDI inflows of US\$ 1.9 billion during 2016 as compared to US\$ 1.7 billion in 2015, driven by increased investments in electricity projects, construction and manufacturing. As per the ASEAN Investment Report 2017, the ASEAN countries emerged as the largest investor in Cambodia (share of 28 percent in total), followed by China (22 percent) in 2016. The financial sector emerged as the major investment recipient in 2016, followed by real estate and manufacturing. Light manufacturing industries like automotive, beverage and consumer goods are receiving increasing investment in the recent years, as these sectors are part of regional value chain with production targeted for exports to neighboring countries like Thailand for further value addition. For example, Denso (Japan) opened a US\$ 19 million second plant in 2016 to produce magnetos and oil coolers. Production from the new plant is exported to Denso's Thailand subsidiary, where it undergoes quality assurance before being supplied to the motorcycle and automotive industry in that country and other ASEAN Member States.

According to fDi Markets database, the cumulative FDI received from January 2003 to March 2018 by Cambodia was US\$ 34.1 billion. Cumulatively during the same period, real estate has emerged as the major sector attracting foreign investment followed by financial services, coal, oil and natural gas, alternative or renewable energy, and transportation (Chart 3.1). Healthcare forms a meagre 0.5 percent of the total FDI inflows to Cambodia.

Consumer **Building & Products** Construction 2% Others **Materials** 12% 3% Food & Tobacco Real Estate Communications 4% 4% Metals 4% **Financial** Transportation Services 5% Alternative/Renewa ble energy Coal, Oil and 12% **Natural Gas** 12%

Chart 3.1: Sectorwise FDI Inflows to Cambodia

Note: fDi Markets tracks cross-border investment in a new physical project or expansion of an existing investment which creates new jobs and capital investment. This data differs from official data on FDI flows as company can raise capital locally, phase their investment over a period of time, and can channel their investment through different countries for tax efficiency.

Source: fDi Markets Database and Exim India Analysis

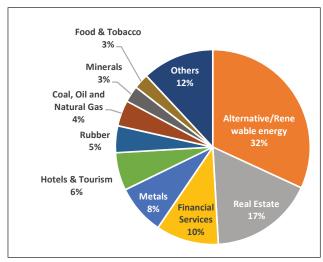
Lao PDR

According to UNCTAD, Lao PDR received FDI of US\$898 million in 2016 decreasing from US\$1.1 billion in 2015. According to the ASEAN Investment Report 2017, the country majorly attracted investments in electricity, construction and financial services from other ASEAN members during 2016. China continued to be the largest investor in Lao PDR, followed by the ASEAN countries, South Korea, and Japan. Among the land-locked developing countries, Lao PDR was the fifth largest recipient of FDI during 2016 with a

share of 3.7 percent in total FDI flows to land-locked countries. Lao PDR has majorly received investment in infrastructure particularly power generation, followed by mining and quarrying, construction and manufacturing during 2016.

According to fDi Markets, FDI received by Lao PDR for the period January 2003 to March 2018 is US\$ 19.2 billion. During this period, the major sectors attracting investment are alternative or renewable energy, real estate, financial services, metals, and hotel and tourism (Chart 3.2). Lao PDR has the lowest share of FDI in healthcare sector among CLMV countries, with a marginal 0.1 percent share out of the total FDI received.





Note: fDi Markets tracks cross-border investment in a new physical project or expansion of an existing investment which creates new jobs and capital investment. This data differs from official data on FDI flows as company can raise capital locally, phase their investment over a period of time, and can channel their investment through different countries for tax efficiency.

Source: fDi Markets Database and Exim India Analysis

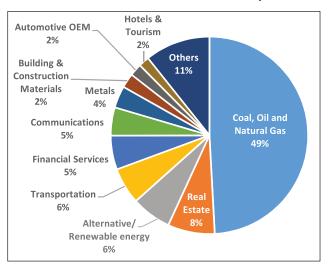
Myanmar

According to UNCTAD, Myanmar received FDI of US\$ 2.2 billion in 2016, decreasing from US\$ 2.8 billion in 2015 as a result of the delay in implementing large-scale projects and policy uncertainty over coal

fired power projects. The largest sector to receive FDI were mining and quarrying, transportation and storage and manufacturing during 2016. Labor-intensive manufacturing sectors like garments, footwear and electronic assembly have majorly attracted investment in the country during 2016. According to the ASEAN Investment Report 2017, ASEAN countries accounted for the highest FDI contribution to Myanmar during 2016, with a share of 56 percent, followed by EU, China and Hong Kong.

According to fDi Markets, Myanmar received US\$ 59 billion as FDI during January 2003 to March 2018. The major sectors receiving investment in Myanmar were coal, oil and natural gas, followed by real estate, alternative or renewable energy, transportation, financial services and communications (Chart 3.3). Myanmar received the highest proportion of FDI to healthcare in the CLMV region, with the sector attracting 1.3 percent of FDI.

Chart 3.3: Sectorwise FDI Inflows to Myanmar



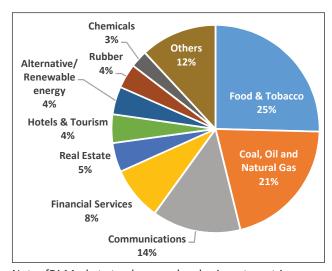
Note: fDi Markets tracks cross-border investment in a new physical project or expansion of an existing investment which creates new jobs and capital investment. This data differs from official data on FDI flows as company can raise capital locally, phase their investment over a period of time, and can channel their investment through different countries for tax efficiency.

Source: fDi Markets Database and Exim India Analysis

Vietnam

According to UNCTAD, Vietnam received FDI of US\$ 12.6 billion during 2016, increasing from US\$ 11.8 billion in 2015. Vietnam was the fifth largest destination for FDI with a share of 2.8 percent in Developing Asia region after China, Hong Kong, India and Singapore. Vietnam is emerging as an electronics manufacturing hub in the region attracting investments from the other major developing economies like Korea, Singapore and Malaysia. Low production costs, relatively stable economic environment and tax incentives have contributed to the increased FDI in this country. According to the ASEAN Investment Report 2017, manufacturing activity dominated the share of FDI inflows into the





Note: fDi Markets tracks cross-border investment in a new physical project or expansion of an existing investment which creates new jobs and capital investment. This data differs from official data on FDI flows as company can raise capital locally, phase their investment over a period of time, and can channel their investment through different countries for tax efficiency.

Source: fDi Markets Database and Exim India Analysis

country in 2016 with a share of 64 percent, followed by wholesale and retail trade, and real estate activities. Major investors in Vietnam during 2016 were South Korea, ASEAN countries, Japan and Taiwan.

According to the fDi Markets database, Vietnam received the highest investment in the CLMV countries during January 2003 to March 2018. While it is the highest recipient of FDI in healthcare in terms of value, at US\$ 1.8 billion, FDI in healthcare as a proportion to FDI remains low at 0.6 percent. Food and tobacco sector received the maximum investment in Vietnam during January 2003 to March 2018, followed by coal, oil and natural gas, and communications (Chart 3.4).

Investments in CLMV Healthcare Sector²²

The CLMV countries have been increasingly attracting FDI in the recent years in sectors like coal, oil and natural gas, real estate, alternative or renewable energy, financial services and metals. However, the share of investment in healthcare sector in the region remains low in all the countries.

According to fDi Markets database, healthcare received an overall investment of US\$ 2.8 billion during January 2003 to March 2018 in 68 projects, generating 9,268 jobs in the region (Table 3.2). The major investors in the sector during the corresponding period were Indonesia (US\$ 644.8 million), followed by Singapore (US\$ 368.4 million), Japan (US\$ 355.5 million), China (US\$ 235.9 million) and USA (US\$ 233.8 million) in the CLMV region. India is the 13th largest investor in healthcare sector during the same period, with investment amount of US\$ 19.5 million.

Major Healthcare Projects in CLMV Countries

Some of the recent healthcare projects in CLMV counties are given below.

 Vietnam's Siagon Medical Investment Joint Stock Co. partnered with Cambodia's Sokimax Co. to establish Cho-Ray Phnom Penh Hospital at a cost of US\$ 47 million.²³

²²Healthcare includes pharmaceutical sector

²³Cho Ray Phnom Penh Hospital (http://www.chorayphnompenhhospital.com.kh/)

Table 3.2: FDI Inflows in Healthcare Sector in CLMV Region, January 2003 – March 2018 (US\$ million)

| | Cambodia | Lao PDR | Myanmar | Vietnam | CLMV |
|---|----------|----------|----------|-----------|-----------|
| Indonesia | 12.8 | - | 538.0 | 94.0 | 644.8 |
| Singapore | 4.8 | - | - | 363.6 | 368.4 |
| Japan | - | - | 1.0 | 354.5 | 355.5 |
| China | - | - | - | 235.9 | 235.9 |
| USA | - | - | - | 233.8 | 233.8 |
| Thailand | 44.2 | 18.0 | 107.0 | - | 169.2 |
| Germany | 12.0 | - | - | 139.2 | 151.2 |
| Malaysia | - | - | 70.0 | 75.0 | 145.0 |
| Vietnam | 81.2 | - | 62.0 | - | 143.2 |
| France | - | - | - | 95.5 | 95.5 |
| Total FDI in Healthcare | 175.3 | 18.0 | 779.5 | 1,812.6 | 2,785.4 |
| Total FDI in the Country | 34,071.1 | 19,190.4 | 58,965.9 | 324,052.6 | 436,280.0 |
| Share of total FDI in healthcare to total FDI | 0.5 | 0.1 | 1.3 | 0.6 | 0.6 |

Note: fDi Markets tracks cross-border investment in a new physical project or expansion of an existing investment which creates new jobs and capital investment. This data differs from official data on FDI flows as company can raise capital locally, phase their investment over a period of time, and can channel their investment through different countries for tax efficiency; - denotes not available or negligible

Source: fDi Markets Database and Exim India Analysis

- One of the biggest healthcare project in CLMV is the expansion of Siloam hospitals by Lippo group of Indonesia in Myanmar at a cost of US\$ 400-500 million. The company envisions becoming a national hospital network with over 10 hospitals in the country by 2023.²⁴
- Columbia Asia, a subsidiary of Columbia Pacific Management (Seattle (WA), USA has expanded its operations in Vietnam by establishing three hospitals. Founded in 1998, GiaDinh was the first private hospital in Vietnam directly invested by 100 percent foreign investment fund.²⁵
- Singapore-based Shangri-La Healthcare Investment Pvt Ltd. collaborated with Vietnam's Hoa Lam Company to form a joint venture of Hoa-Lam Shangri La Medical Co. Ltd. The venture then

established the City International Hospital, one of the largest private hospitals in Ho Chi Minh city. ²⁶

Existing Indian Investment in CLMV Healthcare Sector

India's investments in healthcare including pharmaceutical sector in the CLMV region gradually increased across the years and the country currently is the thirteenth largest investor in the CLMV region in healthcare including pharmaceutical sector. According to fDi Markets, Indian investments amounted to US\$ 19.5 million in healthcare sector of CLMV countries during January 2003 to March 2018. Apollo Hospitals launched its telemedicine facility in Myanmar in 2012 to facilitate ready access to specialists in India without physical presence.²⁷ In 2016, the group launched its telemedicine centre

²⁴Pun Hlaing Siloam Hospital (PHSH) (http://punhlaingsiloamhospitals.com/overview/)

²⁵Columbia Asia International Hospital, Vietnam (http://www.columbiaasia.com/vietnam/hospitals/gia-dinh/overview)

²⁶5-star international hospital opens in HCMC, Tuoitrenews, June 01, 2014 (http://tuoitrenews.vn/society/16625/5star-international-hospital-opens-in-hcmc)

²⁷Apollo enters Myanmar with telemedicine service, Economic Times, December 12, 2012

⁽http://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/apollo-enters-myanmar-with-telemedicine-service/articleshow/17586100.cms?intenttarget=no)

in Phnom Penh with the objective of training the local doctors and encouraging more Cambodians to travel to India for complicated medical procedures²⁸. Dr. Agarwal's Eye Hospital opened the first lasik surgery hospital in Cambodia in 2014.

Indian investors are yet to realize the full potential of healthcare sector in CLMV countries. The strategy should be to invest in tertiary and primary healthcare simultaneously. The focus in short run should be on expanding accessibility of healthcare rather than profits.

External Financing in CLMV Healthcare Sector

With low levels of FDI in healthcare, major investments in healthcare sector of CLMV countries have been primarily financed by the externals sources of finance, received from other countries and health organizations. According to the World Bank, all the CLMV countries fell under the lower-middle income status, whose GNP per capita ranges from US\$ 1,006 to US\$ 3,995. However, once they move to a higher income status, most of the grants they receive will be reduced. Their reliance on grants and aids for financing healthcare is therefore not sustainable.

Among CLMV countries, Cambodia and Lao PDR have the highest levels of external health expenditure as a percentage of their current expenditure on health. According to the World Bank, external health expenditure are funded from external sources, composed of direct foreign transfers and foreign transfers distributed by government encompassing all financial inflows into the national health system from outside the country. Cambodia's external health expenditure increased from 14 percent in 2005 to 19.2 percent in 2015. Myanmar and Vietnam have relatively lesser share of external health expenditure as a percentage of their current expenditure on health (Chart 3.5).

International Aid Agencies in Healthcare Sector in CLMV Region

Many international healthcare organizations and the aid agencies of various countries have been assisting CLMV countries in ensuring healthcare facilities to the citizens. Most of the funding are in the form of aids, grants and loans.

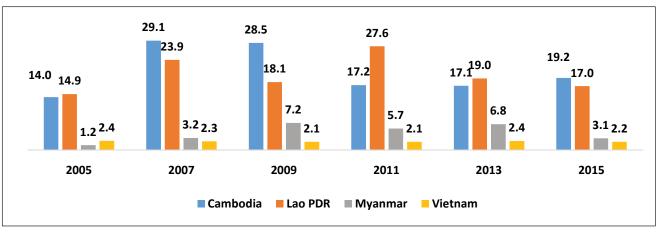


Chart 3.5: External Health Expenditure as a Percentage of Current Health Expenditure

Source: World Bank Database

²⁸Indian Hospital Opens a Center in Cambodia, Agence Kampuchea Presse, August 12, 2016 (http://www.akp.gov.kh/?p=85291)

Major organizations providing financial and technical assistance in the region include WHO, GAVI, the Global Fund, Asian Development Bank (ADB), USAid, Japan International Cooperation Agency (JICA), Korea International Cooperation Agency (KICA), Thailand International Cooperation Agency (TICA), and AusAid, among others. ADB has been one of the largest multilateral development partner for CLMV countries.

ADB has been involved in supporting social and economic infrastructure development and carrying out poverty alleviation in its member states. **Table 3.3** shows the cumulative lending, grant and technical assistance commitments in the healthcare sector in CLMV countries. Figures in the bracket reveal the share of healthcare to cumulative total commitments.

Table 3.3: Assistance by ADB (US\$ million)

| | Cambodia | Lao PDR | Myanmar | Vietnam |
|------|----------|---------|---------|---------|
| 2013 | 59.0 | 81.0 | 63.1 | 398.3 |
| | (3.1) | (4.3) | (5.4) | (3.2) |
| 2017 | 104.9 | 129.7 | 84.7 | 566.4 |
| | (4.9) | (5.0) | (3.9) | (3.6) |

Note: Assistance includes loans, grants and technical assistance to the countries

Source: Asian Development Bank Member Fact Sheet

Other than Myanmar, financial assistance from ADB in terms of share of healthcare sector out of total assistance has increased in other three CLMV countries in last five year. Total commitments made to Cambodia during 1966 to 2017 in terms of lending, grant and technical assistance in the healthcare sector, amounted to US\$ 104.9 million. The share of healthcare in total commitments increased to 4.9 percent in 2017 from 3.1 percent in 2013. Share of healthcare in total commitments to Lao PDR and Vietnam witnessed a relatively modest increase from 4.3 percent and 3.2 percent in 2013 to 5 percent and 3.6 percent, respectively in 2017. Share of investments in healthcare for Myanmar, however, decreased from 5.4 percent in 2013 to 3.9 percent in 2017. Healthcare sector has essentially received modest investment and therefore has immense future prospects.

FDI flowing into health sector is extremely low when compared to the aid they are eligible for, from international organizations. Since these countries have been growing at a fast pace, they will soon fall out of the eligibility criteria to avail such aids and grants from international organizations. To supplement their growing healthcare needs, the countries need to bolster their efforts to increase private investment in the sector. Increased government funding is of paramount importance to create the necessary infrastructure so that more private investments can be attracted.

Exhibit 3.1: General Electric in Healthcare sector in Cambodia

In 1998, General Electric (GE), a multibillion dollar conglomerate, ventured into the sector of healthcare with its path-breaking technological innovation in digital radiography, mammography and fluoroscopy. In 2007, the company entered Cambodia in healthcare, industrial solutions and home and business sectors.

GE announced its plan for sustainable health development called healthymagination in 2009, which aims at substantial reduction of the cost of procedures and processes with GE technology, increasing people's access to healthcare services and to improve the quality of care by partnering with physicians and other stakeholders. GE expanded its business in Cambodia by building a network base while developing partnerships with private and public sectors.

The strategic alliances that GE has maintained with various partners create synergy and a high degree of competence. In 2011, the company collaborated with M+W, a global engineering and construction company to help the developing nations in overcoming the lack of essential biopharmaceuticals. The venture aimed at offering governments and pharmaceutical companies an integrated, cost-competitive "turn-key" approach for the construction of biopharmaceutical manufacturing plants, to help meet the rapidly increasing worldwide demand for these potentially life-saving treatments.

The company chose to have close partnerships with the local hospitals in Cambodia which helped it to reduce its risk of failure and the costs of establishment. The collaboration was helpful to the hospitals too as they could obtain advanced medical equipment to which they had no access earlier. GE Foundation, through the Developing Health Globally Program (DHG), has donated over US\$ 8 million worth of medical equipment to upgrade the infrastructure and increase access to care at 31 hospitals in 24 provinces in Cambodia since 2008.

The company has expanded its business in major ASEAN countries. GE entered Myanmar in 2012 and has supplied over 2000 medical devices to 40 public and private hospitals, treating roughly 5,00,000 patients every year. It set up its first representative office in Vietnam in 1993 and established GE Vietnam Ltd. in 2003, a 100 percent GE capital investment. Under its health developing program, the company has made investments of US\$ 20.3 million in ASEAN, of which US\$ 13.5 million has been invested in Cambodia and US\$ 3 million in Myanmar.

According to GE's annual report for 2017, the healthcare division of the company grew annually by 5 percent. The annual revenue from the sector was US\$ 19.1 billion in 2017.

Sources: General Electric Website; ECSEAS: FDI in Cambodia, November, 2012; M+W Group Website

4. POTENTIAL INVESTMENT AREAS IN CLMV HEALTHCARE SECTOR

Increasing per capita income, ageing population, rising standards of living and increased demand for better healthcare services make the CLMV region a potential hub for investment in the healthcare sector. Accordingly, countries in the region have increasingly opened up healthcare and related sectors for foreign investment.

Investment Scenario

This section analyses the two aspects of investments in the region: the official requirements for entering in the investment sector and the incentives being offered by the prospective governments to enter the sector.

Cambodia

Cambodia allows 100 percent foreign ownership of business though it is recommended that foreign companies work with local partners.²⁹ The Council for Development of Cambodia (CDC) is the sole organisation responsible for the rehabilitation, development and oversight of investment activities. Cambodia encourages joint venture between Cambodian entities, as well as between Cambodian entities and foreign entities or between foreign entities in the country.

Investors could apply for Qualified Investment Project (QIP) status by registering their projects with the CDC. However, a project with investment capital less than US\$ 2 million needs to register with the municipal/provincial investment sub-committee. QIPs enjoy tax holidays for the stipulated time period as determined by the CDC up to a maximum period of 9 years. A

domestic QIP that does not aim at exports, will have its imported construction materials and production equipment exempted from custom duty.³⁰

Hospital, clinical, medical, dental services, and the sale of medical and dental goods incidental to the performance of such services, and insurance services are exempted from VAT³¹. The corporate income tax for medium and large taxpayers in the country is 20 percent, while it ranges from 0-20 percent in the case of small tax payers. Insurance companies are taxable at a rate of 5 percent on the gross premium income and at the rate of 20 percent on other income derived from non-insurance/reinsurance activities.³²

Lao PDR

Investment Promotion Department, which is under the Ministry of Planning and Investment is the authority responsible for promoting foreign investments in Lao PDR.

According to the investment policies of Lao PDR, investments in the construction of hospitals, colleges, universities, research centres and some public utilities could obtain exemption of 3 to 15 years in rental or land concession depending on the regional location of the project. The investors could get the benefit of additional corporate profit tax exemptions and exemption from import duties for the importation of raw material and equipment which are directly used for production.

The government also grants permission to lease land for up to 20 years from a Lao national and up to 50 years from the government.³³

²⁹Healthcare Resource Guide: Cambodia, Export.gov

³⁰The General Department of Customs and Excise of Cambodia (GDCE), Qualified Investment Project; Cambodian Investment Board (CIB)

³¹Client Update: Cambodia, Raiah & Tann Asia, June 2017

³²Investing in Cambodia, KPMG, June 2016

³³Investment Promotion Department, Ministry of Planning and Investment, Lao PDR

Myanmar

Directorate of Investment and Company Administration, the Myanmar investment agency promotes foreign investment in urban solutions for the country where it emphasizes on provision of private healthcare.³⁴ In private hospitals, joint ventures with 51 percent foreign equity are permitted. Foreign investors are not allowed to own land but can acquire land from the government on long-term lease.

The Special Economic Zone Law, enacted in 2014, paved the way for special economic zones in Myanmar. Activities such as manufacturing, housing, departmental store, banking, insurance, school, hospital and recreational place can be carried out in promotion zone. For the first five years, there are income tax exemptions and custom duties exemptions on production machinery used.

The Government of Myanmar and India have signed an agreement for the promotion and protection of investment, according to which, both the countries should encourage and create favorable conditions for investment from the other country.

Vietnam

Foreign Investment Agency (FIA), an organization belonging to the Ministry of Planning and Investment, is commissioned to advise the Minister of Planning and Investment, to implement state management function related to FDI activities in Vietnam and Vietnam's overseas investments.³⁵

According to Vietnam's WTO commitments, there are no limitations in market access for foreign investors in the hospital, medical and dental services in cross border supply and consumption abroad. Considering commercial presence in Vietnam, foreign service suppliers are permitted to provide services through the establishment of 100 percent foreign-invested enterprises, joint venture with Vietnamese partners

or through business cooperation contract. The minimum investment capital for a commercial presence in hospital services is US\$ 20 million for a hospital, US\$ 2 million for a policlinic unit and US\$ 200,000 for a specialty unit.

Investment incentives would be provided if the projects invest in the following business lines, including medical examination and treatment; production of medicines, medicine ingredients, essential medicines, medicines for prevention and treatment of sexually transmitted diseases, vaccines, biological, herbal and orient medicines; and scientific research into preparation technology and/or biotechnology serving creation of new medicines.

Eligibility for investment incentives is based on their locations as well i.e. administrative divisions in disadvantaged area and industrial parks, export-processing zones and economic zones. Investment incentives are provided in the form of lower tax rates for whole duration of investment term or part thereof; import duty exemption for fixed assets; and reduction/exemption of land rental (Table 4.1).

Potential Investment Areas in Healthcare Sector of CLMV Countries

The following section discusses the potential investment areas in healthcare in the CLMV region.

Healthcare Infrastructure

Infrastructure is the core potential investment sector in healthcare. It covers both physical and digital infrastructure. Following are the broad infrastructure sectors to be augmented.

Hospitals

Hospitals lay the foundation of a country's healthcare system. As discussed earlier, in spite of the fact that Myanmar has higher population as compared to Lao PDR and Cambodia, the total number of hospitals was the lowest in Myanmar.

³⁴Directorate of Investment and Company Administration, the Republic of the Union of Myanmar

³⁵Foreign Investment Agency (FIA), Ministry of Planning and Investment, Vietnam

Table 4.1: Broad Overview of Investment Scenario in CLMV Countries

| | Cambodia | Lao PDR | Myanmar | Vietnam |
|-------------------------|--|--|---|---|
| Investment Authority | Council for Development of Cambodia (CDC) | Investment Promotion Department, Ministry of Planning & Investment | Directorate of Investment & Company Administration, Myanmar Investment Commission | Foreign Investment Agency, Ministry of Planning & Investment |
| Investment Form | Joint venture, 100 percent foreign ownership | Joint Venture, 100 percent foreign ownership, business by contract | Joint ventures, SEZ | 100 percent foreign ownership, joint ventures or business cooperation contract |
| Requirements | - | Any foreign partner must contribute at least 10 percent in a joint venture. | | Minimum investment capital for hospital services is US\$ 20 million. |
| Incentives | A QIP enjoys tax holiday for maximum of 9 years. Maximum Corporate income tax in the country is 20 percent. | Investments in hospitals, research centres obtain exemption of 3-15 years in land concession and corporate profit tax exemptions, depending on location. | Income tax exemptions for 5 consecutive years. | Lower tax rates for whole duration of investment or part thereof Reduction/exemption of land rental. |

The need for specialised hospitals has been rising with the changing incidence of diseases in the region. Cardiovascular diseases have become the major cause for deaths in CLMV countries. The treatment for these diseases is only possible in specialized hospitals. However, the number of specialized hospitals remains low. District / rural hospitals cater to the needs of rural population without much access to healthcare facilities. They lack the basic infrastructure to provide healthcare facilities to the citizens. With limited number of super-specialty hospitals, and trained medical personnel, the prospering income class of these countries seeks treatment abroad. Thailand has become the leading Asian medical travel destination for patients.

Also, less number of advanced schools for medical education and lack of state of the art technology

in healthcare inhibits the development of health infrastructure. Constrained financial resources exacerbate the situation. Primary investment in healthcare should be directed towards infrastructural development of provincial and specialized hospitals. These hospitals cater to a larger number of patients and therefore offer the opportunity of expansion. A better healthcare system domestically can deter medical tourism and encourage prospects for existing players.

Ambulance Services

CLMV region also faces shortage of ambulance services, which are a crucial part of emergency health services. Poor road conditions as well as restricted land connectivity in the region also limited the reach of ambulances. The countries face geographical and

financial constraints in expanding the emergency healthcare services. It has been estimated that around 89 percent of patients in Myanmar do not receive timely and systematic emergency treatment prior to admission in hospitals. Also, only around 3-5 percent of emergency case admissions to a medical institution have access to ambulance services. Availability of ambulances and emergency care could substantially reduce mortality rates in CLMV countries. This gives an avenue where Indian players can strategically enter the market for ambulance services.

Digitalization of Medical Services

With advancements in internet connectivity, healthcare sector has been revolutionized. Facilities like telemedicine and digitalized medical records have made healthcare more accessible.

Telemedicine allows doctors in one hospital to connect and consult the experts in the other specialized hospitals. This reduces the need to physically consult the specialist and increases the accessibility in times of emergency. Telemedicine in the CLMV region has vast potential due to the unfavorable geographical location and increasing coverage of internet. Doctors in rural and provincial hospitals can be connected with the specialists at national and international level.

Personal health information management has been becoming popular in the developing economies. The market for this service has been expanding in India. Under the information management system, medical history and other medical information is stored online which can be accessed anytime. It improves patient care with more accurate diagnosis, and increases the ability to instantly share information with multiple clinicians at the same time. The scope for this technology in CLMV countries exists because of the increasing internet connectivity and rising demand for better healthcare technologies.

Internet penetration is a pre-requisite for expansion of advanced healthcare services like telemedicine, tele-education or digitization of medical records. According to the World Bank database, the percentage of population using internet in the CLMV region has been rising which makes them a prospective market for these services (Chart 4.1).

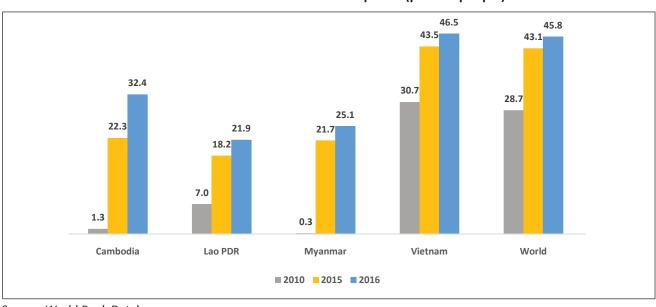


Chart 4.1: Fixed Broadband Subscriptions (per 100 people)

Source: World Bank Database

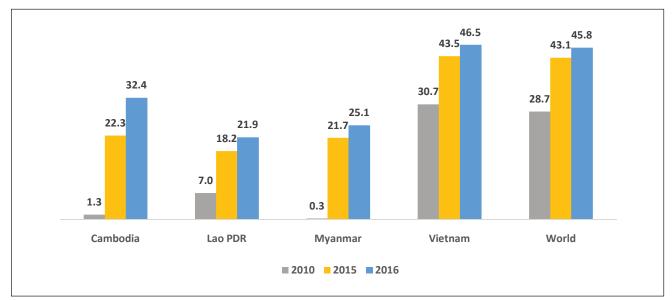


Chart 4.2: Individuals Using the Internet (Percent of Population)

Source: World Bank Database

Around half the population of Vietnam uses internet services (Chart 4.2). The share of internet services users has also substantially increased in Cambodia from a marginal 1.3 percent of its population in 2010 to 32.4 percent of population in 2016. Myanmar also witnessed an increase in individuals using internet services from 0.3 percent of total population in 2010 to 25.1 percent of population in 2016.

At the TELSOM-ATRC (ASEAN Telecommunication Regulator's Council) Joint Working Group meeting in May 2016, India proposed to share the GPON technology based broadband access with CLMV countries. Under Digital India Program, the technology provides connectivity to over 250,000 Indian villages and if extended, could help CLMV countries connect their rural areas.³⁶ Wide accessibility of internet facilities not only improves the medical infrastructure but it also enables the population to make better use of it.

Capacity Building and Availability of Medical Personnel

One of the major reasons for inadequate healthcare services in these countries is the short supply of

medical professionals including physicians, midwives, nurses, physiotherapists and paramedical personnel. A shortage of qualified medical staff is common in hospitals of CLMV countries. Medical doctors are concentrated mainly at central and provincial health facilities.

According to the World Bank, the global average for physicians per 1,000 people stood at 1.9 in 2013. As discussed earlier, the number of physicians per 1,000 people in CLMV countries ranges from 0.1 in Cambodia to 0.8 in Vietnam, which is much below the global average at 1.9. Similar is the case with availability of nurses and midwives per 1,000 people which was below the global average of 3.1 in 2013. Vietnam has the maximum number of nurses and midwives per 1,000 people at 1.4 among the CLMV countries. As regards Myanmar, the figure is as low as 0.9.

The availability issue of medical personnel is more severe in the case of specialist surgical workforce. Specialist surgical workforce is the number of specialist surgical, anesthetic, and obstetric (SAO) providers who are working in each country per

³⁶Annual Report 2016-17, Department of Telecommunications, Ministry of Communications, Government of India

100,000 population. According to available data from the World Bank, while the global average of specialist surgical workforce per 100,000 population stood at 30.1 in 2014, Lao PDR had just 2.9 specialist surgical workforce per 100,000 population. Similarly, Myanmar had only 2.4 specialist surgical workforce per 100,000 population in 2013.

There is a lack of medical education and training institutes, which translates into a lack of trained staff. According to Geneva Foundation for Medical Education & Research, there are 10 medical schools in Vietnam, 6 in Myanmar, 2 in Cambodia and only 1 in Lao PDR. The countries also require more nursing schools for advanced training and skill development.

International agencies of several countries have been involved in capacity building in healthcare sector in the CLMV region. Japan International Cooperation Agency (JICA) entered into a technical cooperation project, 'the Project for Enhancement of Medical education (PEME)' with the Ministry of Health, Myanmar aiming at capacity development in research, clinical skills and education of four medical universities in Myanmar. The program is implemented with the technical support of the Japanese six national universities network.37 JICA has been involved with Cambodia in projects for promotion of medical equipment management and human resource development of co-medicals. In Lao PDR, the agency has been involved in the project for medical education and research of Setthathirath Hospital.

Sydney Medical School signed Letters of Agreement in 2013 to exchange students and staff and establish research collaborations with five medical schools in Myanmar.³⁸ Australia's Royal Melbourne Institute of Technology (RMIT) set up its campus on Vietnam in 2000 with financial assistance from Asian Development Bank.

The state medical university in Cambodia is assisted by international organisations to help build an international network for higher education, training and research in healthcare sector in Cambodia. The organisations include universities and international agencies of France, Korea, USA, UK, Belgium and Singapore, among others.³⁹ Lao PDR has opened up the education sector to private investment.

Indian players can venture into the education sector by setting up medical institutes and organizing exchange programs with the already existing institutes. With increase in non-communicable diseases in the CLMV region, India and CLMV countries could also collaborate on cancer care, rehabilitative medicine and senior living initiatives. Apart from the physical educational infrastructure, investments can also be made in tele-education. Tele-education complements the efforts being made in building physical infrastructure. It provides the opportunity of training healthcare professionals in collaboration with the distant and highly advanced medical institutes.

Insurance Sector in CLMV Countries

The CLMV countries have gradually opened up insurance sector to foreign investment. Concomitantly, the market for health and life insurance have also picked up in the region.

Cambodia

The official regulator of insurance in the country is the Insurance Division of the Department of Financial Industry⁴⁰. Anyone carrying out insurance activities in Cambodia is subject to the new Law on Insurance, promulgated on August 4, 2014, replacing that of July 25, 2000⁴¹. It is mandated that only insurance companies licensed in Cambodia could underwrite insurance business in Cambodia. At the same time, there are no FDI restrictions on full ownership of local insurance companies by foreign investors.

³⁷Japan International Cooperation Agency (JICA) Website

³⁸The University of Sydney Medical School & Myanmar

³⁹University of Health Sciences (UHS), Cambodia

⁴⁰Insurance regulation in Cambodia, Norton Rose Fulbright, January 2018

⁴¹Asia Insurance Market Report 2016, Willis Towers Watson, January 2017

The insurance market in Cambodia is at its nascent stage and is fairly small, with insurance penetration at 0.5 percent in 2015, which is below the ASEAN penetration rate of 3.8 percent⁴². Cambodia's first life insurance company, Cambodian Life, was launched in 2012. The Ministry of Economy and Finance signed agreements with PT Asuransi Central Asia, Asian Insurance Co Ltd, Bangkok Life Assurance Plc and Bangkok Insurance Co Ltd to provide the insurance services. The company is 51 percent government owned, with the remaining ownership divided between the four insurance companies.

Cambodia's insurance market has displayed vast potential for growth with more market players coming into the market across the years. According to Insurance Association of Cambodia, there are 27 insurance companies in Cambodia, comprising of 11 licensed general insurers, 7 life insurers, 8 microinsurers and 1 reinsurer, operating in the market. With the introduction of life and micro-insurance, insurance companies are now reaching out to the general, largely uninsured public with dynamic tailormade products to make individuals less vulnerable to personal catastrophes such as disease or the loss of the main breadwinner in a family. The law provides annual tax on Income (TOI) rate of 5 percent on gross premiums received for insurance or reinsurance activities on property or other risk, and 20 percent TOI for insurance or reinsurance on life with saving features and other insurance that is not property insurance.43

In terms of growth by lines of business, medical insurance grew at a CAGR of 20.9 percent during 2011-2016, with 16 percent market share in the total general insurance sector in Cambodia.⁴⁴ Medical insurance premium accounted for 16 percent of the US\$ 70.4 million gross general insurance premiums recorded in 2016.

Lao PDR

Ministry of Finance (MOF) is the supervisory insurance authority in Lao PDR. MOF has set up an insurance regulator unit, Department of Government Investment Enterprise and Insurance Management Authority, to supervise and be responsible for regulating the insurance sector in the country to bring Lao PDR in line with the international standards. Businesses operating life and non-life insurance activities in Lao PDR are governed by the same law, regardless of whether the legal entity is operated by a foreign business investor or a local investor⁴⁴.

The main regulations on insurance sector include the Law on Insurance no 06/NA dated December 21, 2011; Instructions on the Implementation of the Law on Insurance no 539/MOF dated February 19, 2014; and instructions on the Issuance of Insurance Operating Licenses no 770/MOF dated March 21, 2016.

Currently, there are no prohibitions on foreign investors from investing in an insurance business (both life and non-life). An insurance company could be formed as a wholly domestic or foreign-owned company; as a joint venture between domestic and foreign investors; or as a joint venture between state-owned enterprises and the private sector. The Insurance Law mandates that a registered capital of at least LAK 16 billion (approximately US\$ 2 million), of which 80 percent must be paid within 90 days of the date of the registration of the business with the Ministry of Planning and Investment (MPI). The remaining capital could be paid within a year after the incorporation date.

Any person who wishes to operate an insurance business in Lao PDR (either life or non-life) including foreign insurance companies is first required to obtain

⁴²Investing in Cambodia, KPMG, 2017

⁴³Insurance Association of Cambodia

⁴⁴Insurance and Reinsurance in the Lao People's Democratic Republic: Overview, Thomson Reuters, January 2018

an Investment License issued by the MPI. It takes approximately 65 working days from the submission date of a complete application and all required supporting documents to the One-Stop Service Office of the MPI. They also need to procure an Insurance Operating License from MOF. The processing time to obtain such Insurance Operating License is about 45 working days from the date of the MOF's receipt of a complete application⁴⁵.

As of August 2017, 24 insurance companies were registered with the Ministry of Industry and Commerce, the business registration authority in Lao PDR. However, the insurance sector in Lao PDR is still small. A few foreign companies has recently invested in Lao PDR, including Navakij Insurance Plc (NKI), which invested in two joint ventures in life and non-life insurance, and Hannover Rueck SE, through its Malaysian branch signed a partnership agreement with Phongsavanh Insurance (APA) involving both life and non-life insurance. The Ministry of Health is planning to introduce a Health Insurance Law to improve the healthcare system and ensure patients benefit as intended, and is expected to come into effect in late 2018.

Myanmar

The Insurance Business Supervisory Board, which reports to the Ministry of Planning and Finance (MOPF), is the insurance authority in Myanmar, and is responsible for issuing insurance licenses, underwriting agents and insurance brokers. Earlier there was only one health insurance provider in the country, Myanma Insurance. With liberalization in investment laws, 12 domestic private insurance companies were granted licenses in 2013⁴⁶. Liberalization of insurance sector in Myanmar is still underway. The government has recognized the need for insurance reforms and are planning to speed up the liberalisation of the sector, allowing entry to

foreign investors and removing restrictions on local firms on their product offerings.

The opportunity of directly venturing into the insurance market is still not open to the foreign investors, but they are allowed to open their representative offices to establish contacts for future business prospects. Currently, around 15 foreign insurance companies have opened representative offices in Myanmar, operating only as general liaison, except for Sompo Japan Nipponkoa Insurance Inc, Mitsui Sumitomo Insurance Co. Ltd., and Tokio Marine & Nichido Fire Insurance Co. Ltd. These foreign insurers obtained licences in May 2015 to operate in the Thilawa Special Economic Zone (SEZ) under special permissions pertaining to the SEZ⁴⁷.

The country has insurance penetration of around 0.07 percent of GDP for non-life insurance and 0.01 percent for life insurance.⁴⁸ In 2017, nine local Myanmar private insurance companies began a new version of health insurance sale to local citizens and foreigners which guarantees to pay partial cost of hospitalization expense and insurance coverage for accidental deaths.

In 2018, Myanmar Insurance Association was set up with all licensed insurance companies in Myanmar as its members. It has signed MOUs with four foreign insurance schools, namely, General Insurance Association of Japan (GIAJ), Insurance Institute of India (III), Malaysia Insurance Institute (MII), and the Australian and New Zealand Institute of Insurance & Finance (ANZIIF) for partnering in its aim to open an insurance school in Yangon.

Vietnam

Ministry of Finance (MOF) is the key regulatory body overseeing insurance activities in Vietnam. The Insurance Supervisory Authority (ISA), part of

⁴⁵Insurance Market In Laos, Conventus Law, September 2017

⁴⁶Overview of healthcare in Myanmar (https://aseanup.com/overview-healthcare-myanmar/)

⁴⁷Myanmar Business Guide, PWC, October 2017

⁴⁸The Last Frontier, Myanmar's Insurance Market, Aon Inpoint, April 2017

the MOF assists MOF in supervising the insurance business and market in Vietnam. Together with the Association of Vietnamese Insurers (AVI), ISA is working on a range of measures to support the expansion of new insurance services in the Vietnamese market, including the development of private pensions, universal life insurance, unit-linked life insurance and natural disaster coverage.

Vietnam's insurance market is one of the most open to foreign investment among CLMV countries. As a result of Vietnam's comprehensive WTO accession protocol, foreign insurers are permitted to own locally incorporated subsidiaries and are allowed to establish commercial presence via branching, with the exception of life insurance.⁴⁹ Life insurers established in Vietnam need to operate through a locally established company and general insurers have to operate through either a locally established company or as a branch of a foreign insurer. Foreign institutional members/shareholders of a newlyestablished insurer are required to have been operating for at least ten years in the sector of business intended to be engaged in Vietnam, and should have total assets worth of at least US\$ 2 billion in the year immediately preceding the year that the application for licensing is submitted⁵⁰.

A foreign investor could participate in Vietnam's insurance sector through one of the following methods: cross-border supply, establishing a branch in Vietnam, establishing a local insurance company, or by acquiring equity interest in an existing insurance company in Vietnam⁵¹. There are many international players in the health insurance market. Some of them entered through joint ventures with Vietnamese insurance firms. In 1996, Tokio Marine partnered with Bao Viet Holdings to form Bao Viet Tokio Marine Insurance Joint Venture Company, the first foreign insurance joint-venture in Vietnam⁵².

According to Association of Vietnam Insurers (AVI), there are 61 insurers in Vietnam's insurance market, therein 29 non-life insurance companies, 17 life insurance companies, 2 reinsurance companies, 1 foreign life insurance branch and 12 insurance brokers⁵³. Life insurance sector is among the fastest growing sectors in Vietnamese economy. Roughly 86 percent of the market share is being held by the 5 big insurance companies.

According to Ministry of Health, Vietnam, around 72 percent of population is covered under health insurance⁵⁴. The Government has set a target of universal health insurance coverage by 2020.

⁴⁹ASEAN Insurance Markets, Global Counsel, October 2015

⁵⁰Insurance Regulation in Vietnam, Norton Rose Fulbright, January 2018

⁵¹Vietnam's Insurance Market: An Overview, January 2014, Mayer Brown

⁵²Bao Viet Tokio Marine Insurance Company Limited (http://www.tokiomarine.com/asia/en/asia/Tokio-Marine-Story/our-regional-companies/vietnam/bao-viet-tokio-marine-insurance-company-limited.html)

⁵³Vietnamese Insurance Market Report, Department of International Trade Promotion (DITP), Thailand, December 2016

⁵⁴PLAN For People's Health Protection, Care and Promotion 2016-2020, Ministry of Health, Vietnam, March 2016

5. POTENTIAL FOR ENHANCING INDIA'S EXPORTS IN CLMV HEALTHCARE SECTOR

India's exports to CLMV countries broadly comprise meat and edible meat offal, fish and crustaceans, iron and steel, cotton, coffee, tea, maté and spices, pharmaceuticals, machinery and mechanical appliances, and electrical machinery and equipment. India is the second largest source of pharmaceutical products to the CLMV region, exporting US\$ 254.3 million worth products in 2016. India accounted for 10 percent of CLMV's global imports of pharmaceuticals. India's exports of medical and surgical equipment to CLMV countries amounted to US\$ 9.1 million in 2016, accounting for 1.7 percent of CLMV's imports of medical and surgical equipment from the world.

Incidentally, India is the largest exporter of pharmaceutical products to Myanmar, second largest exporter to Cambodia and Vietnam, and fifth largest exporter to Lao PDR in 2016. India meets 26 percent of Myanmar's pharmaceutical needs. Prominent Indian pharmaceutical companies which set up investments in Myanmar include Zydus Pharmaceuticals Ltd., Sun

Pharmaceuticals Ltd., Ranbaxy, Cadila Healthcare Ltd., Dr. Reddy's Laboratories, and CIPLA. Major Indian pharmaceutical firms such as Torrent and Glenmark have set up offices to promote their products in Vietnam. Indian exporters could further increase export of medical and surgical equipment and pharmaceuticals, which are on high demand in the CLMV markets, thus supporting the healthcare sector of the region.

This section attempts to identify potential of exporting Pharmaceutical Products (HS-30) and Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018), from India to CLMV countries. The selection of potential commodities under these broad categories of products are primarily based on an analysis of CLMV countries' top imports and low share of India in their import basket, keeping in view India's global export capability in these categories. This would entail identification of

Table 5.1: Cambodia's Major Sources of Imports of Pharmaceutical Products (HS-30)

| Double on Country | 20 | 10 | 2016 | | |
|-------------------|-----------------|---------|-----------------|---------|--|
| Partner Country | Value (US\$ mn) | % Share | Value (US\$ mn) | % Share | |
| World | 103.6 | 100.0 | 167.0 | 100.0 | |
| France | 24.9 | 24.0 | 31.6 | 18.9 | |
| India | 19.4 | 18.7 | 28.4 | 17.0 | |
| Thailand | 9.8 | 9.5 | 19.4 | 11.6 | |
| Indonesia | 5.4 | 5.2 | 10.3 | 6.2 | |
| China | 3.0 | 2.9 | 10.2 | 6.1 | |
| South Korea | 5.4 | 5.2 | 8.7 | 5.2 | |
| Vietnam | 2.5 | 2.5 | 8.4 | 5.0 | |
| Pakistan | 1.5 | 1.5 | 8.0 | 4.8 | |
| Belgium | 2.3 | 2.2 | 6.9 | 4.1 | |
| USA | 4.5 | 4.3 | 5.8 | 3.5 | |

Table 5.2: Pharmaceutical Products (HS-30) – Potential Exports to Cambodia

| HS Code | Product Label | Cambodia's Imports from World, 2016 (US\$ mn) | Cambodia's Imports from India, 2016 (US\$ mn) | India's Share in Cambodia's Imports (%) | India's Exports to World, 2016 (US\$ mn) |
|---------|---|---|--|---|--|
| 300450 | Medicaments containing pro vitamins, vitamins, incl. natural concentrates and derivatives | 2.5 | 0.1 | 2.7 | 234.7 |
| 300590 | Wadding, gauze, bandages and the like | 1.9 | - | - | 43.0 |
| 300440 | Medicaments containing alkaloids or derivatives | 0.8 | - | 0.5 | 45.3 |
| 300390 | Medicaments consisting of two or more constituents mixed together. | 0.6 | - | - | 247.4 |

Note: - not available or negligible

Source: ITC Trade Map, derived from UN COMTRADE and Exim India Analysis

potential export items under these two categories, up to the 6-digit HS commodity code.

Cambodia

Pharmaceutical Products (HS-30)

Cambodia's total import of pharmaceutical products increased from US\$ 103.6 million in 2010 to US\$ 167 million in 2016, with majority of the imports being sourced from France, which accounted for 18.9 percent of Cambodia's total imports of the commodity in 2016 (Table 5.1). India accounted for 17 percent of Cambodia's imports of pharmaceutical products in 2016.

Pharmaceutical products constitute India's 5th largest global exports in 2016, amounting to US\$ 13 billion, with a share of 5 percent in India's global exports, highlighting high global export capability of India for this commodity. India has the potential to further enhance export of these items to Cambodia, keeping in view Cambodia's high demand for these commodities. With a view to increasing India's exports to Cambodia, potential items for exports at 6-digit HS commodity code have been identified and presented in **Table 5.2**.

Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018)

Cambodia's total import of Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018) has increased over two-fold, from US\$ 10.6 million in 2010 to US\$ 24 million in 2016, with majority of the imports being sourced from Japan, which accounted for 25.8 percent of Cambodia's total imports of the commodity in 2016 (Table 5.3).

Instruments and appliances used in medical, surgical, dental or veterinary sciences are India's major exports under optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments (HS-90) category exports in 2016, amounting to US\$ 618.7 million (0.2 percent share in India's global exports), highlighting high global export capability of India for this commodity. India has the potential to further enhance export of these items to Cambodia, keeping in view Cambodia's high demand for these commodities. With a view to increasing India's exports to Cambodia, potential items for exports at 6-digit HS commodity code have been identified and presented in **Table 5.4**.

Table 5.3: Cambodia's Major Sources of Imports of Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018)

| Double on Country | 20 |)10 | 2016 | | |
|-------------------|-----------------|---------|-----------------|---------|--|
| Partner Country | Value (US\$ mn) | % Share | Value (US\$ mn) | % Share | |
| World | 10.6 | 100.0 | 24.0 | 100.0 | |
| Japan | 0.5 | 4.7 | 6.2 | 25.8 | |
| Thailand | 0.9 | 8.0 | 5.0 | 20.7 | |
| USA | 4.2 | 39.2 | 2.6 | 10.8 | |
| China | 0.7 | 6.7 | 2.5 | 10.6 | |
| Germany | 0.2 | 1.8 | 1.5 | 6.3 | |
| South Korea | 0.5 | 5.1 | 1.2 | 5.0 | |
| India | 0.3 | 2.4 | 0.8 | 3.2 | |
| Singapore | 0.9 | 8.8 | 0.7 | 2.8 | |
| France | 0.6 | 5.9 | 0.6 | 2.4 | |
| Netherlands | 0.1 | 0.7 | 0.5 | 2.2 | |

Source: ITC Trade Map, derived from UN COMTRADE and Exim India Analysis

Table 5.4: Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018) – Potential Exports to Cambodia

| HS Code | Product Label | Cambodia's Imports from World, 2016 (US\$ '000) | Cambodia's Imports from India, 2016 (US\$ '000) | India's Share in Cambodia's Imports (%) | India's Exports to World, 2016 (US\$ '000) |
|---------|---|---|--|---|--|
| 901890 | Instruments and appliances used in medical, surgical or veterinary sciences | 12,487.0 | 558.0 | 4.5 | 186,305.0 |
| 901819 | Electro-diagnostic apparatus | 4,654.0 | 17.0 | 0.4 | 45,250.0 |
| 901839 | Needles, catheters, used in medical, surgical, dental or veterinary sciences | 2,590.0 | 25.0 | 1.0 | 211,599.0 |
| 901812 | Ultrasonic scanning apparatus | 1,602.0 | - | - | 34,622.0 |
| 901831 | Syringes, with or without needles, used in medical, surgical, dental or veterinary sciences | 987.0 | 36.0 | 3.6 | 31,452.0 |
| 901811 | Electro-cardiographs | 758.0 | 8.0 | 1.1 | 16,950.0 |
| 901849 | Instruments and appliances used in dental sciences | 145.0 | - | - | 8,298.0 |

Note: - not available or negligible

Lao PDR

Pharmaceutical Products (HS-30)

Lao PDR's total imports of pharmaceutical products has increased from US\$ 14.8 million in 2010 to US\$ 17.1 million in 2016, with majority of the imports being sourced from Thailand, which accounted for 62.1 percent of Cambodia's total imports of the commodity in 2016. India's share is marginal at 4.2 percent in 2016 (Table 5.5).

With a view to increasing India's exports to Lao PDR, potential items for exports at 6-digit HS commodity code have been identified and presented in **Table 5.6**.

Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018)

Lao PDR's total import of instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018) has decreased from US\$ 5.1 million in 2010 to US\$ 3.7 million in 2016. The majority of the imports were sourced from Thailand, which accounted for a

share of 40.6 percent of Lao PDR's total imports of the commodity in 2016 (Table 5.7).

India's exports of instruments and appliances used in medical, surgical, dental or veterinary sciences to Lao PDR in 2016 stood at a meagre US\$ 0.1 million, accounting for only 2.9 percent of Lao PDR's global imports of the commodity. With a view to increasing India's exports to Lao PDR, potential items for exports at 6-digit HS commodity code have been identified and presented in **Table 5.8**.

Myanmar

Pharmaceutical Products (HS-30)

Myanmar's total import of pharmaceutical products has increased from US\$ 163.4 million in 2010 to US\$ 344.1 million in 2016, with majority of the imports being sourced from India. India accounted for 26 percent of Myanmar's imports of pharmaceutical products in 2016, though its share has come down from 39.2 percent in 2010 (Table 5.9).

Table 5.5: Lao PDR's Major Sources of Imports of Pharmaceutical Products (HS-30)

| Double on Country | 20 |)10 | 2016 | | |
|-------------------|-----------------|---------|-----------------|---------|--|
| Partner Country | Value (US\$ mn) | % Share | Value (US\$ mn) | % Share | |
| World | 14.8 | 100.0 | 17.1 | 100.0 | |
| Thailand | 7.4 | 50.4 | 10.6 | 62.1 | |
| Switzerland | 0.4 | 2.7 | 1.2 | 6.9 | |
| UK | 0.1 | 0.6 | 0.9 | 5.1 | |
| China | 0.9 | 5.9 | 0.8 | 4.8 | |
| India | 1.4 | 9.3 | 0.7 | 4.2 | |
| Pakistan | 0.01 | 0.1 | 0.7 | 4.1 | |
| Vietnam | 1.0 | 6.5 | 0.7 | 4.0 | |
| Malaysia | 0.3 | 2.1 | 0.6 | 3.4 | |
| Netherlands | - | - | 0.2 | 1.1 | |
| Australia | 0.7 | 4.6 | 0.2 | 0.9 | |

Note: - not available or negligible

Table 5.6: Pharmaceutical Products (HS-30) – Potential Exports to Lao PDR

| HS Code | Product Label | Lao PDR's Imports from World, 2016 (US\$ mn) | Lao PDR's Imports from India, 2016 (US\$ mn) | India's Share in Lao PDR's Imports (%) | India's Exports to World, 2016 (US\$ mn) |
|---------|--|--|---|--|--|
| 300490 | Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic purposes | 7.2 | 0.2 | 3.4 | 9,798.2 |
| 300410 | Medicaments containing penicillin or derivatives with a penicillanic acid structure | 3.7 | 0.2 | 4.6 | 417.6 |
| 300610 | Sterile surgical catgut, similar sterile suture materials | 2.3 | - | - | 21.9 |
| 300440 | Medicaments containing alkaloids or derivatives | 0.9 | 0.1 | 11.6 | 45.3 |
| 300220 | Vaccines for human medicine | 0.5 | 0.2 | 32.2 | 677.2 |
| 300290 | Human blood; animal blood prepared for therapeutic, prophylactic or diagnostic uses | 0.5 | - | - | 17.6 |
| 300390 | Medicaments consisting of two or more constituents mixed together | 0.5 | - | - | 247.4 |

Note: - not available or negligible

Source: ITC Trade Map, derived from UN COMTRADE and Exim India Analysis

Table 5.7: Lao PDR's Major Sources of Imports of Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018)

| Double of Country | 20 | 10 | 2016 | | |
|-------------------|-----------------|---------|-----------------|---------|--|
| Partner Country | Value (US\$ mn) | % Share | Value (US\$ mn) | % Share | |
| World | 5.1 | 100.0 | 3.7 | 100.0 | |
| Thailand | 2.4 | 47.5 | 1.5 | 40.6 | |
| Vietnam | 0.2 | 4.8 | 0.5 | 13.8 | |
| Japan | 0.0 | 0.3 | 0.3 | 9.3 | |
| China | 0.9 | 17.3 | 0.3 | 8.5 | |
| Germany | 0.1 | 1.3 | 0.2 | 5.4 | |
| South Korea | 0.002 | 0.04 | 0.1 | 3.9 | |
| Taiwan | 0.02 | 0.4 | 0.1 | 3.7 | |
| India | 0.2 | 4.6 | 0.1 | 2.9 | |
| Hong Kong | 0.0 | 0.3 | 0.1 | 2.4 | |
| Singapore | 0.3 | 5.5 | 0.1 | 2.3 | |

Table 5.8: Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018) – Potential Exports to Lao PDR

| HS Code | Product Label | Lao PDR's Imports from World, 2016 (US\$ mn) | Lao PDR's Imports from India, 2016 (US\$ mn) | India's Share in Lao PDR's Imports (%) | India's Exports to World, 2016 (US\$ mn) |
|---------|---|--|---|--|--|
| 901890 | Instruments and appliances used in medical, surgical or veterinary sciences | 2.3 | 0.01 | 0.4 | 186.3 |
| 901819 | Electro-diagnostic apparatus, incl. apparatus for functional exploratory examination | 0.6 | 0.03 | 4.0 | 45.3 |
| 901831 | Syringes, with or without needles, used in medical, surgical, dental or veterinary sciences | 0.4 | - | - | 31.5 |

Note: - not available or negligible

Source: ITC Trade Map, derived from UN COMTRADE and Exim India Analysis

Table 5.9: Myanmar's Major Sources of Imports of Pharmaceutical Products (HS-30)

| Double of Countries | 2010 | | 20 | 16 |
|---------------------|-----------------|---------|-----------------|---------|
| Partner Country | Value (US\$ mn) | % Share | Value (US\$ mn) | % Share |
| World | 163.4 | 100.0 | 344.1 | 100.0 |
| India | 64.0 | 39.2 | 89.3 | 26.0 |
| Thailand | 16.2 | 9.9 | 39.0 | 11.3 |
| Indonesia | 8.5 | 5.2 | 29.1 | 8.4 |
| Singapore | 3.3 | 2.0 | 25.3 | 7.4 |
| China | 4.4 | 2.7 | 24.6 | 7.2 |
| Denmark | 0.02 | 0.01 | 22.9 | 6.7 |
| USA | 2.4 | 1.5 | 20.3 | 5.9 |
| South Korea | 8.2 | 5.0 | 12.0 | 3.5 |
| Vietnam | 4.3 | 2.6 | 10.0 | 2.9 |
| Bangladesh | 5.8 | 3.5 | 9.8 | 2.9 |

Source: ITC Trade Map, derived from UN COMTRADE and Exim India Analysis

With a view to increasing India's exports to Myanmar, potential items for exports at 6-digit HS commodity code have been identified and presented in **Table 5.10**.

Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018)

Myanmar's total imports of instruments and appliances used in medical, surgical, dental or

veterinary sciences (HS-9018) has increased over three-fold from US\$ 13.7 million in 2010 to US\$ 43.3 million in 2016, with majority of the imports being sourced from China. China accounted for a share of 35.7 percent of Myanmar's total imports of the commodity in 2016 (Table 5.11).

India's share in Myanmar's imports of instruments and appliances used in medical, surgical, dental or veterinary sciences was 5.6 percent in 2016, declining from 6.6 percent in 2010. With a view to increasing India's exports to Myanmar, potential items for

exports at 6-digit HS commodity code have been identified and presented in **Table 5.12**.

Vietnam

Pharmaceutical Products (HS-30)

Vietnam's total imports of pharmaceutical products has increased from US\$ 1.1 billion in 2010 to US\$ 2 billion in 2016. India's exports of pharmaceutical products to Vietnam stood at US\$ 135.8 million in 2016, increasing from US\$ 95 million in 2010 (Table 5.13).

Table 5.10: Pharmaceutical Products (HS-30) – Potential Exports to Myanmar

| HS Code | Product Label | Lao PDR's Imports from World, 2016 (US\$ mn) | Lao PDR's Imports from India, 2016 (US\$ mn) | India's Share in Lao PDR's Imports (%) | India's Exports to World, 2016 (US\$ mn) |
|---------|---|--|---|--|--|
| 300450 | Medicaments containing provitamins, vitamins, incl. natural concentrates and derivatives | 13.0 | 1.3 | 9.9 | 234.7 |
| 300410 | Medicaments containing penicillin or derivatives thereof with a penicillanic acid structure | 7.5 | 0.4 | 4.9 | 417.6 |
| 300210 | Antisera and other blood fractions and immunological products, whether or not modified | 7.0 | 0.6 | 8.3 | 86.7 |
| 300590 | Wadding, gauze, bandages and the like | 2.2 | 0.01 | 0.4 | 43.0 |
| 300660 | Chemical contraceptive preparations based on hormones, prostaglandins, thromboxanes, leukotrienes | 1.5 | - | - | 137.8 |
| 300390 | Medicaments consisting of two or more constituents mixed together | 0.8 | 0.03 | 3.7 | 247.4 |
| 300439 | Medicaments containing hormones or steroids used as hormones but not antibiotics | 0.6 | 0.04 | 5.4 | 57.8 |

Note: - not available or negligible

Table 5.11: Myanmar's Major Sources of Imports of Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018)

| Double ou Country | 2010 | | 2016 | | |
|-------------------|-----------------|---------|-----------------|---------|--|
| Partner Country | Value (US\$ mn) | % Share | Value (US\$ mn) | % Share | |
| World | 13.7 | 100.0 | 43.3 | 100.0 | |
| China | 4.6 | 33.3 | 15.5 | 35.7 | |
| Singapore | 0.7 | 5.2 | 10.1 | 23.3 | |
| Japan | 3.0 | 21.6 | 6.0 | 13.9 | |
| India | 0.9 | 6.6 | 2.4 | 5.6 | |
| USA | 0.7 | 4.8 | 1.7 | 4.0 | |
| Germany | - | - | 1.4 | 3.3 | |
| South Korea | 0.8 | 5.5 | 1.3 | 3.0 | |
| Thailand | 0.2 | 1.4 | 1.1 | 2.5 | |
| France | 0.3 | 2.1 | 0.7 | 1.7 | |
| Malaysia | 0.3 | 2.2 | 0.5 | 1.3 | |

Note: - not available or negligible

Source: ITC Trade Map, derived from UN COMTRADE and Exim India Analysis

Table 5.12: Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018) – Potential Exports to Myanmar

| HS Code | Product Label | Myanmar's Imports from World, 2016 (US\$ mn) | Myanmar's Imports from India, 2016 (US\$ mn) | India's Share in Myanmar's Imports (%) | India's Exports to World, 2016 (US\$ mn) |
|---------|---|--|---|--|--|
| 901819 | Electro-diagnostic apparatus, incl. apparatus for functional exploratory examination | 35.5 | 1.7 | 4.7 | 45.3 |
| 901831 | Syringes, with or without needles, used in medical, surgical, dental or veterinary sciences | 2.9 | 0.2 | 5.3 | 31.5 |
| 901890 | Instruments and appliances used in medical, surgical or veterinary sciences | 1.9 | 0.1 | 7.0 | 186.3 |
| 901820 | Ultraviolet or infra-red ray apparatus used in medical, surgical, dental or veterinary sciences | 1.3 | 0.03 | 2.7 | 2.5 |
| 901812 | Ultrasonic scanning apparatus | 0.2 | - | - | 34.6 |
| 901811 | Electro-cardiographs | 0.1 | - | - | 17.0 |

Note: - not available or negligible

Table 5.13: Vietnam's Major Sources of Imports of Pharmaceutical Products (HS-30)

| Double on Consultant | 20 | 2010 | | 16 |
|----------------------|-----------------|---------|-----------------|---------|
| Partner Country | Value (US\$ mn) | % Share | Value (US\$ mn) | % Share |
| World | 1,063.4 | 100.0 | 2,019.6 | 100.0 |
| France | 141.8 | 13.3 | 238.2 | 11.8 |
| Switzerland | 68.4 | 6.4 | 220.6 | 10.9 |
| Germany | 75.4 | 7.1 | 189.5 | 9.4 |
| South Korea | 126.1 | 11.9 | 168.2 | 8.3 |
| India | 95.0 | 8.9 | 135.8 | 6.7 |
| Singapore | 65.4 | 6.1 | 130.7 | 6.5 |
| Belgium | 28.7 | 2.7 | 92.1 | 4.6 |
| Thailand | 57.8 | 5.4 | 86.9 | 4.3 |
| China | 43.8 | 4.1 | 73.3 | 3.6 |
| UK | 28.3 | 2.7 | 77.6 | 3.8 |

Note: Mirror data is considered for Vietnam

With a view to increasing India's exports to Vietnam, potential items for exports at 6-digit HS commodity

code have been identified and presented in **Table 5.14**.

Table 5.14: Pharmaceutical Products (HS-30) – Potential Exports to Vietnam

| HS Code | Product Label | Vietnam's Imports from World, 2016 (US\$ mn) | Vietnam's Imports from India, 2016 (US\$ mn) | India's Share in Vietnam's Imports (%) | India's Exports to World, 2016 (US\$ mn) |
|---------|---|--|---|--|--|
| 300490 | Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic purposes | 1,126.3 | 87.3 | 7.7 | 9,798.2 |
| 300210 | Antisera and other blood fractions and immunological products, whether or not modified | 139.3 | 0.3 | 0.2 | 86.7 |
| 300220 | Vaccines for human medicine | 87.5 | 5.2 | 5.9 | 677.2 |
| 300450 | Medicaments containing provitamins, vitamins, incl. natural concentrates and derivatives | 35.5 | 2.6 | 7.4 | 234.7 |
| 300439 | Medicaments containing hormones or steroids used as hormones but not antibiotics | 30.5 | 0.1 | 0.2 | 57.8 |
| 300660 | Chemical contraceptive preparations based on hormones, prostaglandins, thromboxanes, leukotrienes | 17.0 | 0.4 | 2.4 | 137.8 |
| 300339 | Medicaments containing hormones or steroids used as hormones, not containing antibiotics | 1.4 | - | - | 81.0 |

Note: - not available or negligible; Mirror data is considered for Vietnam Source: ITC Trade Map, derived from UN COMTRADE and Exim India Analysis

Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018)

Vietnam's total import of instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018) has increased from US\$ 283.4

million in 2010 to US\$ 452.6 million in 2016. With a share of 24.8 percent in Vietnam's total imports of the commodity, Japan was the major source of Vietnam's imports of the commodity in 2016 (Table 5.15).

Table 5.15: Vietnam's Major Sources of Imports of Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018)

| Double on Country | 20 | 2010 | | 16 |
|-------------------|-----------------|---------|-----------------|---------|
| Partner Country | Value (US\$ mn) | % Share | Value (US\$ mn) | % Share |
| Total | 283.4 | 100.0 | 452.6 | 100.0 |
| Japan | 57.9 | 20.4 | 112.4 | 24.8 |
| Singapore | 70.3 | 24.8 | 58.9 | 13.0 |
| Germany | 25.8 | 9.1 | 53.0 | 11.7 |
| USA | 23.6 | 8.3 | 49.9 | 11.0 |
| South Korea | 25.7 | 9.1 | 41.0 | 9.1 |
| China | 23.6 | 8.3 | 40.2 | 8.9 |
| Netherlands | 1.9 | 0.7 | 13.8 | 3.0 |
| France | 4.1 | 1.4 | 11.6 | 2.6 |
| Malaysia | 11.0 | 3.9 | 9.5 | 2.1 |
| Hong Kong | 4.7 | 1.7 | 8.1 | 1.8 |
| India | 1.9 | 0.7 | 5.8 | 1.3 |

Note: Mirror data is considered for Vietnam

India's share in Vietnam's import of this commodity was marginal at 1.3 percent in 2016, though increased from 0.7 percent in 2010. With India's large exports of the commodity globally,

there exists huge potential for enhancing India's exports of this product to Vietnam at 6-digit level, which have been identified and presented in **Table 5.16**.

Table 5.16: Instruments and appliances used in medical, surgical, dental or veterinary sciences (HS-9018) – Potential Exports to Vietnam

| HS Code | Product Label | Vietnam's Imports from World, 2016 (US\$ mn) | Vietnam's Imports from India, 2016 (US\$ mn) | India's Share in Vietnam's Imports (%) | India's Exports to World, 2016 (US\$ mn) |
|---------|--|--|---|--|--|
| 901890 | Instruments and appliances used in medical, surgical or veterinary sciences | 184.3 | 1.3 | 0.7 | 186.3 |
| 901839 | Needles, catheters, cannulae and the like, used in medical, surgical, dental or veterinary sciences | 104.2 | 3.6 | 3.4 | 211.6 |
| 901819 | Electro-diagnostic apparatus, incl. apparatus for functional exploratory examination | 37.6 | 0.01 | 0.03 | 45.3 |
| 901812 | Ultrasonic scanning apparatus | 34.3 | 0.1 | 0.2 | 34.6 |
| 901813 | Magnetic resonance imaging apparatus | 21.7 | - | - | 30.4 |
| 901850 | Ophthalmic instruments and appliances | 20.1 | 0.1 | 0.4 | 18.3 |
| 901831 | Syringes, with or without needles, used in medical, surgical, dental or veterinary sciences | 16.0 | 0.2 | 1.2 | 31.5 |
| 901832 | Tubular metal needles and needles for sutures, used in medical, surgical, dental or veterinary sciences | 7.8 | 0.5 | 5.8 | 32.1 |

Note: - not available or negligible; Mirror data is considered for Vietnam Source: ITC Trade Map, derived from UN COMTRADE and Exim India Analysis

6. EXPORT-IMPORT BANK OF INDIA IN CLMV REGION

As the apex financial institution in India for financing, promoting and facilitating India's international trade and investments, Export-Import Bank of India (Exim India), since its inception in 1982, has focused on promoting and supporting south-south cooperation, trade and investment. As a partner institution to promote economic development in developing and least developed countries, the commitment towards building relationships and fostering cooperation among southern countries is reflected in the various activities and programmes, which Exim India has set in place. Exim India operates a comprehensive range of financing, advisory and support programmes to promote and facilitate India's trade and investment.

Accordingly, countries in the Southeast Asia region, including CLMV, have been a focus region for Exim India, and thus form a critical component of the Exim India's strategy to promote and support two-way trade and investment.

Lines of Credit (LOCs)

To promote bilateral and regional commercial relations, Exim India extends Lines of Credit (LOCs) to governments, parastatal organizations, financial institutions, commercial banks and regional

development banks to support export of eligible goods on deferred payment terms. Operative LOCs covering the CLMV region extended by Exim India, at the behest of Government of India are given in **Table 6.1**.

Supporting Project Exports

Exim India extends both funded and non-funded facilities for overseas turnkey projects, civil construction, supplies as well as technical and consultancy service contracts across various sectors of the economy. Exim India has financed several Indian project exporters in the region in various sectors including, among others, water resources development and power projects; irrigation and power projects; gas pipeline and power projects; and hydropower projects.

Buyer's Credit under National Export Insurance Account (NEIA)

In order to provide further impetus to project exports from India on medium- or long-term basis, especially in the infrastructure sector, in April 2011, a product called Buyer's Credit under National Export Insurance Account (BC-NEIA) was introduced. Under this programme, Exim India facilitates project exports

| Table 6.1: Exim India's Op | erative Lines of Credit in CLMV | Countries (as on March 31 | l, 2018) |
|----------------------------|---------------------------------|---------------------------|----------|
|----------------------------|---------------------------------|---------------------------|----------|

| Country | Amount of Credit (US\$ mn) | Key Sectors/Projects Covered |
|----------|-------------------------------|--|
| Cambodia | 102.1 | Electricity Transmission Line; Water Development Projects |
| Lao PDR | 118.6 | Electricity Transmission Line project; Irrigation Project; Hydropower Projects |
| Myanmar | 538.9 | Railway Projects; Refinery Projects; Manufacturing Plant Projects; Irrigation System; Petrochemicals |
| Vietnam | 191.5 | Hydro Power Project; Exports of Textile Machinery and Equipment |
| Total | 951.1 | |

from India by way of extending credit facility to overseas sovereign governments and government-owned entities for import of goods and services from India on deferred credit terms. Indian exporters can obtain payment of eligible value from Exim India, without recourse to them, against negotiation of shipping documents. NEIA is a Trust, set up by Ministry of Commerce and Industry and administered by ECGC. All the CLMV countries feature among the positive list of 86 countries identified by ECGC for which Indian exporters can avail BC-NEIA.

Finance for Joint Ventures

With a view to support Indian companies in their endeavour to globalise their operations, Exim India operates a programme to support overseas investments by Indian companies through JVs/ WOS. Such supports include loans and guarantees, equity finance and in select cases direct participation in equity along with Indian promoter, to set up such ventures overseas. As on March 31, 2018, Exim India has sanctioned ₹ 295.9 crore to ten Indian companies for setting up ventures in sectors such as agro & food processing, capital goods, plastics and packaging, wood products, and consumer goods in Myanmar and Vietnam.

Project Development Fund (PDF) for CLMV Countries

The Ministry of Commerce and Industry (MOCI), Government of India, engaged Exim India for conducting a study for developing a framework to identify opportunities for India in trade and investments in CLMV countries. For this study, Exim India mounted a Mission to CLMV countries to gather inputs from all stakeholders in those countries and submitted the final report to MOCI. Subsequently, the Union Finance Minister in his Budget Speech for 2015-16 announced in the parliament that "in order to catalyze investments from the Indian private sector in this region, a Project Development Company will, through separate Special Purpose Vehicles (SPVs), set up manufacturing hubs in CLMV countries, namely, Cambodia, Lao PDR, Myanmar and Vietnam".

In compliance with the Finance Minister's announcement and to catalyse Indian private sector investments in CLMV countries, under the 'Act East' policy of the Government of India, a Project Development Fund (PDF) with a corpus of ₹500 crore has been created in August 2016. The PDF, housed in Department of Commerce, will be operated through Exim India, which will act as the Empowered Institution under the Initiative. The PDF shall be governed by an Inter-Ministerial Committee under the chairpersonship of the Commerce Secretary. The primary objective of the PDF is to facilitate Indian investments and broaden the manufacturing base of Indian companies in CLMV countries. The PDF will be used to identify projects, which support Regional Value Chain (RVC) and help integrate Indian companies into the RVC. The projects identified under the initiative, if found feasible/ viable, will be incorporated/ implemented through SPVs in CLMV countries.

Exim India as a Consultant

Exim India is well positioned to share its experience and expertise in the fields of capacity creation, institutional strengthening, export development and export capability creation. The Bank is thus well placed to provide a range of technical assistance in these fields. Exim India has rendered consultancy services to a number of institutions in Southeast Asia region such as:

- Study on Regional Cooperation in Export Finance and Export Credit Guarantees for the Economic and Social Commission for Asia and Pacific (ESCAP) (includes CLMV countries);
- Expertise provided on developing a National Export Strategy of Myanmar; and
- Designing Export Marketing Seminars for SMEs in Vietnam.

Institutional Linkages

Exim India has a wide network of alliances with financial institutions and investment promotion

agencies, market promotion boards and service providers across the globe for assisting externally oriented Indian companies in their quest for excellence and globalization. In the CLMV region, Exim India has entered into an MOU with the Investment and Trade Promotion Centre, Vietnam to promote bilateral trade and investments between the two countries.

Asian Exim Banks Forum

With a view to enhance cooperation and forge a stronger link among its member institutions, the Asian Exim Bank's Forum (AEBF), a grouping of Asian Exim Banks, was conceived and initiated by Exim India in 1996. Since 1996, the Forum meets every year at an Annual event hosted by Export Credit Agencies' (ECA), in rotation. Members comprise ECAs from Australia, China, India, Indonesia, Japan, Korea, Malaysia, Philippines, Thailand, Turkey and Vietnam. Asian Development Bank is a Permanent Observer.

The task of Asian ECA Forum is to enhance cooperation and forge a stronger link among its member institutions, thereby fostering a long-term relationship with the Asian ECA community. The Annual meetings serve as a forum for discussing a wide range of issues focused on fostering common understanding as well as exchanging and sharing information. Together, the endeavour is to meet the challenges faced as an export credit agency in Asia and explore possible areas for further regional cooperation. Among the CLMV countries, Vietnam is a member of the AEBF and Myanmar and Lao PDR has attended meetings of the AEBF as observers.

Research Studies

Exim India carries out research on areas related to bilateral trade and investment, sector/product/ country and regional studies, as also policy issues related to the external sector with a view to enhancing competitiveness of Indian exporters. The published

research studies related to CLMV include:

- India's Engagements With CLMV: Gateway To ASEAN Markets;
- Act East: Enhancing India's Engagements with Cambodia, Lao PDR, Myanmar, Vietnam (CLMV);
- Enhancing India's Bilateral Ties with Cambodia, Lao PDR, Myanmar, Vietnam: A Brief Analysis;
- India's Trade and Investment Relations with Cambodia, Lao PDR, Myanmar, Vietnam (CLMV): Enhancing Economic Cooperation;
- Enhancing India-Myanmar Trade and Investment Relations: A Brief Analysis;
- ASEAN Countries: A Study of India's Trade and Investment Potential; and
- BIMSTEC Initiative: A Study of India's Trade and Investment Potential with Select Asian Countries.

Representative Offices

Exim India has two representative offices in the ASEAN region - Singapore and Yangon. These offices seek to establish and maintain relationships with multilateral agencies, regional development institutions, trade and investment promotion bodies, international banks, chambers of commerce, government departments and institutions in various Southeast Asian countries, including CLMV countries, and identify areas of cooperation. The representative offices play a role in facilitating India's economic cooperation with ASEAN countries (including CLMV), while keeping close coordination with Indian Missions in the region. The offices project Bank's capabilities in financing India's international trade and investment, as also keeps the Bank abreast of the developments in the economic and banking/financial sectors Region, including of the Southeast Asian CLMV countries.

7. KEY STRATEGIES & RECOMMENDATIONS

The gap in the healthcare sector has created lots of opportunities for investment in the CLMV region. The increasing focus of the governments on healthcare has opened up new opportunities for foreign engagement. Further, governments in the region also offer several financial incentives, in healthcare sector related investments. For instance, the Government of Lao PDR offers greater tax holidays if the healthcare infrastructure is built farther from the capital city – especially in rural areas.

Technical cooperation projects and enhancing supply of pharmaceutical and medical equipment will play a crucial role. The Indian private healthcare enterprises have the expertise that the region lacks. India's successful involvement in the African healthcare sector could be replicated in the CLMV region. Indian investors could capitalize on the country's proximity with the CLMV region and its expertise in pharmaceutical manufacturing and hospital management. Some of the strategies and recommendations to augment healthcare sector in the region is given below.

Investment in Healthcare Infrastructure in CLMV Countries

The basic infrastructure requirement for the CLMV region is the establishment of hospitals, specialist centers and clinics at the province as well as the central level. There is a need for super-specialty hospitals and advanced healthcare technologies, owing to the epidemiological shift. Many Indian hospital chains have established hospitals in countries abroad. For example, African region has been a hub of Indian investment in healthcare. Fortis Healthcare operates two hospitals in Mauritius and is in management agreements with few hospitals in Uganda and Nigeria. Manipal Hospitals has presence in Nigeria. Indus healthcare opened office in South Africa in 2008 for catering to the medical tourism

traffic to India. Apollo hospitals has telemedicine peripheral centers in Nigeria and Sudan. The CLMV region too has the potential to become another investment hub for the Indian entities.

According to a research study by Observer Research Foundation,⁵⁵ India has assisted Myanmar in the improvement of Yangon Children Hospital and Sittwe General Hospital. India supplied medical equipment, and imparted training to staff in these hospitals. An Indian company has prepared the Detailed Project Report (DPR) for these hospitals.

A network of telemedicine facilities can be expanded throughout the geographically inaccessible areas. This can be done in cooperation with the provincial or district hospitals or the rural health centres and posts which possess more information about the area. In the regions where establishment of hospitals is tough and there is no advanced healthcare technology, these facilities can help save lives and ensure improved quality of treatment at lower rates. Apollo Hospital has taken the lead among Indian players in introducing healthcare advancements in the CLMV region. The hospital launched its telemedicine facilities in Myanmar to increase access to Indian doctors without their physical presence. Apollo's project aimed at providing infrastructure supports like telemedicine, tele-education for the medical fraternity, video-conferencing via satellite and fibre optic network. It is also collaborating with Vietnam to provide technical assistance to telemedicine programmes for deploying a telehealth system that improves the coverage and quality of medical care.

Pan CLMV e-Network could also be set up, which could electronically connect the entire region through this platform covering key sectors including healthcare. In fact, India has set up an Information and Communications technology (ICT) project called the

⁵⁵India-Myanmar Connectivity: Possibilities and Challenges, Observer Research Foundation, Kolkata, Anasua Basu Ray Chaudhury and Pratnashree Basu, November 2015

Exhibit 7.1: 108 Bike Ambulance Service

GVK Emergency Management and Research Institute (GVK EMRI), the largest professional emergency service provider in India, was incepted in 2005. It is a not for profit professional organisation in the Public Private Partnership (PPP) mode. An emergency response system was established that coordinates every emergency through a single toll free number 108 which when called in an emergency ensures prompt activation of a response, including assessment of the emergency, dispatch of the ambulance and transport of the patient to the healthcare facility.

In 2015, the institute rolled out the first bike ambulance services in Karnataka where the reach of four-wheeler ambulances was constrained. Each motorcycle ambulance carries 40 medical items, including stethoscope and oximeter, apart from 53 basic drugs. The rider is a trained paramedic with a driver license who gives the emergency treatment before the regular ambulances arrive.

The 108 GVK service team in Uttarakhand faced the challenges of hilly terrain where regular ambulance services could not reach. To address the problem of road connectivity to interior regions, the institute introduced 'dolis' in 2011. 'Dolis' or 'palanquins' are flexible stretchers used to transport patients from inaccessible areas to the nearest connected roads to get him to a medical facility. The project was funded by National Rural Health Mission (NRHM). Teams from IIT, Hanover University of Germany were consulted to improve the design of the stretcher, easing the burden of the doli bearer and ensuring safety and comfort of the patient. The benefits of the initiative have been availed by 500 villages in Uttarakhand.

GVK EMRI operates in 15 Indian states. In 2016, the institute collaborated with Sri Lankan government to launch emergency ambulance services in the country. This PPP model of emergency response services can be replicated in the CLMV region.

Road connectivity is limited in CLMV countries. The quality of roads is poor in these countries. Vietnam ranked 92 on the quality of roads index by World Economic Forum's Global Competitiveness Report 2017-2018, followed by Lao PDR at 94 and Cambodia at 99 out of 137 countries. In areas where the reach of four wheelers is minimal, bike ambulances can provide the much needed medical assistance. The concept of dolis can be introduced as well to assist people in geographically inaccessible areas.

Sources:

GVK EMRI website; 'Bike Ambulances to serve accident victims in Bangalore', Business Standard, April 2015

Pan Africa e-network project in 2009 in partnership with the African Union, with the objective of sharing India's expertise of telemedicine, tele-education, resource mapping, and e-governance, among others, with the member countries of the Union. Under the telemedicine effort, 12 super-specialty hospitals were connected with 48 patient end hospitals in African countries.⁵⁶

Digitization of medical records offers another avenue for investment in the CLMV region. India has a pool

of expertise who are major players in this field to share their knowledge. For instance, NCORD Health Card LLP, a pioneer in healthcare technology services has developed a globally calibrated, internationally patented health record management system called "eHealthSystem". The system powers storing and downloading of medical records anywhere and anytime.⁵⁷ The company has enough exposure in Southeast Asia with its operations in Vietnam, Indonesia and Thailand. Sharak Healthcare is also

⁵⁶Pan African e-Network Project (PAENP), Ministry of External Affairs, Government of India

⁵⁷NCORD Health Card LLP (https://www.ehealthcardindia.com/about-ehealthcard)

another player in this domain. The increasing demand for improved healthcare services and growing internet coverage would also support this initiative in the CLMV region.

Cooperation in Emergency Relief System

One of the crucial services which needs to be strengthened in the CLMV region on a priority basis is the emergency relief system. However, the poor quality of roads in the region is a major challenge which needs to be addressed to facilitate and enhance the coverage of the emergency relief services. CLMV countries require more state-of-the-art ambulances which could act as mobile ICUs, and are equipped with advanced medical equipment.

Indian investments could give a special focus on two-wheeler ambulances as it could provide basic first-aid to the patients till the four-wheeler ambulance arrives to the scene. Bike ambulances can make way through traffic jams and congested roads as well as remote places where there are no proper roads for four wheeler ambulances, and hence, can reach out with the requisite emergency service. One successful case in India would be the service provided by GVK EMRI, the largest emergency relief provider in India, which launched bike ambulances in Bangalore with the support of the Government of Karnataka (Exhibit 7.1).

Cooperation in Capacity Building in Healthcare Sector

One of potential areas for cooperation to bolster the healthcare infrastructure in the CLMV region would be cooperation in healthcare related education sector, which include establishment of campus in the region or through exchange programs and capacity building. For instance, Manipal University has presence in in four countries abroad offering wide range of medical courses. Manipal College of Medical Sciences (MCOMS), Pokhara in Nepal was inaugurated in 1994 with an MBBS Degree program.

After this, a 700-bed Manipal Teaching Hospital (MTH), Pokhara was inaugurated in 1998. The college and hospital have been created with modern facilities for medical education and healthcare. The college was an outcome of an agreement between Manipal University and the Government of Nepal.⁵⁸

Melaka Manipal Medical College in Malaysia, launched in 1998, is the single largest contributor of doctors to the country. The university established its campus in the small LAC country of Antigua in 2004. The curriculum offered is in line with the US medical school programs with an immediate focus on medical capacity building. Manipal offers biotechnology courses in its Dubai campus. The education group has invested in medical education in the campuses abroad leaving a positive impact on the healthcare situation of these countries, while simultaneously expanding its business operations.

Indian universities, medical institutes and hospitals have been conducting exchange programs with universities and medical institutes abroad in areas relating to healthcare. University of Pune carries out faculty exchange with US universities in pharmaceutical sciences. Apollo Hospitals signed an MOU with Fiji National University in 2014. ⁵⁹ The MOU covers enhancement of the healthcare infrastructure in the country, enabling better access to high quality healthcare for the people using telemedicine facilities and sharing of content on medical education and training program. Exchange programs and technical cooperation projects could help in strengthening the knowledge base of the medical personnel in the region.

The basic first responder training, including administration of critical first aid and cardiopulmonary resuscitation (CPR) and proper evacuation of the critically injured need to be provided for emergency service providers.

Another form of capacity building is tele-education. Apart from exchange programs, medical practitioners and related staff can be trained via satellite networks.

⁵⁸ Manipal University Website

⁵⁹Apollo Hospital Website

This would require a collaborative effort between medical institutes in India and the CLMV region. Pan Africa e-network project set up tele-education teaching and learning centres in 5 Indian institutes to support the education efforts in 5 African regional universities. Many students have enrolled in undergraduate and postgraduate programs. ⁶⁰ Similar initiative can be taken in the CLMV region. A project for setting up of Centre of Excellence in Software Development and Training (CESDT) by Centre for Development of Advanced Computing (CDAC), India in CLMV countries, which was proposed in the TELSOM ASEAN Telecommunication Regulators' Council (ARTC) meeting, was commenced in 2017.

An MOU was signed between India and Myanmar in 2017 to cooperate in the field of health and medicine. Under the terms of MOU, India would be providing training for local medical professionals, providing input in the drawing up of regulations for trading in pharmaceuticals and medical equipment and providing assistance for human resource development of the country and hospital management. Similarly, an MOU was signed between India and Vietnam on health cooperation in 2016. Similar agreements could be made with other countries in the region, with regular knowledge sharing to expand on the existing agreements depending on the needs of CLMV countries.

Under its Overseas Training Program, Imphal based Shija Hospitals, in collaboration with the Association of Minimal Access Surgeons of India (AMASI), has provided free training to two surgeons and six nurses from Monywa General Hospital, Myanmar for two months in the areas of Laparoscopic surgery, Operation Theatre Technology and Critical Care. Similar medical training could be provided by major Indian hospitals to medical staff in CLMV countries.

The CLMV countries are open to foreign investment in education. Educational institutes can venture into the region, tapping on the unutilized potential of the sector. They will be benefited by the low competition in the sector and their already existing vast experience. There exist opportunities in setting up nursing schools in CLMV countries to enable skill development and meet advance training requirements of the countries. More exchange programs for students, faculties and medical professionals can be organized by the Indian medical institutes with requisite infrastructure. This can be done with both the government and private institutes in CLMV countries. India's active involvement in medical education in these countries can provide for the future needs for trained staff to match the increasing investments in the healthcare sector as a whole.

Cooperation in Insurance Sector

In the countries open to foreign investment, insurance firms can enter the market solely or in the form of joint ventures. Investors can enter the insurance sector by entering into a joint venture or setting up a branch in Vietnam and Cambodia. In Lao PDR, it is possible through joint ventures and partnerships with the government. In countries like Myanmar where insurance sector is not yet open to foreign investment, investors can look for prospective partners in the sector. Currently, Myanmar's insurance penetration is very low, with only a 0.07 percent share of GDP, and the insurance density is close to US\$ 161.

Insurance products do not have to be necessarily offered by insurance companies only. Hospitals too can take a step in that direction. Narayana Health initiated a rural healthcare scheme which was later developed into a government supported low-cost, self-financing insurance scheme (Exhibit 7.2). Innovation in insurance can give the Indian investors an edge over the other competitors.

One hindrance related to insurance sector in the CLMV countries is the lack of awareness about it. In Cambodia, people remain susceptible to buying insurance as they are not ready to think long-term.

⁶⁰Pan African e-Network Project (PAENP), Ministry of External Affairs, Government of India

⁶¹Interview with Daw Sandar Oo, Managing Director, Myanma Insurance and Chairperson, Myanmar Insurance Association, published in Oxford Business Group Website

Companies in the region have been working on their marketing strategies in a way that they can bring about more awareness and a behavioral shift in the people towards insurance. Manulife Cambodia has launched several marketing campaigns since it started operations in 2012. It has been holding seminars across the nation to explain about life insurance and its role in people's lives. 62 Prudential Life Assurance, a subsidiary of the British insurance giant, placed education as a core strategy. Through the mode of educational seminars in association with the MEF, the company has achieved 90 percent brand awareness among Cambodian families in Phnom Penh.⁶³ While entering the life and health insurance market of the region, the investors need to focus on their marketing strategy. There is, thus, a need to focus on awareness campaigns.

Health cards - Health insurance covers expenses related to hospitalization. Diagnostic and preventive care accounts for majority of the healthcare expenses and are generally left out of the insurance coverage. Bridging this gap are health cards. Health cards usually offer discounts on doctor consultations, diagnostic services at select hospitals and clinics and offer tele-consultation as well. The market for health cards in India has been increasing. Some hospitals also offer health card facilities for their own clinics. Apollo Assure is the health card offered by Apollo Clinics which offers unlimited doctor consultations and diagnostic services for ₹ 5000 for a year. 64 Other firms competing in the domain of health cards in India are Indian Health Organisation (IHO), Sharak Healthcare and Yos Technologies.

Health cards can be an effective way of reducing out of pocket expenditures, which is alarmingly high in CLMV countries. Companies specializing in health cards can tie up with the clinics and hospitals in the region and offer their services. Hospitals planning to venture into the region can offer health cards which can attract more customers.

Medical Tourism

While promoting Indian investments in healthcare sector of CLMV countries, medical tourism to India could also be encouraged. Medical tourism sector has emerged as one of major components in India's services trade, which is known for its low cost and high quality services. Features such as low cost healthcare solutions, availability of skilled healthcare professionals, reputation for treatment in advanced healthcare segments, India's traditional wellness systems, and strengths in information technology makes India an ideal destination for patients from the CLMV region.

Medical tourism between India and CLMV countries offers a lot of potential. Nationals from the CLMV region generally sought medical treatments from neighbouring countries such as Thailand. Nationals from CLMV countries could take advantage of the region's proximity with India and visit the country for medical treatment. In fact, the Government of India has already made an effort to connect India through Manipur to Myanmar and Thailand. Visa charge fees for visiting are waived off for Myanmar nationals (except e-visas).

Guwahati has emerged as one of the destinations of health services with presence of prominent hospitals like Narayana Superspeciality Hospital, Apollo Hospitals, Ayursundra Hospital, and Sri Sankar Nethralaya. Further, Shija Hospitals and Research Institute in Imphal has been treating patients from Myanmar. According to Shija Hospital authorities, on an average around 70 patients from Myanmar visit the hospital for treatment in a month. Under its Mission Myanmar venture, Shija Hospitals has been conducting free medical camps in Myanmar in collaboration with the Monywa General Hospital. As of now, the hospital has conducted three medical missions for providing quality medical care, and

⁶²'New players in a Growing Insurance Market', Middle East Insurance Review, April 18, 2017

⁶³Insurance in Cambodia: A Review of an Industry Facing Long-term Growth, January 30, 2015 (http://www.phnompenhpost.com/insurance/insurance-cambodia-review-industry-facing-long-term-growth)

⁶⁴'Apollo Clinics Launches Health Card Apollo Assure', Business Line, August 24, 2016

has performed a number of medical treatments such as cleft lip, palate, cataract blindness and key hole surgeries free of cost. Since four Northeast Indian states share border with Myanmar, Myanmar nationals could come to these states for timely medical assistance. In order to support medical tourism, Guwahati could be linked with Yangon by direct air.

In Sum

Following are few policy recommendations for different players involved in CLMV countries in healthcare sector.

 Government's role – Government of India's role can be on the similar lines to its involvement in healthcare in Africa. ICT projects like Pan Africa

- e-network project can be replicated in the CLMV region by the government, through tie-ups with private investors.
- Sensitization efforts To encourage the citizens of CLMV to spend on better healthcare facilities, the governments of the respective countries and the new and existing players in the market need to carry out awareness campaigns to sensitize people.
- Addressing informational barriers The investment agencies of the countries need to promote healthcare as an investment sector. Informational barriers regarding entry regulations, requirements and incentives need to be addressed.

Exhibit 7.2: Narayana Health: The Case of Low Cost Surgeries and Insurance Scheme

Bangalore-based Narayana Health is a chain of multi-specialty hospitals, operating in 19 locations in India. The hospital also has its presence in Cayman Islands in Caribbean. The chain offers specialty services in cardiology, cardiac surgery, oncology, nephrology and paediatrics. The motive of Narayana Health has been to disassociate healthcare from affluence by bringing down the costs of expensive medical procedures through innovation.

The cost of a cardiac surgery in Narayana Health is around US\$ 2000 - 3000. The cost for the same in USA can be around US\$ 50,000 - 90,000. A proportion of patients pay even lesser as they are insured under the insurance scheme of the hospital. The hospital also offers concessional rates to patients depending on their financial conditions. The hospital runs one of the largest telemedicine networks in the world and reaches out to patients through a network of rural clinics via telemedicine facilities.

The reason behind its low cost surgeries is the hospital's ability to minimize the costs of surgeries by changing the compensation structure of the staff, reducing costs on construction substantially, and use of innovative technologies. The high patient volume helps the hospitals in gaining economies of scale.

Narayana Health initiated the concept of "rural healthcare scheme", which was later modified by the Government of Karnataka in 2003 to come up with the Yeshasvini Health Insurance Scheme to cater to 17 lakh farmers paying a minimal annual payment. The insurance scheme covers consultations, diagnostics at discounted rates and all kinds of operations across the recognized private hospitals across the state. The scheme is self-financing. In 2016-17, the scheme covered 43.7 lakh people across Karnataka and the annual premium has been increased to Rs. 300/- for Rural Yeshasvini and Rs.710/- for Urban Yeshasvini.

The hospital has been able to carry out its expansion process, offering low-cost health facilities at the same time. The strategies that the hospital network has been deploying to make healthcare more affordable can be replicated in the CLMV region. It can make healthcare accessible to the poorest section of population in these countries.

Sources: Narayana Healthcare Website; Narayana Hrudayalaya: A model for accessible, affordable healthcare, Knowledge@Wharton, July 2010; Yeshasvini Co-operative Farmers Health Care Scheme Website

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