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Making Myanmar the Star Growth Performer in ASEAN in the Next Decade: A Proposal of Five Growth Strategies

Toshihiro KUDO
Research Planning Department, Institute of Developing Economies, External Trade Organization (JETRO)

Satoru KUMAGAI
Malaysian Institute of Economic Research (MIER)

So UMEZAKI
Inter-disciplinary Studies Center, Institute of Developing Economies, External Trade Organization (JETRO)

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Abstract: *After decades of isolation, Myanmar is now actively re-engaging with the global economy. For successful re-engagement, Myanmar needs to implement comprehensive economic reforms based on a shared vision for long-term economic development that is characterized by human-centered, high, sustainable, pro-poor, inclusive, and balanced economic growth. In this paper, we propose five growth strategies: "Agriculture Plus Plus," an export-oriented strategy, a foreign direct investment-driven strategy, a two-polar growth strategy, and a strategy to develop domestic economic corridors. These strategies are used as guides to translate these development agendas into a set of implementable policies, programs, and projects.*

Keywords: Myanmar (Burma), growth strategy, economic reforms, re-engagement with global economy

JEL Classification: O10, O20, O53

Introduction

There is a new dawn in the political and economic landscape of Myanmar with the country moving towards political and civil reforms and economic growth. While the world waited for many long years for Myanmar to open up, Myanmar responded to this only after the new establishment of "civilian" government led by President U Thein Sein in March 2011. And since then, it has responded positively, both in words and actions, in setting down its development agenda to the world at large and to its immediate neighbors in Southeast Asia and East Asia.

After decades of isolation, Myanmar is now actively re-engaging with the global economy. The new political and international environment provides Myanmar a good opportunity to join the global and regional economy. Myanmar has embarked on an ambitious program of sweeping reforms to end its isolation and integrate its economy with the global system. The political transition has found active support from all nations as can be seen in an end to western sanctions. The future of Myanmar would be largely decided by its ability to remain on the course of reforms and openness, which would in turn benefit the people across the country.

Myanmar's reforms and opening-up of the economy to the rest of the world occur in the midst of economic integration and rise of its giant neighbors, i.e., China and India. Both provide Myanmar new opportunities and new challenges. Economic integration facilitates Myanmar to participate in the production and distribution networks of East Asia. Export-oriented and FDI-driven growth strategy will make Myanmar grow faster than before. At the same time, Myanmar's domestic industries will face severe competition in the integrated economy. They have to compete with imports from China, India, and ASEAN. Moreover, high economic growth is definitely necessary, but not enough. Growth should be pro-poor, inclusive and balanced, and environmentally and socially sustainable. In

a nutshell, human-centered growth is required.

In order to successfully re-engage with the global economy after decades of isolation, the development agenda for Myanmar is inevitably comprehensive and challenging. Indeed, even the prioritized agenda in the Framework for Economic and Social Reform (FESR), which the current government issued as the first policy and reform strategic plan, consists of ten areas of interrelated reforms, namely, (1) fiscal and tax reform, (2) monetary and finance sector reform, (3) trade and investment liberalization, (4) private sector development, (5) improvements in health and education, (6) food security and agricultural growth, (7) governance and transparency, (8) mobile telephony and internet, (9) infrastructure investment, and (10) efficient and effective government. Translating these development agendas into a series of implementable programs in itself is a challenging but immediate task for Myanmar. This requires a shared comprehensive development vision as guidance for further prioritization and streamlining of equally important development agendas.

This paper cannot address all development agendas, but would rather like to focus on growth strategies. Given the current status of Myanmar as one of the lowest income countries in the world, high and sustained growth is inevitably necessary. How to achieve a high rate of growth is an enormous challenge for Myanmar. Quality of growth is also important. Growth is necessary, but not sufficient for long-term poverty reduction. Trickle-down economics does not automatically work. If growth is accompanied by an increase in inequality, poverty can even increase. Myanmar is composed of geographically and ecologically diversified regions with a number of ethnic groups. Therefore, growth should be inclusive for all people and balanced among every region and state. Environmental sustainability supported by green growth is also an indispensable element of prospective growth. Thus, we would like to make a proposal of five growth

strategies for Myanmar.

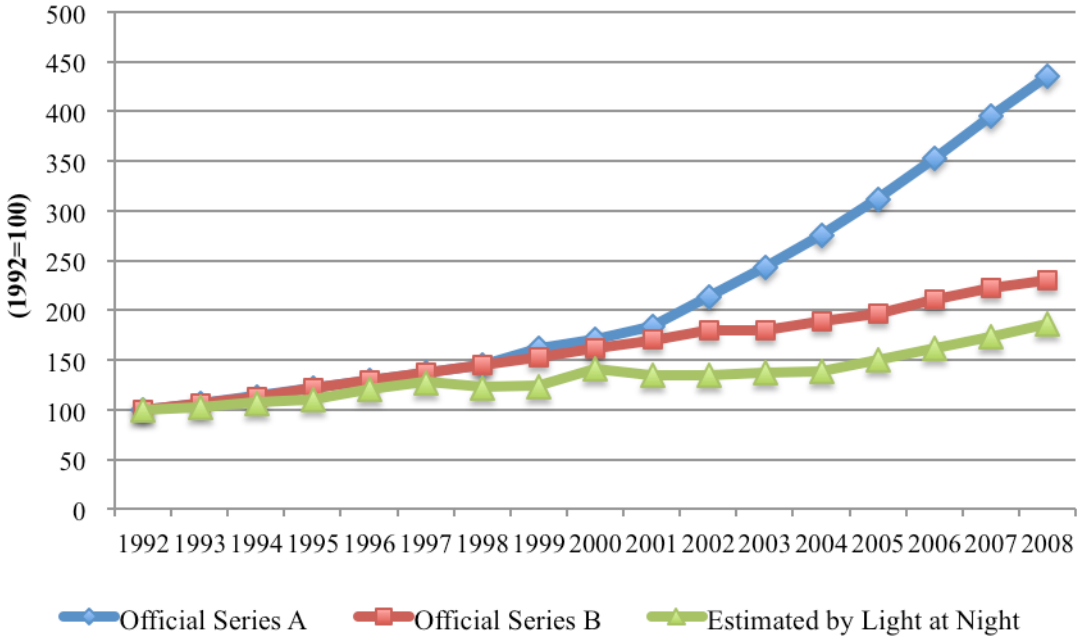
The remainder of this paper is as follows. In the first section, we review growth performance in the past and envisage growth prospects for the future. The second section examines the role of agriculture in the long-run development of the country and proposes "Agriculture Plus Plus" growth strategy. The third section examines Myanmar's external sector with the comparison of other Southeast Asia countries and proposes export-oriented and foreign direct investment (FDI)-driven growth strategy. The fourth section deals with a geographical aspect of growth and proposes two-polar growth strategy, emphasizing the importance of Yangon and Mandalay as growth poles. The fifth section argues the significance of re-emergence and re-engagement of Myanmar in the region and examines how to make Myanmar a connecting node in the region from a missing link in the past. In conclusion, the paper argues that Myanmar can be a star growth performer in the region in the coming decades, given sound strategies are adapted.

1. Growth Performance and Prospects

Before exploring Myanmar's growth performance and prospects, we need to share some words of caution regarding the quality of official statistics on which our discussion will rely. According to the official GDP, compiled and published by the Myanmar government, Myanmar achieved double digit growth for twelve consecutive years from FY1999 to FY2010.[1] However, few believe that Myanmar experienced such a high and sustained economic growth for the period under the international sanctions. Figure 1 shows three series of GDP statistics, (1) the official series A, compiled and published by Myanmar government, (2) the official series B, estimated by the UNDP (2011) based on the official series A to adjust for

the strong controls on the exchange rate, and (3) an estimate based on a satellite images of lights at night by Kumagai, *et al*. (2012a). Considerable discrepancies are observed. Although it is difficult to judge which series reflects the reality most, both of the additional estimates imply the possibility of over-reporting in the official statistics. Another sign of low reliability on the official statistics was indicated by Myanmar government itself. The government started its efforts to produce more reliable statistics after the inauguration of the Thein Sein administration in March 2011. In addition, in his speech on 19 June 2012, President Thein Sein clearly identified having accurate and reliable statistics as one of the four pillars of economic policies.[2]

Figure 1: Myanmar's GDP in Different Sources



Sources: UNDP (2011) and Kumagai, *et al* (2012a).

1.1. Growth Performance and Prospects

Table 1 shows the growth performance and prospects of selected Asian economies including Myanmar, based on the World Economic Outlook Database compiled by the International Monetary Fund based on the official statistics of its member countries. According to this, Myanmar experienced a rapid growth in the last two decades, 7.9% on average in the 1990s and 11.5% in the first decade of the 21st century. Myanmar's GDP per capita in terms of current US dollar increased by 10.8 times for the last two decades, which is the second highest in ASEAN next to Vietnam. Nevertheless, even with this high performance, which may also reflect the over-reporting, Myanmar's GDP per capita in 2010 is USD742, the lowest in ASEAN and one of the lowest in developing Asia. The gap in GDP per capita between Vietnam and Myanmar widened from USD30 in 1990 to USD432 in 2010. Based on the IMF's statistics, the size of Myanmar's GDP is about 43.8% of Vietnam's as of 2010. Moreover, according to the latest medium term forecasts by the IMF, Lao PDR (9.1%) and Cambodia (8.2%) are expected to outpace Myanmar (7.5%).

Table 1: Growth Performance and Prospects of Selected Asian Economies

	GDP growth, constant prices, local currency					Per capita GDP, nomical, USD				
	1970s	1980s	1990s	2000s	2010-18	1970s	1980s	1990s	2000s	2010
	Annual average in %					Times				USD
Singapore	9.9	8.6	8.0	6.3	4.3	5.4	2.6	1.8	2.0	44,697
Hong Kong SAR	10.0	7.5	4.4	4.5	4.5	5.9	2.3	1.9	1.3	32,429
Korea	8.5	10.9	7.3	4.6	4.1	5.9	3.7	1.8	1.8	20,540
Taiwan	10.9	8.5	6.9	4.3	4.4	5.5	3.4	1.8	1.3	18,488
Malaysia	8.9	6.7	7.9	5.1	6.0	4.4	1.3	1.7	2.2	8,634
Thailand	7.7	8.8	4.9	4.8	4.9	3.8	2.2	1.3	2.5	4,992
China	6.9	10.4	11.7	11.7	9.7	3.0	1.7	2.8	4.7	4,423
Indonesia	8.7	6.1	4.4	5.8	7.4	6.4	1.1	1.3	3.7	2,986
Philippines	6.7	1.9	3.2	5.3	6.3	3.8	1.1	1.3	2.0	2,155
Bhutan	4.5	10.9	5.3	9.7	11.1	1.8	1.7	1.5	2.6	2,063
Papua New Guinea	2.8	1.6	5.1	4.5	8.7	3.8	0.9	0.8	2.2	1,494
India	3.2	6.2	6.2	8.2	7.3	2.2	1.4	1.2	2.9	1,356
Vietnam	4.3	6.5	8.4	8.1	6.2	1.0	0.2	4.1	2.9	1,174
Lao PDR	4.1	6.2	6.8	8.0	9.1	0.3	0.7	1.4	3.6	1,105
Cambodia	n.a.	11.7	7.8	8.9	8.2	n.a.	3.9	2.7	2.6	753
Myanmar	4.7	1.4	7.9	11.5	7.5	2.6	2.7	2.6	4.2	742
Bangladesh	1.7	4.1	5.5	6.6	7.5	3.1	1.2	1.3	2.0	723
Nepal	1.8	5.3	5.6	4.5	4.6	1.8	1.6	1.2	2.3	533

Note: There is a sharp drop in Myanmar's per capita GDP in 1990, probably due to the turmoil in 1988 and afterwards and changes in exchange rates. To see the medium term trend, changes in per capita GDP in the 1980s for Myanmar covers 1980-1989, instead of 1980-1990. The data for Cambodia and Vietnam starts from 1986 and 1973 respectively.

Source: International Monetary Fund, *World Economic Outlook Database*, April 2003 for the 1970s, and April 2013 for the subsequent years. For Myanmar, September 2011 edition is also used for the 1980s and 1990s.

According to Asian Development Bank Institute (ADBI) (2012), Myanmar aspires to achieving the highest average annual GDP per capita growth rate (7.81%) among ASEAN for the two decades to 2030 (Table 2). With this growth rate, Myanmar' GDP per capita will increase from USD714.8 in 2010 to USD 3,216.4 in 2030, slightly overtaking Cambodia which will remain below USD 3,000 in 2030. As advanced ASEAN Member States also have aspiration for steady economic growth, CLMV countries will need to achieve significantly higher economic growth to

narrow the development gaps in the region. One of the biggest challenges for the latecomers is to sustain such a high growth rate for longer term.

Table 2: ASEAN Aspirations (2010-2030)

	GDP per Capita in 2010 (US$, at 2010 market prices)	**2030 Target** (2030 value as a multiple of 2010 value)	**GDP per Capita in 2030** (US$, at 2010 market prices)	**GDP per Capita 2010-2030 Average Yearly Growth** (%)
Brunei Darussalam	30,173.2	2.5	75,432.9	4.69
Cambodia	733.5	4.0	2,933.9	7.18
Indonesia	3,023.3	3.5	10,581.6	6.46
Lao PDR	1,035.0	3.5	3,622.6	6.46
Malaysia	8,260.1	3.0	24,780.4	5.65
Myanmar	714.8	4.5	3,216.4	7.81
Philippines	2,013.6	2.5	5,034.0	4.69
Singapore	43,897.6	1.8	79,300.0	3.00
Thailand	4,734.8	3.0	14,204.4	5.65
Viet Nam	1,238.9	3.5	4,336.2	6.46
ASEAN	**3,105.2**	**2.97**	**9,325.3**	**5.6**

Source: Asian Development Bank Institute (2012). *ASEAN 2030: Toward a Borderless Economic Community: Draft Highlight*, Tokyo: ADBI.

Original sources: Population: World Population Prospects: The 2008 Revision, United Nations, Available at http://esa.un.prg/unpp/index.asp ; ASEAN 2030 background paper on country perspectives.

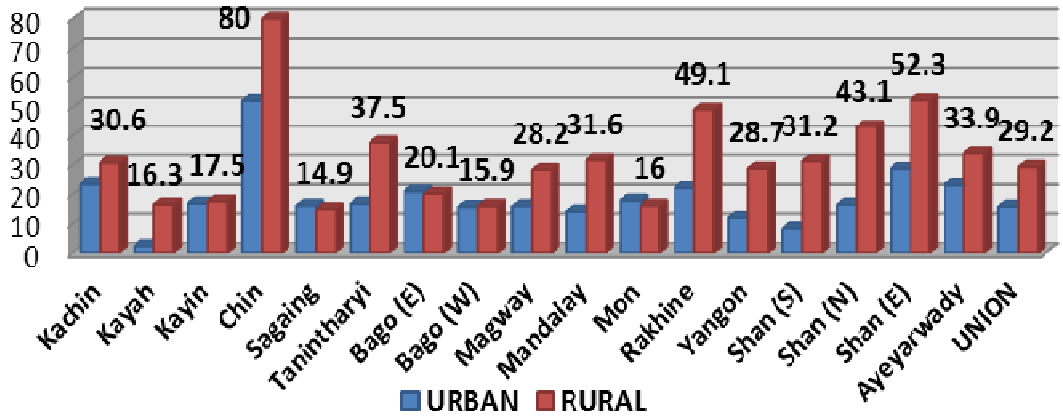
As shown in Table 2 above, and implied by the theories of economic growth, as economies grow, the growth rates tend to decline in the long run. This is one of the sources of convergence, i.e., narrowing the development gaps. The so-called Asian NIEs (Newly Industrialized Economies), namely Singapore, Hong Kong, Korea, and Taiwan, achieved high economic growth over or close to 10% per annum in the 1970s and the 1980s, and slowed down in the subsequent decades. Similar tendencies are also observed in advanced ASEAN Member States namely Malaysia, Thailand and Indonesia, although the IMF views a higher potential in Indonesia for

the years to come. For Myanmar, sustaining 7.81% economic growth on average for the next two decades is clearly a highly challenging aspiration.

1.2. Quality of Growth and Sustainability

In order to make the high economic growth sustainable in the long run, Myanmar needs to pay explicit attention to the quality of growth. Economic growth must be inclusive to reduce poverty and inequality; otherwise it will not be socially and politically sustainable.

Figure 2: Rural and Urban Poverty Incidence in 2010



Source: UNDP and MNPED (2011).

Figure 2 illustrates poverty incidence in 2010 by states and regions to see uneven distribution of poverty. At a first glance, there is strong positive correlation between rural and urban poverty, and the poverty incidence in rural areas tends to be higher than in urban areas. The highest poverty incidence is observed in the rural area of Chin state, where 80% of the population is below the poverty line. The incidence is more than 5 times higher than that of the rural area of Sagaing (14.9%). The lowest poverty incidence is observed in the urban area of Kayah state, where the poverty incidence in the rural area (16.3%) is also significantly lower than the

national average (29.2%). It should be noted that the poverty incidences in the rural areas of Yangon (28.7%) and Mandalay (31.6%), the centers of economic activity in Myanmar, are still comparable to the national average. These differences in poverty incidences can be a source of social instability and therefore Myanmar government explicitly pays attention to this issue in designing its economic growth strategy to reduce economic disparity among regions and states, and between urban and rural areas.

Although income is an important indicator, it is not sufficient to measure the progress of economic development. Table 3 shows the Human Development Index (HDI) compiled by the UNDP. Myanmar's HDI in 2012 is 0.498, the second lowest in its neighbouring countries next to Nepal, and is ranked 149th out of 187 reporting countries. Life expectancy at birth is 65.7 years, also the second lowest in Table 3 next to Cambodia, and is significantly lower than the average in the East Asia and the Pacific (72.7 years). Most of the detailed items are correlated with the HDI and income levels, but this does not mean that an increase in income automatically improve each items. Rather, economic growth strategy needs to be designed to accompany improvements in these items.

Table 3: Selected Indicators of the Human Development Index (HDI)

	Human Development Index (HDI)		Life expectancy as birth	Maternal mortality rate (/1000)	Mean years of schooling	CO2 emmissions per capita (tonnes)	Changes in forest area: 1990/2010 (%)
	Value	Rank out of 187					
Singapore	0.895	18	81.2	3	10.1	6.7	0.0
Brunei Darussalam	0.855	30	78.1	24	8.6	27.5	-8.0
Malaysia	0.769	64	74.5	29	9.5	7.6	-8.6
China	0.699	101	73.7	37	7.5	5.3	31.6
Thailand	0.690	103	74.3	48	6.6	4.2	-3.0
Philippines	0.654	114	69.0	99	8.9	0.9	16.7
Indonesia	0.629	121	69.8	220	5.8	1.7	-20.3
Vietnam	0.617	127	75.4	59	5.5	1.5	47.4
India	0.554	136	65.8	200	4.4	1.5	7.0
Cambodia	0.543	138	63.6	250	5.8	0.3	-22.0
Lao PDR	0.543	138	67.8	470	4.6	0.3	-9.0
Bhutan	0.538	140	67.6	180	2.3	1	7.1
Bangladaesh	0.515	146	69.2	240	4.8	0.3	-3.5
Myanmar	0.498	149	65.7	200	3.9	0.3	-19.0
Nepal	0.463	157	69.1	170	3.2	0.1	-24.5
East Asia and the Pacific	0.683		72.7	73	7.2		

Source: UNDP, Human Development Report 2013.

Another key aspect to ensure long-term economic growth is fiscal sustainability. The crucial role of infrastructure in economic development cannot be overemphasized, and one of the biggest challenges is how to finance infrastructure projects. Most of Asian countries have effectively used official development assistance (ODA) from advanced countries, the World Bank, the Asian Development Bank and other donors, in meeting the huge demand for infrastructure finance during the process of economic development. Table 4 provides an overview of external debt of selected Asian countries. The debt burden in terms of total external debt stocks to gross national income (GNI) is the highest in Lao PDR in 2011 (80.3%), followed by Bhutan (65.0%), and Vietnam (49.1%). And this ratio is decreasing in

the 200s in most of the countries in the table. Advanced ASEAN Member States, Indonesia, Thailand, and Malaysia in particular, who were hit hard by the Asian currency crisis in the late 1990s, experienced significant increases in the debt burdens, and then have successfully managed the debts in the 2000s.

Table 4: External Debt of Developing Asia

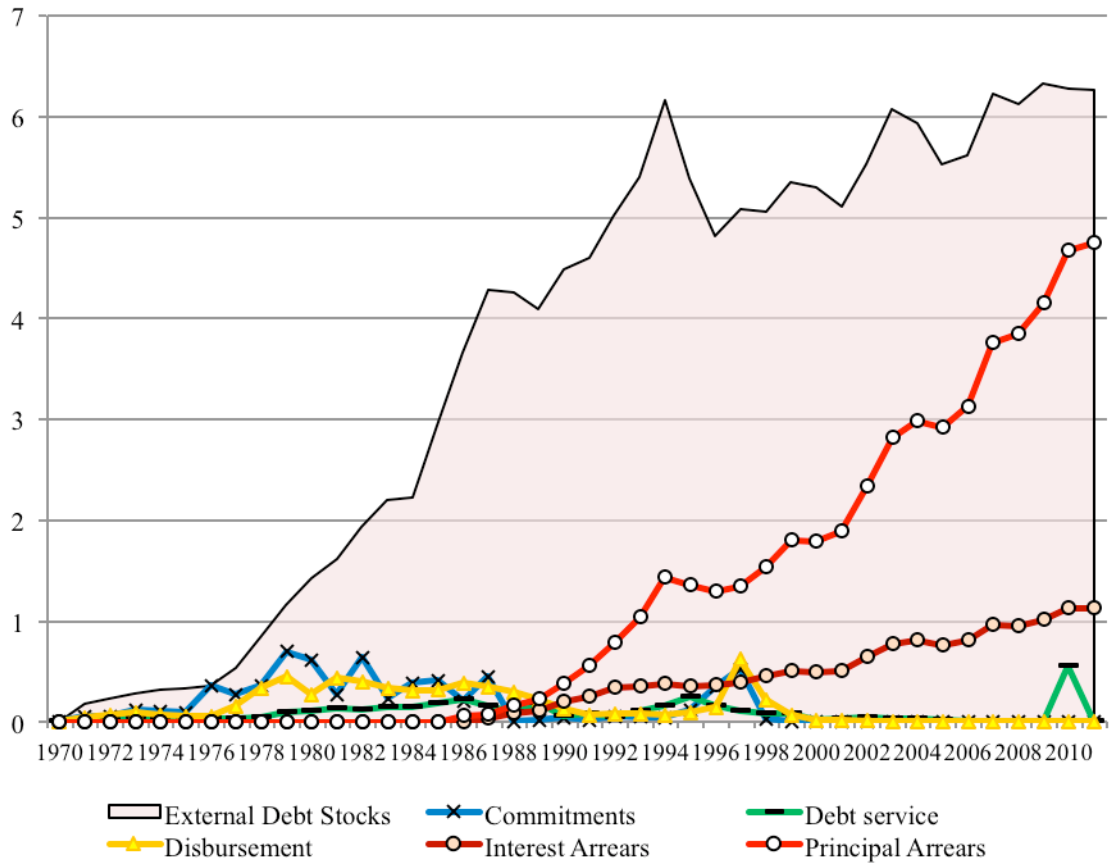
	External debt stocks to GNI (%)				Debt service ratio (%)			
	1990	**2000**	**2010**	**2011**	**1990**	**2000**	**2010**	**2011**
Lao PDR	204.0	151.7	84.2	80.3	8.5	8.0	13.2	n.a.
Bhutan	28.1	50.5	63.9	65.0	n.a.	n.a.	13.5	11.1
Vietnam	384.0	41.9	48.4	49.1	n.a.	7.5	3.5	3.2
Cambodia	165.5	74.9	35.9	35.3	n.a.	1.7	0.9	1.0
Malaysia	36.4	48.7	37.1	34.8	12.6	5.6	5.5	3.9
Philippines	70.2	72.2	36.9	33.6	27.6	16.0	21.8	17.6
Indonesia	64.0	95.6	28.4	26.0	33.5	22.8	17.4	14.5
Thailand	33.3	66.1	26.4	24.0	16.9	16.3	4.7	3.8
Bangladesh	39.9	31.9	23.5	22.6	34.6	10.5	4.7	5.5
Nepal	44.7	52.2	23.5	20.8	15.2	7.5	10.5	9.5
India	26.6	21.5	17.4	18.3	34.9	17.5	6.8	6.5
Myanmar	168.0	65.5	17.2	15.1	18.2	1.2	7.1	n.a.
China	15.4	12.3	9.5	9.4	11.7	9.1	3.6	3.6

Note: For Myanmar, external debt stocks are expressed as the share to GDP, based on the data from IMF, *World Economic Outlook*, April 2013.

Source: World Bank, *International Debt Statistics 2013*.

CLMV countries had heavy debt burdens in 1990, and all of them have successfully decreased the external debt to GNI ratios, but in a different way in Myanmar. During the last two decades, Cambodia, Lao PDR, and Vietnam have been granted debt restructuring with the total amount of USD 3.2 billion, USD 2.21 billion, and USD 12.4 billion, respectively[3]. In contrast, debt restructuring granted to Myanmar during the same period was only USD 76.0 million, reflecting Myanmar's isolation under the military government.

Figure 3: Myanmar's Long Term External Debt (billions USD)



Note: For Myanmar, external debt stocks are expressed as the share to GDP, based on the data from IMF, *World Economic Outlook*, April 2013.

Source: World Bank, International Debt Statistics 2013.

As illustrated in Figure 3, Myanmar started to receive ODA in 1971, and the resulting long-term external debt stocks sharply increased to USD 6 billion by 1994. Commitments on long-term loan were regularly made in the 1970s and the 1980s, but stopped in 1998, when the military government seized power in a coup. Since then, the amount of both commitments and disbursement has been limited, mainly as a result of economic sanctions imposed by the US and European countries. Along with this trend, the repayment of principals and payment of interests started to fall into arrears. As a result, the amount of external debt has remained at around USD 5-6 billion with a slight upward trend. By the end of 2011, the total external debt

has accumulated to USD 7.8 billion, of which USD 6.3 billion is long-term debt. That is, the observed reduction in the debt to GNI ratio in Table 3 was caused solely by the increase in GNI, instead of repayments. In short, Myanmar was isolated from the international aid community in both directions during the last two decades.

Ongoing changes in Myanmar since March 2011 have been welcome by the international community with keen interests to resume official assistance to Myanmar. At this stage, the accumulated external debt and the arrears were exposed as a major bottleneck. However, the problem has been overcome by highly cooperative responses of the international community, the government of Japan in particular. As the first major reaction from the international community, Japan decided to waive USD 3.7 billion debt and overdue charges, and reached to an agreement when President Thein Sein first visited Tokyo, Japan in April 2012. This agreement enabled Japan to resume its yen loans to Myanmar. Japan also played a key role in the agreement in the Paris Club. The Paris Club agreement on 25 January 2013 to provide a debt relief of US$ 6 billion to Myanmar was the second monumental step, because this enabled other major donors, including the Asian Development Bank (ADB) and the World Bank, to provide fresh aids to Myanmar in the emerging context.[4]

2. Role of Agriculture and Its New Growth Strategy[5]

On 19 June, 2012, President Thein Sein declared that the government had entered into the second phase of its reform strategy focusing on economic development (NLM dated 20 June, 2012). In the same speech, he announced four economic policies: (1) sustaining agriculture development towards industrialization and all-round development; (2) balanced and proportionate development among states and regions with equal share of budget and taxation, foreign aid and foreign and local investment; (3) inclusive growth for entire population, and (4) compilation of quality and accurate statistics.

It is natural and reasonable that the government prioritizes agriculture as a source of broad-based growth and poverty reduction. Agriculture accounts for 36% of GDP, employs a majority of the workforce, and generates 25% to 30% of export earnings.

However, as known as Petty-Clark's Law, the share of agriculture in both employment and GDP decreases as GDP per capita increases. This means that agriculture alone will not be able to absorb increasing labor-force of Myanmar, and it will not to be a leading industry in the long-run as it is. Then, what is the role of agriculture for the long-term economic growth in Myanmar? How does agriculture realize its role?

2.1. Role of Agriculture in the Long-run Economic Growth

Myanmar is still an agrarian economy. It is rather surprising to know that the share of agriculture in GDP had remained as high as about 60% up to 2000 (Table 5). Since then, it declined to 36% in 2010. The five-year plan (2011/12-2015/16) targets to reduce the share of agriculture from 36.4% to 29.2%, and increase the share of industry from 26.0% to 32.1%, and that of services from 37.8% to 38.7%. If

the target is achieved, the industry will become the largest sector, replacing agriculture, in Myanmar.

However, the decline of share of agriculture in the first decade of the 21st century may be erroneous due to the overestimation of GDP figures as mentioned. Many economists believe that official GDP figures had been overestimated, and that the real growth rates shall be much smaller. During the overestimated period, industry had grown much more rapidly, at about 20% per annum, than agriculture to achieve the double digit GDP growth rates. As a consequence, the share of agriculture in GDP substantially declined in the first decade of the 21st century, while that of industry increased.

Table 5: GDP by Industry

	Primary industry				Secondary industry			
	1980	1990	2000	2010	1980	1990	2000	2010
Myanmar	47	57	57	36	13	11	10	26
Cambodia	-	56	38	36	-	11	23	23
Lao PDR	-	61	49	31	-	15	19	27
Vietnam	50	39	25	21	23	23	37	41

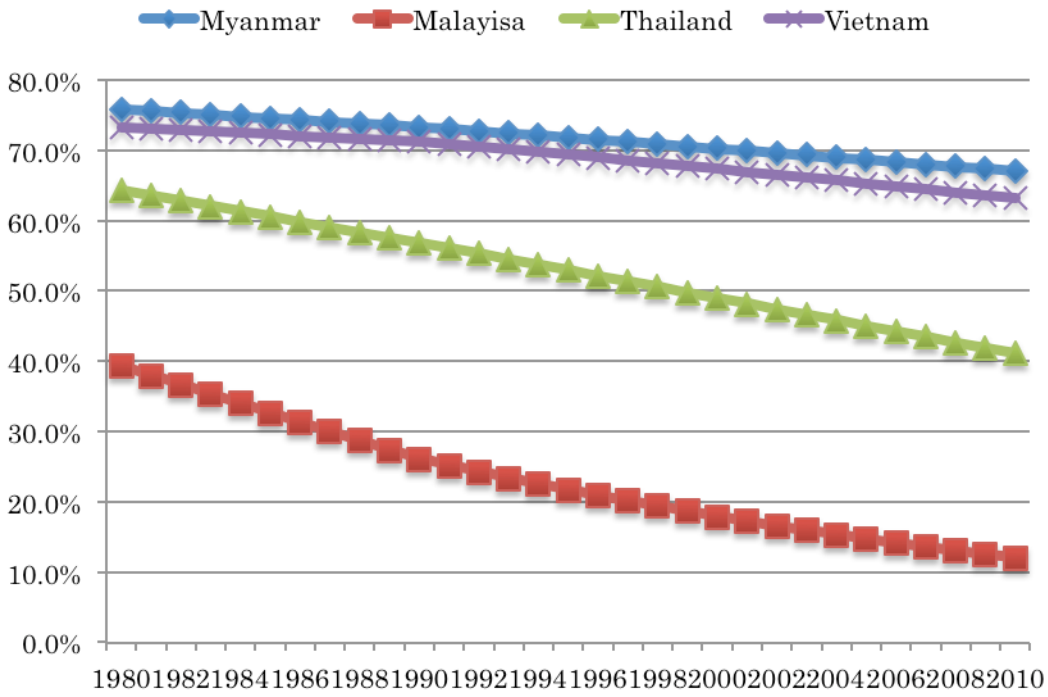
Source: ADB, Key Indicators for Asia and the Pacific, 2012b.

Agriculture employs a majority of workforce in Myanmar. Figure 4 shows the share of agricultural population (AP, hereafter)[6] in total population for selected ASEAN countries. AP share for Myanmar is 67.1% in 2010.

Based on the experiences of neighboring countries, the AP share declines as GDP per capita increases, and Myanmar will not be an exception. However, the decline in the AP share is slower than that of agricultural GDP share. For instance, the share of primary industry in GDP for Vietnam is declined from 50% in 1980 to 21% in 2010. On the other hand, the AP share for Vietnam was 73.3% in 1980 and still 63.2% in 2010. Thus, in the case of Myanmar, agriculture is expected to continue

to be a main employment source for the short and medium term.

Figure 4: Share of Agricultural Population in Total Population



Source: FAO Stat.

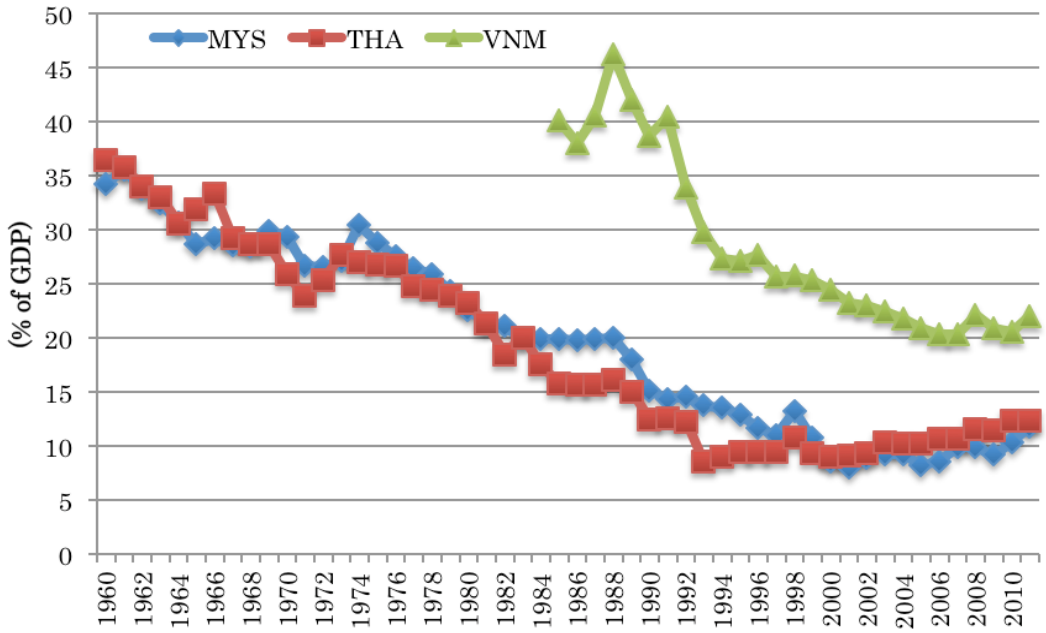
Figure 5 shows Agricultural GDP (AGDP, hereafter) share for selected ASEAN countries. For Thailand and Malaysia, the AGDP share declined from around 35% in 1960 to around 10% in the 2000s. For Vietnam, the GDP share was over 40% in the late 1980s and declined to around 20% in the first decade of the 21st century. From these experiences of neighboring countries, Myanmar's AGDP share is also expected to decline in the long-run.

However, one important observation is that the AGDP share of these countries seems not to decline toward zero. Moreover, in the first decade of the 21st century, the declining trend of the AGDP share has been curtailed. Figure 6 shows the value added in agriculture for Thailand, Malaysia and Vietnam. Although the AGDP share has declined until around year 2000, the absolute value of agricultural value added

has actually been increasing. The pace of increasing value added in agriculture seems to accelerate in the first decade of the 21st century. This is partly because the increasing prices of primary goods supported by the ever-increasing world population and the economic development of large emerging countries, represented by China.

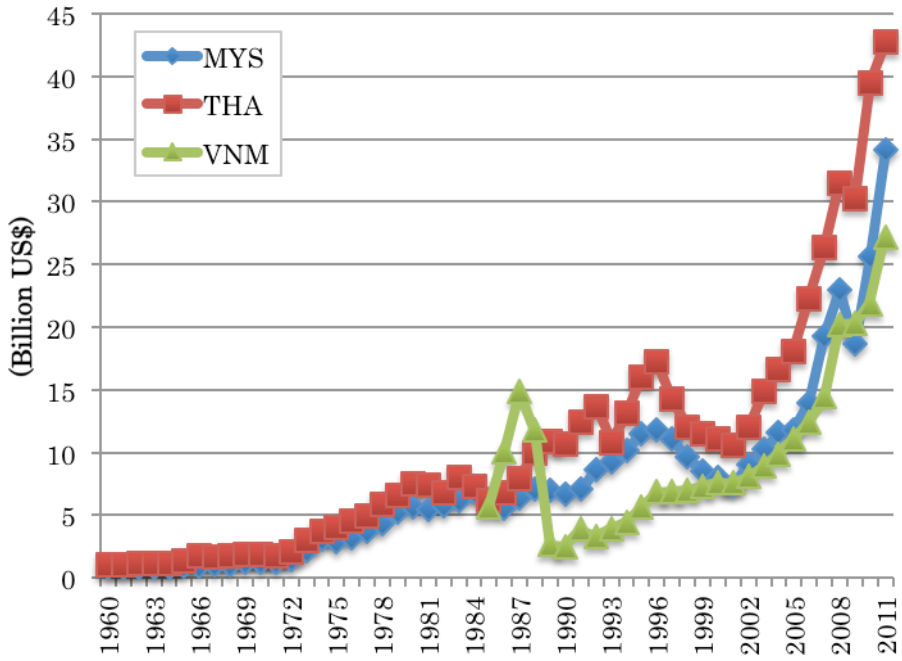
This means that although the relative importance of agriculture is declining in industrializing economies, agriculture is definitely not a sunset industry. Agriculture is not supposed to absorb more labour force than manufacturing and services in industrializing economies and even expected to release labour force to other sectors in the long-run. Nevertheless, it can still contribute to the economic development by increasing land and labour productivity.

Figure 5: Agricultural GDP Share



Source: World Development Indicators.

Figure 6: Value Added in Agriculture



Source: World Development Indicators.

Moreover, agriculture has special powers in reducing poverty. The World Bank's cross-country estimates show that GDP growth originating in agriculture is at least twice as effective in reducing poverty as GDP growth originating outside agriculture (*World Development Report 2008*, p.6). Rural population represents about 70% of total population in Myanmar, and poverty incidence in rural areas was around twice as high as in urban areas at 29% and 15% respectively as of 2010 (NPED, SIDA, UNICEF and UNDP 2011). As a result, rural areas account for almost 85% of total poverty in Myanmar. Agriculture and its related businesses are expected to contribute to poverty reduction.

The industrial sector of Myanmar is still dominated by agro-processing activities including rice milling and oil extraction. Comparative advantage will still lie in primary activities such as agriculture, livestock breeding, fisheries and agro-processing for the foreseeable future. Under such a situation, agricultural growth can induce strong growth in other sectors of the economy through multiplier

effects. This is why, for many years to come, the growth strategy for most agriculture-based economies has to be anchored on getting agriculture moving (*World Development Report 2008*, p.7).

2.2. How to Develop Agriculture?

Given the discussion above, what strategy should we take for the growth of agriculture in Myanmar? Suppose the following is the production function for agriculture:

$$Y = Af(A_L L, A_N N)$$

where Y is the output, A is the total factor productivity, A_L is the labour productivity and L is the labour input, A_N is the land productivity and N is the land input. In this case, the sources of the growth are A, A_L, L, A_N, and N.

Table 6 shows the agricultural productivity in selected ASEAN countries. Labour productivity is defined as AGDP per economically active population in agriculture. The figure of labour productivity in Malaysia is exceptionally high, USD 11,370 per labour. The labour productivity in agriculture seems to follow the level of economic development. Those of Indonesia, Thailand and the Philippines are around USD1,500 per labour, and those of Cambodia, Laos and Vietnam are around USD700-800. For Myanmar, the labour productivity is very low, around USD300 per labour.

Table 6: Agricultural Productivity in Selected ASEAN Members (2009)

	(A) Agricultural GDP (million USD)	(B) Total economically active population in agriculture ('000)	(C) Agricultural area ('000 Ha)	Labour productivity (A)/(B)	Land productivity (A)/(C)	Land per labour (C)/(B)
Cambodia	3,484	4,895	5,555	712	627	1.13
Indonesia	82,503	49,513	53,600	1,666	1,539	1.08
Malaysia	18,646	1,640	7,870	11,370	2,369	4.80
Myanmar	5,598	18,613	12,411	301	451	0.67
Thailand	30,234	19,494	19,795	1,551	1,527	1.02
Vietnam	20,321	29,302	10,272	694	1,978	0.35
Philippines	22,019	13,336	11,950	1,651	1,843	0.90
Lao PDR	1,929	2,311	2,346	835	822	1.02
Total/Average	184,734	139,104	123,799	1,328	1,492	0.89

Source: FAO Stat and ADB.

As for the land productivity, there are two groups of countries. The first group is Malaysia, Indonesia, Thailand, Vietnam, the Philippines, and the land productivity for these countries is around USD1500-2500/ha. The second group is Cambodia, Myanmar, and Lao PDR, and the land productivity for these countries is less than USD1000; among them, that of Myanmar is exceptionally low at USD451/ha.

As for the land per labour, there are no large differences among ASEAN countries except for Malaysia, the highest land per labour (4.80ha/labour), and Vietnam, the lowest (0.35ha/labour). For Myanmar, land per labour is second lowest (0.67ha/labour) to Vietnam.

The discussion above tells us that we cannot rely on the growth of labor inputs (L), because more and more workforce shall be absorbed by other sectors, manufacturing in particular. So, we have four other sources of growth to tap.

(1) Expansion of Agricultural Land (*N*)

Expansion of agricultural land is naturally one option. Is there any possibility to reclaim agricultural land in Myanmar?

Myanmar's agricultural land per capita is 0.261 ha. This is on par with Thailand (0.288 ha) and Malaysia (0.282 ha), and among the highest in populated ASEAN countries (Table 7). On the other hand, agricultural land (net area sown) is only 18% of national territory (Figure 7). This is smaller than the Philippines, Thailand, Vietnam and Cambodia with more than 30%, Indonesia and Malaysia with more than 20%.

Table 7: Agricultural Area and Population of Selected ASEAN Members (2009)

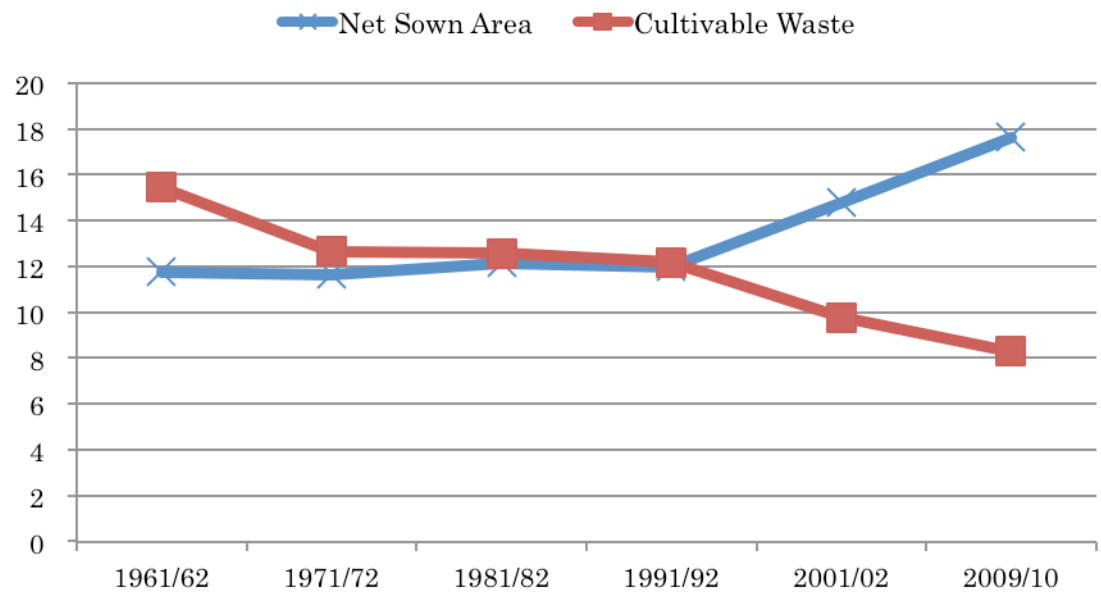
	(A) Agricultural area ('000 Ha)	(B) Area ('000 Ha)	(C) Population ('000)	(A)/(B)	(A)/(C)
Myanmar	12,441	67,659	47,601	18.4%	0.261
Malaysia	7,870	33,080	27,949	23.8%	0.282
Thailand	19,795	51,312	68,706	38.6%	0.288
Vietnam	10,272	33,105	86,901	31.0%	0.118
Indonesia	53,600	190,457	237,414	28.1%	0.226
Philippines	11,950	30,000	91,703	39.8%	0.130
Cambodia	5,555	18,104	13,978	30.7%	0.397
Lao PDR	2,346	23,680	6,112	9.9%	0.384

Source: FAO Stat.

The successive governments tried to reclaim new agricultural land, and the military government successfully increased the net sown area for the last two decades. Still, "cultivable waste other than fallows" remains about 8% of national territory. There is possibility to further reclaim cultivable wasteland in Myanmar.

However, the frontier for reclaimable agricultural land has been disappearing in Myanmar, and expansion of agricultural land is becoming more technically difficult and financially costly. The military government implemented large-scale deep-water reclamation projects for paddy cultivation in the Ayeyarwaddy Delta in the early 21st century, but they mostly failed. Moreover, the environmental and social impacts should also be taken into account when the reclamation of agricultural land is planned. Thus, we need to focus more on the improvement of productivity rather than sheer expansion of agriculture land.

Figure 7: Land Use in Myanmar



Source: Agricultural Statistics.

(2) Enhancing Labour and Land Productivity (A_L, A_N)

There are three kinds of productivity we suppose, namely, labour productivity (A_L), land productivity (A_N), and total productivity (A). We first discuss on the land and labour productivity. As shown in Table 6 above, the agricultural labour productivity in Myanmar was USD301/person in 2009, the lowest among Southeast

Asian countries. It was less than half of that in Vietnam, and less than one fifth of that in Thailand. As for the land productivity, that in Myanmar was USD451/ha in 2009, also the lowest among ASEAN countries.

To investigate production volume, rather than value, let us focus on paddy, the most important crop in Myanmar. Table 8 shows the land productivity, based on the production and area of paddy in 2010. The paddy yield of Myanmar was 4.12 ton/ha. This is about the average of East Asian countries and there is room for improvement, but not that low.

Table 8: Paddy Production and Area (2010)

	(A) Production(ton)	(B) Area(Ha)	(A)/(B)
Republic of Korea	6,136,300	892,074	6.88
China	197,212,010	30,117,262	6.55
Japan	10,600,000	1,628,000	6.51
Vietnam	39,988,900	7,513,700	5.32
Indonesia	66,469,400	13,253,500	5.02
Myanmar	33,204,500	8,051,700	4.12
Malaysia	2,548,000	673,745	3.78
Philippines	15,771,700	4,354,160	3.62
Lao PDR	3,070,640	855,114	3.59
Cambodia	8,245,320	2,776,510	2.97
Thailand	31,597,200	10,990,100	2.88

Source: FAO Stat.

However, there is a skeptical view toward the statistics for Myanmar in Table 8. If we use the United States Department of Agriculture (USDA)'s data for Myanmar, Vietnam's average yield of paddy is nearly twice as high as that of Myanmar in 2008. Two sets of data show big discrepancies in paddy yield for Myanmar (Kubo 2013, Figure 2). Again accurate data is required to analyze the agricultural productivity.

The widening gap of yield between two countries can be attributable to technological change rather than the changes in their rice price policies. In fact, the rice farmers in Myanmar are equipped with less-elaborate irrigation facilities and lower-performing HYVs compared with their Vietnamese counterparts (Kubo, 2013).

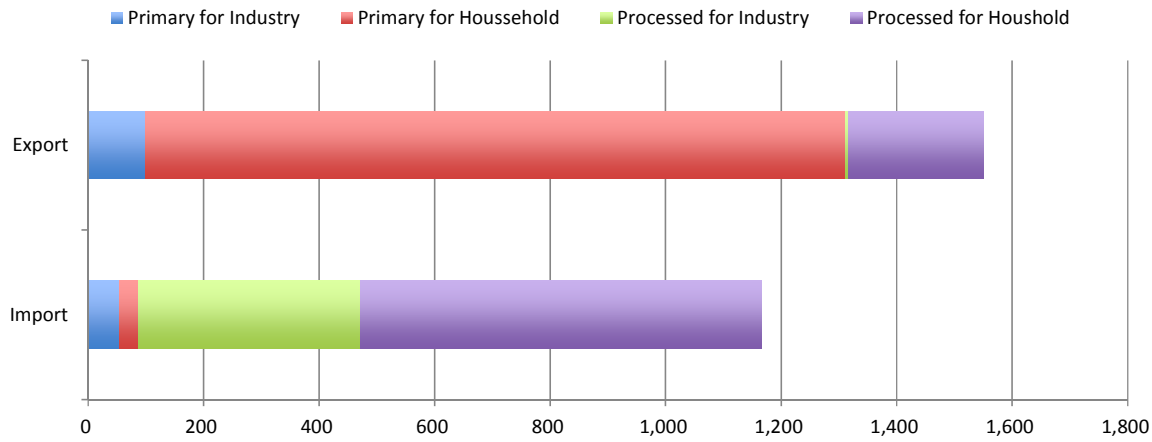
It seems obvious that we need to enhance both land and labour productivity of agriculture in Myanmar. The typical way of enhancing land productivity is irrigation and the proper use of fertilizer. Myanmar government needs to make comprehensive plan of the betterment of irrigation and the way to disseminate fertilizer among farmers. The typical way of enhancing labour productivity is mechanization. The mechanization of agriculture also needs a comprehensive plan.

(3) Enhancing Total Productivity (*A*)

We also think of the enhancement of total productivity of agriculture. There are two ways. One way is to shift to higher quality products and higher degree of processing. Myanmar exports low-quality agricultural produce (Figure 8). For example, price of Thai White rice is nearly twice as high as that of Myanmar rice in the international markets. This is mainly due to low quality of Myanmar rice and poor reputation in the international markets. Myanmar is also an importer of food, processed one in particular. Daw Than Than Soe, President of City Mart, one of leading retail chains, stated that about 80% of food sold in her group stores are imported from abroad, because of underdevelopment of food-processing industry and poor logistics including cold chain (JETRO Yangon Life, 2013). Myanmar exports low-quality and primary agricultural produce, and import processed food. As a result, the trade balance of food for Myanmar is not that large against the general impression that the country is a big agrarian exporter. Quality seeds, good farm management, improvement in post-harvest system, processing and marketing and so forth are necessary to provide high-quality agricultural products to the international

markets.

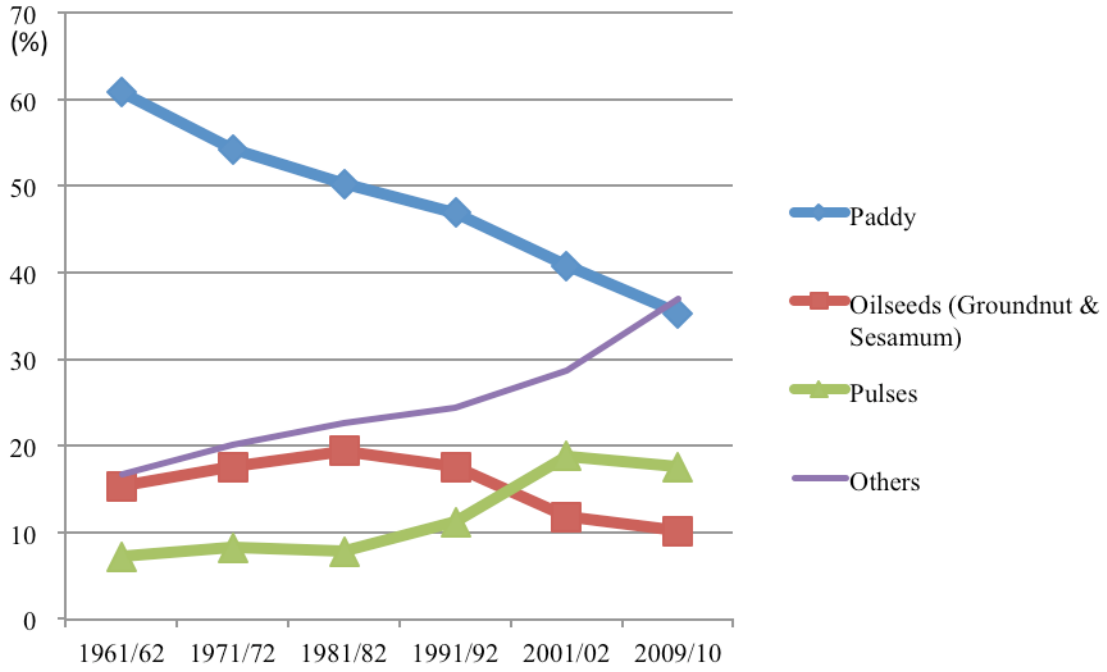
Figure 8: Myanmar's Export/Import of Food in 2010 (USD, millions)



Source: UN Comtrade.

The other way is to diversify the crops according to market demand. The share of paddy in sown acreage had continuously declined since the 1960s (Figure 9). Myanmar's agriculture is no longer rice-dominated. It is now more diversified. The share of pulses in sown acreage increased in the 1990s due to exports, mainly to India, but stagnated in the first decade of the 21st century. The share of oilseeds (groundnut and sesame) in sown acreage had declined in the last two decades due to palm oil imports from Malaysia and Indonesia. Others such as rubber, sugarcane, cotton, maize, fruit and vegetables had continuously increased since the 1960s. Livestock and fisheries have also huge potential. Given the paddy production remains self-sufficient, Myanmar's agriculture has more room to diversify into higher value added crops and food responding to changing market demands.

Figure 9: Sown Acreage by Crop in Myanmar



Source: Agricultural Statistics.

2.3. Agriculture Plus Plus

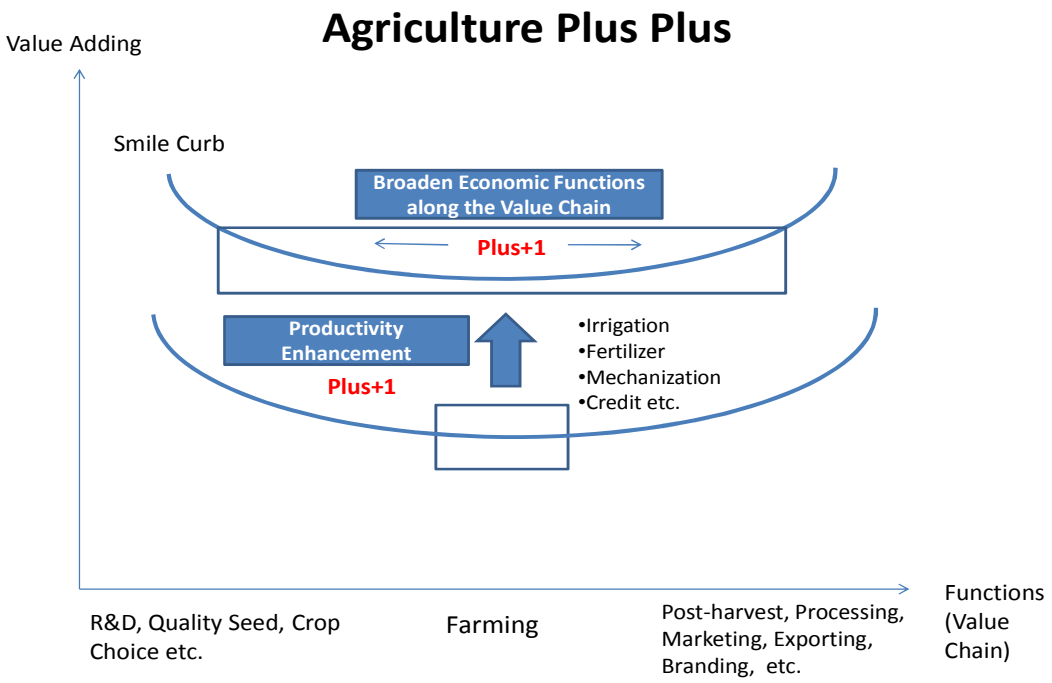
Summing up above discussion, there are two ways to create more values from agriculture, that is, enhancement of productivity and broadening economic functions along the value chain. We would like to name this strategy "Agriculture Plus Plus" after Malaysia's "Manufacturing Plus Plus," the concept of which was coined in the Second Industrial Master Plan (IMP2) for 1996-2005 (MITI 1995).

The main thrust of Malaysia's "Manufacturing Plus Plus" has its focus on attracting manufacturing facilities of higher value-added products, and moving along the value chain of production towards higher value-added activities, through emphasizing R&D and after-production activities such as services, distribution and marketing.

Since any economic policy that is deemed appropriate at one time or for one country may not be appropriate at another time or for another country, Myanmar should modify Malaysia's success scenario. While Malaysia's "Manufacturing Plus

Plus" can be a role model, an "Agricultural Plus Plus" strategy could be envisioned for Myanmar. Thus, this strategy aims to move along the value chain of agriculture from farming to higher value-added activities such as agricultural R&D, development and usage of quality seeds, post-harvest businesses including distribution and marketing (one plus); and also to shift the whole value chain to a higher level through productivity-driven growth (another plus) (Figure 10).

Figure 10: "Agiculture Plus Plus" Strategy



Source: Authors.

Although agriculture is not a sector absorbing more labour force in the long run, it is definitely not a sun-set industry. Moreover, agriculture has special powers in reduding poverty, and multiplier effects on other sectors of economy. There are some ways to increase the value added of agriculture not relying on the growth of labour and land inputs. The key is to enhance three kinds of productivity, i.e., labour, land and total productivity. We named this strategy here "Agriculture Plus

Plus." We need to elaborate this broader concept to more concrete and comprehensive action plans. This is a challenge for both the Myanmar government and the private sector.

3. Globally Linked and Private Sector-led Industrial Development

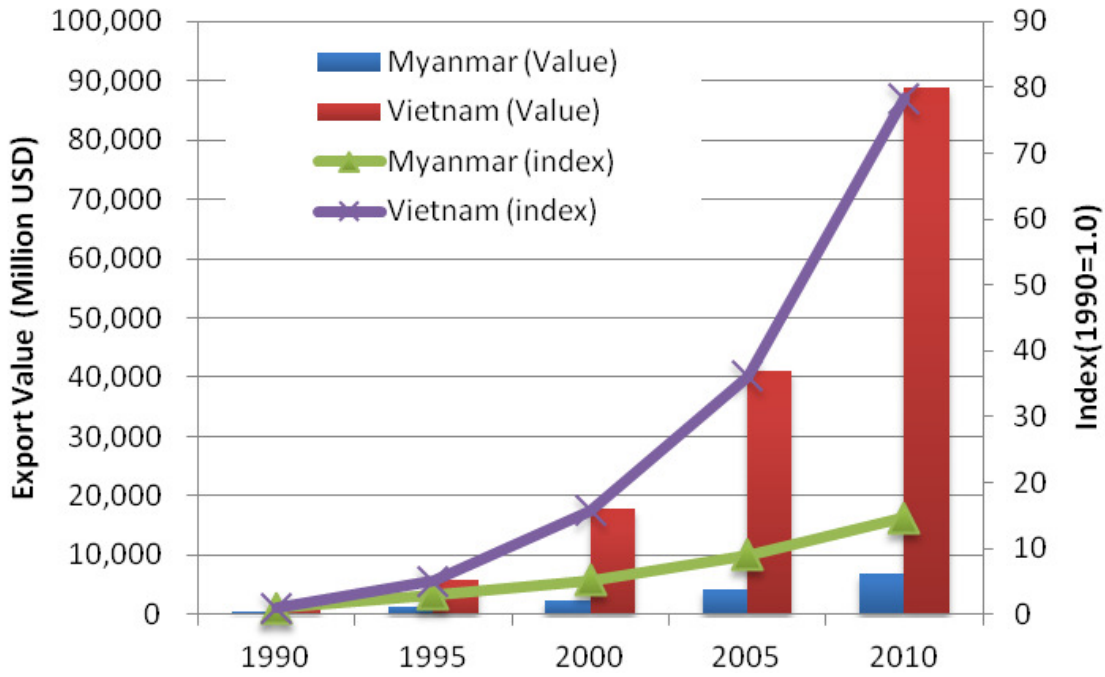
3.1. Export-oriented Growth Strategy[7]

As Baldwin (2004) argued, mentioning Rodriguez and Rodrik (2001), it is not an easy task to statistically prove the positive relationship between trade openness and economic growth. However, our observations in East Asia after the mid-1980s tell us that it is difficult to conceive how a country could achieve rapid growth without being integrated in the global economy. Virtually, no East Asian country has been able to record high economic growth without a strong export sector, and to do so, the smooth import of intermediate goods is the key, especially at the early stages of export–oriented industrialization.

More than twenty years ago, Myanmar also tried to follow this scenario. Soon after the military took power in 1988, the Myanmar government launched a series of open-door policies. It allowed private firms to engage in external trade, and legitimized border trade with its neighboring countries. As a consequence, Myanmar's foreign trade increased rapidly during the 1990s and the first decade of the twenty-first century. Its exports grew fifteen times for the period of 1990-2010.

Nevertheless, the value of Myanmar's exports was by far smaller (less than ten percent), than that of Vietnam in 2010 (Figure 11). While Vietnam exported only 2.5 times more than Myanmar did in 1990, it exported more than 13 times the amount Myanmar did in 2010. Even though the two countries started their open-door policies toward the end of the 1980s, why has such a big gap in export performance been created?

Figure 11: Exports of Myanmar and Vietnam



Source: UN Comtrade.

(1) Diversification of Exports

One difference is the degree of diversification of each country's exports. Table 9 shows the shares of the top ten exports for Myanmar and Vietnam in 2010. Natural gas accounted for more than half of Myanmar's exports, which had been exploited off shore from Martaban Bay and transported to Thailand by pipeline since around 2000. Another natural gas field off Rakhine State, called Shwe, is under development, and gas will be exported to Yunnan Province of China by pipeline starting in 2013. Then, the share of natural gas in Myanmar's total exports will increase even more. Myanmar's natural gas exports increased from 108.6 million USD in 2000 to 2,595.4 million USD in 2010. Excluding exports of natural gas, Myanmar's total exports grew by only 6.2% per year from 2000 to 2010. The second largest export item was wood (16%), followed by apparel and clothing (11%). Thus, only three goods accounted for 80% of Myanmar's total exports in 2010.

Clearly, then, Myanmar's exports have yet to be diversified.

On the contrary, Vietnam's exports have been more diversified. Apparel and clothing accounted for 18% of total export in 2010, followed by footwear (13%), petroleum and its products (9%), miscellaneous manufactured articles (8%), and telecommunications and sound equipment (7%). The top ten goods accounted for 78% of Vietnam's total exports. Moreover, the share of petroleum in Vietnam's exports has declined from 33.4% in 1990 to 19.7% in 2000 and further to 6.0% in 2010.

Table 9: Top 10 Export Goods of Myanmar and Vietnam (2010)

Myanmar				Vietnam			
SITC	**Description**	**Value (USD million)**	**Share**	**SITC**	**Description**	**Value (USD million)**	**Share**
34	Natural gas	2595.4	52.4%	84	Apparel & clothing	11309.8	17.9%
24	Cork & wood	792.4	16.0%	85	Footwear	8185.7	12.9%
84	Apparel & clothing	556.2	11.2%	33	Petroleum & products	5372.1	8.5%
28	Ores & metal scrap	201.8	4.1%	89	Misc manufactured articles	4756.9	7.5%
23	Crude rubber	193.9	3.9%	76	Telecommunications & sound equipment	4626.2	7.3%
66	Non-metal minerals	165.5	3.3%	82	Furniture	4120.4	6.5%
85	Footwear	90.1	1.8%	77	Electrical machinery & parts	3268.1	5.2%
22	Oil seeds & Oleaginous fruit	62.8	1.3%	65	Textile yam & fabrics	2737.5	4.3%
68	Non-ferrous metals	51.0	1.0%	75	Office machines	2724.0	4.3%
27	Crude fertilizer	44.8	0.9%	32	Coal & Coke	1993.2	3.1%
	Others	196.7	4.0%		Others	14205.4	22.4%
	Total	4950.5	100.0%		Total	63299.6	100.0%

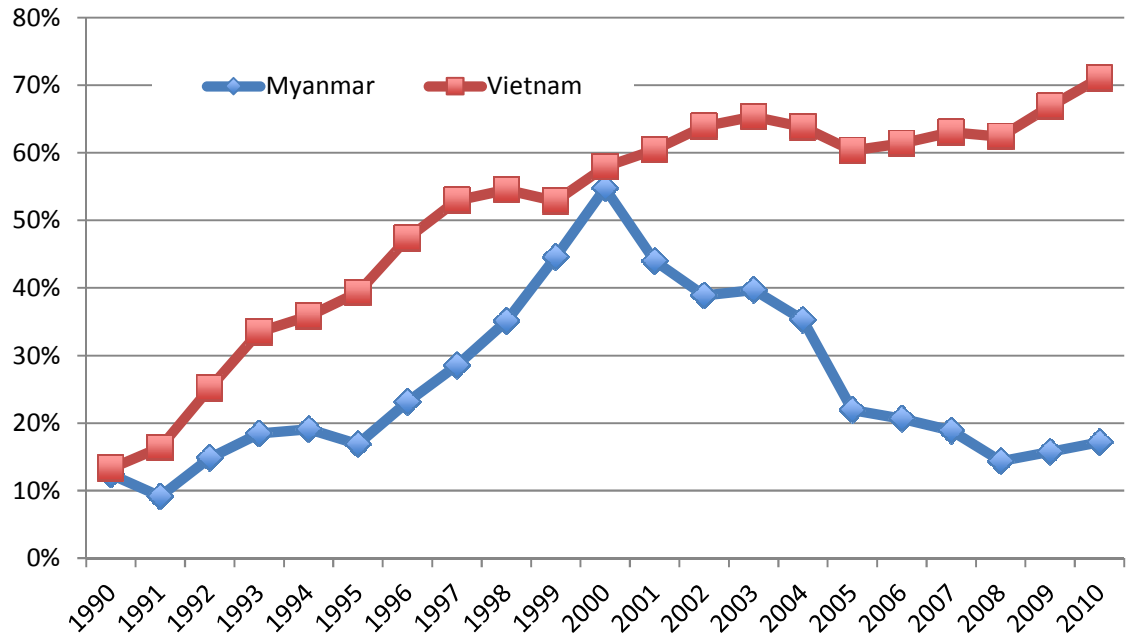
Source: UN Comtrade.

(2) Export of Manufactured Goods: Apparel and E&E

While Myanmar's exports are still dominated by primary goods, with the exception of apparel and clothing, Vietnam exports various kinds of manufactured goods. Figure 12 shows the shares of manufactured goods in Myanmar's and Vietnam's exports. The export shares of manufactured goods of the two economies were nearly the same at about 12-13% in 1990 and 55-58% in 2000. Since then,

Vietnam constantly increased its export share of manufactured goods to 71% in 2010, while the share of Myanmar's total exports drastically declined to about 20% by 2005.

Figure 12: Share of Manufactured Goods in Exports (1990-2010)



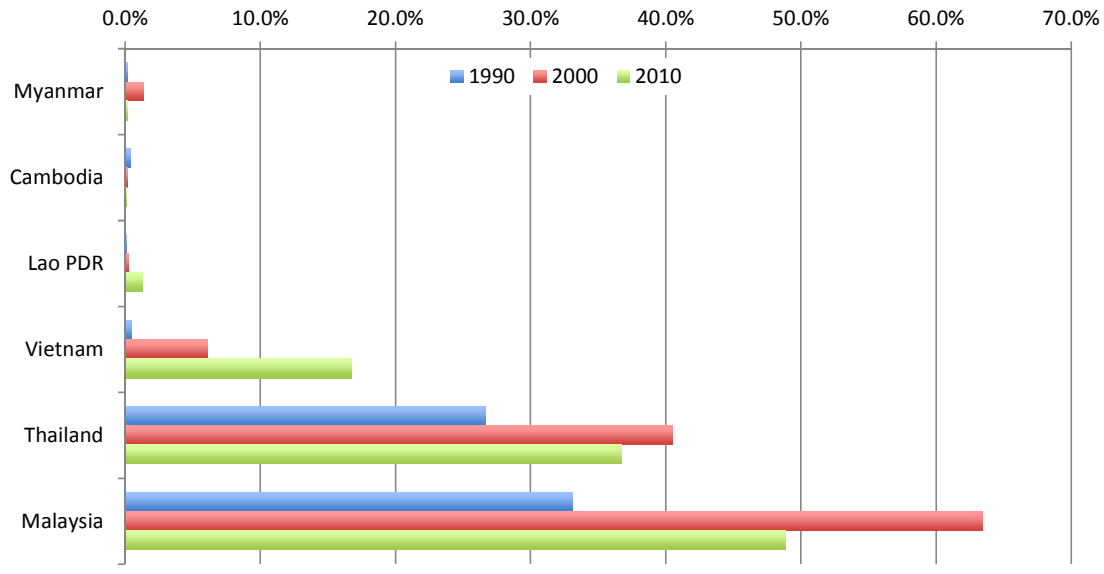
Source: UN Comtrade.

Apparel and clothing have been the only manufactured export goods in Myanmar. The export share of manufactured goods substantially increased in the last half of 1990s, mainly due to garment exports to the United States (US) and the European Union (EU). However, the US import ban that began in 2003 and the EU's unwillingness to source made-in Myanmar goods due to human rights issues severely damaged Myanmar's apparel exports. Myanmar's apparel exports declined from 0.80 billion USD in 2000 to 0.56 billion USD in 2010. On the contrary, Vietnam continuously expanded its apparel exports, from 1.65 billion USD in 2000 to 11.31 billion USD in 2010, which was 20 times larger than the value of Myanmar's apparel

exports.

Another category of important export goods is electric and electronic (E&E) products. Historically, E&E products are the main export goods for most of the East Asian countries. Especially after signing of the Plaza Accord on exchange rates in 1985, E&E multi-national enterprises (MNEs) in Japan and Asian NIEs have shifted their production bases to developing ASEAN countries, and production networks have been established in the region. The dependence on E&E exports is a sign of a particular country's participation in the production networks of East Asia. Figure 13 shows the E&E' shares of exports for selected ASEAN countries. Thailand and Malaysia seem to be 'graduating' from depending on massive E&E exports, and instead Vietnam is increasing E&E exports. Myanmar, Cambodia and Lao PDR seem not yet able to join the E&E production networks in East Asia.

Figure 13: Share of Electric and Electronic Products in Exports



Source: UN Comtrade.

(3) Joining Production and Distribution Networks in East Asia

As described in Kimura and Obashi (2010), participation in production networks is an essential part of the novel development strategy in East Asian countries. "These economies aggressively utilize MNEs in an open setting and accept almost all sorts of such firms, which enables them to participate in international production networks and form industrial agglomerations. After this stage, local firms, entrepreneurs, and engineers increase their participation through their penetration into MNEs' production networks." (*Ibid*, p.1).

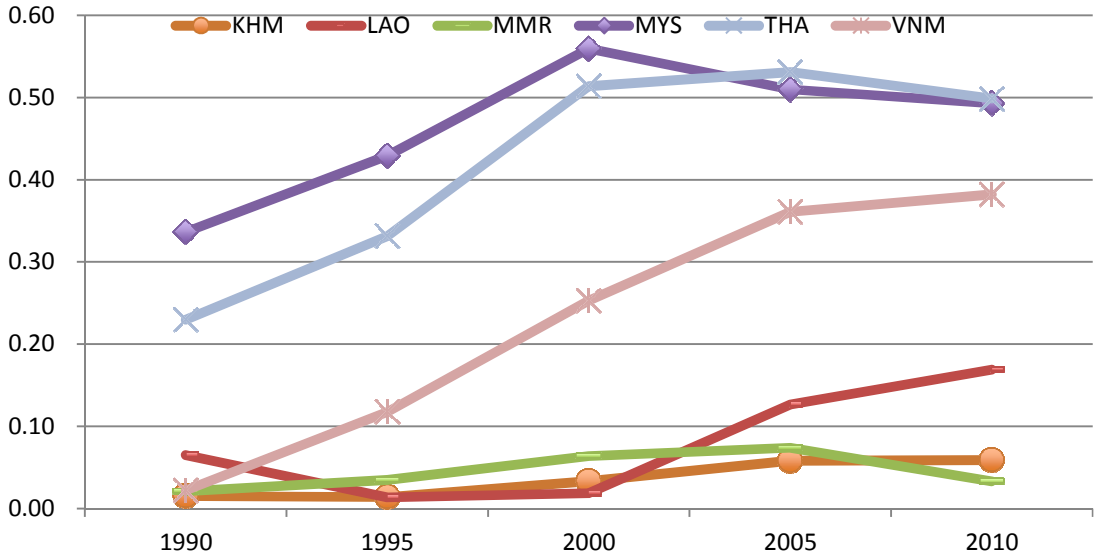
Here, we regard the Harmonized System (HS) 2-digit level weighted Grubel-Lloyd (GL) index as a "proxy" of the degree of the participation to East Asian production networks. The GL index is a measure of intra-industry trade of a particular product, defined as 1-((|X_i-M_i |)/((X_i+M_i))). It takes 0 if the trade for a particular product is one-direction, i.e., no intra-industry trade. It takes 1 if the trade for a particular product is reciprocal and balanced, i.e., the trade is completely intra-industry. We calculated the GL index for HS 2-digit level and weighted it by the export share of each goods and trade partners, but we limited the trade partners for ASEAN+3 countries. Thus, the index shown in Figure 14 is an intra-regional GL index.

Can a higher GL index be interpreted as a sign of tighter integration into the production networks? If two countries reciprocally export the parts and components of a particular industry, we can assume there is a production network between them. If one country exports the parts and components of a particular industry, while the other country exports the final goods of the same industry, we can assume there is a production network between them. But if two countries reciprocally export the final goods of a particular industry, can we still assume there is a production network between them?

If this were a case examining the EU, the answer might be no. For example, if Germany exports BMW to France and France exports Peugeot to Germany, this is a case of intra-industry trade, but not a production network. If this was a case for East Asia, the answer is likely to be yes, as in East Asia the reciprocal exports of the final goods tend to be intra-firm trade. For instance, Toyota exports pickup trucks from Thailand to other ASEAN countries, while it exports minivans from Indonesia to other ASEAN countries, under the Innovative International Multi-purpose Vehicles (IMV) project. This is a case of intra-industry trade, and also a case of a production network.

Figure 14 shows the intra-regional GL index for selected ASEAN countries, as mentioned above. We notice that Malaysia and Thailand, two of the advanced ASEAN countries have higher GL indexes, while Cambodia, Lao PDR and Myanmar, the latecomer ASEAN countries, have very low GL indexes. In the case of Vietnam, its GL index increased from 0.02 in 1990 to 0.38 in 2010, showing that Vietnam has been participating in production networks in East Asia during the last two decades.

Figure 14: Intra-regional Grubel-Lloyd Index for Selected ASEAN Countries



Source: Calcurated from figures of UN comtrade.

For many years, the West has pressured Myanmar in the direction of democracy and respect for human rights by ostracizing its military government through measures such as economic sanctions. Now, the thick fog of military rule that has so far enshrouded the country has become clear. As Western sanctions have been eased or lifted, Myanmar's products will no doubt regain access to global markets, and there will be an influx of foreign investment to this country. The Myanmar economy will become more integrated into the global and regional economies, and have the chance to realize its latent potential.

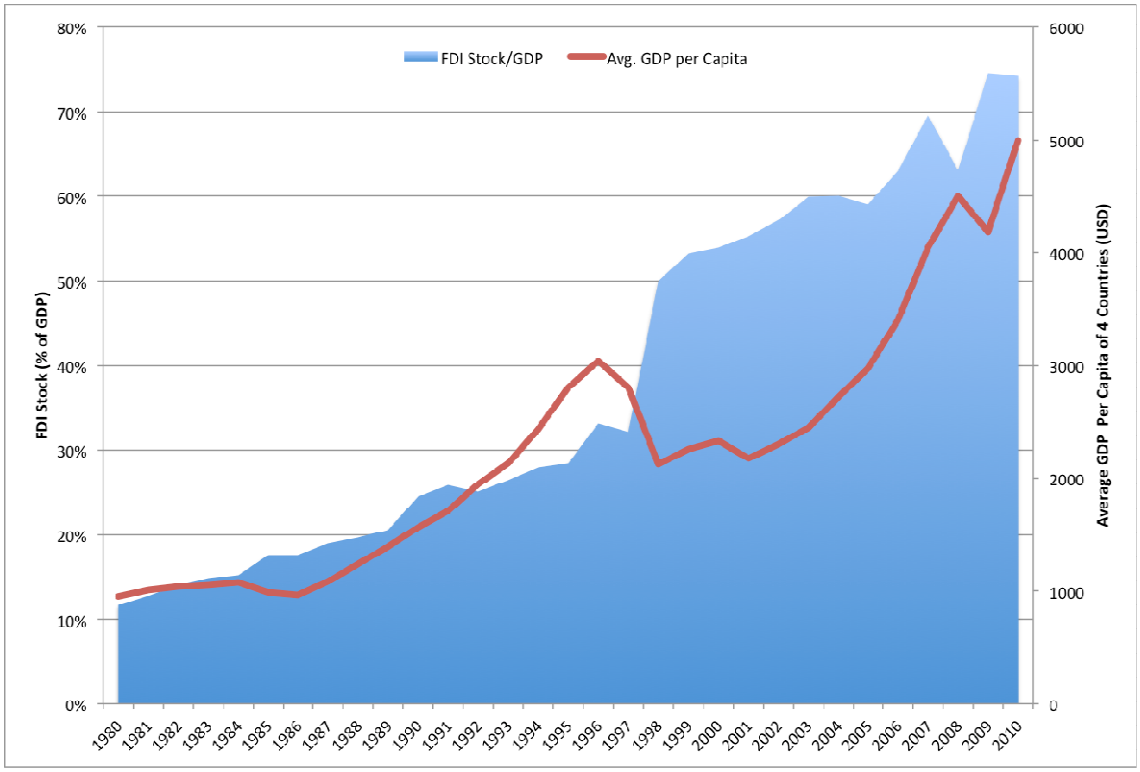
Myanmar's exports will accordingly increase, and the export goods and destination shall be diversified. To do so, the first step for Myanmar is to show its ability to host export-oriented industry. The apparel industry seems to serve as a litmus test for this. After that, to be a part of production and distribution networks for E&E industry in East Asia will be a key for Myanmar to proceed to the next stage of industrialization. Myanmar should also tap into intra-regional markets, such as China, India and Thailand, in addition to traditional export markets such as the United States and the EU. Utilizing the regional free trade agreements and further enhancement of the connectivity with these countries is also important for the export-oriented growth strategy for Myanmar.

2.3. FDI-driven Growth Strategy

The past decades have seen considerable interests among academics and policymakers to attract inward foreign direct investment (FDI) for economic growth. FDI brings in capital, technology, and skills to host economies. New investment projects by foreign investors can also contribute to employment creation in host economies. A number of developing countries have attempted to attract foreign investors by giving them with preferential investment incentives in an attempt to

build industrial clusters and to enable local firms to participate in global value chains. Indeed, many of East Asia economies have attracted foreign investment and achieved remarkably high economic growth together. Figure 15 shows the past trend in the growth of inward FDI flows and economic growth of four countries, Indonesia, Malaysia, Singapore and Thailand. Although it is difficult to correctly measure the impact of FDI on economic growth, it is apparent that larger FDI inflows are associated with higher economic growth in East Asia.

Figure 15: FDI Stock and GDP per Capita for Four Countries



Source: UNCTAD (2012).

Table 10 shows the significance of FDI in host economies in terms of value added, employment, exports, tax revenue, wages and salaries, R&D expenditures and capital expenditures. East and Southeast Asia enjoys relatively high contribution of

FDI on employment, exports and R&D expenditures. The figures indicate that efficiency-seeking FDIs have built up labor-intensive and export-oriented production facilities here. Among alternative determinants, market-seeking and efficiency-seeking motives constitute a fundamental incentive for multinational firms in manufacturing to make direct investment in a foreign market (Markusen, 2004). Their market-seeking motives tend to be weaker for small market size of small developing economies, least developed countries (LDCs) in particular. On the contrary, efficiency-seeking FDI is encouraged by low production costs including wages of workers in developing economies. Thus, it is inferred that FDI shall play more important role in job creation and exports enhancement in LDCs, including Myanmar.

Table 10: UNCTAD's FDI Contribution Index, by Host Region, 2009*

(Percentage shares in each variable's total for the region)

Region/economy	Value added	Employment	Exports	Tax revenue	Wages & salaries	R&D expenditures	Capital expenditures
Total world							
Developed countries	**12.7**	**7.5**	**19.3**	**13.9**	**14.6**	**24.2**	**10.5**
Developing economies	**12.2**	**7.9**	**17.3**	**14.6**	**15.4**	**24.1**	**11.6**
Africa	21.7	7.3	..	..	21.7	37.2	18.4
East & Southeast Asia	10.5	9.9	30.9	7.7	8.9	22.5	6.2
South Asia	10.3	6.1	..	..	16.0	..	3.8
West Asia	16.8	5.5	1.9	..	15.0	..	3.8
Latin America & Caribbean	15.9	6.0	17.9	18.9	16.0	35.0	14.8
Transition economies	**21.7**	**3.0**	**..**	**..**	**11.2**	**15.4**	**25.7**

Note: Data from economies not listed in the FDI Contribution Index (because they do not cover at least four of the seven variables), are included in these calculations.

Source: UNCTAD (2012, p.33).

Drawing on the successful experiences on FDI promotion and economic growth, FDI-driven growth strategy for Myanmar shall be envisaged. For the past decades,

Myanmar has been relatively closed to international trade and foreign investment. While the other East Asian economies have experienced a rapid economic growth mainly through the opening up of the economy, Myanmar has experienced a remarkably slow growth. However, the current government led by President U Thein Sein indicates promotion of foreign investment as one of important policy areas to accelerate the economic growth. Therefore, it is a growing important policy issue as to what policies Myanmar should seek to attract foreign investors and how FDI promotion would contribute to its economic growth.

Here, we review the current status on inward FDI in Myanmar in comparison with its neighbors. Among CLMV and Thailand, the ratio of FDI inward stock as of GDP is the lowest. We note that the ratio substantially declined from 36.1% in 2000 to 18.2% in 2011. The international sanctions must have affected inward FDI into Myanmar. The United States prohibited new investment of American companies in Myanmar since 1997, and resorted trade and financial ban since 2003. The EU also imposed various sanctions including deprivation of GSP status of imports from Myanmar since 1997. The United States and the EU's successive sanctions seriously damaged multinational firms' interests in investing in Myanmar.

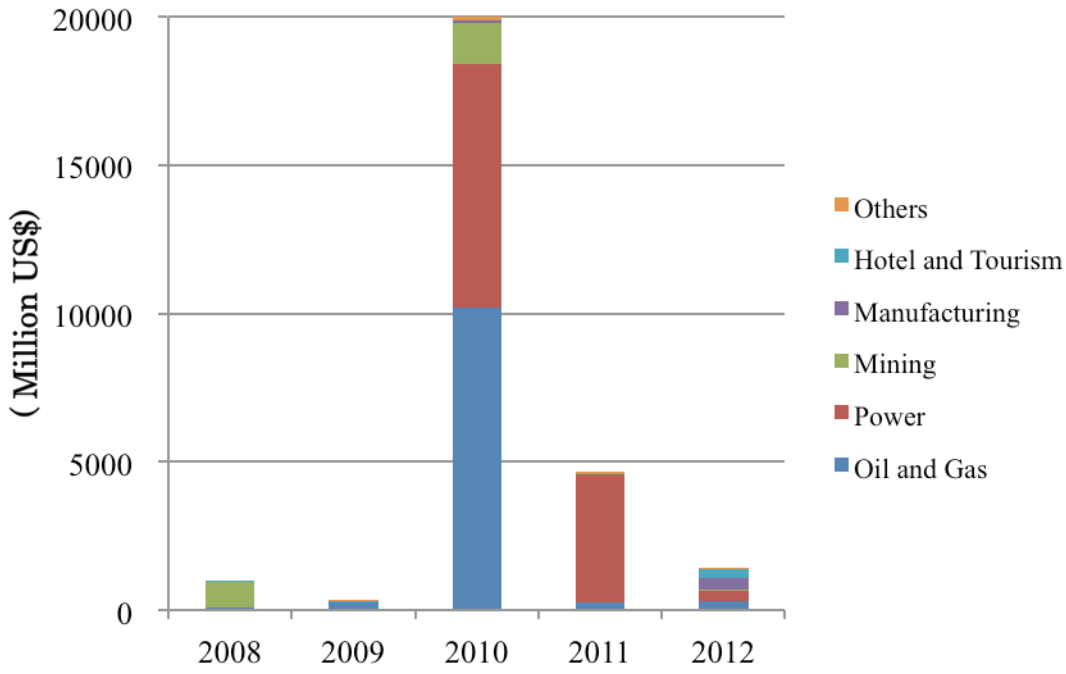
Table 11: FDI Inward Stock in Selected Southeast Asian Countries

	FDI inward stock (Million USD)			FDI inward stock/GDP (%)			Number of greenfield FDI		
	1990	2000	2011	1990	2000	2011	2005-07	2008-10	2011
Bangladesh	477	2162	6166	1.6	4.6	5.4	24	66	18
Cambodia	38	1580	6850	4.2	43.3	52.1	21	103	37
Lao PDR	13	588	2521	1.4	35.9	31.9	27	49	13
Myanmar	281	3211	9123	10.1	36.1	18.2	6	16	11
Thailand	8242	29915	139735	9.6	24.4	41.2	377	827	137
Vietnam	1650	20596	72778	25.5	66.1	59.8	657	797	172

Source: UNCTAD, *World Investment Report 2012*; IMF, *World Economic Outlook Database*, October 2012.

Thus, there were almost no investments of advanced nations in manufacturing and services sector. On the contrary, most of FDIs in Myanmar was occupied by resource-seeking, energy in particular, ones by its neighboring countries such as China and Thailand (Figure 16). These include hydro power projects in the mountainous areas and gas exploitation and pipeline projects, to export electricity and gas to China and Thailand.

Figure 16: Approved FDI to Myanmar by Sector

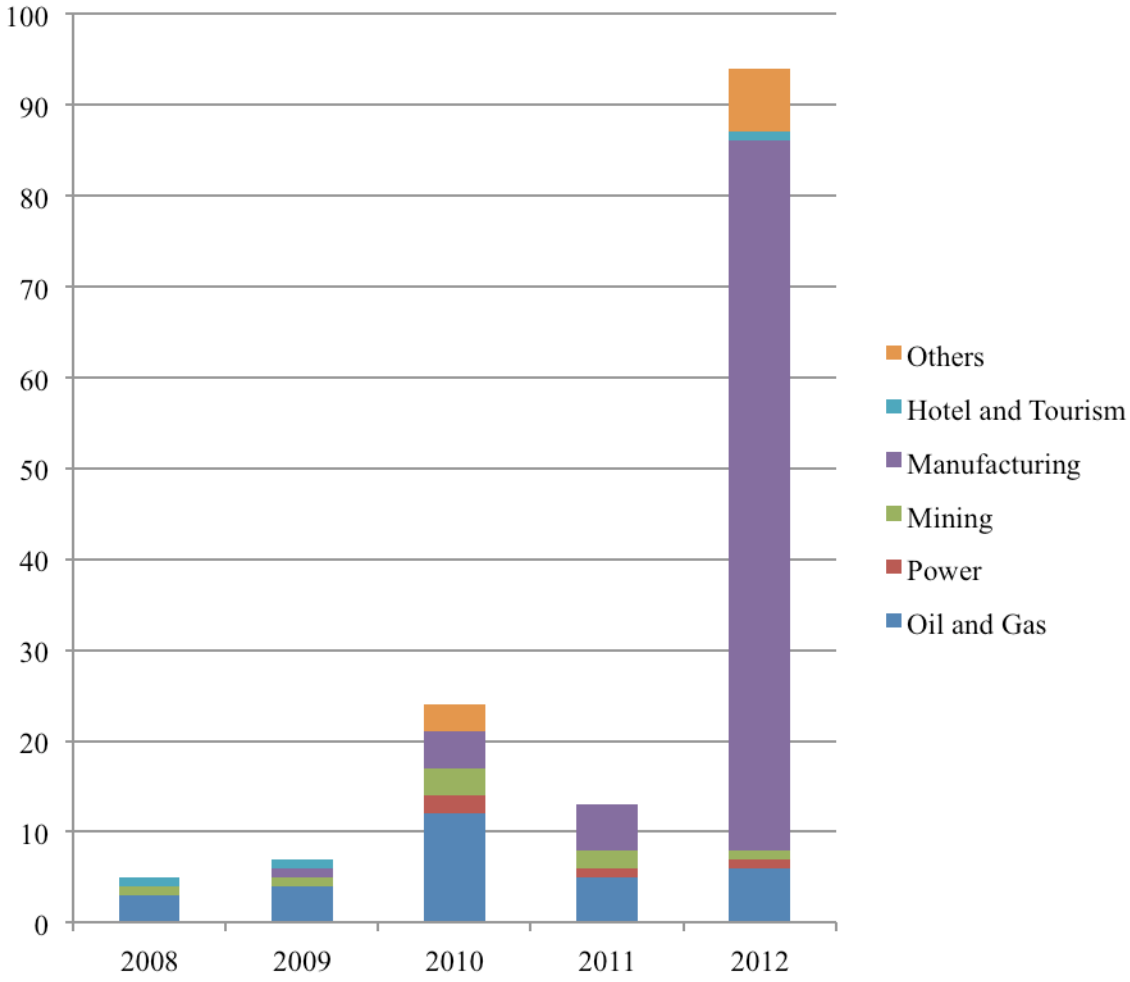


Source: CSO, *Selected Monthly Economic Indicators*, March 2013.

However, the sanctions of the United States, the EU and others have been relaxed or lifted under the reforms of the current government of Myanmar. The international business community has made an about-face in their perception on Myanmar from one of outposts of tyranny to the last economic and business frontier left in Asia. A boom of sending business missions to Myanmar has started since mid-2011, and the hotel and office rental charges have jumped by three to five times. Accordingly, the number of foreign investments in manufacturing sector is also

rapidly increasing (Figure 17).

Figure 17: Approved FDI to Myanmar by Sector (number)



Source: CSO, *Selected Monthly Economic Indicators*, March 2013.

In order to explore the potential benefits of FDI, Myanmar first needs to attract FDI, accompanied by an appropriate strategy to spread the benefits of FDI to the national economy. According to the experiences of forerunners in ASEAN, general policy recommendations are simple and conclusive. The policies that enhance country's economic development are also effective to attract and benefit from FDI. These policies include (1) development and improvement of various infrastructures,

(2) stabilizing macro economy, (3) open trade policy, (4) providing capable human resources, (5) setting up the investment promotion agency, and so on.

On the other hand, the effectiveness of various policies intended to facilitate spillover directly, such as the regulation on local content, joint venture or technology-sharing requirements is arguable. And if implemented, these restrictions are expected to have negative impacts on FDI inflows, especially those from developed countries. Moreover, these specific policies are basically prohibited by the TRIMs agreement of WTO and hard to implement, although developing countries are temporarily exempted from the prohibitions as far as the policies are coherent with Article XVIII of GATT, which considers the difficulties of developing countries.

There are ample lessons Myanmar can learn from the experiences of neighboring countries. Making use of this latecomers' advantage, Myanmar should design a comprehensive and consistent set of policies to promote FDI and benefit from FDI.

3. Two-polar Growth Strategy

As mentioned earlier in this paper, one of four economic policies that President U Thein Sein announced on 19 June, 2012 includes "balanced and proportionate development among states and regions with equal share of budget and taxation, foreign aid and foreign and local investment." Thus, the Myanmar government seeks higher and balanced economic growth. This is a challenge for the government since some economic literature identifies a trade-off between higher economic growth and better regional equality, especially for countries in the early stages of development.

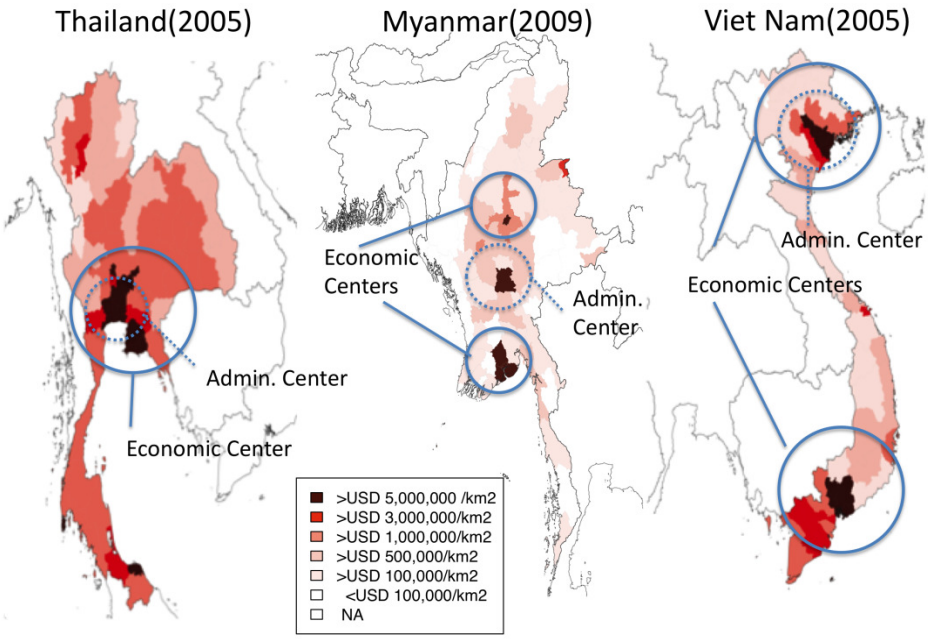
In this section, we propose a two-polar growth strategy that includes both "high" and "balanced" growth. The first growth pole is Yangon and the second is Mandalay. Nay Pyi Taw, the national capital, will develop as an administrative centre, not as an economic or commercial one. We also propose border development with enhanced connectivity to richer neighboring countries as a complementary strategy to the two growth poles.[8]

3.3. Two Growth Poles Balance between "Balanced" and "High" Growth

"Balanced regional economic growth" is an attractive policy slogan at present in a world where many countries suffer and fail to manage regional income inequality. But there is a question as to whether or not equality with higher economic growth is feasible in the first place. There are a number of studies that examine the relationship between economic growth and regional income inequality, finding that regional income inequality is not just an adverse effect of economic growth and that the two phenomena have circular causation. Just as economic growth enhances economic agglomeration, economic agglomeration also enhances economic growth. The rationale is as follows: Inevitably, economic growth is geographically uneven because some regions have more advantages in doing business than other regions. Workers and firms tend to agglomerate in developed regions where they seek higher wages and larger markets. Thus, economic growth enhances economic agglomeration. At the same time, economic agglomeration is a source of positive externalities such as labour pooling and knowledge spillover. It makes it possible to provide physical and institutional infrastructures efficiently with limited resources. Therefore, economic agglomeration enhances economic growth. The first principle of economic development seems that scarce development resources should not be spread to too many regions, especially in the early stages of economic development.

It is important to learn how the geographical concentration of economic activity in other developing countries has changed during the rapid economic growth period. The benchmarks for Myanmar seem to be Thailand and Vietnam, both of which have similar land areas and population sizes relative to Myanmar.[9] Thailand and Vietnam have a contrasting spatial structure of economic activities with each other. Thailand is a typical "one-polar" country while Vietnam is clearly a "two-polar" country. Figure 18 shows the GDP density (GDP per km2) of Thailand, Myanmar and Vietnam. For Thailand, it is obvious that the country's economic activity is concentrated around Bangkok. For Vietnam, there are two agglomerations of economic activity: around Hanoi in the north and Ho Chi Minh City in the south. Considering the spatial development strategy of Myanmar, it is important to choose whether to be one-polar or two-polar (or many-polar).

Figure 18: GDP Density of Thailand, Myanmar and Vietnam



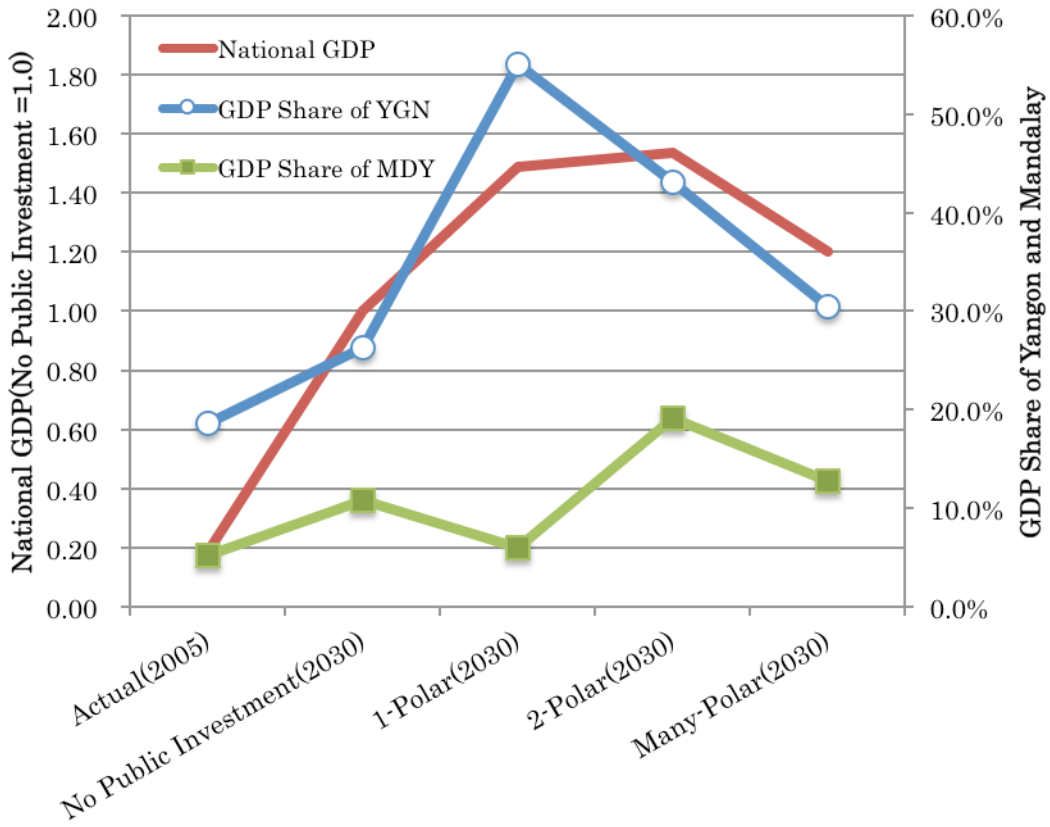
Source: Authors based on IDE-GSM dataset.

From the population and GDP density by district, and industrial distribution, we found that Yangon is eligible to be the first pole of economic growth because both economic activities and population are concentrated here. We also found that the second pole of economic growth would be Mandalay. This is because Mandalay and its surrounding area, including the poor Central Dry Zone (CDZ), already have a certain level of economic activity and population, although the agglomeration is smaller than that of Yangon. To forecast the consequence of each development strategy, we conducted the simulation analysis using an IDE Geographical Simulation Model (IDE-GSM). We analyzed the relationship between the number of development poles, the national GDP of Myanmar, and Yangon and Mandalay's GDP share in national GDP.[10]

We assume that the costs of increasing the productivity parameter in a growth pole are proportional to its population. We also assume that available public development expenditure is fixed and that if the number of development poles is increased, the expenditure would be shared by all growth pole regions proportional to their population. In addition, the increase in productivity of each region is assumed to be proportional to the development expenditure per capita.

Under this assumption, the two-polar strategy would decrease Yangon's GDP share to 43.1% from 55.1%, while the national GDP would slightly increase to 1.54 times from 1.49 times, compared with the one-polar strategy. Mandalay's GDP share would increase to 19.1% from 10.8%. There seems to be no trade-off between higher growth and lower inequality for the two-polar strategy. However, if development resources are spread to many poles (here we assume 15 regions, including Yangon and Mandalay), the national GDP decreases to 1.20 times, while the share of Yangon's GDP decreases to 30.4% (Figure 19).

Figure 19: The Number of Growth Poles, National GDP and GDP Share of Yangon and Mandalay (as of 2030)

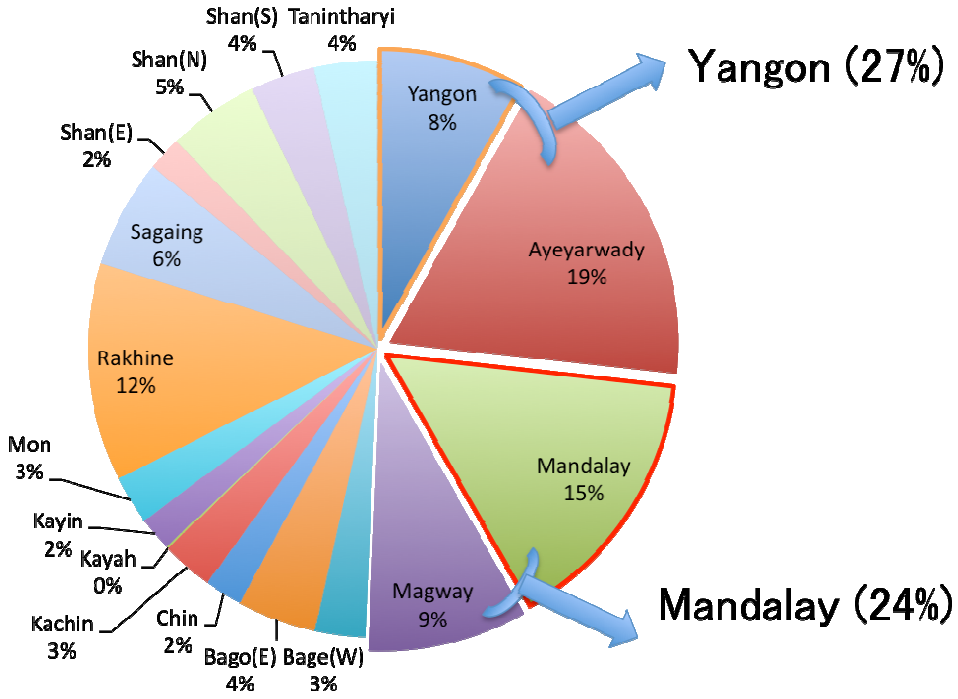


Source: Authors based on IDE-GSM simulation results.

From the viewpoint of poverty eradication, again, the two-polar strategy seems to be proper. As depicted in Figure 20, Yangon, the economic centre of Myanmar, has a poverty share of 8.1%. Combined with neighboring Ayeyarwady, the poverty share becomes 26.7%. If Yangon takes care of the poverty population in Mandalay and Magway, a part of the populated and poor CDZ, the share reaches 50.6%, just above half of the national poverty population. This is clearly too much, and a poverty eradication strategy depending on mono-centric economic agglomeration in Yangon has some risk. Considering that Mandalay already has relatively high economic agglomeration, it is more reasonable for Mandalay to take care of its own poverty population as well as the poverty population of neighboring Magway (and

Sagaing). For Myanmar, it seems to be desirable to have a two-polar economic structure like Vietnam.

Figure 20: Poverty Share by Region/State (2010)



Source: Authors based on UNDP (2011).

3.4. Border Development with Enhanced Connectivity

As noted above, some degree of concentration of economic activity is inevitable and even desirable for developing countries, especially for least developed countries. However, care should be taken relative to regions that are on the economic periphery. In the case of Myanmar, mountainous border regions need due attention. It is difficult to invite or develop certain kinds of industry to less developed regions with small populations.

The first principle of economic development discussed in this paper is that scarce development resources should not be spread to too many regions, especially in the early stages of economic development. When considering the fact that Myanmar is

surrounded by richer neighboring nations, enhancing the connectivity with these nations is a key to more balanced development while not diverting much development resources from economic centres.

Here, the economic effects of enhancing connectivity are analyzed again by IDE-GSM. In this “enhanced connectivity” scenario, we combined: (a) the customs facilitation measures at some national borders in 2015 and 2020, (b) upgrading the roads connecting these borders through major cities in Myanmar in 2015 and 2020, and (c) connecting Dawei and Kyaukphyu ports with India and Europe in 2020.

Table 12 shows that the income gap between seven regions, where Burmese people mostly live, and seven states, where ethnic minorities mainly live, is narrowed by enhancement of connectivity, while the average incomes of seven regions and seven states improved, compared with the two-polar strategy without enhancing connectivity. This simulation result shows that the enhancement of connectivity considerably increases the GDP in periphery regions without reducing the GDP in economic centres. The inequality measures are all improved when compared with the two-polar strategy without enhancement of connectivity.

Table 12: Inequality between Seven Regions and Seven States in Myanmar by Development Strategy

	Seven regions (vs. Seven states=1.0)		GDP per capita (national avg.(2005)=1.0)		
	GDP	GDP per capita	Seven regions	Seven Ssates	National
Actual (2005)	3.01	1.12	1.03	0.92	1.00
No Public Investment (2030)	3.42	1.15	3.63	3.15	3.51
1-Polar (2030)	5.73	1.74	5.47	3.14	4.93
2-Polar (2030)	5.92	1.79	5.64	3.15	5.06
2-Polar+Connectivity (2030)	5.80	1.76	5.75	3.26	5.17
Many-Polar (2030)	4.02	1.30	4.35	3.33	4.10

Source: Authors based on IDE-GSM simulation results.

A two-polar growth strategy and border development with enhancement of connectivity prevents over- or under-concentration and makes high and balanced growth possible. To make the strategy feasible, spatially targeted investment, including physical and institutional infrastructure, in Yangon, Mandalay, and some border areas is required.

Making Yangon and Mandalay growth poles where they can contribute to alleviation of poverty is a challenge. For that, the establishment of special economic zones (SEZs) can be an effective policy tool to promote industrial clusters in targeted areas. Another important policy tool is the promotion of FDI, as we have discussed in the previous section. Without substantial inflows of FDI, Myanmar, one of the least developed economies in the region, cannot possibly be integrated into the production and distribution networks in East Asia. Here again, Yangon and Mandalay are the keys to attract FDI into Myanmar.

5. Re-emergence of Myanmar: From a Missing Link to a Connecting Node

5.1. New International Environment

Despite being a member of ASEAN since 1997, Myanmar economy has been substantively insulated from the regional and global economy, with the significant exception of China, mainly because of economic sanctions imposed by the United States and the EU. The high degree of uncertainty under the military government has kept even other AMS from enhancing their engagement with Myanmar economy.

Myanmar's re-emergence into the global and regional economies has been taking place in the changing external environment as discussed above. During the decades of Myanmar's isolation, neighboring countries in developing Asia have achieved remarkable economic growth. Developing Asia is now strongly connected to the global economy through the regional production networks, which have expanded the frontiers to Myanmar's neighboring countries such as Thailand, China, and India. In fact, Myanmar has long been the significant missing link in the regional production networks. Paradoxically, this is the breakthrough. Although the regional production networks have not expanded to Myanmar, they have already reached to the neighboring countries such as Thailand, China and India. By enhancing the connectivity with these neighboring countries, Myanmar can join the well-developed regional production networks and enjoy the benefits from being a part of them. This is a short-cut for Myanmar to re-emerge into the global economy. In addition, Myanmar is expected to become the node connecting three of the world most vibrant economies, namely, China, India and ASEAN.

The recent political and economic reforms in Myanmar, indeed, have completely been changing the landscape surrounding Myanmar. Japan's decision to write-off outstanding debts amounting to JPY 300 billion in early 2012 was the first major

response from the international community, which induced unprecedented interests from Japanese companies on Myanmar. In response to the successful by-election in April 2012, the United States and the EU started to lift their sanctions on a step-by-step basis. In addition, with the effective support of Japan, the Paris Club agreed to provide a debt relief of US$ 6 billion to Myanmar, paving a way for the World Bank and the ADB to resume fresh aids to Myanmar.[11]

Thailand began in earnest with a comprehensive development project in Dawei, which is known as a part of the Mekong-India Economic Corridor (MIEC).[12] This project is expected to enhance the connectivity between the Greater Mekong Subregion and India, by providing an alternative and short-cut route connecting the two vibrant economies. Moreover, Thailand started to provide official assistance to upgrade the road infrastructure between Kawkaleik and Mawlamyine, a critical section to physically connect Myanmar and Thailand, and beyond. The re-emergence of Myanmar provided Thailand new and feasible opportunities to expand its economic activities to Myanmar, India, and beyond.

As a part of the re-activation of its "Look East Policy", India has been reengaging with Myanmar. Indian Prime Minister Manmohan Singh visited Myanmar in May 2012 for the first time in a quarter century, and agreed with President U Thein Sein to enhance bilateral economic ties. In the resulting Memorandum of Understanding, India and Myanmar agreed to double bilateral trade by 2015, and for this purpose India agreed to provide US$ 500 million credit, with a focus on connectivity related projects such as repair and upgrading of the bridges on Tamu – Kalewa friendship road along the ASEAN Highway No.1, the Air Services Agreement between India and Myanmar, border area development projects, and so on. For India, the connectivity with Myanmar is expected to contribute in the economic development of the Northeast Region, a relatively isolated part of the

country.[13]

The relationship with China has evolved differently. Before the democratization under the Thein Sein administration, China was acting as a guardian for the then military government. During the absence of other development partners, China initiated a number of development projects, such as the deep sea port and a special economic zone in Kyaukphyu, oil and gas pipelines connecting Kyaukphyu and Yunnan province of China, and hydropower plants in the border areas, based on its strategic interests to open an alternative route to the Indian Ocean and to help meet the rapidly growing demand for energy. The resulting over-dependence on China has been reviewed since the opening up of Myanmar and the bilateral tie is currently at a crossroad.[14] The suspension of Myitsone Dam project, declared on 30 September 2011, is regarded as an epoch making event. Nonetheless, China is and will be one of the most important neighbors for Myanmar to design a long term vision for its economic development in the emerging context.

All these developments were triggered by the dramatic political and economic reforms in Myanmar since the inauguration of the "civilian" government and will surely help Myanmar to implement the initiatives under the ASEAN Economic Community (AEC) Blueprint and enhance its connectivity with neighboring countries and the global economy.

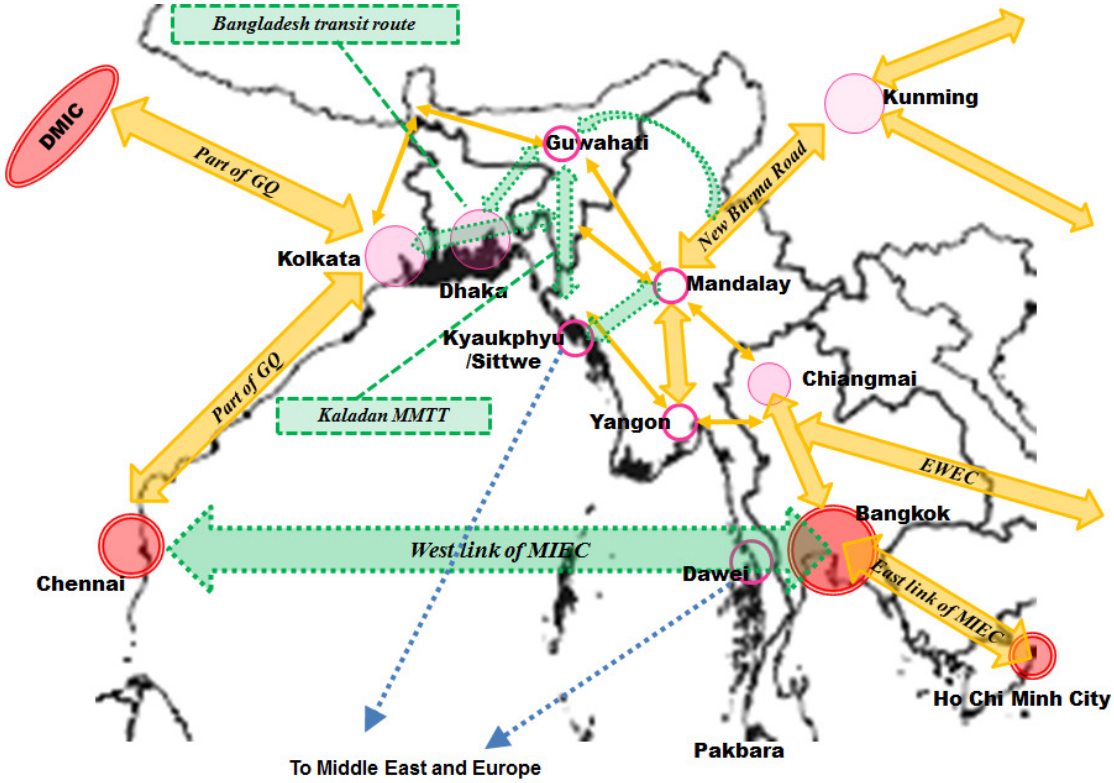
For that, there are several things Myanmar should implement. First of all, Myanmar needs to develop domestic economic corridors with effective connection to the international economic corridors which has already reached to the neighboring countries such as China, Thailand, and India.[15] Figure 21 highlights the strategic location of Myanmar as the regional connecting node. Myanmar can open two main routes connecting ASEAN and India, the sea route, as the west link of the Mekong-India Economic Corridor (MIEC), and the land routes, with various optional

routes, along the trilateral highway between Thailand, Myanmar, and India.

The west link of MIEC, from Bangkok to Chennai via Dawei, is designed to enhance the connectivity between Bangkok and Chennai where large agglomerations of manufacturing industry have been formed by inviting a large amount of FDI most notably in automotive and electronics sectors. The enhanced connectivity between Bangkok and Chennai is expected to enable those manufacturing companies to improve their competitiveness by reviewing and restructuring their production networks, including further fragmentation of some parts of production processes. Reflecting the promising benefits, ASEAN Leaders agreed to promote the completion of MIEC in the Master Plan on ASEAN Connectivity (ASEAN, 2010a).

However, the MIEC is not sufficient to meet a number of challenges the region faces. In order to effectively expand regional production networks, which is of crucial importance to pursue both deepening economic integration and narrowing development gaps at the same time, it is necessary to improve physical infrastructure for land transportation. There still remains large area with less than USD500 per capita income along the north bank of the Andaman Sea, consisting of Myanmar and Northeast India. These economies are characterized by agriculture and other natural resource industry, with no significant manufacturing activity. For these regions, enhanced connectivity with neighboring cities and countries are highly important to widen the access to the large market and to invite new industries, fragmented production processes, based on their location advantages.

Figure 21: Myanmar as an Emerging Connecting Node



Source: Kimura, *et al.* (2011).

Second, in order to effectively join into the regional production networks, Myanmar needs to substantially reduce services link costs, which are the costs to link remotely located production blocks (ERIA, 2010). The lower the services link costs, the more opportunities for foreign investors to consider Myanmar as the destination for the second unbundling. Most of the necessary measures, such as trade liberalization and facilitation, investment liberalization and facilitation, services liberalization, infrastructure development and facilitation measures in the transport sector, are already included in the AEC Blueprint. Although Myanmar has been facing difficulties in implementing the AEC Blueprint, it can now expect bigger than ever assistance from the international community.

Finally but not least, it is important for Myanmar to strategically identify cities to nurture industrial agglomerations. Despite the strong political motivation for

balanced and inclusive economic growth, available financial and human resources are still limited to spread all around the country. Experiences of other developing Asian countries tell us the importance of creating a critical mass in the early stage of economic development. As we have discussed in the previous section, Yangon and Mandalay are expected to play a key role to drive the whole economy. As their simulation analyses revealed, this two-polar growth strategy is expected to guide Myanmar to pursue both high economic growth and balanced and inclusive economic development.

5.2. Domestic Economic Corridors

As pointed out above, the development of domestic economic corridors is important to enhance regional connectivity since Myanmar had been a missing link in the region. International economic corridors together with production and distribution networks are extended up to Myanmar's borderline, but stopped there. In order to extend international economic corridors inside Myanmar, we have envisioned four domestic corridors, that is, North-South Corridor, East-West Corridor, Right Sash (or Northeast-Southwest) Corridor, Left Sash (or Southeast-Northwest) Corridor.[16]

Strategic importance and strategic thrusts of four economic corridors: Domestic economic corridors will not only support the formation of growth poles domestically, but also bring together GMS regional networks.

The outline of four corridors is as follows;

1) **North-South Corridor:** The main corridor will be Yangon-Mandalay route which connects two growth poles, Yangon and Mandalay, the length of which is about 435 miles. It can be extended to Myitkyina, northern part of Kachin State up to Myanmar-China border (Kanpiketi) (919 miles in total).
2) **East-West Corridor:** Tachileik-Kyaington-Taunggyi-Meiktila-Pakokku-Kalay -India border (Reed) route, which could be one of the major routes of Myanmar.

The whole corridor will be 1142 miles. Tachileik-Kyaington to Mongla will be a branch of this corridor which is also on GMS North-South Corridor that links Thailand and China through Myanmar (158 miles).

3) **Right Sash (Northeast-Southwest) Corridor:** that connects Muse in the north to Kyaukpyu in the south through Mandalay. It will be a new trade route along with China-Myanmar oil and gas pipeline that links Yunnan Province to Bay of Bengal through Myanmar (714 miles).

4) **Left Sash (Southeast-Northwest) Corridor:** Myawaddy-Hpa-an-Mandalay -Monywa-Kalay and Tamu route, which is tripartite route that links Thailand and India through Myanmar with a length of 942 miles. The corridor will have a branch from Myawaddy-Mawlamyine-Dawei that is the extension of GMS East-West Economic Corridor from Da Nang to Mawlamyine and connection of Southern Corridor (397 miles).

North-South Corridor will be the main corridor connecting growth pole (Yangon) and growth centre (Mandalay), extended to Kachin State, up to Myanmar-China border. This corridor is intended to serve as the main route for border trades as well as transmission of goods from Upper Myanmar to Yangon ports for export, then to the North South Corridor via a short connection through Thailand to Tak Province.

East-West Corridor will become a sub-route of GMS North-South Corridor that links Thailand and China through Myanmar, providing the cost effectiveness along the trade route between India and Thailand, where has been bearing a relatively high transaction cost due to insufficient road infrastructure. This corridor will also be a connection to GMS East-West Corridor (EWC) which starts at Danang of Vietnam and end in Mawlamyaine, Myanmar.

Right Sash (Northeast-Southwest) Corridor, connecting Muse in the North to Kyaukpyu in the South through Mandalay, will be a new trade route between China and India along China-Myanmar oil and gas pipeline that links Yunnan Province to Bay of Bengal through Myanmar. This corridor is primarily located in connection

with GMS Northern Corridor along the breadth of Yunnan Province from the Gulf of Tonkin on the east and connecting northern Myanmar on the west before reaching the Indian border at Tamu. Infrastructure development between Kyauk Phyu and Muse will not only facilitate the trade between China and India but also to the ethnic groups residing and trading along the corridor.

Left Sash (Southeast-Northwest) Corridor will be an extension of GMS East-West Economic Corridor (EWEC) by including Yangon-Hpa-an link. It will resolve the problem of weak physical connectivity between Myanmar and North India, and will provide the route for an attractive industrial location to export toward Thailand. Once GMS East-West Corridor is in operation, Mawlamyaine and Myawaddy will be among the hubs of the region, attracting industries from Thailand and Southeast Asia to invest along the corridor. In addition, GMS Southern Corridor (SC) that links Dawei, Bangkok, Phnom Penh and Ho Chi Minh City is likely to become one of the major trade corridors in the GMS 4 according to most regional studies.

5.3. Contribution of Economic Corridors to Myanmar Economic Development Vision

Since Myanmar economic corridors are intended to help deepen ASEAN integration with East Asia, they will reflect the improving international relations as well as a creation for trading partners' appreciation of the economic opportunities offered by Myanmar. The immediate and most obvious benefit of the development of economic corridors is in the contribution of the respective corridor to border trade. The economic corridors in Myanmar are basically the trade routes among China, India, Myanmar and Thailand. It has potential for transit trade if cross border transportation mechanism is materialized. In addition, it can be expected to gain the

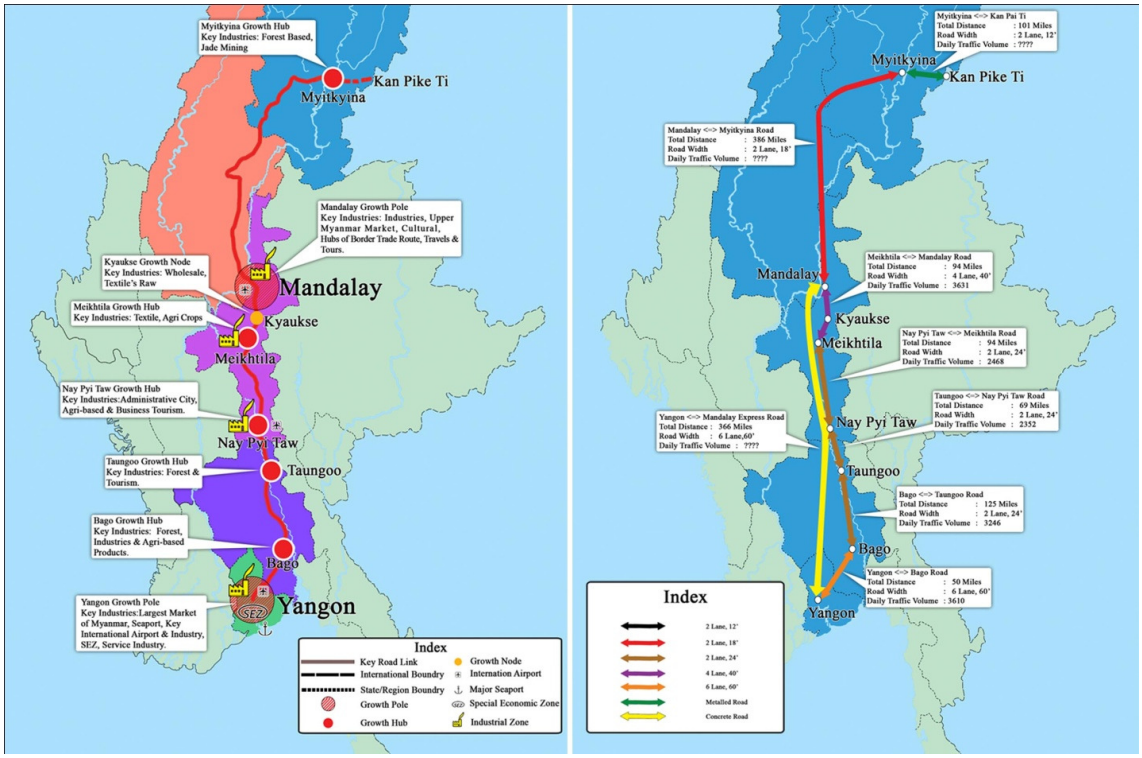
positive spill-over effect on remote places of Myanmar where there are untapped tourist attractions that would make the eco- and cultural tourism possible.

Short term, medium term and long term strategies on transportation infrastructure development, trade facilitation, encouraging investment on the development of transport and logistics services, creating effective Multi-modal Transport and promoting tourism sector development will support economic corridors to be active and best use of them in Myanmar industrial and economic development. These strategies are described in the economic corridor paper.

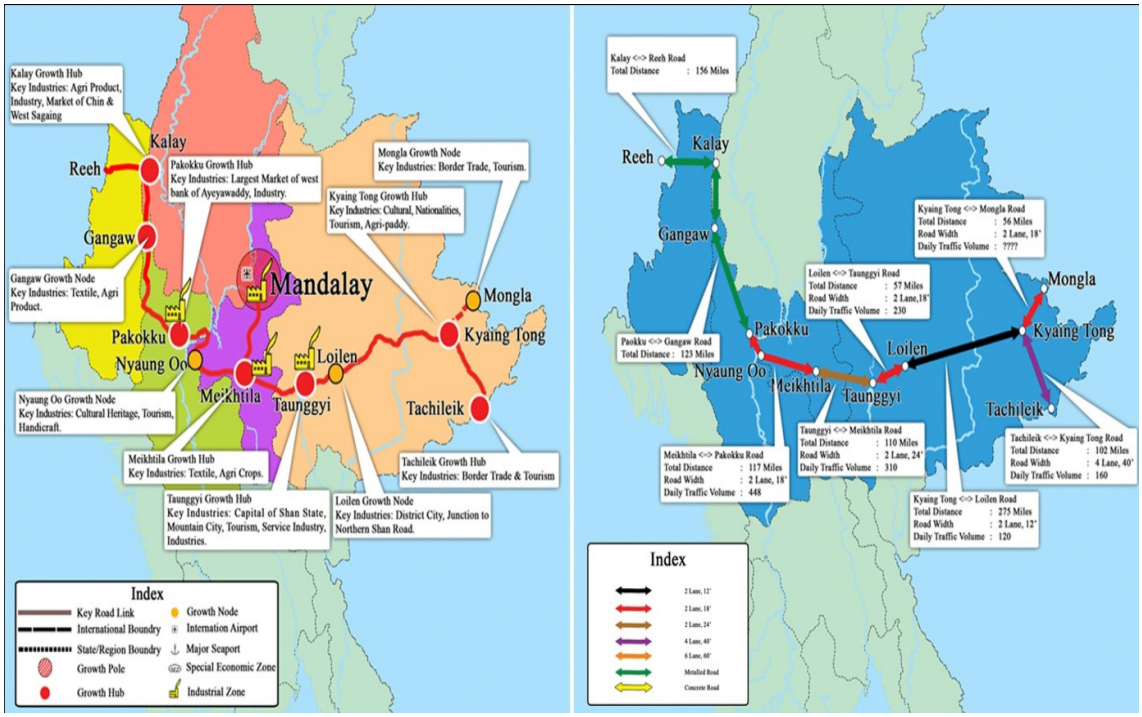
Growth poles, transport networks and hubs along four corridors are shown below.

Figure 22: Four Economic Corridors in Myanmar

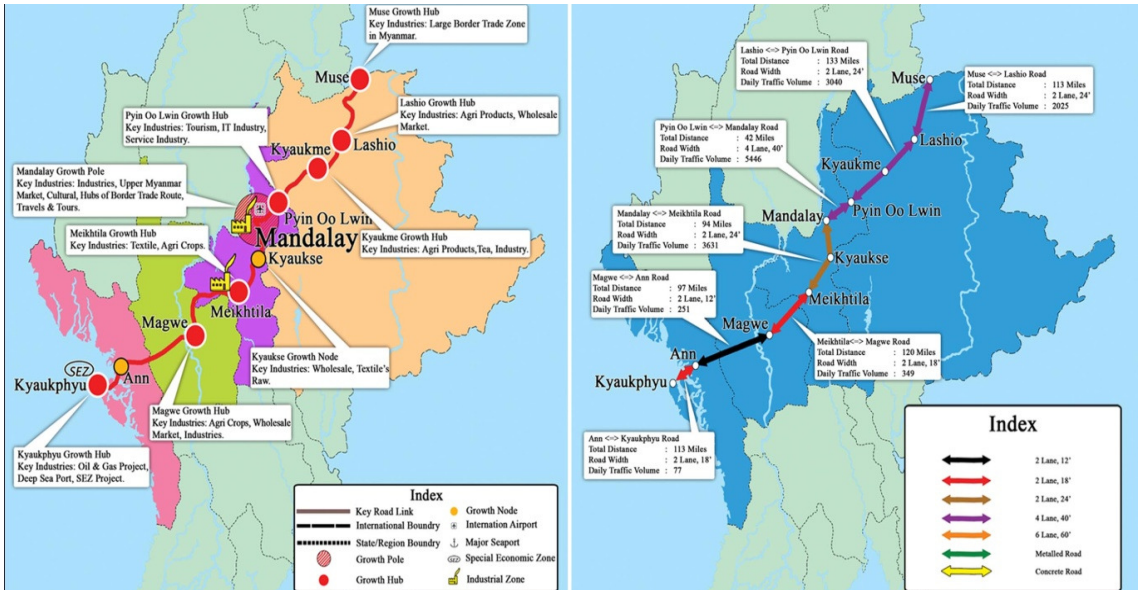
North-South Economic Corridor



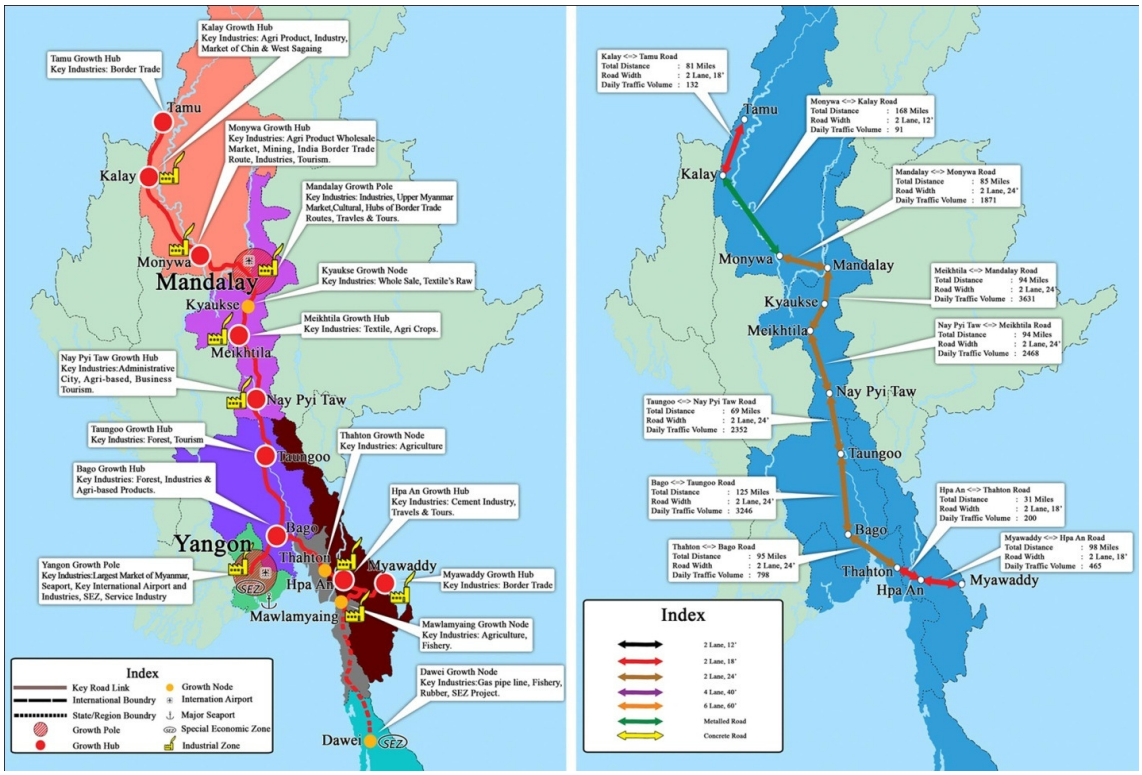
East-West Economic Corridor



Right Sash Economic Corridor



Left Sash Economic Corridor



Concluding Remarks

In this paper, we proposed five synergistic growth strategies, i.e., "Agriculture Plus Plus," export-oriented private sector led industrial development, FDI-driven growth strategy, two-polar growth strategy with border development, and the development of domestic economic corridors. We still need to translate these growth strategies into a series of implementable programs and projects. Such a task is beyond the scope of this paper, but that requires a shared comprehensive development vision and close consultation with all stakeholders. If such elaborate exercises (of developing the implementable programs and projects) are in line with the proposed growth strategies in the paper, we believe it is possible for Myanmar to pursue high, sustained and balanced growth in the coming decades.

However, it would be naïve to be too optimistic on growth prospects of Myanmar. There are challenges on the road to reforms and there will be costs of transition. The absorption capacities of institutions may lead to a loss of effectiveness of the reforms, or, at the very least, the efficiencies may be impacted. Bureaucracy is the traditional tool of development in all developing economies. Development of capacities in the bureaucracy is a time taking process and these might cast a long shadow on the development agenda of the government. The lack of institutionalization in Myanmar also raises a valid question as to how much of reforms are essentially intuitive and well-intentioned and how much are a product of an institutionalized decision making process. All these agendas are not discussed here.

These words of caution are not meant to be a dampener on the progress, or even the speed of growth- related reforms in Myanmar. The important message is to check the weak links in the reforms process and to address them even as the country moves towards openness and stability. At the end, a sustained growth in the

livelihood of people may well be the best cushion against any challenge to the development process in Myanmar.

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ENDNOTES

[1] The fiscal year starts in April and end in March in Myanmar.

[2] President Thein Sein's speech on the four economic policies appeared in *the New Light of Myanmar*, the only English daily newspaper in Myanmar, on 20 June 2012.

[3] Calculated based on World Bank, *International Debt Statistics 2013*.

[4] The Paris Club agreed to cancel half of the arrears Myanmar owed them in two stages, rescheduling the rest over 15 years, with seven years' grace. The ADB announced that the arrears owed to it had been cleared with the help of Japan, and thereby resumed the assistance to Myanmar by offering a US$512 million loan for social and economic projects. Myanmar's arrears to the World Bank had also paid, again with the help of Japan, and the World Bank responded with a US$ 440 million credit.

[5] This section is mainly drawn from Kudo and Kumagai (2013).

[6] FAO defines "agricultural population" as "all persons depending for their livelihood on agriculture, hunting, fishing and forestry. It comprises all persons economically active in agriculture as well as their non-working dependents." (FAO Stat)

[7] This section is mainly drawn from Kudo and Kumagai (2012).

[8] For details, see Kudo and Kumagai (2012).

[9] Although Vietnam has a larger population than Myanmar, both of them are mid-sized countries in mainland Southeast Asia.

[10] For details of the simulation model, see Kumagai, *et al*. (2012b).

[11] The Paris Club agreed to cancel half of the arrears Myanmar owed them in two stages, rescheduling the rest over 15 years, with seven years' grace. As Myanmar's arrears owed to the World Bank and ADB were cleared with the support of Japan, they resumed the assistance to Myanmar by offering US$ 440 million credit and a US$512 million loan respectively.

[12] On 23 July 2012, President Thein Sein and Thai Prime Minister Yingluck Shinawatra signed a memorandum of understanding (MoU) on the cooperation for the Dawei development project, which had been implemented based on an MoU between Myanmar Port Authority and a Thai private developer, Italian-Thai Development, Plc. MIEC is an extended version of the Southern Economic Corridor under the Greater Mekong Subregion program lead by the ADB. For details on MIEC and the Dawei development project, see ERIA (2010) and Kimura, *et al.* (2011), for example. MIEC is also recognized as one of the key projects in the Master Plan on ASEAN Connectivity (ASEAN, 2010a).

[13] For more on the views from India, refer Pulipaka (2013), Kimura, *et al.* (2011), for example.

[14] See Kudo (2012), for the history and the current status of the bilateral relationship between China and Myanmar.

[15] The development of domestic economic corridors will be discussed later in this section.

[16] Four corridors are surveyed by Myanmar Marketing and Research Development (MMRD) as part of exercise of Myanmar Comprehensive Development Vision (MCDV), which is being jointly conducted by Myanmar Ministry of National Planning and Economic Development (NPED) and Economic Research Institute for ASEAN and East Asia (ERIA) in 2012 and 2013.

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