

## CHAPTER 4

# **Industrial Readjustment in Myanmar: Agro-industrial Preparedness for Integration with the AEC**

San Thein

**This chapter should be cited as:**

THEIN, San 2012. “Industrial Readjustment in Myanmar: Agro-industrial Preparedness for Integration with the AEC” in *Industrial Readjustment in the Mekong River Basin Countries: Toward the AEC*, edited by Yasushi Ueki and Teerana Bhongmakapat, BRC Research Report No.7, Bangkok Research Center, IDE-JETRO, Bangkok, Thailand.

# **CHAPTER 4**

## **INDUSTRIAL READJUSTMENT IN MYANMAR:**

### **AGRO-INDUSTRIAL PREPAREDNESS FOR**

### **INTEGRATION WITH THE AEC**

*San Thein*

#### **INTRODUCTION**

Myanmar was under the centrally-planned economy since 1962 and was once again subjected to the command economy with a partially liberalized trade policy regime since 1988-1989 until the end of the military rule in March, 2011. Thus, the assessment of the use of comparative domestic resources and production had neither been done frequently nor debated. Myanmar joined the Association of South-East Asia Nations (ASEAN) in July 1997 and signed an agreement on economic integration with ASEAN member countries for cooperation in trade, investment and industry. This step has encouraged the country to open its door to trade and has led to it catching up with the development process as a late-coming member of the Cambodia, Lao PDR, Myanmar, and Vietnam (CLMV) countries. One of the major steps that ASEAN had taken is the establishment of the ASEAN Free Trade Area (AFTA) which Myanmar has joined. In 2002, ASEAN Leaders declared that the ASEAN Economic Community (AEC) with free flow of goods, services, investment, capital and skilled labour shall be the goal of

regional economic integration by the year 2020. The expected advantages for Myanmar in joining AFTA-AEC are greater investment links within the region, secure access to larger ASEAN markets, and increased attractiveness to Foreign Direct Investment (FDI). In fact, Myanmar does “not” merely require “Cooperation and Integration” but more precisely, “Interdependence and Competition.”

Myanmar pursued the inward-looking, import-substitution industrialising strategy for nearly 50 years and the current status is that of a less developed country. There are likely to be more challenges than opportunities for Myanmar to meet the criteria of AFTA if they are not thoroughly prepared. Possible options are to participate in the regional production network, to expand and upgrade its production capacity and distribution networks, and to maximize benefits and minimize losses in transit trade. Much work and urgent measures are needed in order to prepare for its integration with AEC. The objectives of the paper are therefore (i) to briefly present the economic performances, investment climate, industrial structure and performance, constraints and barriers, (ii) to identify the potential industry and its prospects, and (iii) to highlight the current reform measures in the country by the government and its civil society, and finally (iv) to suggest remedial measures for industrial readjustment and preparedness to be fully integrated with AEC.

## **1. ASSESSMENT OF THE CURRENT SITUATION**

### **1.1. Resource Base**

Myanmar covers a total area of 676,600 km<sup>2</sup> with a population of 57.5 million as of 2007-2008. The total cultivable land area is 17.83 million hectare (ha) of which 33%

has not been brought into commercial use yet. The total forest cover extends to about 32.2 million ha. Net irrigated area has reached 2.28 million ha in 2008, representing about 17% of the total cultivated area. The coastal lines of the country stretch to 2,276 km, surrounded by the continental shelf of 228,000 km<sup>2</sup> and an exclusive economic zone of 486,000 km<sup>2</sup> while inland water resources constitute a surface water potential of 1082 km<sup>3</sup> and ground water potential of 495 km<sup>3</sup> per year, and inland fresh water bodies covers 8.1 million ha, of which 1.3 million ha are permanent water bodies, according to the official reports. Among the diverse energy resources, there is a 12.2 trillion cubic feet reserve of natural gas in the existing off-shore gas fields producing about 1.2 billion cu.ft. of gas per day. Myanmar's power system is predominantly hydropower-based.

## **1.2. Resource Curses**

Since the times of the Myanmar Kings till date, it has often been claimed that the country is blessed with natural resources. Although there has never been a problem of food or poverty in the country, no significant improvement has been achieved in the industrial sector yet. The country with abundant natural resources is still registered as the least developed country by international organizations. The former World Bank Chief, Economist Dr. Joseph Stiglitz, Noble Laureate, during his short visit to Myanmar,<sup>1</sup> suggested avoiding the possible risk of the occurrence of the Dutch disease in the country. Larkin (2011), a free-lance consultant in Myanmar has pointed out that the resource rents could foster a “get-quick-rich” mentality amongst the business people and authority officials. It may hinder them from trying to be competitive in the

---

<sup>1</sup> Joseph E. Stiglitz, December 2009. Towards a More Productive Agrarian Economy in Myanmar. Presentation at Naypyitaw, December, 2009.

industrial business. The fact that a relatively large portion of land resources are still unexploited in the country indicates a prolong persistence of low level commercial development in the country while other developed countries have already used up all their natural land and water resources in the development process. It is important that the country should be very careful in pursuing the development path by wisely using their own resources or let other investors use it in a sustainable manner keeping environmental conservation in mind.

### **1.3. Economic Performance**

#### **1.3.1. National GDP**

In an earlier assessment, the official growth rate of GDP was 2.8% which was identical with the revised figures of International Monetary Fund (IMF) in 1990 but the official data tended to overestimate the domestic economic performances in the later years from 2000 to 2009. The growth rates were registered to be 10.1 to 13.7 in various years but they appeared to be inconsistent with other supportive macroeconomic variables in the country. Upon examining the IMF estimate, the growth rate was shown to be 6.2% in 2000 and 4.9% in 2009. The adjusted GDP growth of Myanmar (Table 1) could be compared with that of Vietnam, Laos PDR and Cambodia showing respective rates of 5.3, 7.6 and -2.0 in percentages<sup>2</sup> in 2009. Another indicator to measure the performance of an economy is per capita GDP in terms of purchasing power parity (PPP) of common currency in US dollar. It was USD 1,199 in 1998 followed by yearly fluctuation and reached USD 1,596 in 2010 according to the UNDP Human

---

<sup>2</sup> Key Indicators for Asia and Pacific 2010 for the countries other than Myanmar.

Development Reports (HDR) and World Development Indicator Database. By comparison, per capita GDP of Cambodia, Laos PDR and Vietnam were USD 2,321, 1,868, and 2,995 respectively (Table 1).

**Table 1. Some Indicators of Myanmar Economic Performance**

Growth of GDP %	1990	2000	2005	2008
CSO Statement	2.8	13.7	13.6	10.1
Revised by IMF	2.8	6.2	4.5	4.9

GDP per Capita-Yearly	1998	2006	2008	2009	2010
USD (PPP)	1199	881*	1083	1200	1596

GDP per Capita, FY 2010	Cambodia	Lao PDR	Myanmar	Vietnam
USD (PPP)*	1868	2321	1596	2995

Structure of Myanmar Economy, Year wise	1991	2000	2007	2009
Agriculture	47** (57)**	42.8 (57)	41.8 (43.7)	34.9
Industry	13.4 (11)	17.7 (10)	21.2 (19.8)	22.6
Service	39.6 (32)	39.5 (33)	37.0 (36.5)	37.5

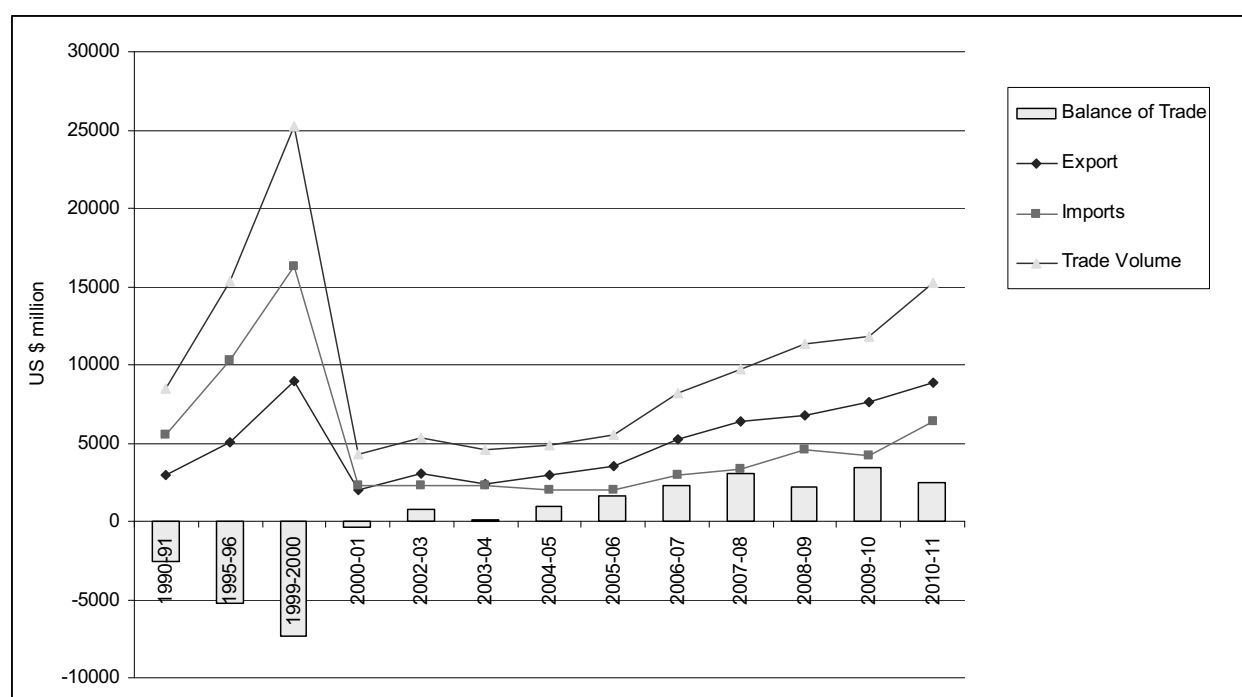
*Source:* \*Human Development Report UNDP, World Development Indicator database, World Bank, ADB Outlook. \*\*Non-bracketed figures are given by CSO/MNPED and bracketed figures are World Development Indicator Database.

### 1.3.2. Structure of Myanmar economy

Structure of Myanmar (percent share of GDP in agriculture, industry and service) was compiled in Table 1 in order to assess the development level of the country. The trend of the structural change is indicative of the process of industrialization. In 1991, 47% of the GDP came from the agriculture sector while the industrial GDP was 13.4%. Thereafter the percent share of GDP in the industrial sector steadily increased while the GDP share in the agriculture sector slowly decreased. In 2009, the industrial share of GDP was 22.6% while that in the agriculture sector was 39.9%. During the period from

1989 to 2008, the industrial sector has grown at the rate of 22% per annum. Myanmar agriculture sector still represents the largest percent share of GDP at 44% as compared to other CLMV countries following Lao PDR (32.2%) and Cambodia (32.5%) and Vietnam (22.2%).<sup>3</sup>

**Figure 1. Export, Import and Trade Balance of Myanmar (USD million)**



Year	Export	Imports	Trade Volume	Balance of Trade
99-2000	8947.3	16264.8	25212.1	-7317.5
2000-01	1960.0	2319.0	4279.0	-359.0
2008-09	6778.9	4543.5	11322.3	2235.4
2009-10	7586.9	4181.4	11768.3	3405.5
2010-11	8861.1	6412.7	15273.8	2448.4

Source: Ministry of National Planning and Economic Development (MNPED), 2011.

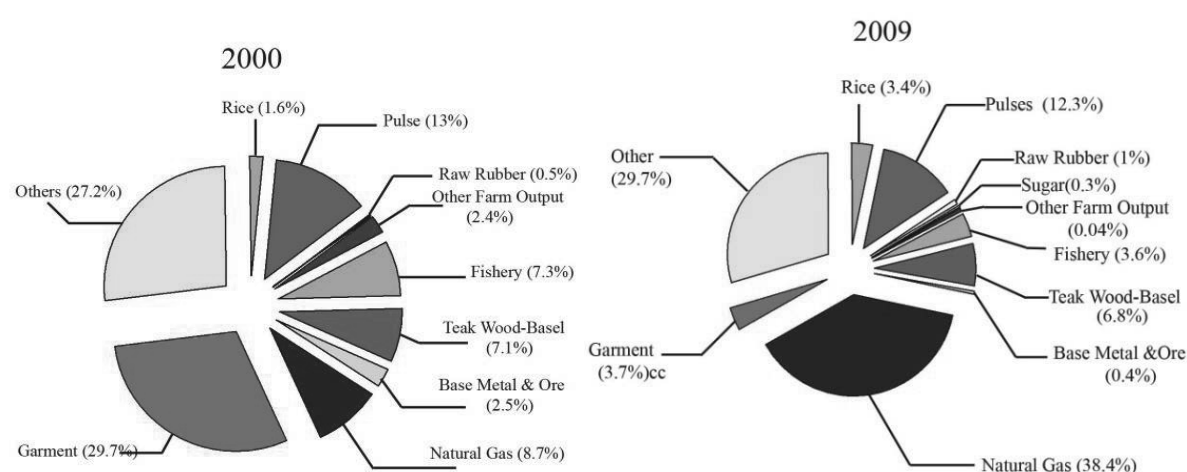
### 1.3.3. Trade balance

Myanmar trade policy adopted the “Export First Policy in 1997. The export value was increased about three times over 20 years from 1990 to 2010. The positive balance was achieved after 2000 (Figure 1). The main export commodities are natural

<sup>3</sup> Key Indicators for Asia and Pacific 2010 for the countries other than Myanmar.

resources-based primary products such as agricultural and fishery products, natural gas, teak and hard wood, precious stones, and garments. Myanmar's main imported commodities are final goods such as machinery, transport vehicles, base metals, electrical appliances, pharmaceutical products, paper and rubber manufactured products, diesel oil, fabrics for garment industry, etc. Percent shares of principal export commodities are shown in Figure 2. Natural gas export increased steeply from 8.7 % in 2000 to 38.4% in 2009. The reverse was true for garment export due to the US Sanction against the country. Export of pulses constituted a large share of the export being about 13%. Fishery product export showed a decline in 2009. There hasn't been a noticeable increase in rice exports yet. Raw rubber (smoke sheet) constituted a small share (1%) of the total export value. Total export value is amounted to USD 8,861 million in 2010-2011 which is so far the highest amount achieved since 1999-2000.

**Figure 2. Percent Share of Principal Commodities in Export (Changing from FY2000 to FY 2009)**



Source: Ministry of National Planning and Economic Development (MNPED), 2011.

Total import value in 2010-2011 was USD 6,412.7 million, about 28% less than the export earnings. The major import items were construction machinery and



equipments related to natural gas exploration and transport equipments and machineries for construction representing about 35% of the total import. Import of diesel oil constituted about 16% of the total import in 2009 as indicated by the monthly bulletins of the Central Statistical Organization (CSO).<sup>4</sup> Apart from the import of capital goods and diesel oil, only 0.1% of the dairy products, bakery and confectionery items were imported. However, display of several assorted, imported food items in every large shopping centre in cities and towns as well as their huge flow to remote rural villages indicate that such food items in beautiful packing have been flooding the markets of Myanmar through informal channels through the Myanmar-Chinese and Myanmar-Thailand borders. Import of fabric and essential garment-based items had declined related with the decline of garment export.

**Table 2. Trade Openness**

Financial Year	Exports (Ks mn)	Imports (Ks mn)	Trade bal. (Ks mn)	Trade vol. (Ks mn)	GDP (Ks mn)	Adj. GDP (Ks mn)	Trade open (% of GDP)
2004/05	2,678,793.1	1,819,068.6	859,724.5	4,497,861.7	9,079,000	9,938,725	45.3
2005/06	3,983,809.3	2,221,597.8	1,762,212.0	6,205,407.6	12,287,000	14,049,212	44.2
2006/07	6,805,438.7	3,815,705.2	2,989,733.5	10,621,143.9	16,853,000	19,842,734	53.5
2007/08	8,144,891.0	4,250,182.0	3,984,709.0	12,395,073.0	22,684,000	26,578,709	46.6

*Source:* The CSO Statistical Year Book data is expressed in kyats in official exchange rate which is readjusted by Larkin and U San Thein (2010).

Table 2 shows the ratios of the total trade volume to Adjusted GDP in different years as computed by S.P. Larkin and U San Thein (2010). Total trade value was accounted for about 45% of the GDP and it could be said that Myanmar has attempted to step out of inward-looking economies and adopts outward-looking strategies. According to the Direction of Trade Statistics, Myanmar export was directed towards

<sup>4</sup> Selected Monthly Economic Indicators, Central Statistical Organization. Various issues.

Thailand, India and China as its highest trade partners among the top ten countries of export destination in 2007 while Myanmar imported commodities mostly from China, Thailand, and Singapore as the first three among the top ten trade partners in 2007. Moreover, intra-ASEAN trade represented only 15.5% of the total export value in 1998 and it jumped to 50% in 2007. In case of imports, on the other hand, intra-ASEAN import to Myanmar remained almost the same at an average of about 43% of all imported values of all countries in both 1998 and 2007.

#### 1.3.4. Inflation

Stability of commodity prices could be seen by examining the changes in consumer price indices (CPI) and it is reported to have increased from 3.7 in 2003 to 32.9 in 2007-2008 with 1997 as the base year.<sup>5</sup> Kubo (2011) reported that the average annual inflation rate and the average annual growth rate of currency in circulation for the last two decades are close to each other, 28.4% and 23.4% respectively. This indicates that the excess supply of money is one reason for inflation. Kyaw Min Tun and Khin Tun (2011) also noted that about 80% of the commodity basket used for CPI calculation is food stuffs and consequently inflation is most likely to represent food prices changes. Further investigations are being conducted by the Union of Myanmar Federation of Chamber of Commerce and Industries (UMFCCI) for the effects of transaction costs on the high food prices in the country. It is obvious that several key players and exporters down to village brokers and collectors are involved in the long distorted supply chains in the whole economy.

---

<sup>5</sup> CSO, Statistical Yearbook 2009.

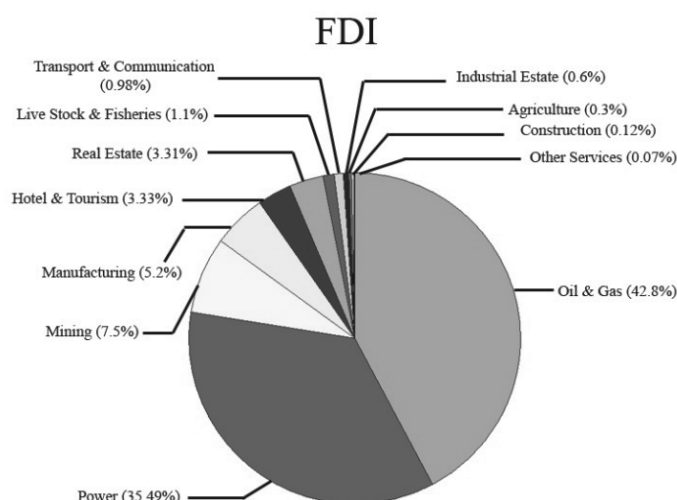
#### **1.4. Investment and its Climate**

As has been commonly said, investment is an important driving force of economic development. In 1988, the State Law and Order Restoration Council (SLORC) government had promulgated the Myanmar Foreign Investment law for promoting foreign direct investment (FDI). Despite several shortcomings in the law, foreign investors chose the extractive industries such as natural gas exploration and production which generated huge profits for them. Other sectors such as agriculture and manufacture sectors received little FDI. Figure 3 presents the sector wise FDI value. The parallel Figure illustrates the sector wise investment by Myanmar citizens. As of October 2011, the cumulative total of FDI values of the permitted enterprises amounted to USD 31,957.324 million while the cumulative amount of Myanmar citizens' investments has amounted to Ks 1,050,110.890 million. The oil and gas and power sector accounts for over 75% of total FDI value while mining and manufacturing sectors account for only 7.5% and 5.2% respectively.

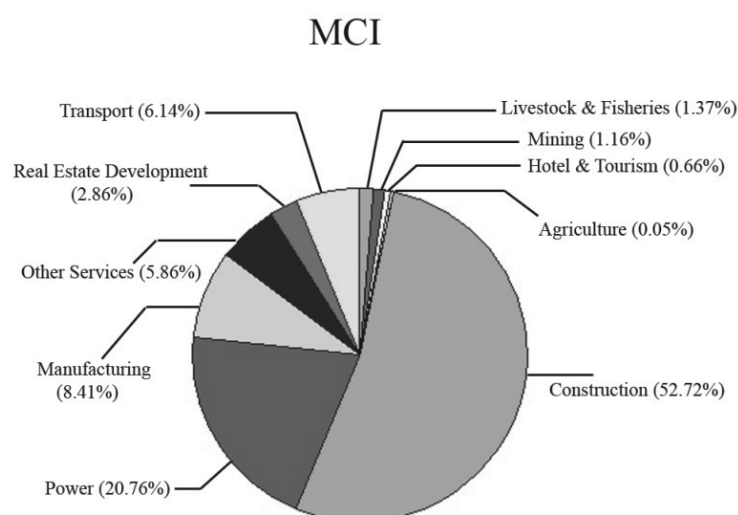
When compared to the FDI values in other ASEAN nations, foreign investment in Myanmar is not very high. ASEAN Statistical Yearbook of 2008 indicates that Vietnam received a 7.2% share while the Myanmar FDI value constituted only 1.1% of the ASEAN total. Of all the FDIs, the investment is only in extractive industries such as natural gas drilling and mining business. Apart from seeking opportunities in power sector, streamlining FDI flow into the manufacturing sector will require a favourable investment climate in Myanmar. The government applied the multiple exchange rate system in which the official exchange rate is fixed at Ks 5.5 to one US dollar while the market rate is fluctuating around Ks 1,000 to one US dollar. The government's lack of unification of exchange rate system is one of the major constraints in attracting FDI.

Moe Kyaw from Myanmar Marketing Research Department (MMRD) had evaluated the investment climate under economic integration in Myanmar in 2009 and the results are shown in Figure 4. He observed that the overall investment climate was fair. About 30% of respondents expressed insufficient electricity as an obstacle in setting up a business in Myanmar. Macro economy with inflation and use of multiple exchange rate system had received a 3.09 score or fair condition in investment climate. A low score (2.89) for the foreign market indicated a low level integration with the regional or global markets. Moe Kyaw had surveyed 60 manufacturing firms and found that 30% of the firms have foreign expatriates and Chinese expatriates hold most of the shares (35%) followed by Malaysian expatriates (20%). Myanmar trade sharing with ASEAN countries contributed 34% in 1998 and increased to 51.6% in 2010. In the FDI flow, investment by ASEAN countries accounted for 30.4% in 1998 and it slightly increased to 35.6% in 2010 according to the official sources of foreign investment.

**Figure 3. Foreign and Myanmar Citizens Investment (FDI and MCI) of Permitted Enterprise by Sector (Cumulative up to 31-10-2010)**



Total: USD 31,957 million



Total: Kyats 1,050,110.89 (Approximately USD 1,050 million)

Source: Directorate of Investment and Company Administration

### 1.5. Government's Efficiency

With respect to the government efficiency, the official database was used for computation to determine the extent of government revenue as a percent of the GDP. It was found that the government revenue was 19.4% of the GDP and the expenditure was 24.3% in 2001. The government expenditure data was released through the

Statistical Yearbook only up to the year 2001. Assessment could not have been made for later periods.

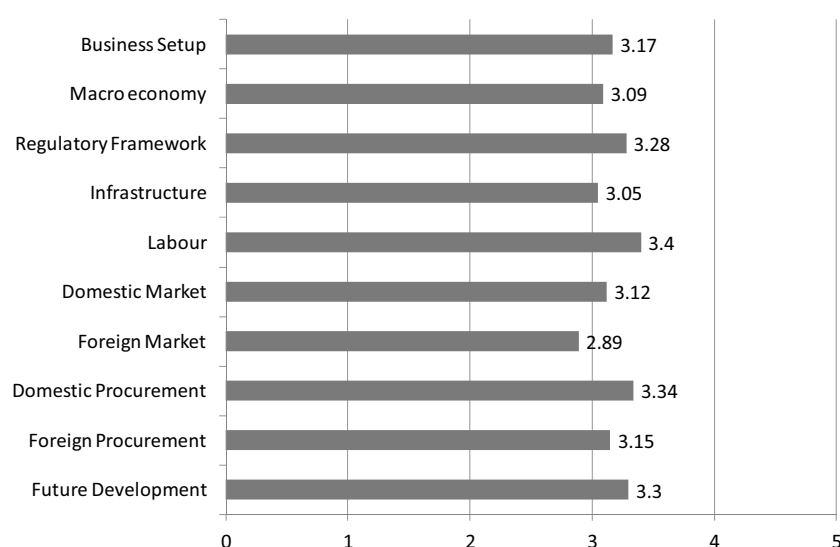
Government tax collection has been examined in terms of the GDP. Statements by both CSO and ADB sources had shown that government taxes and duties collected as percent of the GDP was 4.7% in 2005 from which the values in the other years did not differ much. It is a very low ratio of tax to GDP. By comparison, the ratios of tax to GDP in Cambodia, Lao PDR and Vietnam are 11.5, 12.5 and 21.8 respectively all of which are about two to four times greater than that of Myanmar (Table 3).

**Table 3. Government Tax and Duties as Percent of GDP**

Country	1990	1995	2000	2005
Myanmar, CSO source	6.2	3.74	3.0	4.7
Myanmar, ADB source	9.59	6.55	4.22	4.70
Cambodia	3.9	7.6	10.0	11.50
Lao PDR	9.9	11.4	12.4	12.5
Vietnam	14.7	23.3	20.5	21.8

*Source:* Anonymous. 2008. Study on tax policy improvement measures, Department of Internal Revenue. Ministry of Finance and Revenue, GOM (inclusive of citation for CLV countries).

**Figure 4. Evaluation Results of Overall Investment Climate in Myanmar (2009)**



*Note:* 1=Very Poor, 2=Poor, 3=Fair, 4=Good, 5=Excellent.

*Source:* Moe Kyaw (2009).

## 1.6. Performance of the Industry

### 1.6.1. Internal structure of the industry sector

This section will provide the internal structure of the manufacturing and processing sectors in terms of size, ownership, investment, and production value and the prevailing strategies and practices of the government. More attention will be paid to the agro-based industries including small and medium enterprises (SMEs) in terms of their strengths and weakness. Table 4 presents the number of factories and enterprises with respect to ownership, and size as measured by the number of workers employed.

There are about 800 factories under the state sector and over 100 thousand enterprises in the private sector but 35% of the factories are large scale with over 100 employees in the former sector while in the latter sector about 96% of the total are micro-businesses. Apart from the micro-business, large-scale private factories constitute about 9% of the total number of factories. There are less than 100 establishments under the cooperative sector

**Table 4. Manufacturing Factories and Establishments by Ownership and Number of Workers as of FY 2007 (Number of Factories and Percent)**

Number of Workers	State		Cooperative		Private		Total	
Micro (<10)	110	0.1%	13	0.0%	104748	99.9%	104871	96%
Small (10 - 15)	232	8.0%	60	2.0%	2595	90%	2887	3%
Medium (51- 100)	173	24%	14	2%	546	74%	733	1%
Large (>100)	281	47%	5	1.2%	318	53%	604	1%
Total	798	1.0%	92	0.0%	108207	99%	109095	100%

*Note:* Percent values in rows are comparative for state, coop and private. Percent values in Total column are comparative for size of factories.

*Source:* MNPED.

The government allowed the private sector to enter the industrial sector by means of promulgation of laws such as Foreign Investment Law in 1988, Private Industrial Enterprise Law in 1990, Cottage Industry Law in 1991, Myanmar Citizen Investment Law in 1994, reestablishment of Myanmar Chamber of Commerce and Industry in 1991, announcement of the formation of Privatisation Committees in 1995, etc. At the same time, the respective government ministries established large scale factories. The number of public industrial establishments did not decrease throughout the transitional period towards the claimed market economy but instead industrial expansion reached a peak in 2002-2003 (Figure 5). The timing of this surge in construction suggests that the government launched a massive state-owned factories program in 2000 and 2001. This policy change may accord with the government's drive toward self-sufficiency (Kudo 2005).

The increased number of state-owned factories could be attributable to the increased number of joint ventures with foreign companies. When the foreign companies sought opportunities for joint investment, they preferred to work with government agencies for assurance and better access to the business resources during and after the 1990s. According to the reported figures of CSO Statistical Yearbook, about 60% of the JV enterprises were established under the umbrella of the relevant government ministry. Among all the public enterprises, food and beverage factories make up 20% of the JVs followed by enterprises for construction materials. The boom in construction works had started in the early 1990s and ended in 1997 but is resurfacing with the newly established capital city, Nawpyitaw. The number of establishments for transport vehicles suddenly dropped in 2008-2009. The major players, viz; Union of Myanmar Economic Holdings Ltd. (UMEHL) and Myanmar



Economic Corporation (MEC) which are military-owned businesses had spread out all their enterprises and factories across the country but consolidated statistics of this are not available in the official reports. It is apparent that their share is large especially in large scale businesses.

#### 1.6.2. The years of state dominance in the industry

The Ministry of Industry (1) was so ambitious in state-owned industrial development efforts that the development process was planned by strengthening and expansion of the State-owned enterprises (SEEs). As of 1999, there were a total of 138 factories inclusive of all main and branch factories under six manufacturing Corporations of the Ministry of Industry (1). According to the Ministry's industrial development plan,<sup>6</sup> the plan for the capacity expansion and strengthening of the factories had been formulated and proposed to the higher authorities of the State Peace and Development Council (SPDC, name changed from SLORC) government. The plan consisted of (i) upgrade, expansion, renovation and replacement of the SEEs factories, (ii) development of new industrial projects under SEEs, and (iii) privatization of the old and worn-out factories. The SEEs strengthening plan covered the budgetary requirement of USD 10,000.7 million and kyat 36,567.6 million over the period from 1999 to 2006. The State's guidelines are primarily directed to the import substitution and area development by producing consumer goods to meet the domestic demand. As planned, some of the projects have been implemented. Several factories continued to run with low efficiencies and huge financial losses. At the time of handing over the state rule from the old military government to the new parliamentary government, numerous problems

---

<sup>6</sup> Industrial Development Plan of Ministry of Industry (1), Directorate of Industry, September 1999.

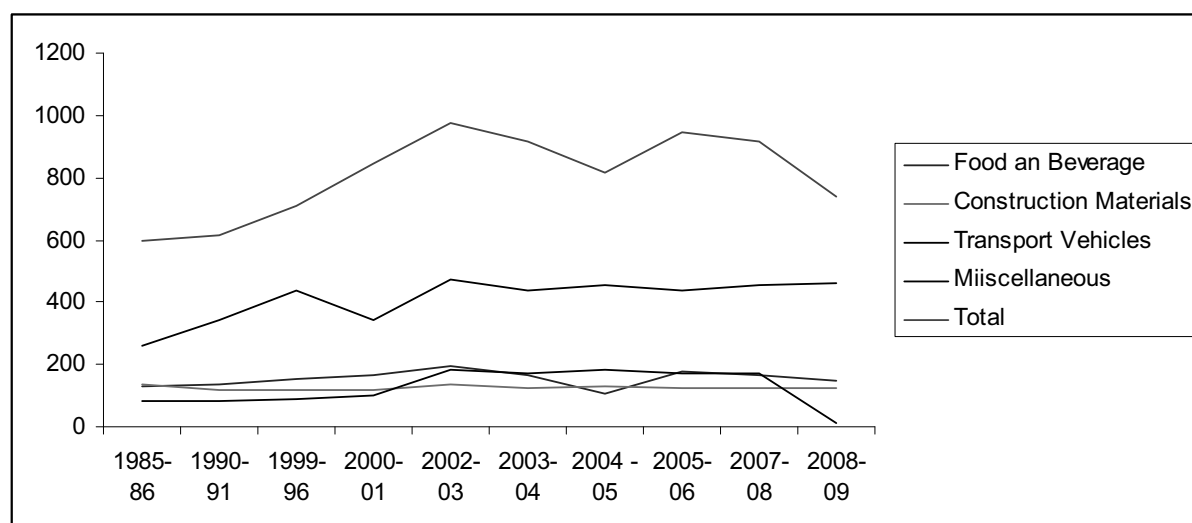
of budgetary deficits had been solved by following complicated tasks of accounting and audit works. Majority of the factories are sold out and leased to private entrepreneurs after the takeover by the new parliamentary government.

### 1.6.3. The role of private industrial enterprises

The responses of private entrepreneurs' to reform measures are remarkable. There were only 27 registered industrial enterprises in 1990-1991 but the number increased by 883 times in 1991-1992. The numbers of factories and enterprises steadily increased to 43,435 in 2004-2005. The number jumped to 101,924 in 2006-2007. This is because of the inclusion of the factories registered not only in the Ministry of Industry (1) but also those registered in the Department of Cottage Industry and Department of General Administration. The total number was then 110,198 in 2008-2009 (Figure 6).

The breakdown of the private factories into food processing enterprises of different sizes could be seen in the factories registered at the Ministry of Industry (1). It is shown in Figure 7 that food processing industry makes up a larger share (over 60%) of all establishments.

**Figure 5. Graphical and Tabular Presentation of Public Industrial Enterprises  
(Yearly Increase in Number by Type of Industries)**



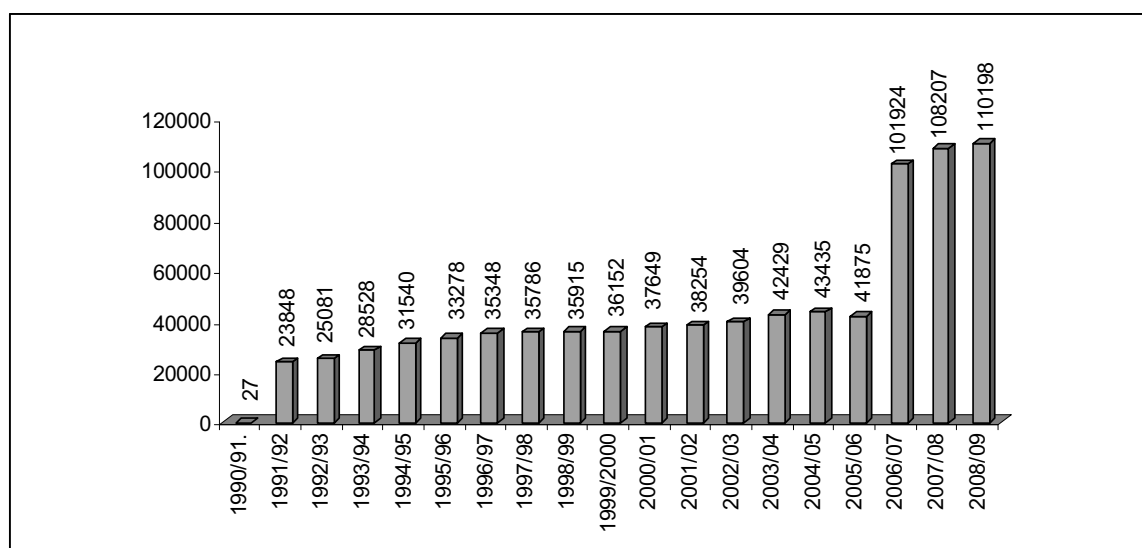
Classification	1990-91	2000-01	2002-03	2004-05	2005-06	2008-09
Food and Beverage	134	164	193	106	176	145
Construction Materials	119	118	136	128	122	122
Transport Vehicles	84	103	181	181	173	14
Miscellaneous	344	343	475	457	438	459
Total	616	848	978	818	947	740

Source: CSO, Statistical Yearbook 2009.

#### 1.6.4. Industrial promotion organization

The Government formed the Central Industrial Development Committee in 2004 and the Committee was chaired by the Vice Senior General of the SPDC and constituted 14 Ministers as members to help formulate the industrial policies.

**Figure 6. Number of Registered Private Industrial Enterprises**

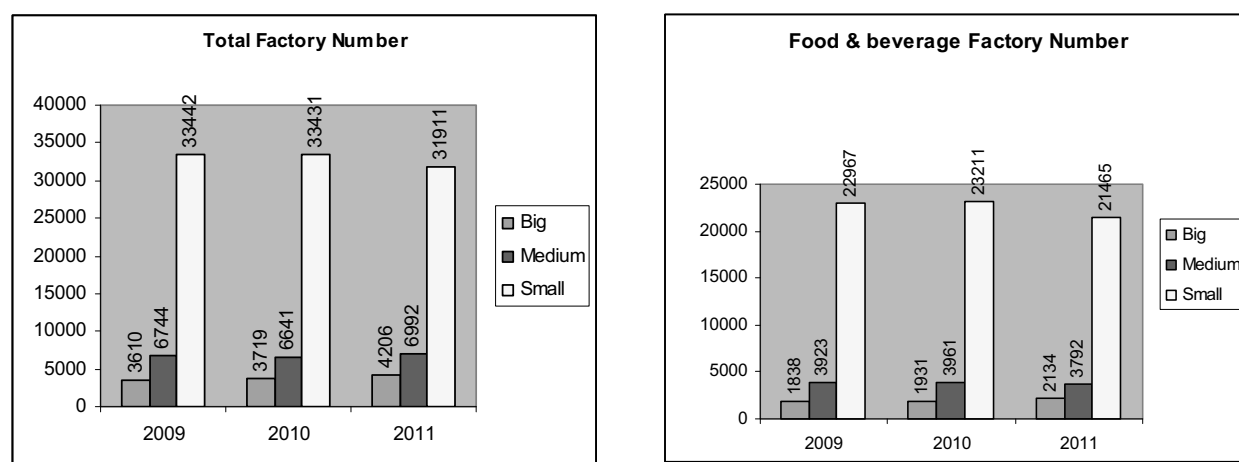


*Note:* The numbers of enterprises for the period 1990/91-2005/06 are those registered with the Ministry of Industry (1) only. After 2005/06 the figures include the number of enterprises registered with the Ministry of Industry (1) as well as with the Department of General Administration and Department of Cottage Industries

*Source:* Ministry of Industry (1), MNPED.

Under it, Myanmar Industrial Development Committee (MIDC) was formed and it was chaired by the Minister of Industry (1) and the Ministers and Dy. Ministers are involved in coordinating the industrial development. Myanmar Industrial Development Working Committee (MIDWC) was chaired by the Minister of Industry (2) to implement the policy for the development of industrial zones including small and medium industries. The objectives of MIDC were to develop agro-based industries, to enhance industrial development quantitatively and qualitatively, and to create suitable conditions for industrial development among others. The civil societies such as UMFCCI and Myanmar Industrial Association (MIA) were also playing a lead role in the private sector development including SMEs by providing various services such as certificate of origins, consultancy, information on trade, economic and industries by means of bulletins, newsletters, workshops and seminars and other promotional activities.

**Figure 7. Number of Factories Registered at DISI (Categories by Size of Business and Split into Food and Beverages Factories)**



Private Industrial investment/output	2009	2010	2011
Total investment of all factories, kyats million	3233095	4333787	4531942
Production value of all factories, kyats million	4866391	4831560	4698160

Source: Ministry of Industry (1), Directorate of Industrial Supervision and Inspection.

#### 1.6.5. Current status of SMEs

Majority of SMEs are located in the residential areas of Yangon and Mandalay. In 1990, the government planned to relocate the SMEs to newly established industrial zones. Industrial zones were started from the adjacent areas of Yangon and these were further extended to other cities and major towns. Mingaldon Industrial Park and Thinlyin-Kyaukttan Industrials zones are developed through a joint venture between the government and foreign partners and these zones are reserved for foreign investments in export processing industries. As of 2006, there are 18 industrial zones with a total of 9,915 industrial enterprises and 150,000 employees in these zones. Industrial zones were made up of 57.5% of small enterprises, 25.2% medium enterprises, and 17.3% large enterprises. This indicates that industrialization strategies should take into account the major role of SMEs and the development scheme for their

growth. Over 60% of the local manufacturing firms are in the food and beverage production lines that heavily rely on agricultural products (Aung Kyaw 2008). Study on the sugar SMEs in Upper Myanmar industrial zones indicated constraints such as shortage of electricity and low competitiveness (San Thein *et al.* 2010).

The financial support of the government to the SMEs was provided by the government financial institutions such as Myanmar Economic Bank and Myanmar Investment and Commercial Bank and the private bank namely Myanmar Industrial Development Bank. About kyat 1144 billion of the SME loans were disbursed at the interest rate of 16% per annum during the period from 2005 to 2010 (Aye Aye Win 2010). Aung Kyaw (2008) conducted the survey on the state of financing of SMEs in 2007 and about 42% to 53% of the SMEs in the industrial zones could access bank loans. Majority used their own money for business start up and expansion. ASEAN countries have been actively promoting SMEs in various financing channels such as term loan, trade financing, revolving loans, factoring, and leasing. Myanmar disbursed the term loans only. Credit guarantee scheme is also a widely adopted mechanism for the viable SMEs without adequate collateral to facilitate access to financing.

### **1.7. Agro-based Industries**

Upon examining the industrial structure with respect to the required degree of processing, Myanmar agro-based industry includes (i) rice milling, pulse grading, edible oil seeds crushing and animal feed mixing under manual-mechanical stage, (ii) sugar and textile under mechanical-chemical extraction stage, and (iii) instant foods, rubber tire, and technically specified rubber sheets under chemical alternation in the value-added process. Rice and pulses are considered as primary commodities and since

these commodities deserve special agricultural topics, it will be left out in this paper. Frozen foods (fruits and vegetables) would be examined under the stage of post harvest handling and preservation technology stage.

**Table 5. Sugar Production by Various Business Organisations, as of 2009-2010**

No	Business Organizations	Size & number		2008-2009		2009-2010	
		TCD	Number	Sugar output, mt	% of total	Sugar output, mt	% of total
1.	MOAI	300-1500 TCD, 2000 TCD	1- 3 1	28869	(10.3)	21673	(9.8)
2.	MEC	2800 TCD 1500 TCD	1 4	56446	(20.2)	13885	(6.3)
3.	UMEHL	2000 TCD	2	17071	(6.1)	13558	(6.2)
4.	MI(1)	1500 TCD	2	2150	(0.7)	1437	(0.7)
5.	private						
	(i) SMEs	Vacuum pan	110	144285	(51.6)	127947	(58.3)
	(ii) Companies						
	(a) Great Wall	1000 -2000 TCD	2	14500	(5.)	25650	(11.7)
	(b) NgweYe Pale	1500 TCD	1	16000	(5.73)	12548	(5.7)
	(c) Shwe Nyaung	300 TCD	1			2573	(1.2)
	<b>Total</b>			<b>279321</b>	<b>100</b>	<b>219271</b>	<b>100</b>

*Notes:* MOAI: Myanmar Sugarcane Enterprise, Ministry of Agriculture and Irrigation.

MEC: Myanmar Economic Cooperation, Military-owned commercial entity.

UMEHL: The Union of Myanmar Economic Holding Ltd., Military-related commercial entity.

MI(1): Ministry of Industry (1). TCD = Tons cane crushing per day.

*Source:* Sugarcane Development Department, MOAI.

### 1.7.1. Sugar industry

Until 2010, the sugar industry was operated under different ownership and various capacities. Table 5 summarizes the sugar industry status in Myanmar.

As of 2011, sugar business was taken up by the SEEs, military-operated companies, private companies and SMEs. The production share is the highest in SMEs sector due to its high number of producers but the technology level is low. However they could produce better quality sugar than in the past. The domestic sugar selling price is higher than Thai sugar but lower than the Chinese price. The private GREAT

Wall company has installed the bio-ethanol distillation plant in the sugar factory and it could produce 37,500 gallons of 99.9% anhydrous ethanol per year. A similar process has been installed by one of the MEC-operated factories. Sugar supply and demand situation is in near equilibrium but the country lacks the facilities to produce high quality sugar. In times of high sugar price in the domestic market, sugar from Thailand usually comes into the Yangon market through informal channels. Sugar has been placed under the sensitive commodity list and the Myanmar sugar industry has some relief until 2015.

#### 1.7.2. Textile industry

It is the second largest agro-industrial establishment next to the food-stuffs industry. However, due to the declining number of traditional hand loom businesses, cotton-based textile industry accounts for not more than 6% of the total manufacturing sector based on the actual registered number at DISI in 2005. The data of the size, structure and production level of the whole textile industry has been compiled by San Thein (2006). Currently two more new spinning and weaving factories in the large scale sector have been added to the existing facilities of MI(1). Going by the number of establishments, the SMEs weaving looms account for a large share of the entire industry. They are largely medium-sized businesses with an annual investment of one to five million kyats, and a power usage of 25 to 50 HP. Their products fulfil the domestic need. The people of Myanmar typically use traditional cloths (longyi) and hence the role of SMEs is likely to be important in the near future. A large stock of clothing in the WinThu Za (Sale Department of MI-1) marketing channel indicates that products from the SEEs textile factories do not often meet domestic market need. For

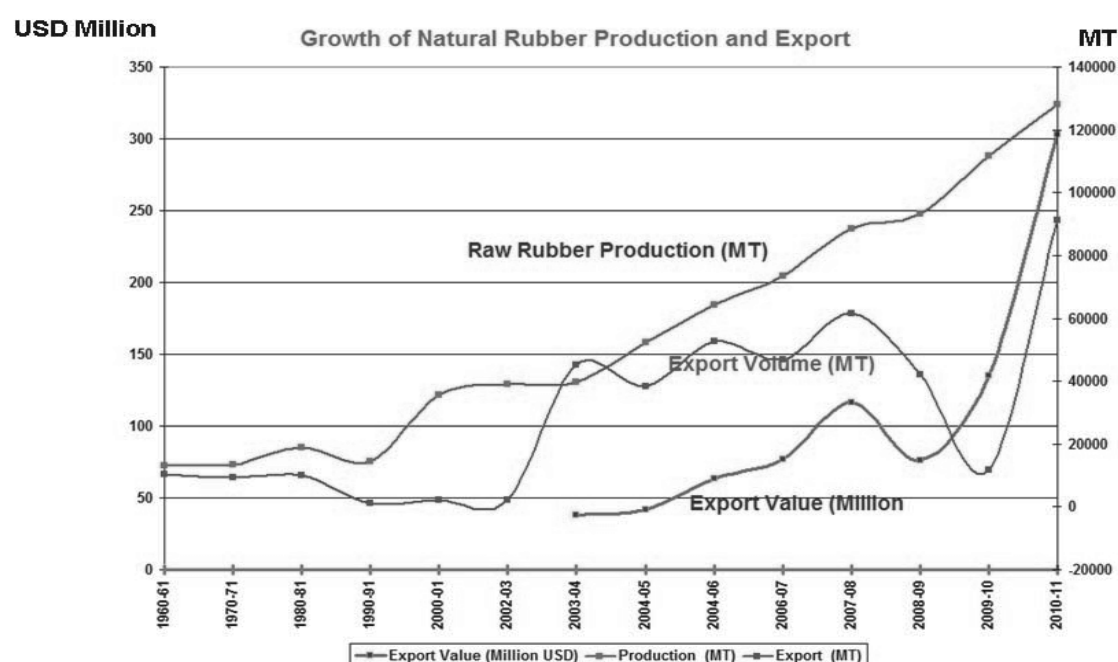


other high grade cotton fabrics, Myanmar is a net importer of textile.

### 1.7.3. Natural rubber industry

Natural rubber plantation could be freely grown under the open market economic system since 1988 but rubber products could not be exported freely until 2003-2004. Rubber exporters could export only after fulfilling the obligatory sale of 45% to the government at the latter's prescribed price in local currency and then they were allowed to export the balance 55% of the commodity at the price approved by the Ministry of Agriculture and Irrigation. It would have been considered to be justified if the revenue (in another form of implicit tax) collected would have been used properly in establishing the rubber plantation and rubber product industrial institutes or for the creation of a reserved fund for future rubber industrial development in the country. However, there was no significant benefit for the country except that the domestic rubber industry became stagnant. After the government withdrew the rubber export monopoly in 2004, rubber planting and production increased dramatically (Figure 8). Sudden drop in export in 2008-2009 was due to the global economic recession in 2008.

**Figure 8. Growth of Natural Rubber Production and Export**



Source: Myanmar Prennial Crops Enterprise (MPCE), Myanmar Industrial Crops Development Enterprise (MICDE).

In rubber plantations, small holders with less than 20 acres of planting constitute 90% of the total number of growers. The number of entrepreneurs working on the rubber estates larger than 100-500 acres and above 1000 acres accounts for only 1% (Figure 9). The industrial growth is closely related to the productivity of small growers. In 2009, the rubber planting area has reached 1.14 million acres and production was recorded to be 411,688 mt and about 90% of the processed natural rubber products is made up of rubber Ribbed Smoke Sheet (RSS). Majority of small holders produce un-smoked sheets which are supplied to the smoke house process to produce RSS. There are about 25 factories owned by private planters and companies that process RSS. After processing the rubber sheets are graded according to the international standards such as RSS1, RSS2, RSS3, RSS4, and RSS5. Most of the RSS produced are of low grades (RSS no. 4 and 5) comprising 90%. A small quantity of Technically

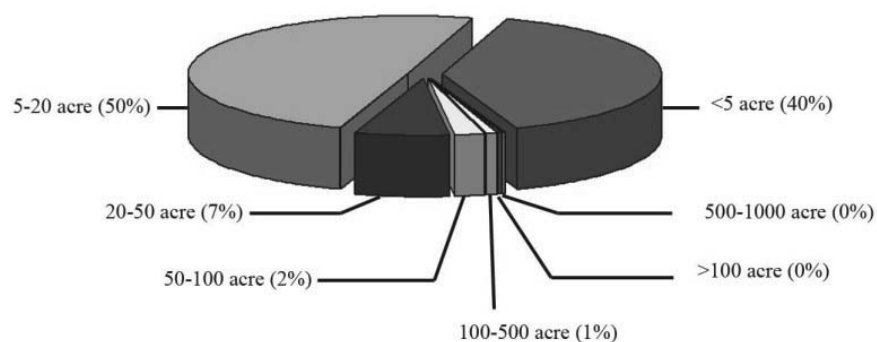
Specified Rubber (TSR) contributes to only 5% of the total processed rubber production. There are two state-run factories and two private factories that process TSR with the capacity of about 3 tons per hour. Machineries were imported from Malaysia. Rubber industry was run by both the state and private sectors. However, now the government has transferred rubber plantations and processing houses to the private sector in 2005.

Privatization scheme was first started in the rubber and cotton sub sector in the Ministry of Agriculture. The government had granted permission to the private entrepreneurs to cultivate fallow and waste lands in 1991 and by the government's notification, an individual or a company is entitled to have lease right up to 5,000 acres of land for a 30 year duration, which can be further extended.<sup>7</sup> Payment of land revenue is also exempted for 8 years in the case of rubber. Large areas of up to 50,000 acres can be cultivated for a big investor with the approval of the cabinet. At first, it was slow however the expansion of rubber plantations has increased after 1994 and reached a total of about 730,000 acres inclusive of the existing areas according to the official data of

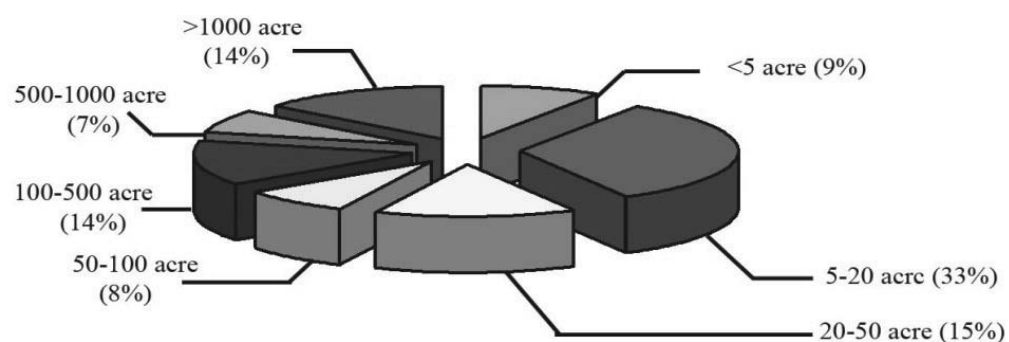
---

<sup>7</sup> Instruction for Duties and Rights of the Central Committee for the Management of Cultivable Land, Fallow Land and Waste Land, Union of Myanmar, SLORC Notification no. 44/91, November 1991.

**Figure 9a. Number of Rubber Planters as Percent of Total with Respect to Size of Plantation Holding**

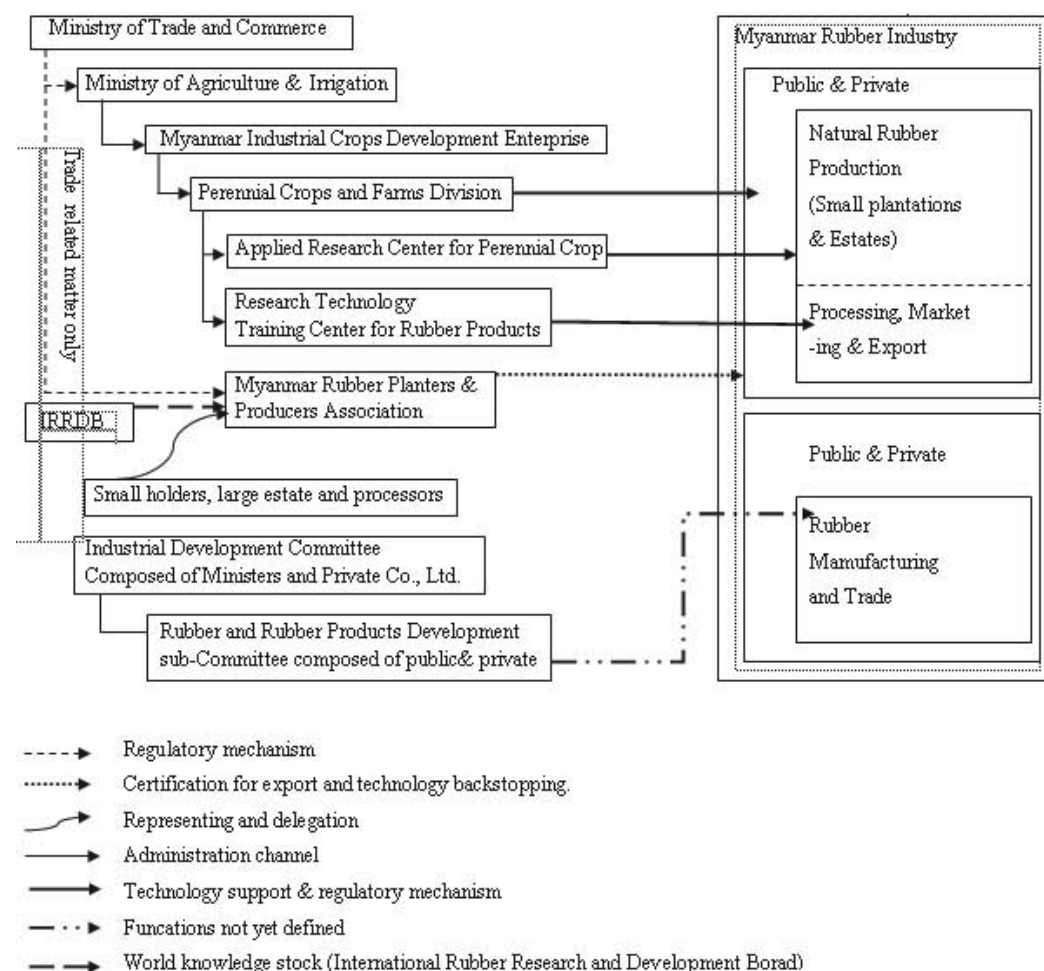


**Figure 9b. Rubber Planted Acre as Percent of Total Area with Respect to Holding Sizes**



Source: MPCE, MICDE.

**Figure 10. Myanmar Rubber Industry and its Business Links**



Source: Own illustration.

Myanmar Perennial Crops Enterprise (MPCE). Productivity was also increased from an average of 329 pounds per acre per year in 1990 to 531 lbs per acre per year in 2006-2007, although it still cannot be compared with the yield from Malaysia and Thailand. As of 2010, the total rubber planted area and production were about 1.246 million acres and 128,000 mt to which the private plantation contributed 97%. Applied Research Centre for Perennial Crops (ARCPC) and Research, Technology and Training Centre for Rubber Products had been opened under MPCE to undertake applied research, for technology transfer and to provide technical services to the rubber

planters and rubber products manufacturers respectively. Myanmar Rubber Planters and Producers Association (MRPPA), a non-government organization, was formed in March 2005. Since then it became the affiliated association of UMFCCL. Its members comprise rubber planters, processors, traders, exporters, and rubber goods manufacturers. The ultimate objective of the functions of MRPPA is to enhance and support rubber productivity and quality improvement in the expansion of rubber industry. MRPPA became a member of the International Rubber Research and Development Board (IRRDB) with effect from 2007 (Hla Myint 2008).

Current status of Myanmar rubber industry is illustrated in figure 10.

#### 1.7.4. Food processing industry

According to DAP statistics the production volume of culinary crops, fruits and vegetables was reported to be 2 mn tonne, 1.829 mn tonne and 1.777 mn tonne from 2009-2010 . Such a production exceeded the domestic need and the exportable surplus could be converted into processed foods and could be marketed in both domestic and foreign outlets. Currently, about 200,000 mt of watermelon, jujube plum, mango, and mesh melon fruits are exported to China every year through border trade. The production base is three times less than that of Vietnam but greater access to markets other than China could boost the production potential in Myanmar. Myanmar entrepreneurs have now emerged as food processors and their products are now meeting the domestic demand through several food stalls and department store channels in big cities. For Yangon food processors, the raw food materials are easily available in big fruit and vegetable markets such as Thiri min galar market and packing and bottling materials are now available in local markets. Thus, the imports can now be

reduced to negligible amounts. If more facilities of preservation and cold storage can be installed with full capacity utilization, export market opportunities should be sought. In such a case, the assurance of food safety and comfort of exporting food products becomes a critical control point. In an effort to produce prepared and processed foods in conformity with the hazard analysis and critical control point (HACCP) norms besides the ISO standard, Myanmar Agro-based Food Processors and Exporters Association (MAFPEA) have established the food industries development supporting laboratory (FIDSL) in the UMFCCI premises with Japanese technical assistance. It is now rendering services to all producers and exporters of processed foods. Food and Drug Administration under the Ministry of Health also expanded the branch laboratories in major cities to administer and ensure food safety.

In 2006, U Zaw Min Win, President of MAFPEA examined the processed food-products in four different categories in his quick survey on foods consumed in the country. The four categories included (i) exported raw foods which could otherwise be exported with value addition based on the condition of market access, (ii) exported foods which had been processed locally with value addition, and (iii) processed foods that have been imported through formal channels and which could otherwise be produced locally and (iv) processed foods imported through illegal (informal) channels. The first category includes a large volume of fruits and some field crop commodities while there are a few products in the second category. In the first category the value of foods exported in raw form was USD 373.1 million. For the second category the private entrepreneurs suffered from some structural limitations to achieve export earnings of more than USD 12.65 million as of 2006-2007. The third category includes tomato paste, potato and wheat based foods, high grade sugar, baby powdered milk,

jams and spread, malted food, etc with a total imported value of USD 103.4 million in 2006-2007. The cost of illegally imported foods had an estimated value of about half a million US dollars. This problem is not much in monetary terms however, the low-priced processed foods imported illegally pose a major threat to the domestic industry. Moreover it has not been subjected to the food safety checks of the Food and Drug Administration. This will be a major problem in the future.

## **2. REVIEW ON THE INDUSTRY COMPETITIVENESS**

### **2.1. Commodity Competitiveness**

The FAO Project (TCP/MYA/2902, Yangon) provided the technical support for the integration of Myanmar's agriculture sector into ASEAN-AFTA in 2003-2004. Some MOAI researchers and economists conducted competitiveness studies on agro-based industrial products and agricultural commodities. Competitiveness in terms of price, quality, and productivity was assessed and the overall situation<sup>8</sup> could be summarized as follows:

- (i) Out of 20 commodities, 14 were price competitive and 6 commodities were not competitive. The price competitive products include: rice, maize, pulses and beans (black gram, green gram and pigeon pea), chilli, sugar, rubber, cashew nut coffee, mango, hard wood, plywood, and shrimp. Cotton, sesame, groundnut, and palm oil, teak garden furniture are not price competitive.
- (ii) The quality-competitive commodities included maize, sesame, pulses and beans (black gram green gram and pigeon pea), cashew nut, coffee, hard wood, ply

---

<sup>8</sup> National Workshop on the Integration of Myanmar Agriculture into the ASEAN, 17-18 March 2004, Ministry of Agriculture and Irrigation cum FAO, Yangon.



wood, and shrimp.

(iii) Qualitatively non competitive commodities are groundnut, chilli, sugar, cotton, rubber, palm oil, pork and teak moulding.

(iv) All but 3 of the 20 products were found to lack in competitiveness in terms of productivity. The competitive commodities are pulses and beans, shrimp, hard wood, plywood and teak moulding. Pulses (green gram, black gram and pigeon pea are productive when compared to the ASEAN productivity but if compared with that of Canadian productivity, they are non-competitive.

## 2.2. Competitiveness Gap

In natural rubber industry, other advanced ASEAN countries such as Malaysia, Thailand and Indonesia predominantly produced technically specified rubber (TSR) while Myanmar is still producing mainly low grade RSS . Latex yield from rubber trees in Malaysia was recorded to be 580 kg per acre while the average yield in Myanmar was only 250 kg per acre in 2007-2008 (Hla Myint 2008). In terms of price, Zaw Win Latt (2011) had compared the nominal price of rubber sheet for Myanmar and Thailand for Years from 2008 to 2010.

Rubber Grade, Country	Mean ,USD/mt	CV %	Minimum, USD/mt	Maximum, USD/mt
MYA- RSS3	2325.58	31.6	1450.00	4050.00
TH - RSS3	2740.27	31.6	1263.25	4580.33
MYA- RSS5	2220.14	33.58	1350.00	1950.00
TH - RSS5	2712.28	32.31	1242.00	4553.33

Rubber production is still relatively cheap in Myanmar. In the sugar industry, on the other hand, Myanmar's sugar was price-competitive in early 2004 but the situation

changed in 2007. On comparison of the estimated FOB, The price of white sugar from Yangon, Myanmar was found to be USD 353 vs. USD 310 per mt from that of Thailand. When Myanmar's sugar was exported to Indonesia, the CIF, Jakarta price for white sugar was USD 414 while the domestic price of Jakarta was USD 389 per mt (San Thein, 2008).

**Table 6. Condition of Competitiveness of Some Selected Commodities of Myanmar**

Commodity		Competitive in terms of		
		Price	Quality	Productivity
<b>I. Cereal crops</b>	1. Rice	C	NC	C <sub>t</sub> , NC <sub>v</sub>
	2. Maize	C	C*	NC
<b>II. Oilseed crops</b>	3. Sesame	C <sub>i</sub> *	C*	NC
	4. Groundnut	NC <sub>i</sub>	NC	NC
<b>III. Pulses and Beans</b>	5. Black gram	C	C	C <sub>a</sub> , NC <sub>omp</sub>
	6. Green gram	C	C	C <sub>a</sub> , NC <sub>omp</sub>
	7. Pigeon pea	C	C	C <sub>a</sub> , NC <sub>omp</sub>
<b>V. Culinary crop</b>	8. Chili	C	NC	NC
<b>VI. Industrial crops</b>	9. Sugar	C	NC	NC
	10. Cotton	NC	NC	NC
<b>VII. Perennial/Plantation crops</b>	11. Rubber	C*	NC	NC
	12. Palm-oil	NC	NC	NC
	13. Cashew nut	C	C*	NC
	14. Coffee	C	C*	NC
	15. Mango	C	-	NC
<b>VIII. Forest products</b>	16. Teak furniture	NC	C	C
	17. Teak moldings	NC	NC	C
	18. Hardwood/Plywood	C	C*	C
<b>IX. Livestock and fisheries</b>	19. Pork	C	NC	NC
	20. Shrimp	C	C	C*

*Notes:* C = Competitive; NC = Not competitive; C\* = Began recently competitive but marginally; The subscripts to C denotes the country where it is competitive; e.g. C<sub>i</sub>= competitive in India market; C<sub>j</sub> = Competitive in Japan market; <sub>a</sub> = ASEAN ; <sub>t</sub> = Thai; <sub>omp</sub> = Other major peas and beans growers.  
*Source:* Compiled by Tin Soe (2004) from the reports of the National Consultants in the FAO Project TCP/MYA/2902-A.

Myanmar textile industry had collapsed before the entry of AFTA. Large textile factories of MI(1) faced problems of under-capacity utilization and were coping with

the Government's mandate "not to exceed the operating ratio of 100%." The private SMEs operated mainly in the Meiktila and Monywa districts. In the early days before Socialism, Monywa textile expanded with a good export capacity, thanks to the national industrial pioneer, U Ba Htoo who collaborated with Indian and Japanese companies for domestic industrial development. Thereafter, the industry was nationalized and the management was placed under the centrally-planned economic body. Productivity and quality declined. After 1988, the market economy enjoyed the export boom of the garment industry and Monywa textile SMEs also took up blanket production using raw materials primarily from the waste outlets of garment factories. Local industries rapidly expanded with a total of 148 factories-cum-production lines employing about 600,000 workers in the entire township. About ten million blankets are sold every year throughout the country. However, before the industrial strengthening took place, the Chinese blankets which were cheap and colourfully attractive flooded the Myanmar market. The indigenous industries downsized and the survival of the rest of the business was threatened. Most workers out-migrated (own survey 2011). Meiktila SMEs produce mainly traditional costumes and the production still continues but they always encounter power shortage and a dwindling supply of raw materials (Thaung Htay 2009).

In the domestic processed food industry, condensed milk production has been extended to the private sector. At the same time, the yearly import of condensed milk also amounted to USD 27 million. Domestic importers intensely negotiated with importers for distribution of home-made products. The importers rejected the proposal on account of the possible contamination of bacteria in some packing. Finally producers themselves took over the distribution network in addition to their regular

production at the fields and factories. They are now following rigorous standardization procedures and are going to conduct clinical trials and biochemical tests for their products. There are some difficulties for bacterial assays and count at the existing facilities of the domestic industries. Private processed food industry needs internationally recognized laboratories for chemical, biochemical and clinical testing of their products.

The competitiveness in food industry not only depends on the cost of the main ingredient but also the competitive price of other contents. In bakery and confectionery, competitive price is determined by the cost of wheat flour and sugar. The price of sugar was high but the cost wheat flour was low in China. The price of sugar in Myanmar was relatively low but that of imported wheat flour was high. Thus, Chinese bakery and confectionery with an advantage of good packaging technology, easily enters Myanmar. Moreover, it often bypasses the check points of the formal channel. The same situation could be applied to condensed milk and dairy products. Both upward and down-stream production lines with all supply chains are required to be strengthened for Myanmar to gain comprehensive competitiveness. Other non-price competitiveness factors such as stable macro-economic conditions, investment climate, stability of product quality, precise timing of delivery, and creditability of the enterprises are also critically important to Myanmar, if the business is to be integrated with the global industrial agglomeration.

Scholars from the National Cheng Kung University, Taiwan had investigated the Myanmar competitiveness on the basis of resource-based strategies (Wang *et al.* 2004). They analyzed four dimensions: economic performance, technology development, human resources and productivity. They found a gap between natural resources and

national competitiveness performance and recommended that a resource-based strategy should integrate national resources with national capability to receive a competitive advantage.

### **3. REFORM MEASURES FOR INCLUSIVE GROWTH AND INDUSTRIAL READJUSTMENT**

#### **3.1. Change to Political System**

March 30 of the year 2011 is a historic day for Myanmar. It marked the dissolution of the military government (SPDC) and the new democratically elected government led by President U Thein Sein took over on 1<sup>st</sup> April 2011. Earlier days in hand-over period was expected by many observers with skeptics as being incomplete and contradictory reform measures and inconsistent implementation. However, when the President calls for reform measures and poverty alleviation by setting up good Governance and clean government drew the country to close attention with optimism. Support from the people and mass media becomes cumulative after a series of steps for the following reform agenda:

- Implementation of the President-led poverty alleviation program.
- Constructive dialogue of President U Thein Sein with the opposition leader Daw Aung San Su Kyi for the good of the country.
- The National League for Democracy party re-registered as the political party on 25 November, 2011 and Daw Aung San Su Kyi will run for the by-elections after the government ban was lifted.
- After the historic visit of the U.S. Secretary of State, Hillary Clinton, to

Myanmar on 1 December, 2011, the diplomatic relation between the two countries would soon improve.

- The possibility of lifting the U.S. economic sanction against Myanmar has now been opened.
- Release of prisoners of conscience (including of high-profile prisoners of conscience).
- Inviting Myanmar citizens who had been abroad for various reasons to come back to Myanmar.
- (Some opposition intellectuals and development economists come back and join the national debate and workshop for charting the future plan).
- The government resumed the steps to reconcile with the ethnic minorities.
- Moving towards a true and vibrant market economy by addressing reform issues: viz;
- Direction to banking and financial system reforms (Dedicated attempts for exchange rate unification with the assistance and cooperation of IMF, revision of the bank interest rate, improvement of financing to SMEs, farmers and primary producers); fiscal policy amendment agenda, guidance to the revision of the foreign direct investment law for inducing more foreign investments in the country, change of the import/export license system, reduction of the export tax, elimination of the Trade Council in an attempt to facilitate more trade activities among other measures.
- Two Legislative bodies in the Parliamentary Assemblies (Amyotha Hluttaw and Pyidaungsu Hluttaw) full-time engaged in processes of reviewing, debating, amending the improper old laws and proposing new bills for

enforcing monetary, fiscal and foreign economic policies and income policy, micro-finance bill, infrastructural and institutional related reforms.

- Lifting the censorship over media and newspaper.
- President's announcement of the policy of transparency, accountability and good governance.
- Holding series of workshops and seminars for participatory planning of reform measures.
- Suspension of the Chinese-invested controversial Myitsone Dam<sup>9</sup> (upper reaches of the Ayeyarwady river) as a result of the widespread public protest over the possible environmental and social impact.
- Speaker of the Pyithu Hluttaw (People's Assemblies) Thura U Shwe Mann made a wake-up call to the ministries concerned as well as Hluttaw representatives by telling the members that the government needs to speed up preparations for entry into the AFTA-AEC of ASEAN countries.<sup>10</sup>

Reform processes are on-going but more critical works are still needed for getting the fundamentals right, ensuring strict enforcement of the rule of law, strengthening institutions, building capacities and developing human capital.

### **3.2. Getting the Fundamentals Right**

The previous regime sold natural gas, jades and gems from the extractive industry and

---

<sup>9</sup> The 6000-megawatt Myitsone dam is part of the series of seven dams in the basin of Maykha-Malikh rivers and Ayeyarwady confluence to be built by Chinese Power Investment Corporation (CPI) at a total estimated cost of USD 20 billion. This dam construction would displace about 20,000 ethnic people of which more than 2000 have already been moved and resettled, according to CPI. Detail news was reported in The MYANMAR TIMES 30/596, October 3-9, 2011. The dam water coverage is said to be larger than the whole area of the state of Singapore .

<sup>10</sup> The MYANMAR TIMES. September 12-18, 2011. Vol. 30/592.

the accumulated wealth of the nation has been nearly turned into the so-called “dutch disease” which started to display the “resource curse” symptoms by the time the country was handed over to the newly elected democratic government. The daily decline of US dollar value and appreciation of local currency kyat has become a great concern for the public. Everyone from farmers to exporters complained of the market exchange rate problems in which the exchange value of the dollar has fallen by 30% in one year from Ks 1,000 to Ks 700. Analytics pointed out several factors causing such problems and the Chief Economic Advisor to the President, Dr. U Myint<sup>11</sup> and several other economists had listed all the attributing factors and these can be consolidated as one summary paragraph.

A large part of Myanmar’s foreign exchange inflows has come from the sale of natural gas, and the auction of jade and gems, upsurge of direct foreign investment especially in the energy sector and associated SEZ projects. Moreover, people assumed that a large amount of private capital is flowing into the country from the financial centres of the Middle East and neighbouring countries which could be to take advantage of the high interest rates of the Myanmar banking sector. Some money is thought to be used for buying real estate and other economic assets in anticipation of the country’s opening up of the business. A huge amount of kyat currency was transferred from the private sector to the government due to rapid privatisation by selling off left –over buildings and estates of the former government while moving to the new capital city, Naypyitaw. There is an assumption that wealthy people have bought dollars into the country and converted it into kyats to buy the state’s lucrative

---

<sup>11</sup> U Myint. Myanmar kyat exchange rate issue. Paper presented to National Workshop on Reforms for Economic Development of Myanmar, Myanmar Int’l Convention Centre, Naypyitaw, 19-21 August, 2011.



assets. Lack of information and uncertainty has led to speculations. Such contributing factors .has led to the exchange rate appreciation which in turn reduced the competitiveness in the export of agricultural and manufactured commodities. Strong kyat but low dollar value caused financial losses to exporters. This in turn resulted in the farmers and primary producers being severely impacted. Strong nationalists may take pride of the strong kyat currency. However, for Myanmar whose economy is based on the “export first-import later,” the long-term kyat strength will be a negative development. Since the economy of Myanmar relies on exporters of pulses, rice, fish and shrimp and other primary commodities, all stakeholders, farmers and workers will earn less and less of money from the sale of their output.

Upon reviewing the expert advice and other views, the immediate measure that the government has taken is to reduce the export tax of primary commodities drastically from 10% to 2%. As of 11<sup>th</sup> August, 2011, the Notification No. 142/2011 issued by the Ministry of Finance and Revenue stated that trade tax would be imposed at the rate of 5% of the total sales instead of 8% of the total sales. The Notification No. 32/2011 confirmed the exemption of trading tax on export revenues from the sale of rice, beans, and pulses, corn, sesame, rubber, fresh water and sea water products, for a period of 6 months. Only the remaining 2% of the tax is collected from the exporters. In the previous days, the process of applying for an import/export permit required the permission of the Trade Council before being granted. The previous five-step process theoretically took 8 days but actually one month or longer. The Trade Council was now eliminated and the Ministry of Commerce alone could grant these licenses quickly. Need for a fiscal policy was put forward by the Minister of the Ministry of Industry (2) during the said National Workshop in August, 2011. To improve the stability in

economy, the Central Bank of Myanmar is now cooperating with the IMF officials to carry out the exchange rate unification. As a first step to create a level playing ground, the Ministry of Commerce has opened up the palm-oil import market which previously was monopolized by the military-owned UMEHL. Myanmar is now moving and pursuing positive changing trends.

### **3.3. On-Going Activities in the Reform Framework**

The President's signals for national economic development reforms trigger active responses and participation from all reformed-minded people and civil societies and institutions, union and regional government bodies, individuals and communities as well. In the earlier days, the government staffs did not dare to publicly talk about poverty issues or debate for reform measures. Now, they have become aware and motivated. The private media highlights the problems, issues, complaints and perspectives of various opinions and suggestions of economists, old and new generation politicians, business men, free-lance advisors, and lawyers. Some respective ministries start walking forward. The re-orientation and reform outlook of the Minister of the Ministry of Industry (2) who also holds the responsibility for the Ministry (1) will be listed first.

#### **3.3.1. Action plans and activities of the Ministry of Industry**

In his presentation to the National Workshop on reforms for economic development of Myanmar at Naypyitaw in August 2011, the Minister for the Ministry of Industry (2) explained the burden of taxation systems on industrial entrepreneurs and proposed to reform the tax bases, to eliminate the provision of permits to privileged groups, and to

conduct taxation with transparency and accountability. He calls for the macroeconomic reform process to be followed appropriately. Keeping in line with the economic growth of Myanmar, he proposed that the agro-based industry should be built on the revenue from the agricultural take-off and the subsequent industrialization strategy should be directed to the expansion of the manufacturing and service industries inclusive of consumer goods and light industry, export oriented industries, labour-intensive factories, clean and green technology factories and import substitution industry.

Within these policy options, he chaired the restructured organization of the Industrial Development Committee (IDC), which composed of twelve Deputy Ministers and one Director General as members, to play the role of a prime mover in the industrial development process. It was organized in April 2011 and in the follow up meeting, twelve sub-committees were formed chaired by the 11 Dy. Ministers and one DG.

- (I) Industrial Development Supporting Sub-Committee
- (II) Automotive-Motorcycles Production Development Sub-Committee
- (III) Agric. Machinery and Equipment Manufacturing Development Sub-Committee
- (IV) Food, Pharmaceutical, Textile, Chemical and Consumers Products Development Sub-Committee
- (V) Housing and Construction Industry Development Sub-Committee
- (VI) Electrical and Electronic Industry Development Sub-Committee
- (VII) Iron and Steel Industry Development Sub-Committee
- (VIII) Rubber and Rubber Product Industry Development Sub-Committee
- (IX) Small and Medium Enterprises Development Sub-Committee

(X) Human Resources Promotion Sub-Committee

(XI) Environmental Protection and Renewable Energy Development  
Sub-Committee

(XII) Industrial Zones Development Supporting Sub-Committee

Members of the twelve sub-committees are government, private entrepreneurs, and non-government organizations thus providing opportunities and mutual support for the respective industry development.

The author participated in the seminar-meeting of the No. IV sub-committee (food and pharmaceutical industry) to determine ways of industrial strengthening, quality enhancement, food safety and export promotion. Although the formal committee was formed five months ago, the participating private entrepreneurs have been attempting to be better prepared, over the last five years, for their integration with AFTA-AEC. They have already organized the MAFPEA and established a fully-equipped food analyzing laboratory. The sub-committee is going to form 14 specialized food-processing groups to cooperate coordinate and steer the development of specific food commodities. As the meeting proceeds in structuring the working groups, the members prefer minimum number of government officials and more number of relevant private entrepreneurs in the committee.

### 3.3.2. PPP implementation plan

The government officials realised that the task of integration with AEC is so overwhelming that the government cannot prepare and adjust all the activities by themselves and that they need to cooperate with the private sector. The cooperation or partnership program could be started at the mistrial level with the President and

executive committee of the UMFCCI. Unlike in the past, UMFCCI executive committee members now are elected and are not appointed members anymore. U Win Aung, President of UMFCCI has expressed his view<sup>12</sup> during his presentation at the National Workshop at Naypyitaw that the economic development of the country will not happen with the development of private sector alone. He stressed the need for macroeconomic improvement measures that the government should take and to cooperate with the UMFCCI, that all of its members need to be responsible and to show corporate social responsibility in the national development process. At the enterprise level, the respective government officials of the industrial sub-committee should work together with private committee members to pursue the industrial sub-sector improvement.

The processed food industry working group has drafted the public private partnership (PPP) plan. The yearly phased-out plan states that the Food and Drug Administration (FDA) and related authorities from the government agencies (Health, City Development Committee, Veterinary, General Administration, Police Force) will ensure the enforcement of national food laws and regulations and will conduct regular checks on the production, import, storage, distribution and sale of food systematically. The MAFPEA of the industry will act as an interface between the government activities and private manufacturers to volunteer in meeting the standards and running the food lab and ensuring enforcement of the food law. Government representative agencies set up the program to transfer the skills and knowledge through regular training. Attempts to internationalize the capacity and capability building program will

---

<sup>12</sup> U Win Aung, President, UMFCCI, 2011. Establishing a more favourable economic environment for private sector development. Paper presented to the National Workshop on the Reforms for Economic Development of Myanmar, Naypyitaw, 19-21 August, 2011.

be jointly carried out through public and private partnership. Continuous review of the standards will help align these with international norms. Business men have had bad experiences where less stringent standards expose the country to dumping of goods of low quality and internationally banned products. The PPP plan also considers activities to improve public awareness about quality so that they demand a higher quality product which would automatically raise the levels of domestic standards. Such attempts could accelerate with the rising income level of the people.

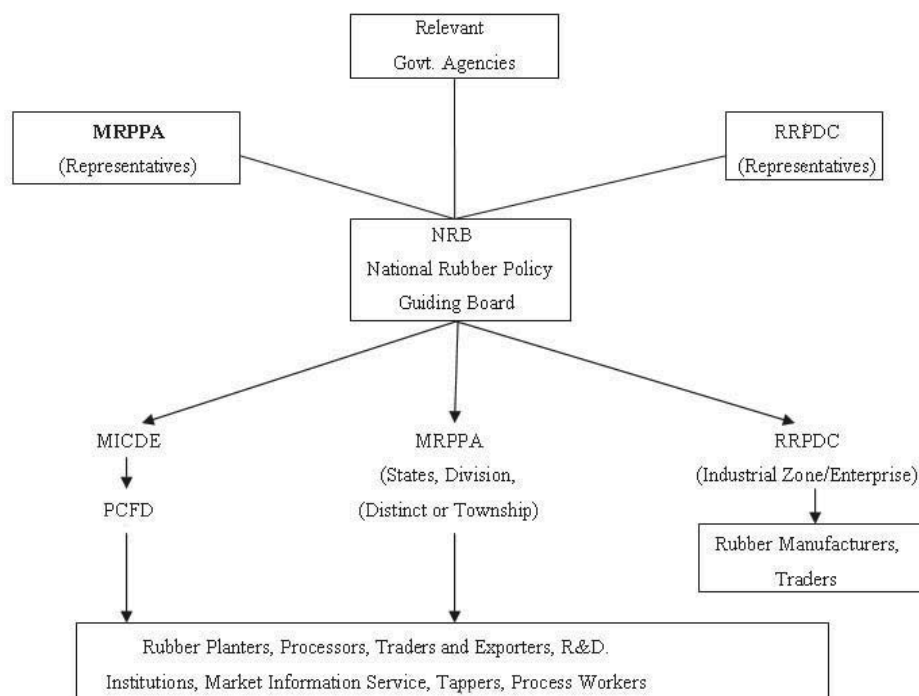
Presently with respect to border trade, there are about 10,000 commodities moving across the China-Myanmar border and over 3500 commodities across the Myanmar-Thailand border (Ministry of Commerce, Trade News, Vol.20, No.5). After 2015, there will be transit trade moving various kinds of commodities within and across the country. It becomes necessary to strengthen facilities and measures of Food Safety, Sanitary and Phyto-sanitary (SPS) and Standards and Trade Development Facility (STDF) at the entry and transit points and it is also important to strengthen the notification and investigation authority structurally and financially. Myanmar needs to keep pace with other trading partners as per international requirements and the country should prepare and meet the changes.

Another PPP plan was considered by the Myanmar Rubber Planters & Producers Association (MRPPA). Quantitative and qualitative improvement of natural rubber production could be achieved only when the PPP approach was followed.

MRPPA is a non-government organisation affiliated to UMFCCI. It became the member of the International Rubber Research and Development Board (IRRDB) in 2005. It aims at cooperating with government agencies (Directorate of Trade and Myanmar Agricultural Produce Trading-MAPT, Ministry of Trade and MPCE,

Ministry of Agriculture and Irrigation (Hla Myint 2008). Trade promotion and quality assurance, inspection and certification could be jointly done with the Directorate of Trade. Since rubber plant is perennial for 30 years of commercial production, use of high-yielding and adaptable clones (crop variety) is extremely important. A long and large investment in rubber plantation will result in a low or no profit if the grower uses low yielding crop varieties. Thus use of the low yielding, disease-ridden varieties must be prohibited by regulation. If government bodies assign the authority for clone certification to designated members of the local MRPPA, the representative could cooperate with government agents to conduct inspections, certifications and enforcement of regulations. This clone certification scheme should be accompanied with the provision of loans to small growers. Funds could be raised from the sale and export of natural rubber. This scheme could be implemented after formulating and adopting the national rubber policy which could be steered by the National Rubber Policy Guiding Board. The related government agencies, MRPPA and the newly formed RRPDC under the Ministry of Industry could work together in the policy steering board (proposed in Figure 11). Members of MRPPA are waiting for the signal and optimum time for initiating this program. In the earlier days, the government bodies were sensitive to the discussion of policy issues. It is often been observed that even the top authority at the ministry level said that they themselves had no authority in policy matters. Now things have changed. The relevant key persons responsible for policy advocacy are now drafting the rice policy issues. Later, attempts of rubber, sugar and other commodity policy issues at the national level are expected to follow.

**Figure 11. Scheme for Organization of National Rubber Board (NRB) and its Proposed Functional Linkage with Other Agencies**



*Notes:*

MICDE = Myanmar Industrial Crops Development Enterprise

PCFD = Perennial Crops and Farms Division

MRPPA = Myanmar Rubber Planters & Producers Association

RRPDC = Rubber and Rubber Products Development sub-Committee

*Source:* Own vision.

In trading of natural rubber, there is not much quality consciousness due to the buyer-driven market. The rapidly growing industrialization in China has lead to a high demand for natural rubber constantly pushing the rubber price. The Myanmar-China border trade accounts for over 80% of the rubber sales. Since there is a steady market, rubber processors and growers do not take quality-improvement measures. Other factors are also responsible for low quality production. Considering all these factors, the public private partnership model should also be applied to upgrade and improve the quality of rubber products for the quality market through cooperative actions of the



Rubber and Rubber Product Development Subcommittee, Myanmar Rubber Planters and Producers Association and Research, Technology and Training Centre for Rubber Products of MPCE for quality certification and export promotion in the quality market. This could ensure the sustainability of the rubber production and trade.

### 3.3.3. Privatisation scheme

During the industrial development committee meeting at Naypyitaw in mid August 2011 the minister of the Ministry of Industry had said that the government will privatize all state-owned enterprises within 10 years but even within five years there will be fewer SEEs factories. He aimed to zero industrialization in the state sector. In practice, privatisation measures have been inconsistent and intermittent. It had been carried out since 1995. The Privatization Commission has privatised 166 economic entities from eight ministries. Most of them are cinema halls, buildings, saw mills, and rice mills. Some saw mills were leased to the private sector. Some barriers are encountered in the implementing stage.<sup>13</sup> In case of private entrepreneurs, lack of experience, insufficient capital, and large scale risk are the factors responsible. On the part of the privatization officials, they lack experience and expertise. They were sent to attend seminars and exposure visit programs abroad. On part of the host ministry, some ministries were unwilling to submit their factories to the privatization commission thus affecting the momentum of the privatization process. The commission has no specific sector target but it has listed criteria such as (i) enterprise with under capacity utilization, (ii) enterprise where technology needs modernization, (iii) enterprises with uneconomical use of inputs, and (iv) small factories. The commission focuses on

---

<sup>13</sup> U Thein Tun, Director, Project Appraisal and Progress Reporting Department, MNPED: Experiences of Myanmar Privatization Program, Country Report, undated.

strategic industries and enterprises which match the macroeconomic policy. Under this method it was expected that privatisation could be carried out with greater efficiency, fairness and transparency.

Direct sale is generally used in the privatisation scheme. Leasing of SEEs factories is occasionally introduced. Direct sale is found to be suitable for privatization of relatively small factories and facilities. However large scale factories could not be purchased by entrepreneurs easily. The fairness criteria may be lost since this method does not give equal opportunities to the privatising of state property. Method of selling shares in corporatized SEEs on the open market was considered but there is still no capital market yet. Some of the important terms and conditions specify that the buyers have to continue the same kind of economic activities after obtaining the SEEs factories.

One major problem is setting the floor price used in competitive bidding. Floor price is usually broken down into land, building, machinery and furniture price. Land contributes to a major portion of the floor price. Factories were normally built in the suburbs of towns and cities however, in the case of urban areas it was spread out over the years and the factory land prices became exceedingly high. When the Japanese company built the Pyinmana sugar factory in 1981, for example, the price of a 90-acre land was valued to be Ks 0.68 million according to the old records. When the privatization committee assessed the land its cost was estimated to be Ks 293 million. High value of land is due to the establishment of the new capital city, Naypyitaw adjacent to Pyinmana. The original price of the machinery was USD 18 million but the value decreased to USD 6 to 7 million during depreciation. Although the dollar value of the old machineries decreased considerably, the cost of other facilities in terms of

local currency increased over time. For example, the original cost was Ks 126 million but the current value is Ks 7,037 million. Inflation has pushed the price. Under such distortion, rent seeking behaviour has often been heard in the transfer of state property to private entrepreneurs. It is not uncommon to discover that the transfer of unpopular enterprises was carried out in transparency while the interested groups were given access to popular facilities. In the on-going transfer process, displacement of a government employee becomes an issue particularly in the food-industry with a large number of factories to be privatised. In order to avoid this problem, the factories were leased. This method demands less investment. Moreover, the Ministry of Industry wanted the private companies to continue to employ the factory employees.

The Director General of the Directorate of Industry had said in a meeting on strengthening the processed food industry in September, 2011 that in the earlier days, the ministries competed with each other in running the industrial development however, today the Ministry has to work together with the private sector for economic development. The government will assume the role of a coordinator. It was often seen that several Myanmar business people used to follow the pioneers once he made a fortune. His Directorate prefers to encourage cluster formation in the industrial complex instead of duplicating other people's business. Thus they need to thoroughly review their plans and application process in order to justify their industrial establishment.

#### 3.3.4. SMEs promotion policy

Currently, the Industrial Development Committee is formulating the draft of SMEs promotion policy which will be submitted to the government for approval and further

action in the next month. The purpose of the policy is to enhance SMEs for the further development of the economy as a whole. The expected main outputs are the implementation of networking integration of all sectors throughout the country, improvement of operation management and product development by SMEs, expansion of business support systems for SMEs, strengthening market integration and promoting sub –contractors, promotion of human resources development, preferential treatment of SMEs including tax reduction and exemption, and provision of research and development assistance

#### 3.3.5. Promotion activities of SMEs

The government has placed emphasis on the development of SMEs as a means of reducing poverty through rural development and expansion of the employment opportunities besides its important role in being the driving force in the development of Myanmar economy. Majority of the SMEs in the industry sector are located in the industrial zones and the cottage industries are located in residential areas in the cities. In Myanmar small enterprises constitute 57.5%, medium enterprises 25.2% and large enterprises 17.3% of the industrial zones. Thus the combined total of SMEs represents 82.7% of total number of establishments in the industrial zones of the country. According to the survey conducted by Aung Kyaw (2008) only 42% of the SMEs availed of bank loans. The difficulties in financing were due to high interest rates. Only mortgaged short-term loans are available. Another difficulty is the need to renew the loan contract every year with the lending bank and the renewal process being as complicated as the process for applying a new loan. The entire process for getting a loan takes one to two months and it involves a lot of detail procedures. The interest rate

was set at 17%. However, now the Banking sector of Myanmar has revised the interest rates. Myanmar Industrial Development Bank will now provide loans to SMEs at an annual interest rate of 15% as notified by the Central Bank on first September 2011. A loan official said that the loans will be provided via group sureties and not through mortgage. Potential borrowers must have recommendations from the Myanmar Industrial Association of UMFCCI and will be subject to the discretion of the bank's board of directors. This is considered to be a short-term remedial measure. The two state-owned financial institutions namely Myanmar Economic Bank and Myanmar Investment and Commercial Bank in addition to the private bank namely Myanmar Industrial Development Bank have given loans to SMEs up to Ks 1,144 billion over the period from 2005-2006 to 2009-2010 as compiled by Aye Aye Win (2011). In this year, a less burdensome interest rate has been set by the bank. Inflation rate in Myanmar was about 33% in 2007-2008 and in the past it ranged from 20% to 40%. Accordingly the interest rate in the banking sectors is negative in real term due to high domestic inflation. If the macroeconomic reform measures have been undertaken with a fair degree of success in the short terms, better macroeconomic performance is expected to help improve the financing situation of SMEs.

Food and beverage SMEs account for a large number of total establishments which could continue to increase if we successfully integrate with AEC. Otherwise it will severely affect business. The above mentioned measures in the processed food industrial section should be consistently carried out to have resilience to external competition. U Aung Khin Myint (2011), secretary of the MAFPEA and owner of A & T Bakery and Confectionary had listed the weakness of the domestic food industry and expected the possible occurrence of threat from the AEC single market. If each

sub-committee of the IDC should identify the weakness and strengths against opportunities and threats, remedial and supporting measures would be in line with the real need of the domestic industry. Most would be common factors which should be applicable to all sub-committees. Industry-specific measures could be tackled by respective sub-industrial groups. The main IDC committee should ensure the formulation of the SMEs promotion policy in realistic manner.

SMEs working on construction materials and clothing and wearing apparel follow the food industry as second runner-up in number but its role in terms of consumer needs are rather high.

**Table 7. Sector Distribution of SMEs, Number with Respect to Small and Medium Sizes of FY2008.**

Sub-sector	Small	Medium	Total number	Share, %
Food and Beverage	22,451	3,818	26,269	65.36
Clothing & Wearing Apparel	1,436	369	1,805	4.49
Construction Materials	2,302	512	2,814	7.00
Mineral and Petroleum	1267	330	1,597	3.9
Personal Goods	431	351	782	1.95
Industrial Raw Materials	380	225	605	1.5
Machining Equipment	179	74	253	0.61
Printing	198	73	65	0.16
Household Goods	123	68	193	0.48
Transport Vehicles	65	26	91	0.2
Agricultural Equipments	38	27	65	0.16
Electrical Goods	12	16	28	0.07
Miscellaneous	4,588	833	5,431	13.49
Total	33,472	6,722	40,194	100

Source: DISI, Ministry of Industry (1).

The opportunities should be for linking with the Cutting, Making and Packaging” (CMP) based industry of the regional or global market. Winner should be picked and it could be integrated with the regional market, these industries could be expanded in size

as well as in number.

In the natural rubber-based product industry, there are 379 rubber product enterprises in Yangon Division and Mon State (Kudo, Toshihiro ed. 2002). Most of the private entrepreneurs of rubber-based factories normally established business links with some government department in order to get the product delivery order or to win the tender bidding and started producing the required items. They were dependent on the requirements of the government factories. Now the SEEs factories are transferred to the private sector and the newly transferred factories are in the stage of renovation and upgrading. There are no orders for the regular requirements as in the old days. Thus some rubber-based enterprises dependent on government business links lost out on the market and have had to close down the factories. Likewise other business lines with access to the government's quota are losing the market for now. Thus, in some industrial zones, factories are turned into warehouses for rental purposes. In the author's survey, one rubber product factory named "BOSS" survives and continues producing over 100 items of rubber-based car spare parts such as break line, break cylinder bucket, engine mount, silent block, hydraulic seal, bush, etc. The main customers are the domestic markets. The industry could produce cheaper products similar to Thai products. The Yangon-based rubber product factory has its own rubber plantation in Mon State where the major rubber plantation industry is located. The factory could produce fair grade rubber products. There is also a good connection with buyers in Thailand. However, the problem is brand image. Foreign buyers like their product but they are reluctant to sell rubber products "Made in Myanmar" to the external market. Market opportunity is slim for Myanmar rubber products. In the future AEC single market, the "country of origin" issue needs to be

dealt with seriously. Without being able to remove such barriers, Myanmar cannot gain much benefit. One potential way for Myanmar rubber product industry is to participate in the supply chain production process of rubber products within the region to be able to enter the regional market.

A new law creating the Special Economic Zone has been passed and more foreign investors are likely to come in with better technology and more investment. Economists warn that SMEs entrepreneurs need to increase productivity as well as to recruit skilled workers so that they can lead the market in competition with foreign investors.

### **3.4. Relaxation of the Foreign Direct Investment Law**

Foreign direct investment in 2010-2011 was a massive USD 20 billion but it was concentrated in a handful of mega projects such as natural gas exploration, mining and the hydro –electric power energy sector. If the main disincentive elements in the FDI law could be eliminated, the investment climate would become attractive to foreign investors. However, the former FDI law has posed severe barriers to investments from foreign countries. During a workshop seminar held jointly by the MNPED and UMFCCI at Yangon UMFCCI conference hall on 4 September 2011, U Aung Naing Oo, Director of Investment Commission pointed out the weakness of the existing law which is the first law enacted by the military government (SLORC) as soon as they came to power. In the statement of the law, foreign entrepreneurs are allowed to invest their money which shall be turned into the local currency at the official exchange rate of 1 US dollar = 5.5 to 6 kyats. Due to the existence of the “immovable property act”, adopted since the socialist regime, provision of law for the lease of land to foreigners is



found to be quite restrictive. In actual practice, working with FDI protocols is quite difficult for both sides. Decision making power for stream lining the foreign investment protocols is held by the supreme power entity which was beyond the scope of the Minister himself who was connected with the investment commission. The MIC body is now reorganized. Investment friendly laws and provisions are now injected. The drafting of law is nearly complete but in order to initiate the FDI program without further delay, the department concerned will issue the notification of the FDI amendment by which foreign investors could start working in Myanmar. According to the new instruction as explained by U Aung Naing Oo, the government and also the private individual citizen could rent out lands to foreign investors without any restrictions. The money to be invested in Myanmar could be exchanged at the prevailing market rate, not the restrictive official exchange rate.

Most reform-minded media in the country now stressed the point that FDI must move beyond the resources. With 85% of this investment in natural resources extraction, and only 15% allocated to the manufacturing and service industries the Ministry of National Planning and Economic Development is expected to encourage more FDI in the manufacturing and service sectors.<sup>14</sup> Investment is required more for the SMEs in the range of USD 1 to 10 million than for a handful of mega projects. More observations are now being made that the extractive industries does not benefit everybody because it does not create large scale jobs for everybody.

### **3.5. Environmental Friendly Enterprise**

The newly reorganized Ministry of Environmental Conservation and Forestry released

---

<sup>14</sup> The MYANMAR TIMES, 10 October, 2011.

the notification that private timber wood forest is allowed in the forest area of Bago Yoma area. However, area extension in the Mon and Tininthary Division is restricted due to the declining forest area in that region. In communication with the Dy. Director General of the Forest Department, it is known that rubber –based agro-forestry is permissible in the degraded forest area of Bago Division. Rubber plantation could be established in patches in the forest, about 400-5,000 acre at a place or in combination with wood forest in that area. It is true that forest possess rich biodiversity as compared to rubber forest. However, rubber plantation is associated with human settlement and creates job opportunities for large number of people.

Attention has now been drawn to the natural rubber industry presenting rubber plantation an environmental friendly business. Cases of rubber plantation for Clean Development Mechanism (CDM) projects have been presented at the Poland Conference in 2008 and Denmark Conference in 2009. For these purposes, three meetings of experts were held in Thailand and Malaysia. Dr. James Jacob,<sup>15</sup> Director of RRI India mentioned that a total area of 9 million hectares of natural rubber plantation in the world and a rubber plantations with an average age of 21 years having the capacity to sequester 28.7 tonnes of CO<sub>2</sub>/ha/year could reverse the CO<sub>2</sub> increase in the atmosphere up to 6.3% .

Researchers from the Malaysian Rubber Board have measured the amount of carbon sequestered in a 15 year old rubber forest plantation and estimated it to be ranging from 272 to 486 tonne/ha/15-year cycle. The Board member from Thailand expresses the hope that the NR producing countries will avail the opportunities provided by CDM and Carbon Trading.

---

<sup>15</sup> Report on the IRRDB – RRIT CDM and Carbon Trading Seminar 8<sup>th</sup> to 10<sup>th</sup> July 2008, Sofitel Centara Grand Hotel, Bangkok, Thailand.

Indian workers also proposed the CDM projects by the use of Biomass Gasifiers for drying technically specified rubber and by “Bio-methanation of sheet rubber processing effluents” to substitute diesel or firewood with biomass gasifiers. Upon implementation, they found significant saving of electricity, firewood and diesel (IRRDB annual report 2008).

### **3.6. Preparation of Big Company for Integration with AEC**

Dr. Sai San Htun, Chairman of Loi Hein Group of Companies expressed a positive outlook towards integration with AEC believing that the whole economic landscape of the country will change extensively within three to five years.<sup>16</sup> The change is expected to follow the internationally practiced pattern of the economy of the advanced countries, giving Myanmar the opportunity for economic restructure. As regards the sources of capital financing, he could lend more capital from the bank if the interest rate is decreased. He is preparing to launch a public company that would have a better chance than a privately owned company in getting an approval to make use of national assets such as electric power and railways enterprises. With the current level of financing available, it will be difficult for them to compete with foreign business. He is seeking an alternative source of capital, which is, getting capital from public through an initial public offer (IPO) of the stock market. He believes that if he has strong financing sources, the cycles of expanding business, creating jobs, increasing incomes, and spending power will follow.

---

<sup>16</sup> The MYANMAR TIMES, September 12-18, 2011.

### 3.7. Addressing the Poverty Issue

Integrated Household Living Conditions Assessment (IHLCA)<sup>17</sup> in Myanmar in 2005 estimated the poverty to be 32.1% in 2005 (MNPED 2007). After a five year interval the same survey estimated a lower poverty at 25.6% in 2010. B.N. Tiwari *et al*, (2011) said that poverty has decreased over time although the decrease varies widely by urban-rural divide and by region/state. Despite the denial of poverty by the former government, the new government accepts the poverty in the country and the President himself in his inaugural speech placed emphasis on the urgent need to alleviate poverty problems for making progress on political, developmental and humanitarian issues. Under the president-led campaign, poverty alleviation programs are being undertaken in all states and divisions. Microfinance bill was submitted to the Pyithu Hluttaw and was approved in August and it will now be sent to the Amyotha Hluttaw for approval. Under the existing Myanmar law, organizations are technically not allowed to lend money either above or below the Central Bank of Myanmar rate of 17% (now changed to 10% at MEB). Very soon the poor will benefit from the approved microfinance law because the NGOs currently doing micro-finance projects are working through a memorandum of understanding with the government. By having a law, more players like PACT Myanmar<sup>18</sup> will emerge to do the work for the poor. The President is also taking an interest in the SMEs project of the rural industrial development based on the rural resources promoting the job creation. Rural-Socioeconomic development groups have been formed in respective regions/state governments.

Myanmar has not received preferential treatment from the World Bank, IMF or

---

<sup>17</sup> Government of Myanmar, UNDP, UNOPS and IDEA International jointly conducted the survey in 2005.

<sup>18</sup> The MYANMAR TIMES, September 5-11, 20-11.

ADB for two decades. It received lesser official development assistance (ODA) than other least developing countries (LDCs). Now the country is in the process of changing in the positive direction and the UN chief and officials are expected to play the role of a negotiator between Myanmar and the development partners.

### **3.8. The Role of UMFCCI in Preparation for AEC 2015**

The Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI) is now playing an active role to enhance Myanmar's participation in AEC. One of its roles is to organize the workshop bringing in the private sector, government officials, foreign specialists, commentators and the businessman together to gain new ideas of better preparedness for integration with AEC. U Win Aung, President of UMFCCI is optimistic that with the cooperation of ASEAN family nations, the private sector in Myanmar could live up to the goal of achieving Myanmar's national economic development while it could contribute to the developing ASEAN AEC in 2015.

The President of Myanmar and Minister of Commerce and Minister of Industry also engage in direct dialogues and consultations with UMFCCI officials for emerging commercial development issues to be dealt with. International institutions such as Japan External Organization (JETRO), Japan International Cooperation Agency (JICA), SEAS, etc. jointly consulted with UMFCCI in series of seminars and workshops particularly in the years 2010 to 2011 about its preparation for AEC integration.

### **3.9. Domestic Resource Cost**

During a study on the comparative advantage of sugarcane, pulses, rice, and maize

(San Thein and von Oppen 2003; San Thein 2008), the domestic resources cost (DRC) was found to be 0.77 for sugarcane, 0.25 for green gram and 0.38 for rice. It implies that the country earns USD 1 in the sugar sub-sector by paying the domestic resources costs of USD 0.77 for sugarcane, USD 0.25 for green gram and USD 0.38 for rice. The value of domestic resources used to produce sugar was higher than that for green gram and rice. However, with sensitivity analysis, the study noted that if cane yield could be improved from the yield level of 20 tons per acre to 30 tons per acre, the domestic cost would be reduced from USD 0.80 to USD 0.55 to earn 1 dollar value of output at export parity price. Domestic resources can effectively be used for increasing productivity.

The same could be applied to the issue of labour cost. From the standpoint of investors, Myanmar is often seen as a country with cheap labour. It is still a valid fact. When Moe Kyaw (2009) evaluated monthly wages of Myanmar and Thailand (USD per month) for 2005, Myanmar workers was paid four times less than Thailand native workers.

Migrant in Thailand	Thailand , Local worker	Myanmar worker
Wage USD 128.57	Wage USD 183.43	Wage USD 45.18

The comparative labour costs (USD per hour) of sugarcane field workers as of 2002-03 between Myanmar and other sugarcane growing countries can be seen below (San Thein 2002).

Myanmar	Thailand	Australia	Brazil	India	USA	S. Africa
0.15	0.44	9.34	0.91	0.73	13.13	0.52

Labour cost (USD per hour) in sugarcane growing area in Myanmar is showing a slow upward trend (Adjusted to the USD). It was recorded in sugarcane growing sector of Myanmar (Author's survey 2008).

Year	2003-2004	2004-05	2005-06	2006-07	2007-08
USD per hour	0.11	0.10	0.09	0.13	0.24
Exchange rate, Ks/USD	700	950	1200	1250	1150

Drastic increase in labour costs could be expected when the factories or establishments are relocated or enter for investment in Myanmar. When the garment industry was established in Myanmar around 1994, the industry absorbed much labour from both rural and urban areas but it appeared that labour absorbed by the garment industry did not offset the labour supply and demand conditions in the country. By the time the number of garment factories reached nearly 300, the industry received a severe set back by the US Sanction against the government. If the garment industry had continued to increase without any interruption, the wage labour market might have been affected in some way. Now, if the country's political development process could induce more investments in the garment industry, there might be an accelerated growth again. Moreover, other CMP-based factories producing footwear, optical instruments, rubber-based and kitchen ware products are likely to be established in the country in the near future. Such CMP-based industries could demand much labour supply and then they are likely to offset the labour wage. By that time there may not be cheap the advantage of labour as compared to the standard of CLV countries. The gradient in labour cost among CLMV countries may be level-off at that time. At present the cost

of unskilled labour is often equated to the selling price of rice, regardless of the materials they produced or labour service they render without any value addition. Once the materials they produced are high-value added commodities, more skill and technical competency will be needed and the labour wage will increase significantly. There could be differences in labour costs as much as the flying goose pattern of the industrial establishment differs among the CLMV countries. With varying human resources development schemes, skill and professional development stages could be different among the countries. Finally the country whose investment is dedicated to human resources development will enjoy better salaries and wages corresponding to the industrial development stage.

#### **4. CONCLUSION**

ASEAN Economic Community Blueprint is the establishment of a single market and production based on free flowing goods, services, investment, capital and skilled labour by strategic planning in liberalizing and facilitating the removal of restriction in trade and services and the transparency process, harmonizing the standards, etc. Later the AEC initiative becomes an ambitious effort to extend beyond the scope of AFTA towards major trade and investment with Japan, China, Korea, India, Australia and New Zealand using ASEAN as a production base (Kagami 2011). Those countries with a capacity for rapid and deep integration would extend the geographical coverage of production network and their industrial agglomeration could be upgraded and reach those of developed countries.

The problem of Myanmar had been and is still largely not aligned with the AEC



integration blue print. The system, the people, process and structure – all have to be restructured, upgraded, changed or some have to be replaced and added. In the industry sector proper improvement of the investment climate, low country risk and small bilateral exchange rate fluctuation will give the location advantage that enables full participation of the Myanmar industries in the regional production network. Some indigenous industries need to be upgraded. The capability to balance diversified products and marketing strategies should be enhanced. The existing import-substituting industries need to be restructured. There should be intensive efforts to streamline the formation of industrial clusters with the emergence of supporting industries. Local firms should then penetrate the regional production net works. The local SMEs such as rubber-based product industry are likely to gain price competitiveness vis-a-vis multinational SMEs. Once they perform well in product quality, delivery and creditability, they could step up and participate in the regional production network of multinational SMEs. Some businesses without having such capability will still have a chance or business partnership in the transit trade within the region.

It becomes clear that the prime movers or changing agents for Myanmar are its people starting from the top leaders, political parties, people's representatives, intellectuals, professionals and management groups, civil government staffs, civil societies, entrepreneurs, business people, business partners, bankers, traders, share holders, skilled labours, farmers, and raw material producers – and this human capital and their efforts and activities need to participate and interact with positive and multiplicative outcomes. Then the prospect for successful integration with AEC will soon be brightened.

## REFERENCES

- Aung Khin Myint. 2011. “Food –Safety Know-How.” Paper presented to the Seminar held by Myanmar Agro-based Food Processors and Exporters Association, Conference Room, Myanmar Pharmaceutical Training Center, Yangon, 10 October, 2011.
- Aung Kyaw. 2008. “Financing Small and Medium Enterprises in Myanmar.” IDE Discussion Paper No. 148. Chiba, Japan: Institute of Developing Economies (IDE-JETRO).
- Aye Aye Win. 2011. “Issues and Prospects of SMEs Development in Myanmar.” ERIA CLMV Seminar in FY 2011 on “The Issues and Prospects in Post-AEC.” 23 September, 2011, Naypyitaw, Myanmar.
- CSO. 2009. *Statistical Yearbook*. Central Statistical Organization, Ministry of National Planning and Economic Development, Naypyitaw, Myanmar.
- Hla Myint. 2008. “Development of Rubber Planting Industry in Myanmar: Review and Major Constraints.” Paper Presented to International Rubber Conference, 13-15 October 2008, Kuala Lumpur, Malaysia.
- IRRDB. 2008. *Annual Report 2008*. Kuala Lumpur: The International Rubber Research and Development Board, Secretariat.
- Kyaw Min Tun and Khine Tun. 2011. Personal Communication with Khine Htun on “Macroeconomic Environment and Development Governance, Myanmar. Background Paper for the Development Policy Options, Myanmar 2011”.
- Kubo, K. 2011. “Natural Gas Export Revenue, Fiscal Balance and Inflation in

- Myanmar.” *ASEAN Economic Bulletin* 28(3): 374-387.
- Kudo, T. 2005. “Stunted and Distorted Industrialization in Myanmar.” IDE Discussion Paper No. 38. Chiba, Japan: IDE-JETRO.
- Kudo, T. (ed.) 2002. *Industrial Development in Myanmar (2): Prospects and Challenges*. Chiba, Japan: IDE-JETRO.
- Larkin, S. 2011. Personal Communication on “Myanmar at the Cross Roads: Rapid Industrialization or De-Industrialization” Paper.
- Larkin, Stuart P. and U San Thein. 2010. “Trade and Exchange Rate Policies to Develop Agriculture.” A report prepared for International Development Enterprise, 12 May 2010, Yangon.
- Ministry of National Planning and Economic Development (MNPED), UNFP, UNOPS and IDE International 2007. Poverty Profile- Integrated Household Living Conditions Survey in Myanmar, June, 2007, Yangon
- Moe Kyaw. 2009. “Investment Climate under Economic Integration: The Case of Myanmar.” MMRD Research Services, Yangon, Myanmar. A Report presented to BRC, IDE –JETRO, Bangkok, Thailand.
- Nu Nu Lwin. 2010. “Analysis of International Trade on Myanmar (1998 – 2007).” *Yangon Institute of Economics Research Journal* 2(1):1-14.
- San Thein, Tin Win and Nilar Than. 2010. “Situational Analysis for the Competitiveness and Survival of Sugar-based SMEs in Myanmar.” Proceedings of Papers Presented to Symposium on Enhancing Competitiveness of Myanmar Sugar Industry. 5 February, 2010, Ministry of Agriculture and Irrigation, Naypyitaw.
- San Thein. 2008. “Review on the Internal and External Competitiveness of Myanmar

- Sugar Industry for Sustainable Development.” Proceedings of the Discussion Papers for Sustainable Development of Myanmar Sugar Industry. Sedona Hotel, Mandalay, 20 June, 2008. (In Myanmar version)
- San Thein and Matthias von Oppen. 2002. “Measuring Comparative Advantage of Myanmar Sugar Production. A Policy Analysis Matrix Approach.” Paper Presented to Proc. Annual Research Conference, December, 2003, Myanmar Academy of Agric., Forestry, Livestock and Fishery Science (Agric. Sector), Yangon, Myanmar
- Tin Soe. 2004. “The Agricultural Development Strategies, Policies, Plans and Institutions of Myanmar”. MOA/FAO, TCP/MYA/2902. Project paper presented to the National Conference on: The Integration of Myanmar Agriculture into the ASEAN, held 17–18 March 2004, Yangon.
- Tiwari, Bishwa Nath, Shafique Rahman and Khine Tun. 2011. “Poverty, Food Insecurity and Vulnerability and Strategies (Myanmar),” Background Paper for the Development Policy Options, UNDP, Myanmar 2011.
- Thaung Htay. 2009. “Trend Analysis of Weaving Industry in Meiktila Industrial Zone.” *Meiktila Institute of Economic Research Journal* 1(1).
- Wang, Tai-Yu, Shih-Chien Chien and Soe Yin. 2006. “National Competitiveness of Myanmar- A View from Resource-Based Strategies.” *Asia Pacific Management Review* 9(2):263-283.
- Zaw Win Latt. 2011. “Market Integration Approach to Natural Rubber Market Development in Myanmar.” M.Agric. Sc. Thesis. Yezin Agricultural University, Myanmar.