

Comparative Advantage of Myanmar's Export Items in China Market: Likely Impact on Natural Forest

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1. Introduction

The tightening sanctions imposed by US and western countries on Myanmar makes the country closer to neighboring countries especially China which says Myanmar's domestic situation is only a country's internal affairs (Kudo, 2005). Because of this enforcement the bilateral economic and trade relations between Myanmar and China increased in recent years. According to COMTRADE data source, China-Myanmar bilateral trade exceeded 1 billion US dollars starting from 2003 with Myanmar's exports to China accounts for about 170 million and its imports from China 900 million (Kudo, 2006). Among the Myanmar's major trade partners, China becomes second biggest trade partner through 2003 to 2006. This paper aims to analyze the share of trade pattern with China for Myanmar, and to calculate the comparative advantage of major export commodities of Myanmar in China market. Moreover, it highlights the likely impact on natural forest.

2. Export-Import structure between China and Myanmar

China is second runner position for trade with Myanmar beginning from 2000. Myanmar's export to China constituted 6.18 percent of Myanmar's total export to all countries in 2000. In the same year, Myanmar's import from China was 18.06 percent of total trade. Share of Myanmar's export to China were 6.04 percent and 5.52 percent in 2003 and 2006, respectively. In contrast, share of import from China to Myanmar were increased from 18.06 percent in 2000 to 31.32 percent in 2003 and 34.61 percent in 2006. Myanmar's total trade with China were 621.2 US million dollars in 2000, US\$ 1079.7 millions and US\$ 1460 millions in 2003 and 2006, respectively. This trade increase was due to import from China to Myanmar.

Myanmar's exports to China are mainly constituted wood, pearls, crude rubber, ores, vegetables, roots and tubers. According to UN COMTRADE data in WITS jointly provided by UNCTAD and World Bank (<http://wits.worldbank.org/witsweb/>), the export share of wood in the rough or roughly square are increased. WITS still does not provide the data for Myanmar. I got the Myanmar data by checking its partner country. In 2000, it was US\$ 59.82 millions, and US\$ 76.98 millions and US\$ 113.5 millions in 2003 and 2006, respectively (Table 1). The share of SITC 242 and 243 exports to China are increased from 64.52 percent in 2000 to 68.28 percent in 2003; and decreased again to 59.56 percent in 2006. Though the income of wood export to China is increased, forests

are limited resources. If government would not manage well in logging the forests, export earning from forest products could be lost. And it should also be considered from environmental impact. China should also help Myanmar to reestablish the forests. If China does not pay attention the lost of its neighbor's forests, the environmental impact may also affect on China as well as on neighboring countries in future.

On the other hand export of rubber to China was consecutively increased from US\$ 0.35 million in 2000 to US\$ 3.17 million and US\$ 21.23 million in 2003 and 2006, respectively. This sector helps to utilize underemployed labor resources because it needs intensive labor resource. And it is also a kind of forest rehabilitation. Myanmar may shift from exporting of long-lived forest products to relatively short-lived forest products like rubber wood. Export of fresh and preserved fishes and dried fruits are ups and downs through 2000 to 2006. Myanmar is importing large number of consumer goods from China. Among these, textile, iron and steels, machinery and appliances, electric power machines, motor vehicles are main imports from China. Myanmar's export to China was only US\$ 124.82 million while import from China was US\$ 496.44 millions making trade deficit of US\$ 371.62 millions. This trade deficit was US\$ 740.70 millions in 2003 and US\$ 954.77 millions in 2006.

Table 1. Myanmar's main export items to China in US\$ (1000)

<i>SITC</i>	<i>Description</i>	<i>2000</i>	<i>2003</i>	<i>2006</i>
031	Fish, fresh & simply preserved	6964.2	2624.9	3973.8
052	Dried fruit including artificially	8967.0	10811.1	5730.8
054	Vegetables, roots & tubers, fresh o	1398.3	1300.2	5027.9
221	Oil-seeds, oil nuts and oil kernels	316.5	7795.6	3366.4
231	Crude rubber-incl.synthetic & recla	346.5	3169.6	21228.6
242	Wood in the rough or roughly square	59818.8	76981.0	113497.7
243	Wood, shaped or simply worked	20705.7	38756.7	36975.2
251	Pulp & waste paper	na	na	11914.3
276	Other crude minerals	7275.2	4125.4	4171.1
281	Iron ore & concentrates	na	na	8800.3
283	Ores & concentrates of non-ferrous	3689.6	9115.1	7797.7
292	Crude vegetable materials, nes	2946.2	3699.9	3092.2
631	Veneers, plywood boards & other wood	186.0	1513.7	1162.3
667	Pearls and precious and semi-precious	8367.5	5287.2	10717.4
891	Musical instruments, sound recorders	2084.4	0.1	1523.6

Source: World Integrated Trade Solution (WITS)

3. Comparative advantage for some selected commodities

Balassa (1965) proposed indicators of revealed comparative advantage (RCA). The RCA or Balassa index (BI) is calculated as the ratio of the share of a given product in a country's export to another country or region to the share of the same product in that country or region's total export. There are many studies using RCA method to analyze specialization patterns in trade. For instance, Kaitila (2001) and Algieri (2004) studied between EU 15 and the new member states of EU and Russia. Batra, A., and Khan, Z (2005) studied RCA for India and China.

In order to analyze Myanmar's export and import structure in a form comparable with other countries, revealed comparative advantage (RCA) is most appropriate method which is defined as follows:

$$RCA_{xih} = (X_{ih} / X_i) / (W_h / W)$$

Table 2. Share of selected commodities and their revealed comparative advantage (RCA)

SITC	Description	2000		2003		2006	
		Share (%)	RCA	Share (%)	RCA	Share (%)	RCA
031	Fish, fresh & simply preserved	9.25	6.61	6.06	4.48	5.56	5.10
052	Dried fruit including artificially	0.46	8.96	0.44	7.15	0.15	3.99
054	Vegetables, roots & tubers, fresh o	5.92	8.25	9.93	12.09	13.31	19.01
221	Oil-seeds, oil nuts and oil kernels	1.67	3.27	1.33	2.12	0.52	1.15
231	Crude rubber-incl.synthetic & recla	0.83	2.20	0.49	1.21	0.75	1.41
242	Wood in the rough or roughly square	16.52	58.34	14.28	58.91	11.90	56.93
243	Wood, shaped or simply worked	4.84	5.41	4.50	5.73	2.55	3.87
251	Pulp & waste paper	0.01	na	na	na	0.38	0.73
276	Other crude minerals	0.37	1.58	0.15	0.40	0.09	0.46
281	Iron ore & concentrates	na	na	na	na	0.19	0.29
283	Ores & concentrates of non-ferrous	0.52	0.99	0.41	0.82	0.26	0.27
292	Crude vegetable materials, nes	0.32	0.62	0.27	0.57	0.17	0.48
631	Veneers, plywood boards & other wood	1.05	1.91	0.59	1.17	0.68	1.52
667	Pearls and precious and semi-precio	1.26	0.72	0.93	0.53	1.58	1.11
891	Musical instruments, sound recorders	0.42	0.17	na	na	0.04	na

Source: Author's calculation; **na:** data not available; **SITC:** Standard International Trade Classification

Where RCA_{xih} is the RCA index of the country i in commodity h , X_{ih} is the exports of commodity h from country i to the rest of the world, X_i is country i 's total exports, W_h is the world total trade in commodity h , and W is the total world trade volume. If the RCA index is above the unity, the country has comparative advantage in

the commodity.

In this paper, I calculate the RCA for Myanmar's major export items to China. The pattern of comparative advantage may differ across different levels of dis-aggregation and sectors (based on HS classification system) in which a country's exports may be typically strong may often include dis-aggregated sub-products in which they are not. This paper only focuses on three digit level. Table 3 shows share of some selected commodities and their revealed comparative advantage. Most of RCA indexes are above one. As see in the table the trend for RCA is ups and downs through 2000 to 2006. If we see for wood products (SITC 242 and 243), the RCA figures are going down. It is clearly stated that government cannot manage well in this sector too. Most of selected commodities shows same trend. Only the vegetables, roots and tubers have shown increased trend.

4. Conclusion

This simple analysis shows China is important for Myanmar economy. But trade between two countries is unbalanced. China is getting trade surplus on Myanmar. If this trend will be longer in the future, China's influence on Myanmar will further be increased. Myanmar's exports to China are mainly based on natural resources especially forest product. But natural resources are limited. If systematic logging is not done, it may happen environmental impact on Myanmar and China as well as on neighboring countries. It does not favor for economic growth of Myanmar. Government should pay attention on the exports which are economic-growth-driven.

References

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