

Chapter 4

Master Plan for Export Promotion

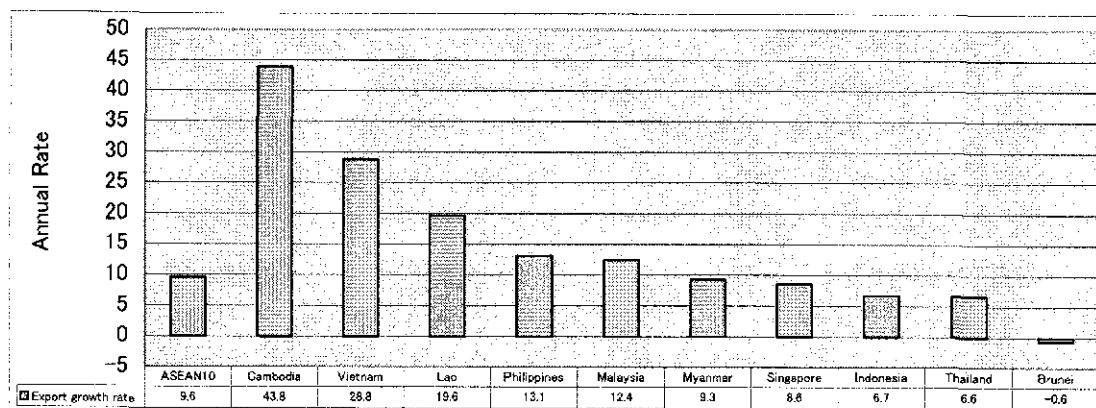
4. Master Plan for Export Promotion

The importance of promoting export has been explained in previous materials. This chapter proposes a master plan for export promotion. It begins with a profile of the trend of export and major tasks for its promotion in Myanmar, followed by analyses and proposals focusing on the policy aspect in Section 4.1, and the analytical results and policy recommendations derived from them for individual export items in Section 4.2.

According to trade statistics of the International Monetary Fund (IMF), worldwide export on the free-on-board (FOB) basis reached 6.4 trillion dollars in 2000 and increased at an annual average rate of 6.5 percent during the 1990s. In the Asian region, the corresponding figures were 1.5 trillion dollars and 8.6 percent. Owing to the economic turmoil triggered by the Asian currency crisis, the share of global trade occupied by the region, which had been in a rising trend and hit 24.4 percent in 1996, fell back to 19.9 percent in 1998 due to a decline in the increase rate following the crisis. Subsequently, a moderate recovery brought the share to 22.9 percent in 2000.

Within Asia itself, there is a trend toward dispersion in this respect. Because the rate of increase in export from Japan has fallen relative to China/Hong Kong and the ASEAN 10, the share of all Asian export occupied by Japan has been lower than the shares of the former since 1993. Although this change is partly due to the shift toward offshore production in Asia outside Japan among manufacturers headquartered in Japan and other developed countries, the underlying factors are a rise in productivity and increase in cost competitiveness in the global context.

Figure 4-1 Export Growth Rates in ASEAN 10 for 1990s



Source: Prepared by the JICA Study Team based on data from the World Bank and other sources

Throughout the 1990s, extremely high rates of export growth were posted by the three Indonesian countries of Cambodia, Vietnam, Laos. Although this was because of the low trade volume in the early part of the decade in the case of Cambodia, for example, there was nevertheless a jump in export on the part of countries that were newly incorporated into the ASEAN economy as compared to those such as Thailand, Indonesia, and Singapore, which had driven it in the past. These countries are clearly cost-competitive, and could very well achieve economic advancement on a par with the forerunning ASEAN countries once they have made the right provisions for export promotion.

Although Myanmar export grew at a corresponding rate of 9.3 percent, this was still less than half as high as the rates for other less-developed ASEAN countries such as Cambodia, Vietnam, and Laos. This is thought to be caused mainly by the underconditioning of the export climate in Myanmar, and calls for urgent measures of correction to promote export.

From 1886 to 1948, Myanmar was in British territory. Since those days, Myanmar has been exporting natural resources, such as rice, freshwater fish, shrimps, marine products, beans, sesame, jute, hardwood, such as teak or the like, bamboo, rubber, precious stone and minerals, such as copper, lead, tin, etc. In addition, she has two major markets: People's Republic of China to the north and India to the west. And they were large food and wood markets.

In 1962, Myanmar became a socialist state, where self-sufficiency-oriented economic policies were taken on a centrally planned economy basis.

In 1988, the administration drifted to the current scheme, in which an "open-door policy" and a "market-oriented economy" were introduced in Myanmar. And the following fourteen items were implemented as economic policies to reform her economy:

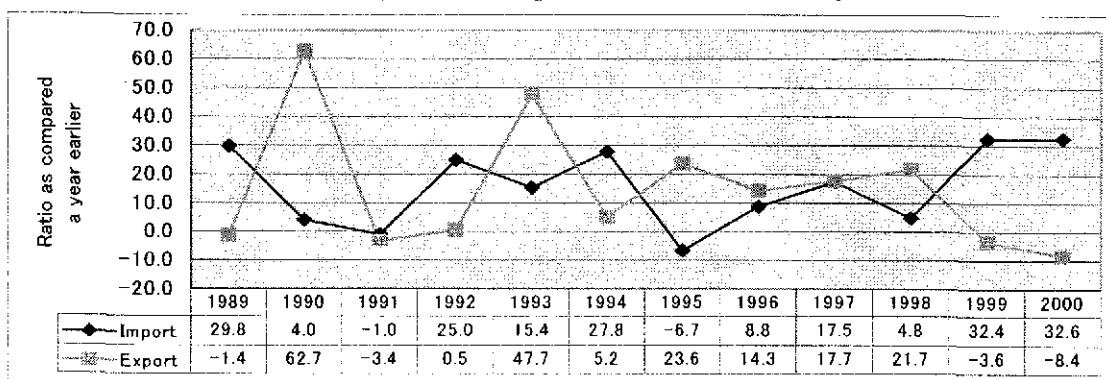
Out of the measures enumerated above, the reform directly related with exportation is 14. Promoting exportation by making the existing export proceedings more efficiency while diversifying a range of export goods by developing new products

As a result of taking such policies, Myanmar increased her exports at an annual rate of 15% on a Kyat basis from 1998 to 2000, coupled with the economic growth in Asian (an annual growth rate of 9.3% from 1990 to 2000 on a US dollar basis according to the IMF statistics already referred to). This growth rate exceeded an annual export growth at 13%. Nevertheless, the trade deficit continued and amounted to 3,036 million Kyat in 2000. For 1990 and 1991, Myanmar had the trade deficit exceed the total export value because of the "import first policy" and of an increase in importation of machinery and raw materials. In addition, her trade deficiency from 1995 to 1998 was also larger than the total export because of a rapid increase in importation, coupled with the growing economy overheated on those days when Vietnam and Myanmar enjoyed a boom. As referred to later, Myanmar has not

built up export environments fully while showing a strong demand for importation. Besides, her import substitute industries have not developed sufficiently yet. Consequently, Myanmar has a strong inclination to have a trade deficit.

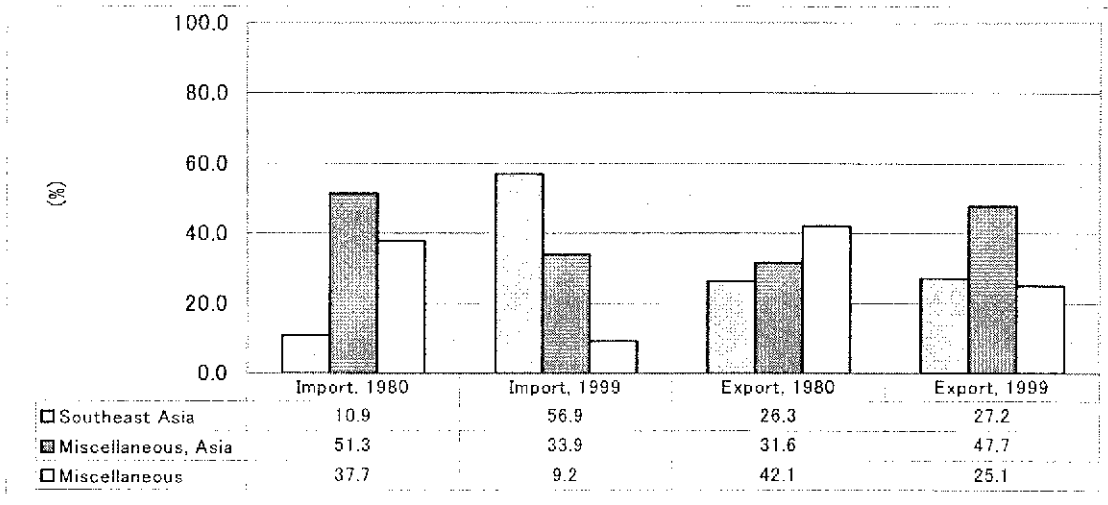
There has been a major change in the composition of Myanmar trade (export and import) by partner region. As compared to that for 1980, the composition for 1999 exhibits three key differences: 1) a sharp increase in import from other Southeast Asian countries, 2) an increase in export to Asian countries outside Southeast Asia, and 3) a steep drop in trade with regions other than Asia. In reality, the current trends are being carried on a flow of regional economic integration rather than globalization. A region with a poor suite of export means, like Myanmar, has difficulties in improving the trade balance, because a rather significant acceptance of imports from neighboring countries would not always be accompanied by the proportional exportation. An adverse balance of trade, therefore, would not improve with ease. Main export items have also changed in a great measure between 1980s and 1990s. In 1980s, Myanmar mainly exported rice and rice products, which occupied 42% of her total export, followed by wood-related products, ores and beans. These four items occupied approximately 80%. In 1999, the rice ranked so far always at the top showed a significant decrease in the main export items, occupying 0.7% only while timber dropped from 25% to less than 10% and ores from 6% to 3%. Beans and marine products, on the other hand, showed a slight increase in component ratio of Myanmar's total exports. And the clothes that had counted at zero in 1980 occupied 9% of her total exports for 1999. There has also been an increased export of goods that have not been major export items in the past. The decline in export of items for which Myanmar has a strong export competitiveness, i.e., rice and sesame, is directly linked to a worsening of the trade balance. Although it is important to develop export of new items, it is also crucial for Myanmar to revitalize its export of what have been the major items so far.

Figure 4-2 Export and Import Growth Rates in Myanmar



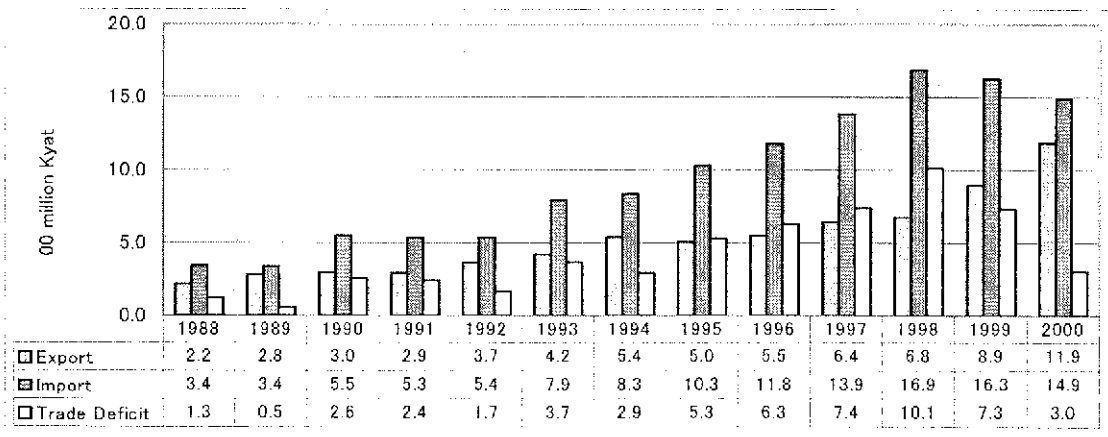
Source) prepared by the JICA study team, based on the data available in the World Bank, etc.

Figure 4-3 Regional Changes by Export/Import Opponent for Myanmar



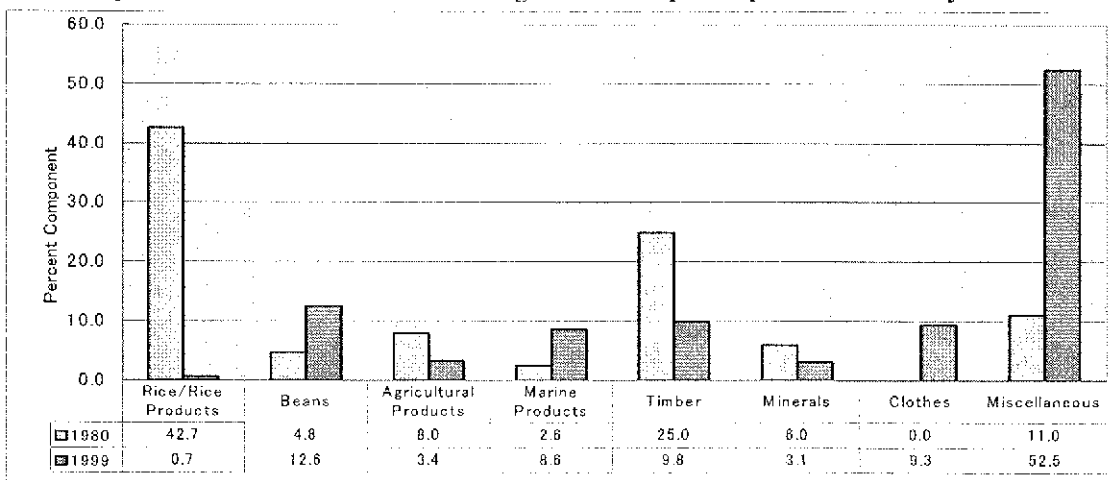
Source) prepared by the JICA study team, based on the data available in the World Bank, Asian Development Bank, etc.

Figure 4-4 Trade Balance Trends



Source) prepared by the JICA study team, based on the data available in the Myanmar Government, etc.

Figure 4-5 A Time-Series of Changes in Principal Export Items in Myanmar



Source) prepared by the JICA study team, based on the data available in the Myanmar Government

4.1 Analysis and Proposals for Promotion of Export in the Institutional and Policy Aspect

4.1.1 Basic Trade Policy in Myanmar

The major measures in Myanmar trade policy are shown below. These measures hinder the smooth conduct of export and import work and the promotion of related business as needed for prompt adaptation to changes in the surrounding circumstances.

- (1) The backbones of Myanmar trade policy are replacement of import and encouragement of export.
- (2) Private enterprises are allowed to engage in trade business in accordance with the rules and regulations related to export and import.
- (3) The "export first" principle is applied to private enterprises. More specifically, private enterprises are allowed to import within the scope of the dollars earned through export. The government allows export of all goods except the 32 items placed under controls with a view mainly to managing the domestic supply of food, including rice and rice products (generally, 31 items plus 1 item of transborder trade; these items can be exported only by state enterprises).
- (4) Exporters and importers must obtain a license for each occasion of export and import business.
- (5) The top-priority items of import (essential goods) are agricultural machinery, agricultural implements, fertilizer, edible oils, industrial materials, machinery/equipment, construction goods, and construction materials.
- (6) In the case of private enterprises, essential goods must make up at least 80 percent of each occasion of import.

Besides the above, there are additional issues, as follows.

- (1) The so-called export tax of 10 percent (consisting of the 8-percent commercial tax plus the 2-percent income tax) is levied on the dollar basis.
- (2) The constraints on travel overseas and collection of information on other countries impede trade business.
- (3) There are many low-quality processed goods that do not have export competitiveness.

4.1.2 Basic Tasks for Promotion of Export in Myanmar

Efforts to promote export must be grounded in provisions for smooth performance of export business and assurance of gain (profit) from it. At present, there remain many obstacles to smooth performance of and profit from export business in Myanmar. The elimination of these obstacles is the substance of the tasks for promotion of export. The table below shows the advisable order of priority for these tasks as viewed from the standpoint of the underlying causes of the problem.

It is true that lack of overseas information is a problem of export promotion. However, private exporters can't export the products unless the exporters can get the export license even though exporters can gather overseas information. Lack of overseas information should be given the lower priority than getting the export license. After improvement of the licensing system and regulation of export items to private sector, lack of overseas information would be given the higher priority than now.

After improvement of the licensing system and lowering of export controls, the focus should shift to provisions for gathering information on foreign markets. In Vietnam, for example, Vietrade was established after the removal of regulations related to export and import licensing.

It is also true that export incentives should be introduced. However, private exporters can't export the products unless the exporters can get the export license even though exporters can enjoy lots of export incentives. Lack of export incentives should be given the lower priority than getting the export license now in Myanmar.

The tasks of high priority should be implemented over the short term. To be more specific, the first-priority ones are to be implemented within the next two or three years, and the second- and third-priority ones, over the medium and long terms, respectively.

Table 4-1 Priority Tasks for Export Promotion

Major issues	Major measures	Order of priority 1) First priority 2) Second priority 3) Third priority	Public and private roles
1. Lack of overseas information and means of accessing such information	<ul style="list-style-type: none"> * Establishment of an export-promoting center (Myanmar External Trade Organization; METRO) integrating a center of trade-related information and a trade service center furnishing services in credit information provision and export assistance * Grooming of human resources in the field of trade business 	3) No direct impact on the business foundation, but needed for promotion of export	Such a center could be established and operated through collaboration by the authorities (MOC, etc.) and private-sector parties such as the UMFCFI
2. Difficulties in obtaining a business passport and rigid entrance and exit requirements	<ul style="list-style-type: none"> * Prompt issuance of business passports on a priority basis 	3) No direct impact on the business foundation, but needed for promotion of export	- Need for relaxation of regulations by the authorities and observance of rules by private firms
3. Shortage of human resources versed in trade business	<ul style="list-style-type: none"> * Preparation of trade training programs through public-private collaboration * Establishment of a trade training center like those in Thailand and the Philippines 	1) Human resources should be developed together with steady relaxation of export restrictions	- Such a center could be established and operated through collaboration by the authorities (MOC, etc.) and private-sector parties such as the UMFCFI
4. Items of export regulation limiting the business activities of private firms	<ul style="list-style-type: none"> * Steady relaxation of export restrictions for items whose export was restricted in recent years, items of export promotion, and industries with promising export prospects undergoing separate study * Privatization in the concerned fields 	1) Constraints on the business foundation; urgent need for revision	- Easing of regulations by the authorities and development of business in items of export promotion by private firms
5. Decline in export competitiveness and profit due to the export taxation (8-percent commercial tax plus 2-percent income tax)	<ul style="list-style-type: none"> * Reduction of export duties on items of export promotion and items in industries with promising export prospects undergoing separate study * Reinforcement of import tariffs * Establishment of a special export zone * Import tariff in dollar to cover losses of abolition of export tax 	1) Direct impact on business profit and international competitiveness	- Revision of tax/tariff rates and reinforcement of surveillance and penalties for illicit private-sector practices such as under-valuation by the authorities, and observance of rules by private firms

6. Import restriction items and quantities	* Shift from quantity-based control to higher tariff rates for import of non-essential goods or import tax in dollars for non-essential goods	1) Large impact on the business foundation, and needed for more efficient trade business	- Need for relaxation of regulations by the authorities and observance of rules by private firms
7. Frequent policy and institutional changes and sudden notifications	* Establishment of an official export promotion steering committee convened on a regular basis with private- and public-sector membership * Revision of the current institutions related to export * Preparation of mutually consistent export promotion programs * Reinforcement of public-private interchange and expansion of private-sector networks by the UMFCCI * Fuller compilation of statistics for major products	1) The problems are linked to an inability to prepare business plans and loss of external credibility; need for urgent improvement	- Promotion of public-private interchange under the leadership of the authorities and expansion of private-sector networks under the leadership of the UMFCCI
8. Rigid customs clearance process and encouragement of black-market transactions due to the recorded price system	* Abolition of the recorded price system in customs duties * Spot inspections and tougher penalties to prevent illicit declarations	2) Constraints on the business foundation; urgent need for revision	- Need for relaxation of regulations by the authorities and observance of rules by private firms
9. Complex, inefficient import-export procedures	* Switch to a more export-oriented system in customs clearance procedures for items not subject to import-export restrictions * Implementation of trade business process re-engineering (BPR) to streamline the process of import-export licensing and customs clearance	2) No direct impact on the business foundation, but needed for more efficient export business	- Improvement of the business process under the leadership of the authorities
10. Inefficient, inconsistent inspection and clearance procedures	* Fuller instruction and training for customs personnel * Installation of an innovative evaluation system for administrative services, degree of user satisfaction, etc. * Improvement of port and harbor facilities in the Yangon area and others in accordance with infrastructure plan	2) No direct impact on the business foundation, but needed for more efficient export business	- Improvement of the business process under the leadership of the authorities

<p>11. Inefficient import-export financing and lack of related services Insufficient export incentives</p>	<ul style="list-style-type: none"> * Resumption of provision of import-export financial services at private-sector financial institutions together with dollar control measures * Instruction and training for staff at the MFTB and MICB, MEB * Duty process improvement and computerization at the MFTB and MICB, MEB * Installation of export financing services 	<p>2) No direct impact on the business foundation, but needed for more efficient export business</p>	<p>- Improvement of the business process under the leadership of the authorities and easing of regulations</p>
<p>12. Insufficient export incentives</p>	<ul style="list-style-type: none"> * Installation of export financing services * Bonus system for model firms 	<p>3) No direct impact on the business foundation, but needed for promotion of export</p>	<p>- Improvement of the business process under the leadership of the authorities and easing of regulations</p>
<p>13. Level of quality not acceptable in Japan and other developed countries (processed lumber and food products, etc.)</p> <ul style="list-style-type: none"> * Low-value-added products * Lack of technology and market 	<ul style="list-style-type: none"> * Expansion of training opportunities for improvement of the quality of items for export promotion and products with promising export prospects (establishment of a training center for improvement of the technical level of export products) * Financial support for the import of production facilities and equipment * Attraction of FDI 	<p>1) Direct impact on the business foundation; one of the key factors for promotion of export</p>	<p>- Integrated measures for technical improvement through public-private collaboration</p>
<p>14. Lots of regulatory issues, Complicated procedures</p>	<ul style="list-style-type: none"> * Designation of a special export zone for leading incorporation of more efficient inspection and clearance procedures 	<p>1) Direct impact on the urgent export foundation; one of the key ideas for promotion of export</p>	<p>- Need for relaxation of regulations by the authorities as a sort of test in order to make a successful case</p>
<p>15. Lots of regulatory issues, Complicated procedures</p>	<ul style="list-style-type: none"> * Designation of export promotion items that producers and exporters can enjoy efficient trade value chain 	<p>1) Direct impact on the urgent export foundation; one of the key ideas for promotion of export</p>	<p>- Need for relaxation of regulations by the authorities as a sort of test in order to make a successful case</p>

Source: prepared by the JICA study team

4.1.3 Specific Plans for Measures to Promote Export over the Short Term

Over the short term, the important thing is for the government to present policy explicitly proclaiming promotion of trade liberalization to all parties inside and outside Myanmar, and to send a clear signal about emphasis on export. Because it would not be practicable for Myanmar to promote export with reliance on financial resources at present, the government should accord top priority to elimination of the disincentives as its direction for lessening the burden on the export industry. In sum, the key tasks over the short term are to send out a clear signal of trade liberalization as a general rule and to instate regulations for exceptional items on a negative list.

- (1) Establishment of a public-private joint committee for promotion of export chaired by the head of state

Myanmar should establish a joint committee, composed of representatives of both the public and private sectors, and chaired by the head of state, for export promotion chaired, along the lines of the supreme trade conferences in Japan and Korea, the conference for exchange of opinion on export promotion in Vietnam, and the export steering committee in Thailand.

The prospective membership is as follows. Secretary 1, Secretary 2, Secretary 3, Minister of Commerce, Minister of Finance, Minister of National Planning and Economic Development, Minister of Industry 1, Minister of Industry 2, Ministry of Agriculture, Ministry of Forestry, UMFCFI Chairman, UMFCFI member in charge of trade, (Foreign chambers of commerce and industry, if necessary)

The immediate task is determination of the specifics for implementation of the short-term export promotion measures described below. In this project, it will be assumed that the joint committee will hold its first meeting in 2003.

- (2) Abolition of the so-called "export tax" (commercial tax and income tax), and provisional instatement of an import surcharge and special account for it

The so-called "export tax" is one of the burdens on export business mentioned by private companies. While its removal is important for increasing the competitiveness of and promoting export, the export tax is also a major source of foreign-currency income as far as the government is concerned. Therefore, the situation demands an alternative source of such income to replace it. Meanwhile, Myanmar does not have sufficient income from import duties. This is because the duties are held on very low levels for adaptation to the provisions

of the ASEAN Free Trade Area (AFTA) and other schemes. It is also due to the exchange rate applied to the assessment of customs duties, which is much lower than the market rate. Considered this circumstance in conjunction with the dollar-based export tax, policy could be regarded as, in effect, encouraging import more than export. It therefore lacks balance as viewed from the standpoint of export promotion. In light of the critical situation of the Myanmar economy at present, measures must be urgently taken to correct this defect.

The results indicate that a dollar-based import surcharge averaging 5 percent would be required to collect revenue on a par with the current export tax. On the other hand, if an import surcharge is applied at a uniform rate of 5 percent, there would be no need to collect the export tax. Uniform application of the surcharge is also recommended; a lack of uniformity could breed graft and lessen the desired effect.

In addition, the revenue collected from the import surcharges should be managed in a special account with clear stipulations for its use.

Initially, these measures should be instated on a provisional basis for a term of from three to five years. The rate should be gradually lowered and finally phased out upon the expiration of this term. (Prospective course of action:- FY2003: deliberation of specifics,- 04: import surcharge rate of 5%,- 05: rate of 3%,- 06: rate of 1%,- 07: 0%)

(3) Opening up of export business to the private sector, beginning with sesame

At present, the Ministry of Commerce (MOC) is encouraging export of the following items.

(1) Rice & Rice products, (2) Pulses & Beans, (3) Marines & Fisheries, (4) Value Added Timber Products, (5) Handicrafts, (6) Jade, Gems & Jewelry, (7) Garment & Textile, (8) Household Goods, (9) Furniture made of timber and cane

In addition, items of the following types with export-competitiveness must be designated for encouragement of export under private-sector leadership. (10) Agricultural Products(Sesame Seeds, Sesame Oils, Cotton and Cotton Products, Kenaf), (11) Minerals (Copper cathodes) (12) Industrial products(Castings) (13) Teak

The items noted above have export competitiveness and good prospects for expanded export. They also could be expected to have a big effect for improving the trade balance as a result.

Private firms are allowed to export pulses and beans, for which Myanmar has among the largest export of all countries worldwide. This export should continue to expand, and is projected to grow at annual rates averaging 8 percent into the long term.

Table 4-2 Future Outlook for Production and Export of Beans and Pulses

	2001	2005	2020
Production (tens of thousands of tons)	103	140	440
Export (hundreds of millions of dollars)	2.8	3.8	12

Source: Prepared by the JICA Study Team based on data from the Myanmar Government and other sources

Like beans and pulses, rice and sesame also have export competitiveness, and definitely could become major export items as in the past.

The government should immediately throw export of rice and sesame open to the private sector and thereby send a clear message about its new policy. The promotion of export in this field could greatly improve the trade balance. As has been mentioned previously, the controls on export of sesame were imposed for production of sesame seed oil to replace import of palm oil.

However, these controls are doing immense damage to export, as follows.

- (1) Import price of palm oil: US\$400 per ton
- (2) Export price of sesame seeds: US\$500 per ton
- (3) Revenue from export of the two tons of sesame seed needed for production of one ton of sesame oil: US\$1,000

In other words, the domestic production of sesame oil to replace one ton of imported palm oil results in an export loss of 600 dollars per ton. Myanmar is neglecting to obtain 1,000 dollars through export of the two tons of sesame seeds and payment of 400 dollars to import one ton of palm oil, thereby realizing a profit of 600 dollars. In 1999, Myanmar produced 250,000 tons of sesame seeds. Assuming that the entire amount had been exported, this would have brought earnings of 125 million dollars, or about 8 percent of the entire 1999 export earnings. Supposing that the entire volume had been used to produce sesame oil for replacement of imported palm oil, the production would have come to the equivalent of 12.5 tons in imported palm oil and resulted in an export loss of 75 million dollars.

With promotion of its export, sesame is thought capable of making a contribution of 8 percent to export and 10 percent to improvement of the trade balance. Similar effects could be induced through export of rice, for example. Although there must be some adjustment in light of the need to assure the food supply, Myanmar should promote export by drawing on the experience of countries that are major rice exporters.

Table 4-3 Trade Balance in Sesame and Palm

Sesame		Palm oil	
1999 sesame production	250,000 tons	1999 palm oil import equivalent to the amount replaceable by sesame oil	125,000 tons
Amount of export in the case of export of the entire production	125 million dollars	Amount of palm oil import equivalent	50 million dollars

1999 export (dollar basis)	1.505 billion dollars
1999 import (dollar basis)	2.443 billion dollars
1999 trade balance (dollar basis)	-938 million dollars
Sesame contribution to export (Amount of possible sesame export / (amount of export + amount of possible sesame export))	$1.25 / (15.05 + 1.25) = 8\%$
Sesame contribution to the trade balance (Amount of possible sesame export - amount of palm oil import equivalent / ((amount of export + amount of possible sesame export) - (amount of import - amount of palm oil import equivalent)))	$(1.25 - 0.5) / ((15.05 + 1.25) - (24.43 - 0.5)) = 10\%$

Source: JICA Study Team

Trade business requires information on both the domestic and foreign markets. Myanmar firms, both private and state-run, presumably do not have better capabilities for gathering information on external products and markets than multinational firms. As such, trade business, which is now licensed to Myanmar firms, should be liberalized to permit use of the networks of multinationals.

The government should open up sesame export to private participation and trade business to foreign firms (while imposing limits on their interest) in fiscal 2003, and open up export of the products noted above from 2004 to 2005.

(4) Abolition of export-import licensing and instatement of an exceptional negative list

The prevailing requirement to obtain a license for each occasion of export or import makes trade business more complicated and inefficient. While some think it is necessary for

control of dollars, which are in short supply, the current export-import procedures must be improved.

A switch from licensing for each occasion to approval of yearly export-import plans would make procedures much smoother for both the government and private firms. This switch could be made merely by compressing the current procedural work. It would also enable estimate of the yearly demand for dollars and therefore assist control of dollars. For private firms, it would bring a reduction of the procedural work load and have few negative aspects. In the event of a major departure from yearly plans due to factors such as change in the product supply-demand situation, the initial plans would have to be modified, and arrangements therefore could be made for planning reviews and adjustments once every quarter. Furthermore, the government could present a negative list containing items whose export must remain regulated for reasons such as social justice or preservation of endangered resources. The general rule should be that items not on this list of exceptions may be freely exported.

The government should embark on preparations for the switch to a scheme of approval of yearly export plans and instatement of the negative list in 2003, and initiate the institutional reform in 2004.

These measures would be no more than provisional ones; the government should aim for the total phase-out of export-import licenses over a period of from three to five years. The officials now engaged in work related to export-import licensing should be reassigned to control of illegal practices.

(5) Abolition of the import dollar account and instatement of a provisional scheme for foreign currency allocation under the principle of "trade first" instead of "export first" or "import first"

In its policy on trade before the Asian currency crisis, the government of Myanmar took an "import first" policy in line with a view to encouraging import that would ultimately raise funds for export. This was done in order to resolve the shortage of funds among export businesses. Instated for the purpose of raising funds for export among private firms, the scheme was premised on the sequence of import of goods by Myanmar firms, sales of these goods in the domestic market, purchase of domestically-produced goods with the revenue from these sales, and export of these goods to foreign companies. The firms were given six months to perform the export, and the government recognized the establishment of up to three simultaneous projects by a single firm. In reality, however, the export of goods did not go as smoothly as had been planned, and the revenue from domestic sales was remitted overseas in many cases. In addition, the limitation of up to three projects by a single firm led to the establishment of "dummy companies" for import business in certain cases. As it turned out,

the scheme did not act to promote export.

In response, the government switched to an "export-first" policy, under which licenses were issued for import within the account (quota) of dollars earned through export. Because of the multi-tiered exchange-rate structure, however, this scheme had the effect of inducing a shift toward import.

At present, firms are not permitted to convert the dollars gained through export directly into kyat; they must convert them into FEC, and use the FEC directly or convert them into kyat. The official rate applied in this conversion is 450 kyat to the dollar, but the corresponding rate in the market is 775 kyat to the dollar. For every 100 dollars earned through export, for example, this makes for a difference of between 45,000 and 77,500 kyat. It might also be noted that the corresponding FEC market rate yields 735 kyat to the dollar. However, the latter is strictly the black-market rate, and detection would result in penalties for the offending firms. In use of the export-based dollar account to perform import, although the same firm would not be permitted to direct all of the dollar account to import, it could probably make sales worth more than 77,500 kyat (based on the market rate), provided that there is no particular problem with the imported products. In import agency business, the amount could be anywhere from 79,000 to 81,000 kyat. For income, this business would take a service fee of at least 2,000 kyat.

Under this structure, the "export first" policy may be regarded as causing a shift to import.

**Table 4-4 Comparison of Use of the Export Dollar Account
(without Consideration of the Profit rate)**

Conversion of the dollar account into kyat	Import within the dollar account
1. Export dollar account: US\$100	1. Import using US\$100
2. Conversion into FEC: \$100	2. Sale of US\$100 worth of imported products at market prices; prospects for earnings of over 75,000 kyat (legitimate). - Import tariffs are low overall.
3. Conversion into kyat at the official FEC rate: 45,000 kyat	3. Agency business for import of US\$100 worth of products, for earnings of from 79,000 to over 81,000 kyat (also legitimate).
4. Conversion into kyat at the market FEC rate: 73,500 kyat (black-market trading at risk of detection and penalization)	
5. Conversion into kyat at the dollar cash rate: 77,500 kyat	

Source: prepared by the JICA study team based on interview data

The lesson from this experience is that both the import-first and export-first lines are

not linked to promotion of export.

The greatest problem currently faced by Myanmar in this respect is the deficit in the trade balance, in spite of the export-first line of recognizing import only within the quota of dollars from export.

Myanmar possesses items that are competitive in export markets. It is critical for the country to actively develop their export through vigorous use of overseas networks. Similarly, the materials required for this purpose must be actively imported. It is only natural for temporal (time-sequence) gaps to open up between export and import. It also should be noted that nonessentials and other items will not be required at the same rate on a continuous basis.

Management of trade (export and import) and dollars is thought to require the instatement of a provisional scheme of foreign currency allocations and phased abolition of that of import dollar accounts.

In Japan, too, a scheme of foreign currency allocations was applied in the postwar period until the phase of high-level economic growth. It was used for priority allocation of foreign currency to the energy and material resources needed for life necessities and industrial activities. In Myanmar, it would be similarly used for priority allocation of foreign currency to those items whose import deserves precedence (such as life necessities and other such goods on the current list of essentials) and those items required for production of goods for export. The government should determine plans for the allocations at the start of the year and revise them six months later. Upon acquisition of sufficient foreign currency through these measures, the scheme of import dollar accounts should be abolished.

(6) Instatement of advance special export processing zones

Various privileges and incentives are provided to export-oriented firms sited in the special economic zones established in the Philippines and other Southeast Asian countries. For example, the following provisions are offered to firms licensed by the Philippine Export Zone Authority (PEZA).

- 1) Exemption from duties on import of capital goods, components, and materials
- 2) Exemption from income tax
- 3) Exemption from wharf dues, export tax, customs dues, and procedural taxes
- 4) Tax deductions for domestically-procured capital goods
- 5) Tax deductions for expenditures on education and training
- 6) Carry-over privilege for loss
- 7) Employment of foreign nationals
- 8) Granting of permanent residence status to foreign-national investors and their families

- 9) Permission for external remittance of profit without the approval of the central bank
- 10) Simplification of clearance procedures

In Myanmar's case, the following measures are thought to be important.

- 1) Exemption from application of export-import licensing requirements
- 2) Assurance of immediate effect by designation of the existing industrial estates in Mingaladon, etc. as special export processing zones.

As shown here, the government should guarantee the free flow of human, material, and financial resources in order to promote export by export-oriented firms.

This report envisions instatement of an application system patterned after that of PEZA in the Philippines.

- (1) Parties desiring to avail themselves of the aforementioned incentives must be sited in the special export processing zone and register with the zone authority (hereinafter referred to as "MEZA," i.e., the "Myanmar Economic Zone Authority"). In so doing, the party must submit documents for the following items to MEZA in addition to the prescribed triplicate application form.

- * Project feasibility study report
- * Transcription of the basic and ancillary articles of incorporation
- * Resolution of the board of directors in favor of making application, and list of the members of the board, major executives, and major shareholders (including career profiles)
- * List of facilities (machinery and equipment) to be used (with clear notation of capacity, ownership, and method of procurement)
- * Profile of the company and photo of the product(s) (or one of these, whichever is more relevant)
- * Other incidental documents, materials, and licenses required by MEZA in correspondence with the character of the business and type of organization of the applicant

- (2) The registration procedure would be as follows.

- * 1. Filing of the application to MEZA with payment of a prescribed application fee

- *2. Decision on approval of the application upon deliberation by the MEZA board of directors
- *3. Issuance of a registration certificate upon conclusion of a registration agreement between MEZA and the applicant, in accordance with the following conditions.
 - a. Satisfaction of all registration prerequisites by the applicant
 - b. Performance (submission) of the registration procedures no more than 20 (calendar) days after receipt of the notice of application approval and formal acceptance of the draft registration conditions
 - c. Payment of the registration fee

While some are of the opinion that such special measures hold little in the way of return to the community, such return depends on the setup for cooperation between the host-country firms and the foreign firms.

It goes without saying that the export-oriented tenants would create many job opportunities and also generate demand associated with physical distribution and infrastructure. In addition, an increase in the local contents of the production assumes increasing importance for the foreign firms, which consequently consider provisions for more extensive local sourcing. Although assembly-base manufacturers could not be expected to develop local sources for key components initially, the pursuit of a higher local contents leads to interaction with local industries in supply of repair components, maintenance parts, tools, and expendables. It is therefore vital to effect a gradual rise in the level of technical capabilities, beginning with these fields.

Bonded warehouses should also be established in inland areas. Because of the risk of bribery in connection with vested rights, management of the special export processing zones and bonded warehouses must include permanently stationed customs officers and guards. The guards must independently control the entry and exit of goods.

The schedule envisages the selection of candidate sites and performance of feasibility studies in 2003, execution of the requisite systemic changes in 2004, and establishment of the first such zone in 2005.

4.2 Analysis of Export Items and Proposal of Measures for Export Expansion

To promote export, the government in 1988 allowed private enterprises and cooperatives to participate in external trade in items which it had dominated up to that time. With certain designated exceptions such as rice, teak, crude oil, natural gas, pearls, and gems, the private sector was permitted to trade freely in all items. As such, the share of such trade handled by private companies rose.

As early as fiscal 2000/2001, export by private companies came to 8.7 billion kyat (or 69.7 percent of the total), higher than the corresponding 3.8 billion kyat (30.3 percent) for the national government. Today, the quickening of private-sector activities in a wider range of areas along with the shift to a market economy is therefore also reflected in the private-sector export share, which is significantly higher than that of SOEs.

However, the questionnaire survey with 36 export-oriented private companies found that most (of the trading companies) are small operations with from just a few to about 20 employees (these companies do not release figures on the sales and profit). Among private firms in the fields of garment-manufacturing, industrial goods, woodworking, and agricultural products, some are big operations (these numbered 12 and employed about 630 on average), but only four had yearly sales of at least 100 million kyat. This finding, too, shows how small transaction amounts are among Myanmar firms at present.

4.2.1 Selection and Features of Promising Items for Expanded Export

As part of the formulation of the master plan for future Myanmar export, it was decided to select five or six items considered to have good possibilities for expanded export over a relatively short term, identify current export-related issues for each, and determine prerequisites for their expanded export (i.e., all types of official support, points of current measures needing improvement, and steps for increasing Myanmar's export competitiveness).

However, it was no simple task to select the few most promising entries from the long list of export items. As a result, in the actual course of the study, the team strove to select about ten, partly also to explore the prospects for expanded export over a scope that was wider, *if only a little*. It was also decided to select about five items which are already major export items and have good prospects for expanded export (i.e., existing export items), and five which have little or no export dimension at present but should be the subject of efforts to develop and expand export (i.e., new export items). The standards of selection were basically as follows.

- * Conformance with opinions and desires expressed by UMFCICI (a taskforce member) and other parties on the Myanmar side (consultation by the UMFCICI with governmental institutions regarding the selection)
- * Items which are thought to have good prospects for export growth/expansion, items for which there is a certain level (volume) of export at present (existing export items), and items thought to be promising for effective use of natural/human resources within Myanmar (new export items)
- * Possibility of expanding export to Japan within a fairly short time

The selection was first narrowed down to 24 items by application of the following six criteria.

- * High (monetary) value of actual export over a period of about ten years
- * Long-standing export
- * Good prospects as regards growth, scale, and competitiveness
- * Preexisting routes for easy acquisition of quality goods even within Myanmar
- * Handling experience among Myanmar people
- * Latent promise as new export items

The selection was then narrowed down to ten items through application of the following criteria.

- * High (monetary) value
- * Good future growth prospects
- * Possibility of export sustained long into the future
- * A certain level of requisite technology within Myanmar
- * At least one major item from every field, if possible

Table 4-5 Ranking of Export Items by Priority

(Million Kyat)

Ranking	Item	Average export over the last five years (FY95 - 99)	Export in FY1999/00	Degree of promise	Growth	Scale	Competitiveness
1	Beans and pulses	1,269.4	1,179	◎	A	A	A
2	Garment	497.2	877	◎	B	A	A
3	Teak	764.6	727	○	C	B	A
4	Shrimp	524.8	529	◎	A	A	A
5	Refined copper	0	289	◎	A	A	A
6	Fish	240.6	229	○	B	C	A
7	Gems and pearls	174.2	217	○	A	A	A
8	Plywood	62.2	101		C	D	C
9	Sesame	159.8	82	○	A	B	A
10	Rubber	132.0	75		C	C	B
11	Footwear	0.0	69	◎	A	B	A
12	Rice	167.2	65	○	A	A	D

A. Extremely high B. High C. Medium D. Low

Source: Prepared by the JICA Study Team based on data from the Myanmar Government and JETRO

The double circles mark the five existing export items which are to be the subjects of in-depth study in the future (i.e., shrimp, refined copper, footwear, beans/pulses, and apparel). Although its average annual export growth rate over the five years in question was basically flat, shrimp was nevertheless chosen in light of the large scale of export and the good prospects for growth in the demand for natural foodstuffs. About 75 percent of the export of these five items is directed to Japan.

The procedure for selection of new export items was as follows.

Besides the existing items, Myanmar has prospects for export of items such as sugar, syrup, tea, coffee, pickles, ginger, green soybeans, devil's tongue, beer, buckwheat, dried/frozen vegetables, processed vegetables, turmeric, molasses, rice flour, edible vinegar, rattan, and vegetable dyes. Based on the findings of surveys with Myanmar state enterprises and private companies, the following four points were emphasized as selection criteria.

* Availability of raw materials within Myanmar

* Underdeveloped as an industry

* No need for large-scale investment

* Prospects for a yearly export of at least 1 million dollars

This led to selection of the following five items.

1. Kenaf
2. Cast-metal parts
3. Projects using old rubber trees
4. Laminated wood
5. Electronic component assembly

The following figure plots the relative positions of the five promising existing export items, the five promising new export items, and some additional items with a large-scale export, with reference to the growth in export to Japan and the export nature (leadership by the private sector versus official intervention). The horizontal axis indicates the growth rate for export to Japan over the last five years. Although it lacks numerical values and is somewhat conceptual, the vertical axis expresses the degree of governmental involvement as gauged from the findings of the interview surveys. The figure suggests that there is a trade-off relationship between export growth and governmental involvement. In other words, there is a substantial gap in respect of growth between items whose export is led by the private sector and those whose export is a subject of official intervention.

Official intervention takes forms such as export restrictions, price controls, and exchange regulations. With correction of the exchange regulations (i.e., removal of export disincentives as viewed from the standpoint of exporters), sesame and apparel would have excellent prospects for expanded export.

The figure also implies that, to promote export from Myanmar, the government should consider an increase in the items for export led by the private sector and decrease in those involving official intervention.

The table presents export disincentives and possible policy options to remove them in the case of the three items of apparel, rice, and sesame.

Garment manufacturing is thought to be an industry of strategic importance for Myanmar in the future. Besides heightening exporter incentive by correcting the exchange rate situation, it would be vital for the government to take steps such as lowering the degree of dependence on the United States, developing a more diversified mix of export markets, and further cultivating the industry's growth. In more concrete terms, it would be important to build up orders not only from dealers in Taiwan but also from those in Hong Kong (which have extensive transactions with the European market) and Singapore, as well as to raise levels of quality as needed for expanded export to Japan. In this connection, the key tasks in the

institutional aspect are establishment of a technical training center and development of a scheme of support for prime contractors.

Figure 4-6 “Trade-off” Relationship between Private Sector Initiatives and Government Intervention (Myanmar’s Exports to Japan in the Past Five Years)

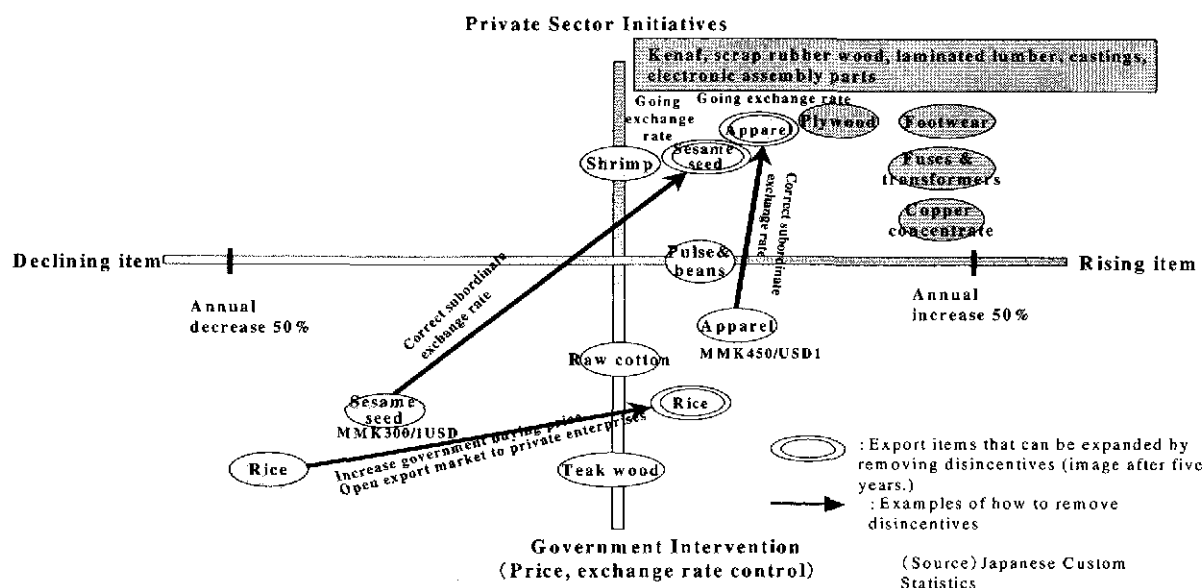


Table 4-6 Examples of Disincentive in Export Political Options to Minimize Disincentives

Items	Examples of Issues	Political Options
Apparel Garment	<ul style="list-style-type: none"> From August 2001, subordinated exchange rate (MMK450/USD1) is applied to foreign currencies gained from CMP export. Resulted in 30% exchange loss. Orders from the US declined significantly due to deliberation of bill to ban exports from Myanmar. 	<ul style="list-style-type: none"> Lower dependence on the US (currently approx. 80%) which has placed economic sanction on Myanmar. Diversify export market. Establish relationships with Hong Kong and Singaporean dealers who have access to European markets and not focus only on Taiwanese dealers who specialize only in the US market. In order to enter Japanese market, technologies to meet Japanese consumers' needs must be acquired. Developing technical training centers and principal contractor system will be effective.
Rice	<ul style="list-style-type: none"> Government buying price of rice has remained low and barely covers farmers' production cost. Domestic retail price is also low. Government dominates profits from export (Buying price is USD20/ton and exports for USD120/ton.) 	<ul style="list-style-type: none"> Increase government buying and loans to farmers for purchasing farming machines and fertilizers (currently loan limit is USD30 for one farmer for six month) in order to gradually minimize forficate differences among farmers. Import hybrid seeds or establish joint venture in order to improve productivity. Open export market to private sector.
Sesame Seed	<ul style="list-style-type: none"> Since 1999, subordinate exchange rate (MMK300/USD1) has been applied to private enterprises' foreign revenue from sesame seed export, in order to export refined sesame oil. Resulted in 50% exchange loss. Sesame oil refining business is not profitable, either. 	<ul style="list-style-type: none"> Open sesame seed export market to private sector. Sesame oil pressing business seems difficult to launch full operation because of extraction rate issues and aging facilities.

Source: JICA Study Team

4.2.2 Measures for Expanded Export of Each Item

A separate report sets forth the situation for each item in question as regards export, trend of export markets, conditions for export expansion, and measures for expanded export. Please see this report for the details in this aspect.

Many items share a need for implementation of various measures, such as simplification of procedures for obtaining export licenses, resolution of export disincentives (most importantly, the so called export tax), and improvement of foreign currency regulations applied in import of raw materials. Because these shared tasks are presented in the separate report, the table below lists the measures for expanded export that are relatively distinct to the item in question.

Table 4-7 Measures for Expanded Export of Each Item

	Basic strategy	Measures
Beans & pulses	<ul style="list-style-type: none"> • Reinforcement of export competitiveness relative to China • Cultivation of abilities for collection of market information and corresponding adaptation 	<ul style="list-style-type: none"> • Improvement of quality, increase in yield, incorporation of screen sorting technology • Expanded production of SQ products for the Japanese market • Abilities for collection and analysis of mainly overseas information on items such as trends in external markets, activities of competitors, and price trends
Sesame	<ul style="list-style-type: none"> • Relaxation of regulations on export by private companies 	<ul style="list-style-type: none"> • Renewal of facilities and increase in yield (sesame oil)
Shrimp	<ul style="list-style-type: none"> • Strategy to bring the distinctive features of natural and cultured Myanmar-produced shrimp to the attention of consumers • Improvement of the safety of cultured shrimp and stable supply of the same 	<ul style="list-style-type: none"> • Measures to heighten recognition in the Japanese market • Information networking linking consumers, shrimp farms, and processors, and stable supply • Publicity about safety in the market • Investment for enlargement of shrimp farms
Copper cathodes	<ul style="list-style-type: none"> • High competitiveness already achieved with the current SX-EW production; conformance with international standards of quality • Expanded export to Japan and neighboring countries 	<ul style="list-style-type: none"> • Dependence on the supply capacity for electric power • Large-scale investment for expansion of production capacity
Kenaf	<ul style="list-style-type: none"> • Promotion of the current five-year plan • Promotion of applied development for use as material in automobile interiors, etc. 	<ul style="list-style-type: none"> • Invitation to technicians from other countries • Construction of small kenaf plants followed by steady enlargement

Metal castings	<ul style="list-style-type: none"> Expanded export to Japan 	<ul style="list-style-type: none"> Partial rehabilitation of production facilities Need for mold fabrication equipment to achieve higher VA levels (wooden molds, aluminum molds, etc.)
Laminated wood	<ul style="list-style-type: none"> Collection of information on the teak market in countries with a large demand for Myanmar teak (Thailand and Singapore), and an increase in the VA level of Myanmar teak Establishment of the woodworking technology center and other steps to reinforce education 	<ul style="list-style-type: none"> Strengthening of abilities for collection of information Input of processing technology and facilities from other countries Cultivation of the growth of new laminated wood processing firms based on JVs with foreign firms
Old rubber trees	<ul style="list-style-type: none"> Development of export as materials for laminated wood (to Malaysia, Thailand, and Vietnam) 	<ul style="list-style-type: none"> Setup for assurance of quality and on-time delivery Investment in facilities and technical education

Source: Prepared by the JICA Study Team

4.2.3 Action Plan for Expanded Export of Two Items

The JICA Study Team formulated a plan of action over the short term for expanded export of two of the ten promising items, i.e., beans and pulses as representative of existing export items, and laminated wood as a new export item. The plan for the latter is premised on development of the industry with a view to increasing the value added level of processing for teak and other types of lumber. This section profiles the plan for these two items.

4.2.3.1 Action Plan for Expanded Export of Pulses and Beans

Export of pulses and beans has rapidly expanded since the permission for private-sector participation in it. In fiscal 2001-02, it passed the 1-million-ton mark and reached 1.03 million tons. Myanmar ranked first in the world for export of matpe and overtook Australia to rank second, behind Canada, for beans and pulses as a whole. The government has already posted increased production and export of beans and pulses as one of its policy objectives. In spite of the various factors impeding this export (to be described below), there are good prospects for its further expansion with the improvement of official measures, in light of the potential deriving from features such as the climatic conditions adapted to cultivation of all sorts of various species in addition to the large store of land resources, plentiful water, and labor force.

Note: In connection with agricultural products, the government has instated policy for

increased production of rice, attainment of a self-sufficient supply of edible oil, and increased production and export of beans and pulses. By the same token, for the purpose of food management, it has placed restrictions on export of rice, white sugar, brown sugar unrefined sugar, peanuts, peanut oil, sesame, sesame oil, raw cotton, and cotton yarn; pulses and beans can be freely traded.

At present, there are about 20 private-sector companies in Myanmar engaged in export of beans and pulses that handle more than 10,000 tons a year. The main export destination is India, and the products directed to that country are of fair average quality (FAQ) or below. Export to Japan must be of special quality (SQ; large-sized matpe left after sorting with a 3.5-mm-mesh screen). The companies handling export to Japan therefore possess sorting facilities for this purpose.

Table 4-8 Trend of Production and Export of Beans and Pulses
(Q'ty : Ton in Thousand)

Item		85/86	96/97	97/98	98/99	99/00	00/01
Matpe	Production	93	323	413	437	421	523
	Export	0	209	308	279	235	274
Green soybeans	Production	30	328	442	457	471	511
	Export	0	128	121	174	145	186
Other beans and pulses	Production	491	658	686	704	823	1078
	Export	89	258	340	169	181	371
Total	Production	614	1309	1641	1598	1715	2112
	Export	89	595	769	622	561	831

Source: Prepared by the JICA Study Team based on data from Myanmar Government

In fiscal 2001-02, this export came to 280 million dollars and 1.03 million tons. As a destination, India received the majority at about 800,000 tons or 77.4 percent in quantitative terms and 210 million dollars or 74.7 percent in monetary terms. It was followed in order by Pakistan, Indonesia, Singapore, and Japan. The export to Japan consisted of 4,818 tons of matpe (down 11.1 percent from the previous year) and 8,952 tons in butter beans and other beans and pulses (down 16.4 percent), for a total of 13,740 tons (down 15.0 percent).

(1) Basic policy for expanded export

Reinforcement of competitiveness relative to Chinese-grown beans and pulses is of primary importance.

- Chinese-grown green beans account for more than 80 percent of Japan's import of

matpe, and are superior to the Myanmar and Thai varieties in point of quality and yield. In recent years, the Chinese share of this import has been rising. To increase its share, Myanmar should quickly deploy strategy to improve quality and yield in order to boost its share. More specifically, it must take steps to enlarge and build up bean sorting plants, and to improve breeds.

- In the category of miscellaneous beans and pulses, there is always concern about the problem of cyanide contamination of butter beans shipped to Japan (for use in production of white bean paste). The Myanmar side must constantly pay attention to and control production to keep the content below the absolute control standard (500 ppm; shipments exceeding this standard are dumped). Recently, there has been a rapid increase in export of red bean paste from China to Japan. An outbreak of a cyanide problem could bring a halt to the export from Myanmar and cause its share of this import to plunge.

As another task, Myanmar must construct a system for the collection and disclosure of information on overseas (export) markets.

- Establishment of the Agricultural Marketing Office (tentative name)
The fluctuation of prices and demand in external markets has an immediate and substantial impact on domestic transactions as well. Many traders and large farms are keenly interested in the matters such as the possibility of export, the trend of prices and demand in neighboring countries, the trend of margins, wholesale prices at the crop exchange centres in Yangon and Mandalay, and official policy (e.g., export bans and policy on transborder trade). In many cases, however, policy changes are not conveyed to the private sector and cause major difficulties. Information on such changes ought to be immediately reported to the general public by means such as radio and TV broadcasts as well as newspapers and official gazettes. The government should establish the Agricultural Marketing Office (tentative name) as an institution for unified collection and provision of information of external markets to the private sector in the Ministry of Agriculture and Irrigation (the Office would also be equipped with the ability to make proposals for development of the market for agricultural produce and trade policy to the government). The government would also have to construct an up-to-date information system with provisions for access by the Internet. The staff could include members of the UMFCCI and experts from the private sector.
- Establishment of an institution for trade promotion and information
The government should also establish an institution whose major duties would consist of referral in response to transaction inquiries, marketing studies and exchange of

information, promotion of participation in trade fairs inside and outside Myanmar, exchange of credit information on transaction partners, and referral to new export destinations. The institution would have offices in both Tokyo and Yangon.

(2) Targets and action plan for expanded export

The following table shows the attainable export targets. The measures to attain them are noted in the second table.

Table 4-9 Targets for Expanded Export

	2001/02	2005/06	2020/21
Production (millions of tons)	1.03	1.4	4.4
Export (hundreds of millions of dollars)	280	380	1,200

Note: Conversion at the official rate of 6.6 kyat to the US dollar

Source: Prepared by the JICA Study Team

Table 4-10 Urgent Measures Over the Short Term (2003 - 2005)

(with an emphasis on expansion of export to Japan)

	Basic tasks	Basic measures (proposals for the government)
1	Improvement of quality and yield	Financial aid for the enlargement and build-up of sorting plants, and purchase of facilities and equipment
2	Collection and disclosure of information on external markets	1) Establishment of the Agricultural Marketing Office Collection and disclosure of information on external markets, and promotion of public-private collaboration 2) Establishment of an institution for trade promotion and information
3	Export incentives	Designation of beans and pulses as an item for national encouragement of export, and instatement of an export tax reduction for exporting parties
4	Establishment of a special export processing zone	Emergence of new products based on FDI (e.g., organic cultivation)
5	Lifting of the ban on trade by foreign-affiliated firms	Prompt removal of the ban
6	Clear statement of commercial policy (transparency) and simplification of procedures for licensing, approval, and trade	Improvement of policies and measures
7	Instatement of export financing services	Expansion of the account for provision of funds to farmers by the Agricultural and

		Regional Development Bank and permission for low-interest funding programs at private banks
8	Issuance of business passports	Priority issuance for private-sector business persons

Source: Prepared by the JICA Study Team

Table 4-11 Measures Over the Medium and Long Terms (2006 - 2020)

	Basic tasks	Basic measures
1	Resolution of the various problems related to trade-encouraging and -discouraging in deployment of the short-term measures	Follow-up on short-term measures
2	Privatization of SOEs	Study and promotion of privatization and transformation into independent joint-stock companies

Source: Prepared by the JICA Study Team

The targets would be an annual export on the order of 1.4 million tons over the short term (2003 - 05), and continued growth in both production and export through promotion of the measures over the medium and long terms, to boost export to the level of 4.4 million tons a year in fiscal 2020.

4.2.3.2 Action Plan for Development of Laminated Wood Industry and Expanded Export of its Products

Myanmar produces three major types of timber: teak, other hardwood, and softwood. Teak has excellent features in the aspects of durability, strength, and beauty. It also has good processing characteristics, and is in use as a deluxe type of wood in the fields of buildings, shipping, and furniture. Myanmar-grown teak is known around the world and is the only Myanmar forestry product that dominates external markets.

The varieties of other hardwood include Pyinkadou, Padauk, and Tamalan. Each has its own particular advantages and is in use like teak, but is not rated as highly as teak in the quality aspect. Softwood is not suitable for use as structural members for buildings because of its low strength and vulnerability to discoloration and rot. It is currently in use for applications that do not require much strength, such as plywood and crating materials. However, the cost of logging (felling and hauling) is the same as for teak, and it is difficult for processing to add much value to the wood. The material (crude/raw) wood cost is consequently viewed as excessive and prevents softwood from finding fuller use.

Recently, Myanmar's timber processing industry has been faced with a shortage of teak in particular. While the major reason is an increase in export of logs, the domestic industry does not possess the technology to prevent this. The shortage of processing technology is resulting in the expanded export in log form. The Myanmar timber processing industry cannot look forward to expansion of its export in the future either unless it incorporates high-performance processing facilities to increase the level of its processing technology, and uses it to improve its quality and yield while turning out high-value added products.

In light of the current circumstances in the timber processing industry, measure to these ends must be taken at an early date. Considering factors such as the scale of investment and marketability of the processed products, the incorporation of processing for laminated wood is thought to be the best plan for concrete action. Furthermore, such processing would be linked to development of the softwood timber. Some private companies are aware of this situation and planning to introduce installations for processing laminated wood. Similarly, the Myanmar Timber Enterprise (MTE), too, recognizes the need for incorporation of such processing.

(1) Current status of laminated wood processing in Myanmar

The following table summarizes the results of an interview survey conducted with five major firms about the current status of laminated wood processing and the advantages of the business.

Table 4-12 Current Status of Laminated Wood Processing in Myanmar

• Production items	Flooring (over 80%), ship decks, counters (top boards, furnishing laminated wood, furniture	
• Export items	Flooring (over 90%), ship decks, half-finished furniture products, etc.	
• Export markets	France, Italy, Germany, United States, Korea, Japan, others	
• Sales (monthly average per firm)	Export (86.3%)	About US\$200,000 (100,000 - 500,000)
	Domestic (13.7%)	US\$30,000 (5,000~100,000)
	total (100.0%)	US\$230,000 (100,000~600,000)
• Current status	<ul style="list-style-type: none"> • Laminated wood processing performed by a combination of manual installations and manual processing • One firm has already placed an order for laminated wood processing installations and is awaiting delivery (used facilities from Japan) 	
• Business orientation	<ul style="list-style-type: none"> • Reinforcement of installations for laminated wood • Development of softwood products • Establishment of joint ventures with foreign counterparts for introduction of such installations • Development of uses for timber from teak thinning 	
• Problems	<ul style="list-style-type: none"> • Shortage of technology • Shortage of funds • Jump in the cost of material wood • Shortage of power • Difficulty of obtaining export licenses • Export tax (need for abolition) 	

Source: JICA Study Team

Table 4-13 Effects of Development of Laminated Wood Processing Business in Myanmar

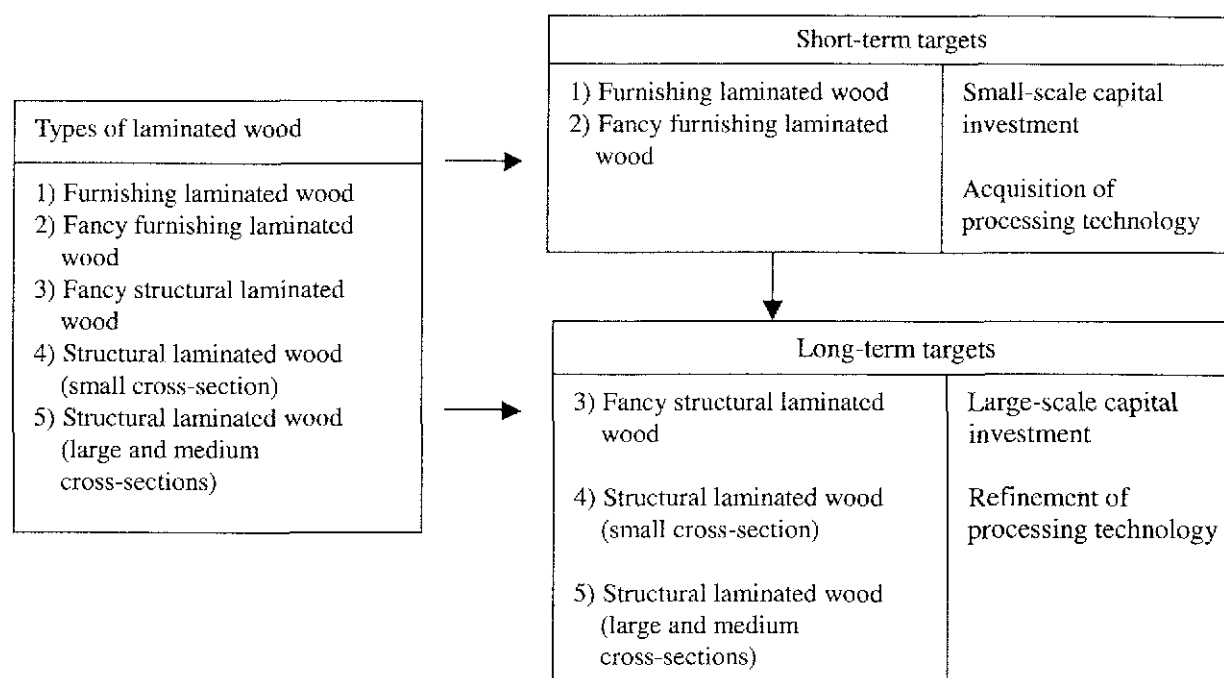
Expansion of export and increase in profitability	• Increase in value added levels	Expansion of the assortment of teakwood products Production of large timber More extensive use of softwood Production of timber without warps and cracks
	• Increase in yield	Active use of ends (measuring at least 2 cm x 5 cm x 30 cm)
	• Improvement of production control technology	Quality, processing technology, quantities/delivery deadlines, materials, installations, labor, prime cost
	• Active use of currently unused timber	Use of combinations of teak and other hardwood Use of softwood for production of laminated wood
	• Active use of timber from teak thinning	Prevention of warping of timber from teak thinning Use in combination with other types of wood

Source: JICA Study Team

(2) Basic perspectives on expanded export through laminated wood processing

This section sets forth the types of laminated wood, the approaches to expanded export, the current status, a plan of action over the short term, targets for expansion over the long term, and key factors for expanded export.

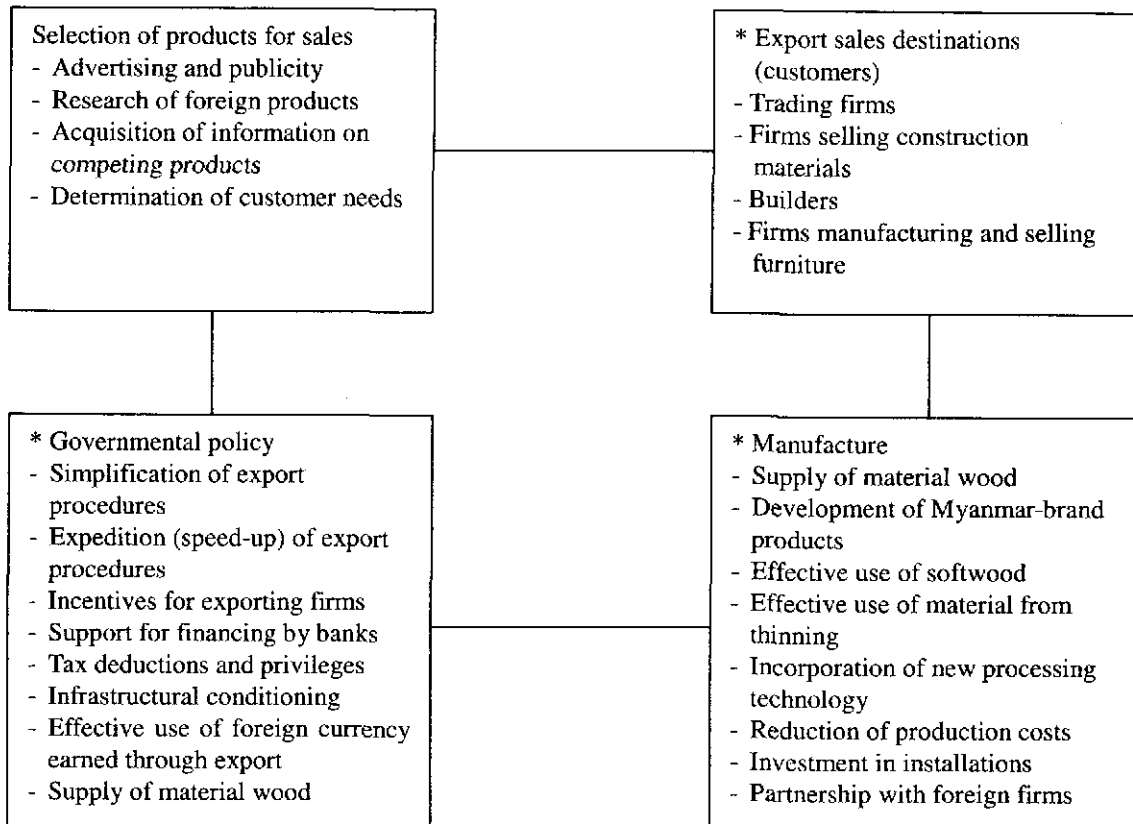
Figure 4-7 Classification and Short-Long Term Objectives for Laminated Wood



Current status	Short-term action plan	Long-term expansion targets
<ul style="list-style-type: none"> • Lack of extensive laminated wood processing at present • Combination of manual installations and manual processing, and inability to export • Placement of an order for one line of laminated wood installations by only one firm • Increased interest in laminated wood processing by export-oriented firms 	<ol style="list-style-type: none"> 1) Preparation of the industrial foundation for furnishing laminated wood 2) Development of a Myanmar brand of laminated wood 3) Combination of teak and other wood 4) Incorporation of installations at a small capital investment 5) Increase in yield 6) Investment target in the initial year <ul style="list-style-type: none"> - 1.2 billion yen total for three lines in three plants 7) Two plants in Yangon and one in Mandalay 8) Export expansion <ul style="list-style-type: none"> - Initial year: US\$2,200,000 - Third year: US\$6,500,000 - Tenth year: US\$13,000,000 	<ol style="list-style-type: none"> 1) Expanded production of furnishing laminated wood 2) Expansion of the types of wood used 3) Refinement of technology 4) Acquisition of capital 5) Start of processing of structural laminated wood 6) Development of application of wood from teak thinning and softwood for laminated wood 7) Export expansion <ul style="list-style-type: none"> - Third year: US\$5,000,000 - Tenth year: US\$20,000,000

Source: Prepared by the JICA Study Team based on data from Japanese Agricultural Standard and other sources

Figure 4-8 Key Factors for Expanded Export



Source: JICA Study Team

Table 4-14 Division of Roles in Execution of the Plans

Private firms	<ul style="list-style-type: none"> - Improvement of quality and yield - Increase in the level of processing and control technology - Collection of information on and cultivation of export markets - Development of new products
Chambers of commerce and industry, forestry associations, etc.	<ul style="list-style-type: none"> - Establishment of facilities for related human resource development - Proxy submission of requests to and parley with the government - Staging of product exhibits and events with invitations to buyers, and dispatch of missions for tours of overseas exhibitions
Government	<ul style="list-style-type: none"> - Relaxation/removal of export and import regulations and procedural requirements - Currency stabilization - Implementation of measures to encourage export - Stable supply of material wood - Improvement of the power supply

Source: JICA Study Team

(3) Action plan for expanded export through production of laminated wood (for furnishing laminated wood)

* Items of production

- Furnishing laminated wood: staircase railings, frames, counters (top boards), etc.
- Fancy furnishing laminated wood: frames, counters (top boards), thresholds (doorsills), lintels, pillars (post), etc.

* Wood used

- Teak
- Other hardwood
- Softwood
- Teak from thinning

* Sales prices

- Sales prices are a major means of competition, and their determination is based either on the total cost to the manufacturer or on prices of competing products (with an emphasis on the market). In the current situation, Myanmar would have to select the latter option. Judging from the market prices for non-structural materials such as counters in Japan, the target FOB price from Yangon would be about 180,000 yen per cubic ton.

* Customers

- Expanded export requires information on products, customers, and competition. As primary necessities, it is essential to obtain a lot of information and to select customers with a view to acquiring new information quickly.

* Export destinations (countries)

- Japan, countries re-exporting teak products from Thailand (i.e., Denmark, France, and the United Kingdom), United States, and big importers of logs from Myanmar (India, Thailand, and Singapore).

* Production plans

- Monthly production of 120 cubic meter x three plants = 360 cubic meter/month

* Plans for investment in equipment and machinery

- Initial year investment targets: two plants for production of furnishing laminated wood and fancy structural laminated wood, for a total of three

The following table presents rough estimates for this investment

Table 4-15 Investment Plan for Laminated Wood Plants

(US\$)

	Amount per plant	Amount for three plants
	US\$	US\$
Equipment and machinery	(2,775,000)	8,325,000
Buildings and power facilities	(558,000)	1,675,000
Total	(3,333,000)	10,000,000

1. Estimates of the plant lot and building area; Lot area: 15,000 m², Plant and product warehouse building (one): 2,500 m², Office and cafeteria building (one): 600 m², Boiler room, dust collection room, transformer room, auxiliary supply storeroom (one): 500 m²

Source: JICA Study Team

Table 4-16 P/L Estimate of Wood Working Plants
(One factory, upon Establishment of the Setup for Production Control and Sales)

Item	Amount (thousands of dollars)	Share (as percentage of total)	Estimate assumptions
Total production and sales	180.0	100.0	Production of 120 cubic meter selling for US\$1,500 per cubic meter
Major material cost	73.3	40.7	Material cost of US\$611 per cubic meter, yield of 55%
Auxiliary material cost	5.2	2.9	Use of urea resin for glue; based on data from "Mokuzai no Jissai Chishiki" (Actual Knowledge of Lumber), by Takeshi Uemura
Electrical power	6.1	3.4	Supply of 650 kW to machinery and equipment at 8.3 cents per kWh
Packing and shipping	6.0	3.3	Based on cases at woodworking plants
Personnel expenses	1.6	0.9	Pay of 10,000 kyat for 80 workers, 50,000 kyat for 17 sales managers, and 200,000 kyat for three executives
Depreciation cost	16.8	9.3	Payment in fixed installments for 16 years for installations and 20 years for buildings; Myanmar law
Interest	24.3	13.5	3.3 million dollars for installations and buildings, and 0.8 million dollars for operating funds; annual interest of 7%
Land leasing fees	3.8	2.1	US\$3/m ² per year for 15,000 m ²
Other costs	11.9	6.6	Based on cases at woodworking plants (including both fluctuating and fixed costs)
Total prime cost	148.9	82.7	
Profit	31.1	17.3	
Export tax	(18)	(10.0)	10% of the sales price * Not applied in domestic sales
Final profit	(13)	(7.3)	

Source: JICA Study Team