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Recent trends in Japanese forest product imports
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日本の林産物輸入の最近の動向

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Résumé

Japanese forest product imports have a significant influence on the world forest products trade. In recent days, there have appeared to some marked changes in the contents of the Japanese imports. Exporters to the Japanese market have also been changing. In the present paper, we identify three marked trends in the Japanese forest products import: the diversification of exporting countries, the increase in processed products import, and the diversification in imported timber use. Then these three trends are related to the underlying changes in the forest resource availability in exporting countires and in the Japanese demands.

要旨

日本の林産物輸入の動向は世界の林産物貿易に大きな影響を持が、近年日本が輸入する木材の品目構成に顕著な変化が見られる。同時に日本への林産物輸出国の顔ぶれにも変化が見られる。本論文は日本の林産物輸入、特にパルプ・チップを除く木材の輸入における三つの変化、すなわち輸出国の多様化、加工度の高い製品輸入の増加、輸入材の用途の多様化を特定するとともに、それらを輸出国における利用可能な森林資源量の変化や日本国内の木材需要の動向と関連づけて説明する。

Introduction

As Japan is one of the largest timber and sawnwood importers in the world, what and how many it imports has a significant influence on the world timber and sawnwood trade. In recent days, there have appeared to some marked changes in the contents of the Japanese imports. Exporters to the Japanese market have also been changing. The purpose of the present paper is to identify these changes, and to relate them to the underlying changes in the forest resource availability in exporting countires and in the Japanese demands. The latter is delt with in section 2, and the former in section 1. Section 3 summarizes the discussion.

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1. Some noticable changes in the Japanese timber imports

Japan has 25 million ha of forest area, of which 10 million ha is artificial forest. Total stock exceeds 3.1 billion m³, and the annual growth is estimated 70 million m³. Although 50 million m³ of removal is considered to be possible, the annual removal is only 25 million m³. Japanese annual wood consumption in 1994 was 108 million m³ (converted in log volume). It follows that domestic timber supply covers less than 1/4 of the total consumption, and that the remaining 3/4 is covered by imports. Japan as well as the U.S. are the largest timber and sawnwood importers in the world.

Table. 1 Japanese forest product imports from major exporters

424000	Country	Imports	Main products imported (quantity)
1	U.S.	2,772	Logs (1,232), Pulp & Chips (1,194), Sawnwood (345)
2	Canada	1,375	Sawnwood (790), Pulp & Chips (509)
3	Malaysia	837	Logs (617), Sawnwood (217)
4	Indonesia	660	Plywood (520), Sawnwood (140)
5	Australia	552	Chips (552)
6	Russia	476	Logs (401), Sawnwood (75)
7	Chile	454	Pulp & Chips (379), Sawnwood (65)
8	New Zealand	303	Logs (152), Pulp & Chips (151)

Note: All figures are in million m' in log volume

Souce: Forestry White Paper, 19951)

During 20 years before 1985, the region with the largest share in the Japanese timber and sawnwood markets had been Southeast Asia including the Philippines, Indonesia, and Malaysia; all of them export tropical timber. However, since 1986 North America, the U. S. and Canada, has been the largest exporting region to Japanese market. Table 1 shows the volume and contents of imports from major exporting countries to the Japanese forest products market. It is worthwhile to mention the following points relating to the table.

- 1) The U.S. is by far the largest exporter to the Japanese forest products market, followed by Canada. Imports from these two countries sum up to 40% of the Japanese timber consumption, indicating the close relationship between North America and Japan.
- 2) Imports from tropical timber exporting countries such as Malaysia and Indonesia has come to be less important than ever, and now their share is less than 15%.
- 3) Imports from countries like Chile and New Zealand that produce Radiata pine have come to be significant.
- 4) Russian timber is not as important in the Japanese market as it was before.
- 5) Agreeing with the above points, it can be said that Japan relies most of forest product imports on the Pacific Rim region, especially on North America.

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During the last few years, there appeared to be not only mere changes in share of exporting countries but also some new trends in the Japanese forest products import. Three major points are as follows:

- 1) Exporting countries to Japan have diversified.
- 2) Import of raw materials like timber has come to have smaller share, whereas import in the form of value-added products has increased rapidly.
- 3) Imported timber is now processed for more various end products in Japan.

In what follows, we discuss on the above three points in some detail.

1) Diversification of exporting countries

Regarding timber imports, while the share of Malaysia dropped rapidly, imports from Papua New Guinea and the Solomon Is. have marked a sharp increase. African countries including Gabon, Cameroon, Congo, Côte d'Ivoire, and Ghana, and Myanma, Cambodia, and Brazil that had exported little, if any, gained some share in 1993.

As regards sawnwood, North and West Europe that exported almost none in 1990 have increased exports to Japan. In 1994 Finland supplyed 210 thousand m³, Sweden 200 thousand m³, Austria 80 thousand m³, Germany 40 thousand m³, Italy 20 thousand m³. Other European exporters include Norway, Denmark, Belgium, and the Netherlands. Imports from European countries are consisted mostly of softwood sawnwood, excepting that Italy mainly exports sawnwood made of African harewood.

Until 1993, Southeast Asia and North America had occupied the glulam import market for decades. However, imports from Sweden, Finland, and New Zealand have increased since then.

The exporters of particle board in 1990 was almost limited to Indonesia, the U.S., Canada, and Germany, but in 1993 Australia, Spain, and Italy turned up on the list.

2) Increases in processed products import

While the import of timber decreased in volume by about 10% from 29.7 to 26.2 million m^3 between 1989 and 1993, the import of sawnwood increased by almost 20% from 9.6 to 11.3 million m^3 in the same period (All figures cited in this and next sections are from Nihon Mokuzai Sogo Joho Center, 1996^{23}). In addition, fiberboard and particle board imports increased 100 to 440 thousand m^3 and 140 to 340 thousand m^3 , respectively between 1989 and 1994. Compared to the increases in domestic production of fiberboard and particle board by $10\sim20\%$, it is clear that the increase in the imports are very rapid.

As regards furniture, more highly processed products, imports of furniture for kitchen, furniture for bedroom, and wooden door and doorcase increased by 88%, 64%, and 170% respectively.

Lastly, we shall briefly mention the import of house as an example of the most highly processed and biggest products. Although Japan does not have statistics revealing the number of houses imported, according to the result of a questionnaire to the housing ind-

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ustry, the increase in house import between 1992 and 1995 is estimated by 74% and from 1,376 to 4,575 in number. Most of the houses imported are of two by four or two by panel, and the U.S. and Canada are the major exporters of them, followed by Sweden and the U.K.

3) Diversification in imported timber use

Plywood had been exclusively made of tropical hardwood in Japan for decades. However, increasing number of plywood mills in Japan began to use softwood lately, resulting that the share of softwood as a material for plywood reaches 20%. The major portion of the softwood material comes from Russia or Chile and New Zealand. Russian larch had been processed only to sawnwood for construction and packaging, but today 50% of imported Russian larch timber is for plywood. Radiata pine from Chile and New Zealand which was formaly processed only to sawnwood for packaging since its annual rings are too wide to be used for construction sawnwood, now begins to be used for plywood production.

2. Factors underlying the changes

So far we have seen the changes in contents of forest products import of Japan. Turning to identifying factors that made those changes occur, we shall examine two aspects of the import market in turn; one is the Japanese demands for forest products, and the other is the availability of forest resources in exporting countries.

1) Changes in the Japanese demands

As is commonly known, the Japanese economy is in the middle of a recession after the collapse of a so-called bubble economy in 1990; companies are proceeding restructuring; households' consumption is in the low level. Under these circumstances, competitions in terms both of price and product's quality have become more and more severe in forest products market. While as yen become stronger against U.S. dollar remarkably in the last few years, imported forest products have come to be less costly relative to domestic products. As a result, imports of forest products have increased. Moreover, under such exchange rates in favor of yen, it is more cost-effective for Japanese companies to import already processed products than to import raw mateirals and have them processed in Japan. Of cource, it is favorable for consumers as well. Thus, as have already mentioned, the imports of highly processed products rather than timber have increased.

As regards imports of end-products such as house and furniture, it should be noted that there is the change in lifestyle of Japanese, namely the westernization. It is said that the most preferable way of spending holiday among Japanese people today is to have an overseas trip, and in fact, the number of tourers visiting Europe and North America including Hawaii has been increasing steadly every year. Japanese people learn western culture directly by touching it, and thereby become to be familiar with western houses, furniture and fixtures so that they are willing to buy products of western design without feeling

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a sense of unbelongingness.

In addition, there is certainly another reason of increasing forest products imports from North America and Europe. That is the better quality control in these regions. Japanese forest products companies have been generally poorer at quality control such as seasoning wood than those in North America and Europe. Accordingly imported products are more favorable for consumers than domestic products.

2) Changes in forest resources in exporting countries

A movement of preserving habitat of spotted owl in the Pacific Northwest in the U.S. led to the strict regulation on harvesting in national forests, which in turn resulted in the sharp increase in export timber prices. To Japan that relies heavily on the forest resources supply from the North America, this means not only a price increase, but also an increasing uncertainty in terms of constant resources supply from the region. The latter is in particular associated with the sudden reduction of old growth forests that could be cut. After all, coping with this change in resource availability in the region that Japan has relied and still relies most heavily on its forest resources, Japan started to import from Scandinavian and other European countries.

On the other hand, in Malaysia, the top exporter of tropical timber to Japan, the following regulations came into effect: the state of Sarawak reduced the annual harvest in 1992 aiming at managing forest resources in a sustainable way: the state of Sabah baned on timber exports for conserving forest resources which had already decreased and deteriorated considerably, and for expanding domestic timber processing industry rather than exporting timber unprocessed. As a result, Japan having relied heavily on tropical timber from Malaysia substituted imports from Papua New Guinea, the Solomon Is., and African countries for Malaysian timber imports decreased. At the same time, to cover the reduction in tropical timber availability, Japan initiated to manufacture plywood of softwood, and introduced softwood from Russia, Chile and New Zealand.

To sum up, Japan began to import timber and other forest products from a wider variety of countries because of decreases and changes in forest resources in main exporting countries to Japan and resulting uncertainty on future supply from them.

Old growth wood supplied from the Pacific Northwest in the U.S. and tropical timber from Malaysia are of the best quality in the world, as softwood and as hardwood respectively. Japan has willingly imported such high quality resources. However, as second growth took gradually the place of old growth in harvest at the Pacific northwest, imports from the region has come to be smaller in diameter and of poorer quality. American timber can no more be said to be of the highest quality in the world. Thus, Japan started importing timber and sawnwood from Europe which are as good in quality as second growth from the Pacific Northwest, but not as old growth.

Likewise, the decrease in resource availability in Malaysia led to the deterioration of imported timber, such as smaller logs in diameter. As a result, timber from Papua New Guinia and the Solomon Is. began to be imported which has been considered to be of poorer quality than Malaysian timber.

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After all, the deterioration of forest resources available at the major exporting countries to Japan resulted in the expansion of the region which could supply timber competitively in quality with the major exporting countries, and indeed Japan has come to import forest products from more various countries than ever.

3. Conclusions

We identified three marked trends in the Japanese forest products import: the diversification of exporting countries, the increase in processed products import, and the diversification in imported timber use. The latter two trends can be explained by the changes in the Japanese demands. In the middle of the recession, Japanese consumers are now more sensetive to cost-effectiveness than before, and thus under the exchange rates that have been in favor of yen, they have come to be more willing to buy products that are processed abroad. It also results in the diversification in imported timber use. In addition, west-ernization of the Japanese life style is another likely explanation of these trends. On the other hand, the diversification of exporting countries is owing to the deterioration of forest resources available at the countries which are major exporters to Japan until today. It resulted in the expansion of the region which could supply timber competitively in quality with the major exporting countries, and accordingly Japan has come to import forest products from more various countries than ever.

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