

Forestry in Japan Solutions for the future

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Background

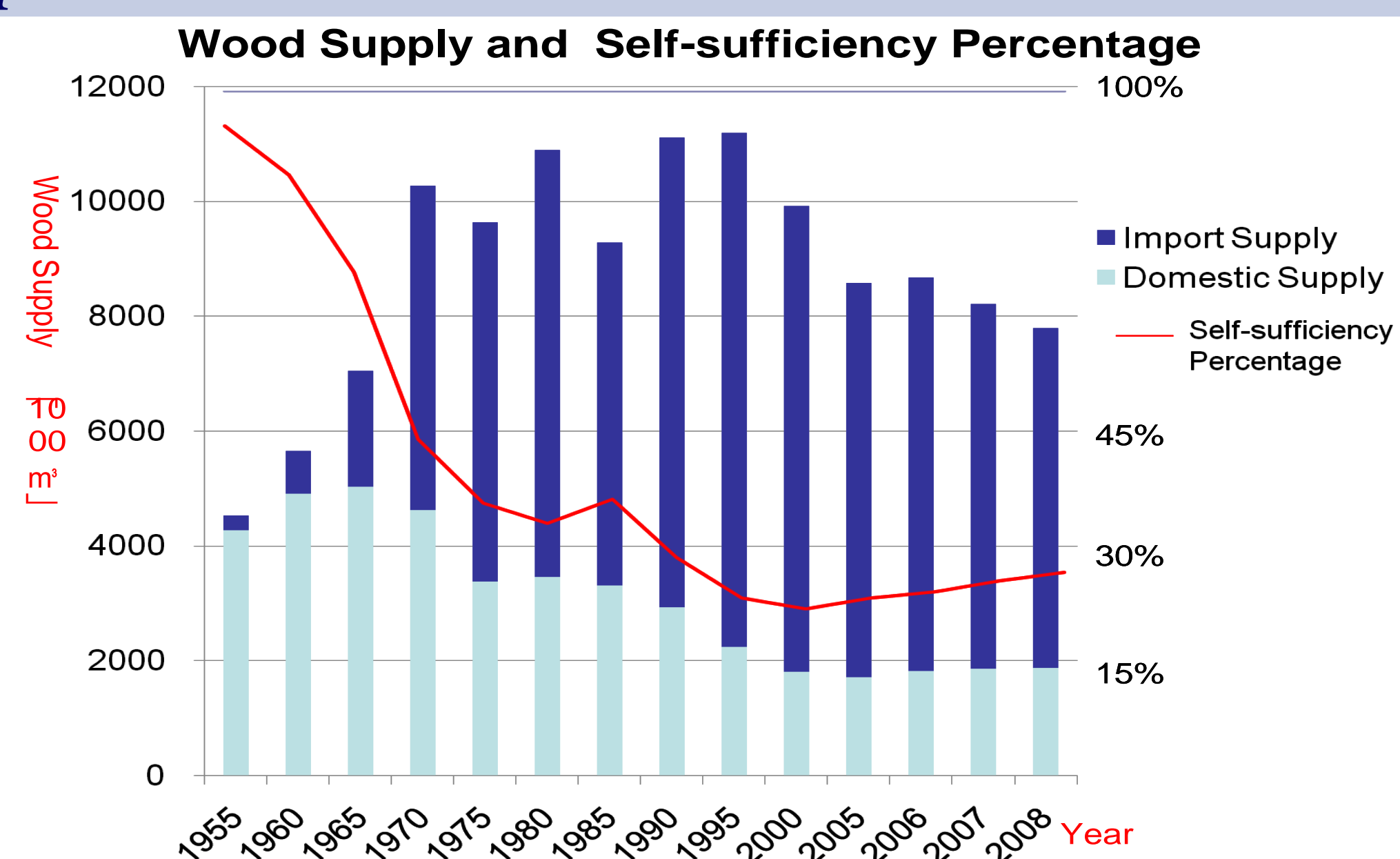
Approximately 67% of the total land area in Japan is covered by forestland. Over 40 percent of these forests are owned by the Japanese government (public forest). Private family forestlands make up a slightly larger fraction, ~57%.



Satellite image of Japan

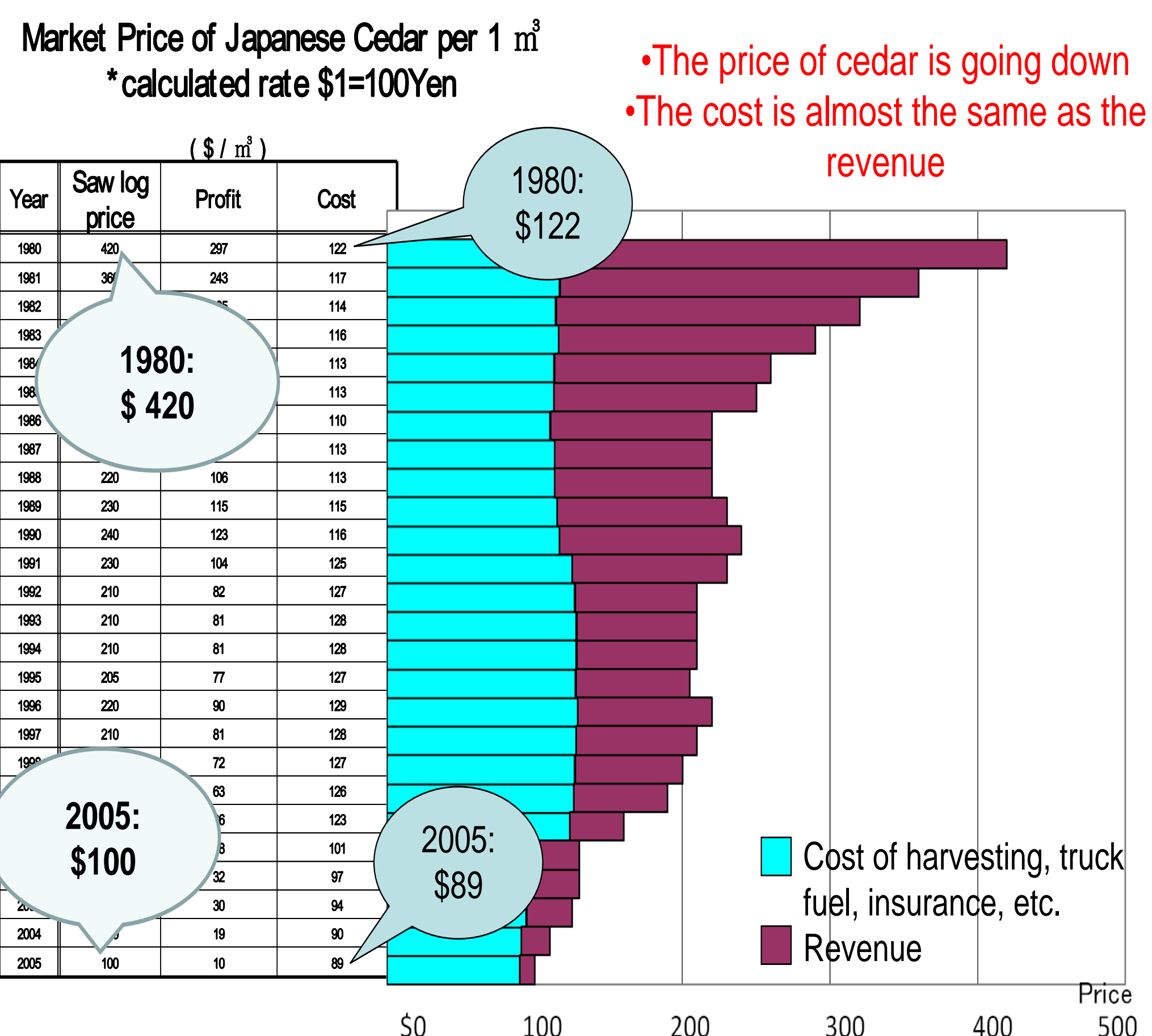
Timber harvesting is done on both public and private forests in Japan, yet Japan imports a great majority of its timber rather than buying domestically. The limited domestic market makes it difficult for small family forestland owners to survive the current economy.

No demand for domestic wood products



Although Japan has such a high demand for wood products, almost all products are sourced internationally, not domestically. In 2008, the domestic market supplied only 28% of total wood used in Japan. Therefore, the market price of domestic species, especially Japanese cedar, has steadily become lower and lower.

Revenue from domestic logs is low



Japanese cedar is one of the most widely grown tree species in Japan. In 1980, the market price of Japanese cedar per 1m³ was \$420. In 2005, the price had dropped to only \$100. On the other hand, the cost of harvesting the trees has not changed from 1980 to 2005. The result is that revenue from logging is steadily decreasing and Japanese foresters cannot get enough money from logs.

Three big problems of Japanese forestry

Why is there almost no demand for domestic wood products in Japan? I found three big problems:

- The domestic market is bad because of low demand and high imports
- Because Japan imports the majority of its logs and lumber (~70%), this possibly encourages illegal harvesting other parts of the world
- In Japan, national forest and private forest are competing in the limited domestic market

Theories of change

In order to address these three big problems, Japan would need to change some of the basic constructs of operation. The following theories of change could possibly help Japan create a stronger forest products industry.

TOC 1: If Japanese domestic lumber became suitable for construction lumber, the demand for it will increase.

Great Hanshin Earthquake



1995

Great Hanshin Earthquake occurred in Japan. The government made two new laws for housing which require

- ① Earthquake-proof structures
- ② Fire-resistant houses

Domestic lumber is not suitable for this type of construction.....therefore imported lumber and other materials are used.

The Ministry of forestry Japan



2010

The Ministry of Forestry of Japan made a rule to encourage the use of domestic lumber:

<New rule>

When we construct a public building, at least 20% of the total lumber used must be domestic lumber.

Construction

Because of this law, construction companies started to use domestic lumber for construction of public buildings. However, they are using the minimum of domestic lumber to satisfy the Japanese government. The remaining 80% of wood used in construction is imported lumber. Imported lumber is much cheaper to use than domestic lumber and is oftentimes of much better quality for construction purposes.

Conclusion

Because of these reasons, Japan doesn't have the ability to use domestic lumber for construction. Japan would need to develop better technology and/or find different uses to make domestic logs suitable lumber for construction.

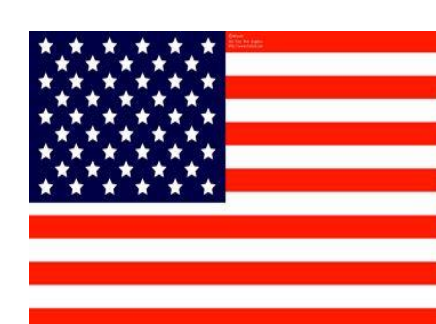
TOC 2: If we stop importing lumber which comes from illegal harvesting, the demand for domestic lumber will increase.



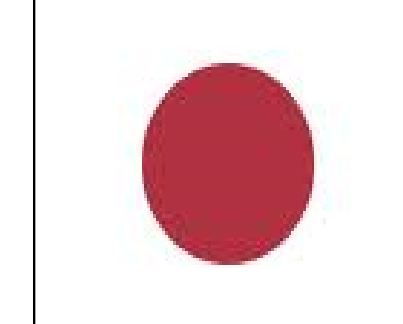
WWF

They estimated that 20% of Japan's imported lumber and logs comes from illegal harvesting.

American exporting companies

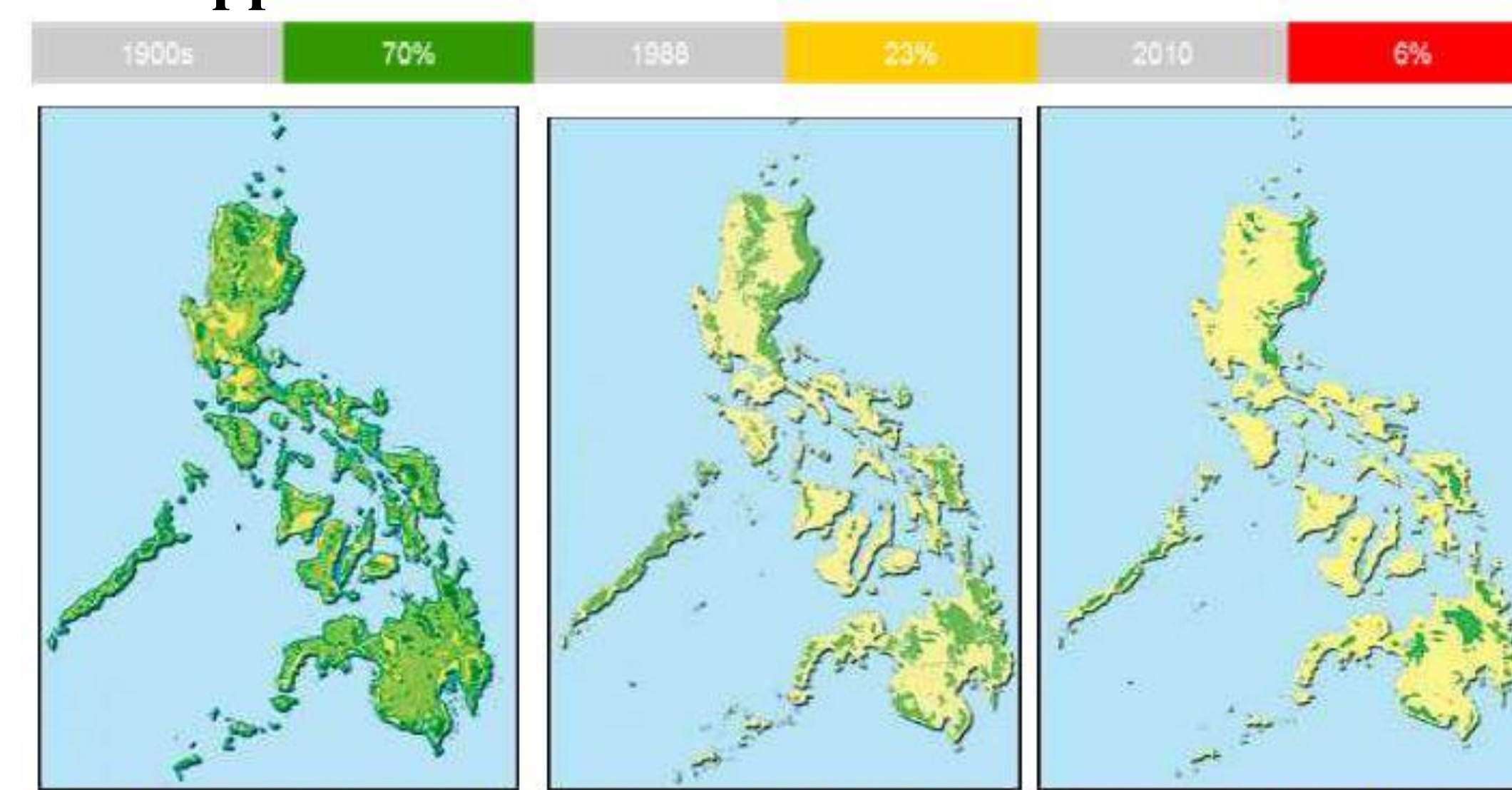


logs or lumber



They say that when they export logs or lumber to Japan, Japan doesn't check the way the logs and lumber are cut, i.e., Japan doesn't require any type of certification.

Philippines:



Source: Key Conservation Sites in the Philippines (Haribon and Birdlife International, 2001), citing ESSC booklet, "Decline of the Philippine Forest"

In the 1900s, 70% of the total land of Philippines was covered by forestland. However, that land area decreased to only 6% in 2010.

One Philippine forest researcher said that in the past, a Japanese company had come to the Philippines and harvested trees for export to Japan. My guess is that at least some of this harvesting might have been illegal.

U.S. Lacey Act

The United States has enacted new legislation to curb illegal lumber imports – The Lacey Act. The declaration requires importers to provide the following:

1. The scientific name of the wood or wood product (including the genus and species) contained in the importation
2. The value and quantity of the wood or forest product being imported
3. The name of the country from which the wood was harvested

This law is quite new one, so we don't know how it will work. At least, every importers started to research where their imported logs and lumber came from.

Conclusion

Japan might be encouraging illegal harvesting in other parts of the world. In order to prevent this situation, Japan would need to make new legislation and policies regarding the import of logs and lumber.

TOC 3: If we stop harvesting from national forest, we can preserve them and the demand for domestic lumber will increase.



Pacific Northwest

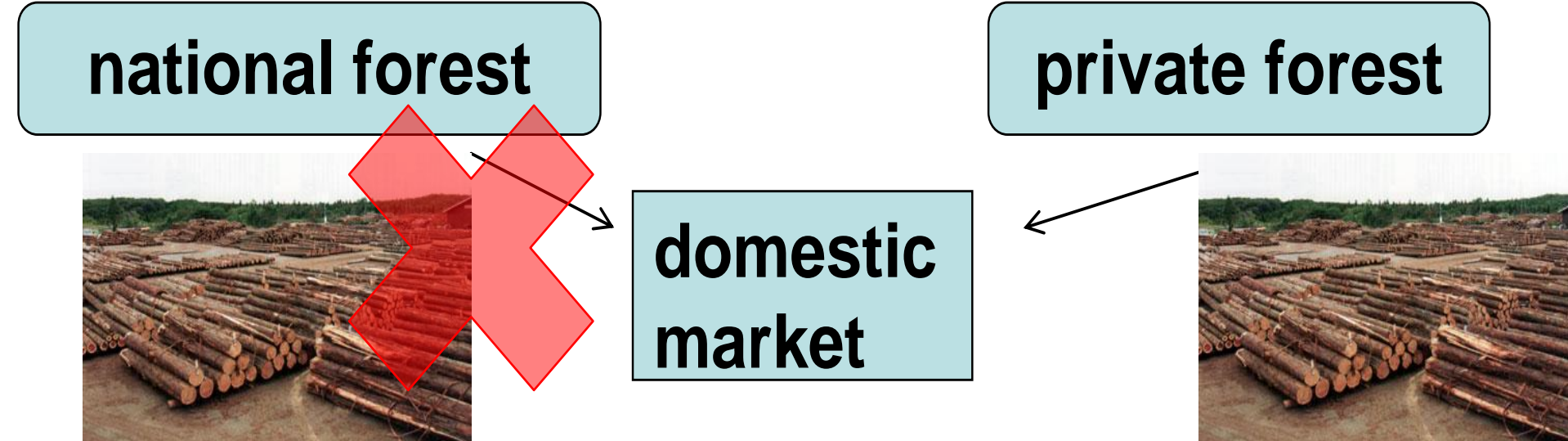
The Northwest Forest Plan of 1994 all but stopped harvesting from national forests. Now, only 30% of the 1990's harvesting levels is taken. However this caused some problems.

Problems

- ① Many people who worked at national forest lost their jobs.
- ② Rural communities suffer a lot.

Japan

Now, national forest and private forest are competing in the very limited domestic market. In addition, Japan is not exporting logs and lumber to any degree that would boost the economy of tree farmers in the country. One solution may be for the national forest to stop harvesting.



In a simple scheme, if harvesting was stopped on national forests, the domestic demand could be filled by private forestland owners. This could also reduce the amount of subsidies which are paid to logging operations on public forests. We can use those monies for creating new jobs for the people who are working in the public forest. Ultimately, protecting and conserving the national forest for the long term is the goal.

Conclusion and Recommendations

• The Ministry of Forestry of Japan made a rule to encourage the use of domestic lumber. However, Japanese constructors are using the minimum amount of domestic lumber. Japan needs to develop the ability to make strong construction lumber from domestic logs.

• In 2007, Japan was the third largest wood importer in the world. This possibly encourages illegal harvesting in some parts of the world. In order to prevent illegal harvesting elsewhere, Japan needs to create new legislation regarding wood imports. The development of rigid import guidelines or even a certification program would be a good start.

• In Japan, national forest and private forest are competing in the domestic market. However, there is almost no demand for domestic lumber in Japan. If harvesting was halted on national forests and protected for the long term we could increase the diversity and age-class of trees in the national forest. Ultimately, this could allow the private forestland owners in Japan to generate revenue from their trees.

References:

1. INECE [Recent Amendments to U.S. Lacey Act Should Help Protect Forests Worldwide]