



Trade and the Environment are Linked

Preserving the environment may have severe economic impacts within one region while the economies of other regions benefit. Similarly, environmental protection in one area may lead to serious environmental damage in another. Global environmental and trade policies become linked through markets. New policies are needed to protect the global environment and to avoid the counterproductive impact of local policies.

Resource Markets are Global

Wood products are traded internationally and flow from timber-growing regions like Russia, North America, and New Zealand to wood deficit regions like Europe, Japan, and the growing Southeast Asian countries.

Local Forestry, Processing, and Consumption Impact the Global Environment

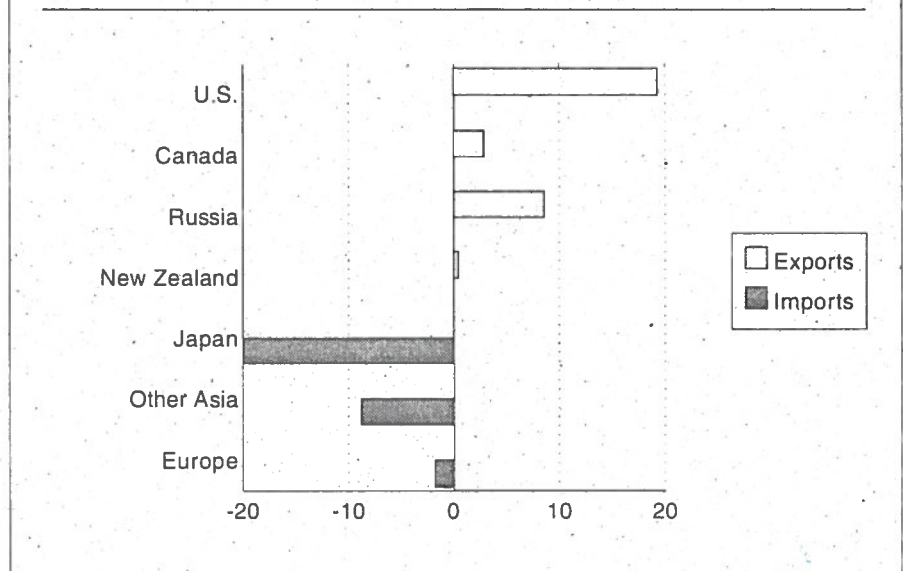
Forest management impacts wildlife, recreation, carbon dioxide levels, and other environmental measures. Processing and consumption further impact energy flows and wastes. Trade or environmental policy changes that constrain supply or trade flows from one region will impact the environment and the economies in other supply regions. For example, preserving productive forest land for northern spotted owl habitat in the Pacific Northwest induces timber supply substitution in international markets, particularly from overseas suppliers. Substitute wood suppliers also impact the environment and may be less efficient wood producers, harvesting more acres, wasting more resources, or using more energy-intensive non-wood substitutes such as steel, aluminum, cement, or plastics.

Single issue environmental policies or trade policies may be

counterproductive to broader environmental and economic goals. For example, if Pacific Northwest harvest reductions are replaced by Russian wood supplies, 15 times as many acres would have to be harvested. Russia is the source of the world's largest timber inventory, but Russian forests are, on average, much less productive than those in Oregon and Washington, and

Russian timber processing operations are less efficient. Pacific Northwest harvest reductions could also be replaced by non-wood substitutes, but this may cause carbon dioxide emissions as great as a fleet of 6 million automobiles. Neither form of substitution—wood or non-wood—will contribute to global environmental protection.

Net Softwood Log Exports and Imports (in million cubic meters)





Developing Better Policies

An analysis of the linkages between environmental and economic impacts leads to two general conclusions:

- ▲ Less efficient processes substituted for more efficient processes to achieve a local environmental goal will cause environmental negatives as well as economic costs.
- ▲ Local regulatory prescriptions on forest practices may be counterproductive to global environmental goals and expensive to the local economy. These prescriptions may drive out forest management rather than increase long-term investment in forest resources for both timber production and environmental values.

Incentives Can Contribute to Broader Goals

In contrast to regulations, which increase costs, incentives to jointly produce timber and environmental amenities can frequently improve the local and global environment. The relatively small cost of these incentives can be carried by those most directly benefiting, thus contributing to both local and global environmental and economic goals. Motivating forest managers to increase wildlife habitat while also producing timber can be far less costly than preserving habitat outright.

Institutional Processes Are Key

Since current regulatory approaches are neither efficient nor effective, new institutional processes should be considered. The Timber-Fish-Wildlife (TFW) agreement in Washington State represents one early cooperative effort. Processes to achieve biodiversity goals through low-cost incentives are possible, but not without developing complementary institutional arrangements.

For more information, contact CINTRAFOR and ask about these publications:

"Managing Landscapes: Role of Goals, Regulations and Incentives," SP-14

"Achieving and Maintaining Biodiversity and Economic Productivity," Journal of Forestry, Vol. 90, No. 9, Sept, 1992.

"Meeting the Need for Environmental Protection while Satisfying the Global Demand for Wood," FPRS proceedings.

"Assessment of the Impacts of Recent Environmental and Trade Restrictions," WP-33

Linkages Between Forest Products Production, Environmental Impacts, and Trade

