There should not, and indeed need not, be any conflict between an open and equitable multilateral trading system, and protection of the environment. So said the signatories of the Uruguay Round of trade talks that culminated in the recent decision to establish a World Trade Organization (WTO), this planet’s first. In fact, the Uruguay Round explicitly acknowledged a need for sustainable development and for institutionalizing conservation of the environment. And the North American Free Trade Agreement (NAFTA) between Canada, Mexico, and the United States, coordinates trade with environmental concerns and sets a precedent for the General Agreement on Trade and Tariffs’ (GATT’s) unfinished environmental agenda.

**Environmental Effects of the Uruguay Round**

The precise effects are hard to predict. However, indirect environmental effects may be traced through the Uruguay Round’s economic effects. Most studies, for instance, predict an increase in the volume of world trade as a result of the successful outcome of the Uruguay Round. Studies carried out by the World Bank, the Organization for Economic Cooperation and Development (OECD), and the General Agreement on Trade and Tariffs (GATT), have predicted the consequence of cuts in trade tariffs and other trade liberalization measures -- an increase in the world’s Gross Domestic Product (GDP) ranging from $213 billion to $274 billion in the Year 2005. According to the joint OECD-World Bank study, most of the predicted gain ($213 billion) will come from trade liberalization in just one sector: agriculture ($190 billion). The rest of the gain ($23 billion) will come from increases in trade in manufactured goods.

**Short and Medium-Term Gains**

Another way of examining the potential environmental effects of the Uruguay Round is by looking at agriculture. Services, textiles, and agriculture are the three sectors that will be most strongly affected by the agreement. Deregulation in trade, for example, will affect global agriculture through price changes, which in turn will have environmental consequences.

The main aspects of agricultural reform, according to the Uruguay Round, will have to do with a reduction in trade tariffs, export subsidies and other domestic support measures. While the full impact of these changes is uncertain, studies concur that the world price of agricultural goods will increase, particularly for dairy foods, sugar and wheat, and, to a lesser extent, for coarse grains and meats. Thus, the principal beneficiaries of the Uruguay Round — at least in the short and medium-term — will be North America, Europe and Latin America, which are major agricultural exporters in these sectors.

**Long-Term Gains**

In the long term, a reduction in protectionist measures for agriculture in richer countries, plus higher world prices for agricultural goods, should lead to a relocation of production to poorer countries, and therefore to an increase in these countries’ incomes. Fears of negative environmental impacts appear to be unfounded, such as an increased use of pesticides and fertilizers in these developing countries as a consequence of the production shifts. The total amount of fertilizer and pesticide now used by developing countries is still quite low, so any increase would be from a very low base. Meanwhile, any negative environmental effects in developing countries caused by an excessive use of inputs, such as waterlogging due to the subsidizing of water or the electricity used to pump groundwater, are a consequence of market distortions, and not of trade liberalization as such.

**The Effects of Trade on Policy Distortions and Market Failures**

When considering trade policies and the environment, there are two basic questions: First, do these trade policies reduce or increase economic distor-
tions, which may be caused either by government subsidies, trade tariffs or by other trade restrictions such as quotas? Secondly, can trade policies mitigate negative environmental developments which are the result of market failures?

An example of a market failure may be the production or consumption patterns of one nation which have negative environmental consequences for another nation, but for which the market on its own does not compensate. Other market failures may arise from an inadequate valuation of ecosystems. At the moment, few of the economic values of ecosystems affected are accounted for — i.e., direct or indirect use values, existence values, or option values. Ill-defined property rights, or the absence of such rights, can also lead to environmental abuse -- deforestation being a striking example.

**Does Trade Exert an Influence on the Environment?**

In general, trade is rarely a cause of environmental degradation. Indeed, to the extent that trade liberalization leads to a set of policies that promote economic efficiency and reduce economic distortions, such reforms are positive for the environment. When market failures and/or policy distortions exist, an increase in trade may cause environmental harm. In such a situation, the solution would be not to reverse the trade reform, but to introduce complementary measures that address the market failure or the policy distortion.

Trade policies on their own are not the first-best instruments for achieving environmental objectives. When trade reform is discussed, the environment is rarely a main topic on the agenda. However, it is generally accepted that trade reform can have positive impacts on the environment. Trade liberalization leads to an increase in economic activity, and the consequent gains in poorer countries incomes have positive environmental spin-offs. Gains in income may increase the public pressure for improvements in environmental policies (since demand for environmental quality has been found to be income elastic, at least after a certain threshold level). Higher incomes also tend to lower population growth rates, thereby easing pressure on natural resources. Conversely, we may ask:

**Can Environmental Policies Have an Impact on Trade?**

Or more specifically, can regulations to protect the environment in one country put it at a disadvantage with respect to another that has weaker environmental rules? Two theories crop up in connection with this problem. One is known as "environmental dumping." Countries with lax environmental policies have lower production costs, and therefore enjoy unfair trade advantages. In practice, however, this is rarely the case. Many studies show that except for a few industries, pollution control costs represent only a small portion of total industrial production costs. Tougher environmental regulations therefore do not necessarily lead to a reduction in competitiveness in trade.

Another theory concerns the concept known as "pollution havens." In this case, firms relocate to countries with (deliberately) less stringent environmental standards. As with the dumping issue, however, little evidence supports the "pollution haven" theory. Just the reverse: there are indications that open economies, by attracting foreign industrial collaborators, adopt cleaner technologies and higher standards to prevent pollution.

Meanwhile, the best way to curtail abuses like "environmental-dumping" and "pollution havens" is to encourage a harmonization of environmental regulations between countries, especially between trading partners. Such harmonization will become increasingly important in the future with respect to global environmental concerns such as acid rain, ozone layer destruction, and global warming.

**References:**


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