

## **X.A.2. Environmental Regulations as Trade Barriers for Developing Countries: The Case of Indian Agricultural Exports**

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As a part of the Rio Declaration on Environment and Development (1992), consensus was reached on the following two points: Trade policy measures for environmental purposes should not constitute a means of arbitrary or unjustified discrimination or a disguised restriction on international trade. Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. From the discussion of the Uruguay round, on the other hand, emerge significant environment related issues. These include the Agreement on Technical Barriers to Trade and the Agreement on Sanitary and Phytosanitary Measures. These two agreements call for environmental standards based on factors that include scientifically and technically based information and risk assessment. Thus, considerable scope exists within current trade policy dispensation for countries to use existing provisions to prevent the import of goods perceived to be not satisfying predetermined environmental standards. As a consequence, export potential of crucial commodities is impacted by the existence of these environment related non-tariff barriers. This paper seeks to test this hypothesis in the context of a few selected agricultural exports from India. It sets up export demand functions for some agricultural products and examines what effect non-tariff barriers have on the quantum of exports from the country. The analysis consists of two parts. Firstly, export functions are set up to examine the impact of different country specific variables on export demand for the selected commodities. At this stage itself, a distinction is made between pre-1991 and post 1991 scenarios, mainly due to the greater openness expected to characterise the Indian economy after that year. At the next stage of analysis, tariff measures and non-tariff barriers index are introduced for the years 1991-96 as explanatory variables. However, they are assumed to remain invariant during this period. Time series data covering the period 1980-81 to 1996-97 is used for the purpose for the following categories of agricultural exports; plantation products, fresh fruits, and vegetables. In all seven commodities are considered. These include tea and coffee, banana, grapes, oranges, apples and onions.

Major importing countries are identified in each case in order to identify country specific factors affecting the level of exports of each commodity. Countries selected are such which as a group, account for 70% or more of the total exports from India. They constitute the major importing markets for India. The study reveals that each export market has its differentiating characteristics. For the country groups considered for various commodities, the changing scenario post 1991 has had a marginal impact on exports. The non-tariff barrier index emerge as

an important deterrent for tea and coffee exports which are exported to a combination of developed and developing nations. On the other hand, this variable is not found significant for commodities which are mainly exported to the developing countries.