



Policy Briefs

The Local Impact of International Policy: Changing Times for Sri Lanka's Potato Farmers

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EEPSEA particularly encourages work on the environmental aspects of trade, taxation and economic policy. This focus is important, since changes at the national and international level can have dramatic and often unforeseen repercussions for both communities and individuals.

This vital linkage is being explored in a new EEPSEA-sponsored project in Sri Lanka. The study looks at the potential impact of the South Asian Free Trade Agreement (SAFTA), which will liberalize trade among member countries.

The purpose of the study is to assess the impact of tariff reductions on imported potatoes on farmers, consumers and the environment. Potato cultivation employs about 25,000 farmers in Sri Lanka, so has received substantial government support over the last decade. It would be significantly affected by tariff reductions proposed under SAFTA.

Trade economists have well-developed techniques to estimate the economic effects of such changes on consumers and producers. But environmental consequences are rarely counted. If they are, they are usually measured in physical terms, and cannot easily be compared to the economic effects. Policy makers are left without a clear picture of how environmental gains or losses compare with economic impacts. Without such information, it is very difficult to design economic policies that promote development sustainably.

The study's authors want to break this information log jam by providing a comprehensive assessment of all the gains and losses - economic and environmental - from the proposed tariff reduction. Two of the researchers - Prof. Weerahewa and Prof. Kotagama - are members of the Sri Lankan President's advisory committee on SAFTA and are acutely aware of what information they need to provide for persuasive policy advice.

The researchers predict that with reductions in tariffs, potato imports will increase and the domestic price of potatoes will drop. As potato prices fall, farmers are expected to switch to substitutes like beans, carrots and beets. Farm-level data on the profitability of various crops has allowed predictions to be made as to the most likely substitutes. Different trade liberalization scenarios have been analyzed by reducing the price of potatoes by increments between 10% and

35%.

Potatoes are currently cultivated on hillsides in important watersheds. They are quite erosive when grown on such sloping land. This erosion causes on-site productivity losses and off-site losses downstream in irrigation and reservoir capacity. Agrochemicals from potato farmers also enter the waterways causing nitrate contamination which has affected human health.

It is clear to Dr. Weerahewa and her team that the different crop regimes that might replace potato will have different impacts - some are more erosive than others and some need different levels of fertilizer input. By including these variables in their model, the researchers can predict the environmental impacts of crop changes.

The next step is to calculate the monetary value of this environmental change. Here specialized methods need to be brought into play: For example, surveys can be done to find out how much people are willing to pay for water supplies free from fertilizer contamination.

The project's preliminary findings - currently being tested - make interesting reading. Under the most plausible assumptions, farmers lose, but consumers and the environment are better off after tariff reductions. The net benefits are large enough that farmers could be compensated through some sort of transfer payments, making everyone better off - an encouraging story about how policy reform can benefit both the economy and the environment.

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