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An Analysis of the World Market for Mangos and its Importance for Developing Countries

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Abstract

Agricultural products are presently still a very significant source of export earnings for developing countries. In the tropics and subtropics, mango represents such an important agricultural product. The objective of this study is to analyse the world market for mangos and determine its importance for developing countries — especially for their welfare — by applying the concept of an interregional trade model. Theory tells and experience shows that participation in world trade and economic development go hand in hand. Open borders and low tariff and non-tariff barriers, ultimately lead to increased foreign trade and eventually increased domestic production. It is the hypothesis of this study that an expansion of export and the reduction of trade barriers have a positive effect on both export revenues and social welfare of developing countries. This will be tested for the case of mango exports from developing countries.

The theoretical part of this paper presents an interregional trade model with a focus on agricultural products in the context of the theorems of RICARDO and HECKSCHER-OHLIN. In the descriptive part an overview of the current situation of the world mango market is given. This includes an analysis of country-specific and regional data on mango production and international trade. Then, a world model for mango shows volumes and structures of all product flows that will minimize the aggregate cost of transportation and production, and determine the pricing system of all products that accompany the optimum allocation system.

The interregional trade of mangos is then simulated in two scenarios. One represents the current situation and the other one simulates a situation with reduced tariffs. The results verify that a reduction of tariffs leads to increased mango production, increased mango trade, and increased aggregated world welfare.

Keywords: International trade, mango market, spatial equilibrium model