

International Trade and Management of Shared Renewable Resources

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ABSTRACT

This paper examines the effects of international trade in a two-country, two-good model where countries share a renewable resource and implement resource management to control their domestic harvest. We show that, contrary to conventional wisdom, an opening up of trade is likely to raise the steady state utility of a resource-good exporting country, even if resource management standards are weak in both countries. A resource-good exporting country always gains from the expansion of its resource sector that enjoys economic rent under resource management (i.e., rent shifting) and may also benefit from an increase in the shared stock caused by trade because the change in the shared stock from autarky depends on the relative resource management standards of the two countries, not on the absolute standards. However, a resource-good importing country is harmed by trade unless the shared stock increases because of the contraction of its resource sector. Thus, a resource-good importing country may have an incentive to implement weaker resource management after trade than under autarky to seek rent shifting. This suggests that, to maximize world welfare under trade, a resource-good exporting country should offer side payments to give the resource-good importing country an incentive to implement strict resource management.

Keywords: Gains from trade; Shared renewable resource; Resource management

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