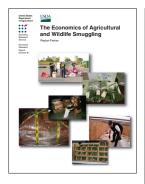
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Find the full report at www.ers.usda.gov/ publications/err81

The Economics of Agricultural and Wildlife Smuggling

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The United States bans imports of certain agricultural and wildlife goods that may pose unique risks to the environment or the agricultural economy. Despite these bans, contraband is regularly discovered during inspections of cargo containers and found for sale in domestic markets. Very little is known about the size and scope of such smuggling.

What Is the Issue?

Banned agricultural goods can carry diseases, pathogens, foreign organisms, or contaminants that threaten the health of humans, animals, and plants; the environment; and the trade status of U.S. exports. Trade in banned wildlife goods may also endanger the survival of a species. Yet, banned goods still appear in U.S. markets. This study examines agricultural and wildlife smuggling—its specific characteristics, including estimations of its size and scope; its responsiveness to economic incentives; and regulations and efforts to reduce its risks.

What Did the Study Find?

Agricultural and wildlife smuggling primarily involves luxury items and jewelry made from animal parts; ethnic foods, such as szechuan peppers and tropical fruits; and specialty goods, including traditional medicines. These types of items are also likely to command high prices relative to their cost and size. Small amounts of smuggled goods occasionally move over pedestrian and personal vehicle pathways, but commercial volumes of smuggled goods are likely to be transported through international shipping channels.

Among all countries exporting to the United States, incidents of detected smuggling are more prevalent with goods shipped from Mexico (wildlife) and China (agricultural). However, both countries are major trade partners with the United States, and U.S. imports from both have increased dramatically over the last 25 years. Interdictions of meat products are particularly high from China. Inspections data reveal that Mexico has the highest amount of refused shipments of fruits and vegetables, though it is also the leading exporter of these products to the United States. Mexico and Russia have the highest rates of refusal of wildlife goods. Refused goods from Mexico typically include live animals, of which birds are a particular concern due to their potential for spreading diseases and pathogens. Differences in smuggling prevalence rates across countries are attributed to differences in the types of goods affected by trade prohibitions, the visibility of smuggled goods, and the targeting of enforcement resources.

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Based on fragmentary inspections data, wildlife smuggling accounts for approximately 1 percent of commercial wild-life shipments to the United States and 0.4 percent of the total value of U.S. wildlife imports. Fragmentary interdiction data show that agricultural smuggling is small, accounting for 0.03 percent of total agricultural imports from China, the country with the highest reported proportions and volumes of smuggled imports. Still, these figures, along with most widely reported estimates, are inexact due to the potential for bias in the data.

Smuggling is motivated by profits. Criminal penalties and fines represent a cost of smuggling, while the difference between the price of a smuggled good at its origin and at its (prohibited) destination represents its return. Governments may reduce the incentive to smuggle both by increasing the cost through higher penalties and tighter enforcement and by reducing its return. To reduce price disparities that encourage smuggling, governments may compensate producers affected by trade bans and eradication programs, ensure that close-substitute goods can gain legal trade access, and reduce the size of markets impacted by a trade ban through regionalization. A small but growing literature finds empirical support that smuggling responds to incentives related to enforcement, detection, and profitability.

How Was the Study Conducted?
The analysis is supported by data on random and targeted inspections of agricultural cargo from USDA's Animal and Plant Health Inspection Service, interdiction data from the U.S. Fish and Wildlife Service, and trade data from the U.S. Census Bureau.