Agriculturalists have been occupied with trade, food safety, and the destruction of the environment. However, another problem, related to agriculture, has been festering. Politicians, jurists, law enforcement professionals, psychologists, physicians, and moralists are deeply involved in setting both policy and the agenda for coping with this problem: the worldwide production and trade of illegal drugs. In contrast, agricultural economists and agricultural scientists, in general, have contributed insufficient input to policy in spite of the magnitude of the drug economy.

Viewed holistically, the War on Drugs is but a part of a much wider challenge: how to create and legitimate imports and exports comes from a variety of sources, including the black market. Of this total world trade, U.S. imports of all products for consumption accounted for about 15% or $462.5 billion (c.i.f.) in 1989. Approximately $23 billion of this U.S. import bill went for agricultural products.

In comparison, Drug Czar, Bob Martinez, Director of the Office of National Drug Control Policy (ONDCP) reported that cocaine shipments to the U.S. alone totalled $26 billion to $44 billion in 1990. Even the low figure, $26 billion, means that Americans import a larger dollar value of cocaine alone than of all agricultural products combined. Hence, the role of illegal commodities in U.S. agricultural trade is quite significant monetarily, even if marijuana, hashish, and heroin are not added in.

As Martinez has stated: “Although (these) estimates are imprecise, they are reliable enough to imply that trade in illegal substances is immense....”

Food Safety

The issue of food safety has been a growing topic of concern in agriculture. The Centers for Disease Control estimated that at least forty-three persons died from salmonella enteritis between 1985 and 1989. Sales of fresh apples in the New York/Newark market fell by 30 percent due to the Alar controversy. Yet, if the yardstick of safety is applied to illegal imports of cocaine, marijuana and opium, the losses caused by these agriculturally produced commodities easily swamp their more conventional counterparts. Costs associated with law enforcement, lost industrial output, drug-related health care, accidents resulting from drug impairment, etc. present society with an expensive bill measured in tens of billions of dollars and hundreds of lives annually.

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Environment

In considering the environmental impact on the national environment of producing countries, the importance of policy choices becomes even clearer. The devastation of the physical environment in drug-exporting countries often brings huge costs as a result of chemical-intensive processing practices and U.S. supply control policies. In Peru, for example, a leading cause of rain forest depletion is an indirect result of U.S. cocaine eradication policy. According to Edmundo Morales in 1989, cocaine farmers whose crops are destroyed by police simply slash and burn remote jungle acreage to continue producing Peru's number one cash crop. Jean-Michel Cousteau of the Cousteau Society framed the cocaine problem as an environmental one this way:

"In some ways, I believe cocaine is the most venal of all pollutants. It pollutes the ancient integrity of the Andean and Amazonian environments. It pollutes the bodies and the minds of the generation that soon must guide humanity into the future. And, in its diabolical corruption of our families and our most cherished legal and economic institutions, it pollutes the human spirit itself."

Implications

Several observations are in order.

First, the data quality of illegal drug statistics needs improvement. Many Congressional estimates are higher than those given above. Policy makers point to the need for better data, yet only limited steps have been taken to improve the data. So, the first policy challenge is for the agricultural community to join in developing a more accurate bank of data.

Second, economists and agronomists could help analyze and interpret the data that are available. One case in point: a 1991 General Accounting Office report on "Drug Policy and Agriculture" includes a table detailing average monthly prices of Bolivian coca from 1986 to 1991. The table includes an "annual" price for 1990 which is below the estimated cost of coca production. This "annual" price, a simple average of the monthly figures, leads to a set of possible explanations from the authors ranging from effective interdiction by police within Bolivia and Columbia, to excess supply on the World market. The idea of quantity-weighted seasonal average prices (a necessity to the agronomist when dealing with the variabilities of agricultural production) somehow did not figure into the analysis.

Another example of how lack of an agricultural perspective has hurt the accuracy of drug-related numbers: it was not until 1991, that the State Department revised coca production estimates to take into account the yield of mature coca plants. Agronomists' skills enable them to deal with the seasonality and variability of agricultural conditions. Furthermore, economists are trained to consider opportunity costs (costs of foregone opportunities) intrinsic to the production and consumption of drugs, and the economic impact of alternative ways to wage the war on drugs.

Third, economists and production agricultural scientists' involvement with drug-related investigations lags behind other disciplines. Admittedly, some theoretical economic work which touches on procedures such as habit formation and "rational" addiction, could help better measure drug use. But clearly the amount of literature related to oil crop and wool product (as examples) consumption and policy alter-

Two tons of seized marijuana in Pima County, Arizona. 
Courtesy of Pima County Sheriff's Department

"Cocaine farmers whose crops are destroyed by police simply slash and burn remote jungle acreage to continue producing Peru's number one cash crop."

"America imports a larger dollar value of cocaine than it does of all agricultural products combined."

Courtsey of U.S. Drug Enforcement Administration

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bicides, and genetically-engineered impotent drug crops are but a few. One example came in 1987 when mysterious butterflies invaded Peruvian coca fields. The caterpillars fed exclusively on Coca and destroyed an estimated 20,000 hectares of the plant, yet entomologists knew little about the pest. Of the $11.6 billion in Federal drug spending, $8.0 billion has been targeted towards law enforcement, courts and interdiction; $1.5 billion to education and community action, and $1.6 billion for treatment. But, according to the ONDCP's "National Drug Control Strategy", Federal spending for promising Agriculture Research Service projects into substitute crops and safe and effective ways of reducing drug crops stood at only $6.5 million, or about one twentieth of one percent of total federal drug dollars. These figures pale in comparison beside the agricultural research expenditure for "critical needs" such as tobacco pathogen investigations, honeybee disease research, fish immune systems, and the U.S. wine grape industry.

Fifth, protectionist domestic political interests have a great effect on U.S. drug crop substitution policy. Officials of the U.S. Agency for International Development (AID) reportedly felt that the American Soybean Association was behind a $100 million cut in the agency's 1986 budget because AID financing might have been used to promote planting of soybeans instead of coca in South America. Of course, if agricultural advice were heeded to begin with, soil-loosening soybeans would not be a likely choice for an alternative crop to coca since coca is grown mostly on hillsides in poor soil according to Iowa's Sen. Grassley.

These observations lead me to urge that the U.S. agricultural scientific professions demonstrate their ability to serve the priority interests of society by moving aggressively to initiate and embrace activities designed to contribute to overcoming the greatest agriculturally related problem this country confronts—the drug problem.

On the research front, we need to mobilize scientific agriculture to look for biological breakthroughs and new technologies in crop substitution and eradication. On the trade policy front, we need both improved measurement and a sane recognition that the free trade in cocaine will have to be replaced by free trade in substitute crops, even if a handful of U.S. producers are slightly inconvenienced.

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