



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

# AGRICULTURAL CHOICES IN THE WAR ON DRUGS: *Pay or Play?*

by Dean G. Fairchild



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 implement policy focused on the supply and demand for all medically-recognized addictive agricultural commodities—cocaine, marijuana, heroin, tobacco, alcohol, and even (according to some social scientists), seemingly harmless commodities like coffee and sugar.

The extent of the drug policy problem's importance to agriculture can be considered in the context of three conventional topics: free trade, food safety, and environmental destruction.

## Trade

The total volume of world trade in all commodities was approximately \$3 trillion in 1990. This number primarily counts trade of legal goods and services, though the income used to purchase

---

*Dean G. Fairchild is Graduate Teaching Assistant in Agricultural Economics at the University of Arizona and Student Assistant for the USDA Arizona Agricultural Statistics Service.*

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 with 75 percent of those deaths attributed to eggs. 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.

**> Illegal drugs have enormous significance for world trade, consumer safety, and the social and natural environment. Thus, drug policy is one of the principal policy choices society faces as the new century approaches. Numerous skirmishes in the War on Drugs are being fought on an agricultural battlefield. But the combat strategies for these skirmishes lack tactical support from the scientific agricultural establishment even though agriculture's unique perspective could contribute new weapons and maneuvers with which the war could be pursued.**



## 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 ag economists 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 season average prices (a necessity to the ag economist 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. Ag economists' 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-

natives are immensely greater than that related to illegal commodities. In fact, most of the scant published research in the *economics* of agricultural drug supply and demand is authored by physicians, criminologists, pharmacists, and psychologists.

Fourth, Federal drug expenditures are overwhelmingly focused on enforcement while attention to drug-related agricultural research is minuscule. The possibilities of biotechnology are endless: coca-specific pathogens, safer selective drug-eradicating her-



*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."*

*Courtesy of U.S. Drug Enforcement Administration*





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 hill-sides 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. **C**

### For More Information

Cousteau, Jean-Michel. Testimony before the Senate Judiciary Committee. S. Hrg. 102-174 "The Unique Problem of Drug Production and its Effect on the Environment." April 11, 1991. Page 5.

Dempsey, Mary. "Butterflies that Thwart Cocaine Barons." *New Scientist*, February 4, 1988.

General Accounting Office (GAO). "Drug Policy and Agriculture: U.S. Trade Impacts of Alternative Crops to Andean Coca." *Report to Congressional Investigators*. October 1991. NSIAD-92-12.

Morales, Edmundo. *Cocaine: White Gold Rush in Peru*. University of Arizona Press. Tucson, AZ. 1989.

Office of National Drug Control Policy (ONDCP). Executive Office of the President. White House. "National Drug Control Strategy." February 1991.

Office of National Drug Control Policy (ONDCP). Executive Office of the President. "What America's Users Spend on Illegal Drugs." Technical Paper. June 1991.

Tullis, LaMond. *Handbook of Research on the Illicit Drug Traffic: Socioeconomic and Political Consequences*. In cooperation with U.N. Research Institute for Social Development. Greenwood Press. 1991.

## The Hubert H. Humphrey Institute of Public Affairs

**E**conomic development in today's world is based on knowledge. It's based on new technology, and it's based on well-educated and highly skilled citizens.

—Humphrey Institute Dean

G. Edward Schuh,  
former World Bank director  
of agriculture and rural  
development;  
former U.S. deputy  
undersecretary of agriculture  
for commodity programs  
and international affairs.

UNIVERSITY OF MINNESOTA

### Teaching

Master of arts in public affairs and master of planning degrees.

Concentrations in:

- Technology, energy and environmental policy
- Land use and human settlements
- Economic and community development
- Foreign policy, international affairs
- Social and distributive justice, including labor policy and women and public policy

### Service

- Environmental clean-up training project in Eastern Europe
- Economics and management training program in Poland
- Legislative Staff Management Institute for professionals from across the country
- North/South Fellowship Program for mid-career professionals from developing nations
- Carlson Lecture Series featuring national and international leaders
- Mondale Policy Forum joining leaders in business, academia, government, the nonprofit sector and the media to discuss major public issues

### Research

- Social and environmental policy
- International relations and economic policy
- National, state and local public management
- Science, technology and environmental policy
- Women's rights and policy toward women
- Labor issues and policy
- Community and economic development