

❑ TRADE AND DEVELOPMENT DIMENSIONS OF U.S. INTERNATIONAL BIOTECHNOLOGY POLICY

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Science-based regulation of agricultural biotechnology contributes to the free trade of safe biotech applications and to the appropriate use of this technology to promote development, writes Alan Larson, under secretary of state for economic, business and agricultural affairs. Larson adds that biotechnology — one of the most promising new technologies of our times — is too important for the future prosperity of the world to ignore.

Biotechnology is one of the most promising new technologies of our times. The expanding use and trade of agricultural biotechnology-derived products is enhancing prosperity and well-being both in developed and developing countries. Unfortunately, while the United States and many other nations around the world are expanding the development and use of safe biotechnology-derived products, some countries have imposed unjustified restrictions on them. Such restrictions threaten the international trading system and are preventing developing countries from exploring the enormous potential of biotechnology to improve the lives of their people.

BIOTECHNOLOGY AND DEVELOPMENT

In 2000, the world's population was about 6 billion. It is expected to increase to 9 billion by 2050. As a result, there will be more people to feed on an increasingly crowded planet. Food production will have to increase, and it must increase in an environmentally sustainable way. Since 1980, 50 percent of the increased agricultural productivity in the developing world came through improved seed technology. Better seeds can come from improving traditional methods, developing conventional hybrids, and through biotechnology. Biotechnology, while not a panacea, can make an important contribution.

Agricultural biotechnology achieves enhanced crop productivity in a more environmentally sustainable way. In the United States, the growing use of agricultural biotechnology is resulting in reduced use of pesticides and increased adoption of environmentally friendly farming practices such as “no-till” farming, which reduces soil erosion and fertilizer run-off. Enhanced productivity

means that more food can be raised on the same amount of land. As population pressure grows in the coming years, the ability to grow enough food for the world's burgeoning population without encroaching on vital habitats such as tropical rainforests will be of enormous benefit to the environment.

The United States is not the only country that is reaping the benefits of biotechnology. New crops derived from biotechnology are being used in developing countries such as Argentina, South Africa, China, the Philippines and India. The attraction of biotechnology in these countries lies in the direct benefits these varieties bring to the developing country farmer. In China, for example, where small farmers grow biotechnology-derived insect-resistant cotton varieties in great numbers, these varieties require fewer pesticides, which not only reduce costs, but also significantly reduce exposure to dangerous chemicals. As a result, farmers are healthier and have expanding incomes that let them buy better food for their families or send a child to school rather than have that child work in the fields. Such results, spread over the population of an entire country where farmers are by far the largest percentage of the population, provide the opportunity for development and improved prosperity.

The challenge is to make tried and tested biotechnology varieties available to more developing countries and to help develop new varieties specifically adapted for their conditions. This is why the United States supports the development of biotechnology-derived staple food crops that will fight disease such as insect-resistant cowpeas, disease-resistant bananas, cassava and sweet potatoes. Biotechnology may also offer a quicker route for undernourished populations to get access to a better diet. For example, a Vitamin A enriched rice variety known as “golden rice” is under development to help fight blindness caused by malnutrition.

The potential benefits of this new technology should not be thrown away or delayed unnecessarily. Last year a few African nations balked at receiving badly needed food aid — food most Americans eat every day — because of unscrupulous and unscientific fear mongering. This must

stop. Rather, the international community should reach out to developing countries — as the United States is doing — to explain how safe biotechnology-derived products can be regulated, used domestically, and traded abroad to the benefit of all.

BIOTECHNOLOGY AND TRADE

Despite the benefits of biotechnology for both the developed and developing world, biotechnology-derived crops are at the center of a number of contentious trade disputes. This is the case even though more than 3,200 esteemed scientists around the world — including 20 Nobel Laureates — have concluded that the biotechnology-derived products currently on the market do not pose greater risks to human health than their conventional counterparts.

The only way to maintain a free and fair trading system is for products traded in that system to be regulated in a logical, objective and science-based manner. When such a system is in place, we can have confidence in the safety of the products we trade. How biotechnology-derived crops are treated in the international system will have consequences not just for biotechnology, but also for all new technologies. It is important that we get this right.

The rules governing the trade of biotechnology-derived products, and indeed all products, must be based on scientific risk assessment and risk management. The World Trade Organization (WTO) Agreement on Sanitary and Phytosanitary Measures (SPS Agreement) requires that measures regulating imports be based on “sufficient scientific evidence” and that countries operate regulatory approval procedures “without delay.”

When science is the basis of decision-making, countries find it easier to agree on rules. For example, the Codex Alimentarius Commission recently approved science-based guidelines for biotechnology food safety assessments relating to human health. These guidelines were approved unanimously by the Commission, which is composed of 169 members, including the U.S., EU (European Union) member countries, and the vast majority of developing nations.

Three international standard setting bodies, including Codex, are specifically recognized by the WTO SPS Agreement. The Codex Alimentarius Commission develops food safety standards. The International Plant Protection Convention (IPPC) focuses on preventing the spread and

introduction of pests in plants and plant products. The Office of International Epizootics (OIE) performs a similar function for animal health. All three organizations base their work on scientific analysis. It is essential for the integrity of the international trading system that the WTO continue to refer to the work of these bodies in assessing biotechnology products and that these organizations continue to perform science-based work.

The U.S. supports workable, transparent and science-based regulations for agricultural biotechnology applications. In fact, the U.S. government provides technical assistance to countries to help them develop their own capacity to regulate this technology and put it to use for the benefit of their citizens. When countries adopt a science-based approach to biotechnology, fair rules for the regulation and trade of biotech products can be established. The U.S. is committed to pursuing such a science-based approach to biotechnology with its trading partners and is convinced that this approach is the best way to ensure a fair and safe trading system for agricultural biotechnology products.

CONCLUSION

Agricultural biotechnology can help both the developing and developed world enhance productivity while preserving the environment. Science-based regulation of agricultural biotechnology applications contributes to the free trade of safe biotech applications and to the appropriate use of this technology to promote development.

Scientists around the world, including those in the European Union, agree that there is no evidence that approved biotechnology-derived foods pose new or greater dangers to the environment or to human health than their conventional counterparts. Indeed, any alleged downsides to agricultural biotechnology lie in the realm of the theoretical and potential. The upsides have already been demonstrated. Biotechnology is too important for the future prosperity of the world to ignore.□