

United Nations to help Cuba sell biotechnology

The United Nations Development Programme (UNDP; New York) embarked on an unprecedented new initiative in July, funding efforts to improve the marketing of products from Cuba's biotechnology industry. Although the UN aid package may help Cuba sell its biotechnology products more effectively in existing niche markets, the UNDP will not address political issues or trade barriers against Cuba; it remains to be seen whether Cuba's biotechnology industry can successfully compete in the global marketplace.

Over the next two years, the UNDP will contribute \$300,000 to a Cuban government program that will direct a total of \$1.1 million toward improving the marketing infrastructure of biotechnology centers, including the 12-year-old National Center for Genetic Engineering and Biotechnology, in Western Havana. The money will pay for a high-speed computer network and access to marketing expertise to help the centers increase sales of their biotechnology products, but specific sales goals have not yet been set. While the total investment is small compared with some US companies' advertising and sales budgets, it is the first time the UNDP has provided this type of aid to what would, in other countries, be a private industry.

The UNDP has never funded an international marketing initiative before, but other types of UN assistance for biotechnology in Cuba have been helping the industry for several years. According to sources in Havana, the country's biotechnology sector has received over \$10 million in aid over the past 20 years, and has been a top priority for Cuba's government since 1985—the availability of well-trained scientists and the opportunity to enter a promising industry in its infancy made biotechnology an attractive investment for the country. Until now, UN money has been used primarily for building new facilities and upgrading manufacturing technologies. Andrew Russell, a program manager at the UNDP, explains that the marketing program is a natural extension of those initiatives: "For many years Cuba has prioritized its biotechnology sector in its overall development strategy, and we've been there since the very beginning to support research and development of products. Now the focus will be on commercializing Cuban products." Currently, those products include recombinant streptokinase, epidermal growth factor, hepatitis B virus antigen, and a meningitis vaccine.

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Because private companies cannot receive UNDP assistance, most developing nations' biotechnology industries receive no support from the agency. In Cuba, however, where the communist government owns the industry, the development of biotechnology is a national project, uniquely qualifying it for aid. Russell asserts that Cuba also has a special need for this type of assistance, saying, "Because of the economic history of the

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The Cuban Biotechnology Institution (above), unlike private companies elsewhere in the world, can receive UNDP financial assistance.

country in the past decades, it has not inserted itself to the same extent into the rest of the region's economy. There isn't so much of a barrier for [other] countries in terms of having access to technologies." Although prominent US politicians have often been vocal critics of both UN aid programs and Cuba, Russell says that the UNDP initiative has not yet been the target of any specific criticism.

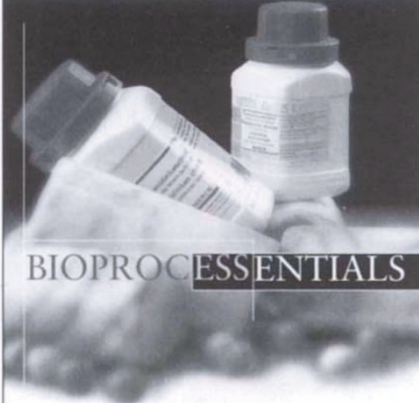
Cuba's recent political history has also hampered its ability to compete in the global market. A trade embargo by the United States and existing patents in other countries have severely limited the marketability of Cuban products. The UN aid package may help Cuba sell its products more effectively in existing markets, but the Cuban government will have to dismantle trade barriers on its own. "The niche for UNDP is extended a bit [by the new program], but it is not extended into any political issues," says Russell.

At least one barrier, the controversial US Helms-Burton Act, which would bring trade sanctions against any country that buys products produced with foreign equipment confiscated by the Cuban government during the communist revolution, is unlikely to apply to biotechnology products manufactured in newly constructed laboratories. Other obstructions, such as the blanket US embargo on trade with Cuba, have been heavily criticized during recent weeks as Cuban President Fidel Castro has been touring neighboring Caribbean countries to promote free trade. Ultimately, though, the success of the Cuban biotechnology indus-

try may depend on niche markets that dodge existing patents and embargoes.

Others contend that Cuba needs more than better salesmanship to keep its biotechnology industry afloat. Harvey Bialy, a long-time observer of biotechnology in developing nations and editor-at-large for *Nature Biotechnology*, thinks that the country has had problems adapting to a decade of changes in the field. "The major problem faced by the Cuban biotechnology enterprise is its difficulty in responding to the new challenges posed by a genomics- and bioinformatics-based biotechnology," he says. According to Alberto Perez, a UNDP spokesman in Havana, a refitting of the industry is unlikely, since "Investment in the research infrastructure, according to the government's perspective, has reached a suitable level." Russell adds that the UNDP charter requires the agency to work within the development priorities set by the host country. It will ultimately be up to the global marketplace to decide whether Cuba's biotechnology industry is a winner, or whether it is "close, but no cigar."

Alan Dove



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