

A NEW STRATEGY FOR FOOD PRODUCTION

Developed nations are wealthy and well-nourished thanks to plants derived long ago from the less-affluent nations. It's time for the South to embrace a new plan.

 by Octavio Paredes-Lopez



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Most of the genetic resources used today by the developed world for food and health purposes arrived long ago from the developing world. Such resources were transferred without any official registration and clearly without any cash payment.

Agricultural strategies in previous centuries were employed in a world much different from today's. The developed world invested in knowledge for the development of agricultural technologies for their own diets and medical requirements. A high proportion of medicines in the previous centuries emerged from consumption of the plants themselves, and from plant extracts generated in different ways. The input of technology increased the quantities of target compounds in selected materials for nutritional, nutraceutical and medical purposes, and consequently the use of plants or their extracts has been modified.

In many cases the evolution of technology, mostly in the affluent world, to produce the same natural or similar compounds by chemical and microbiological ways, has had strong commercial impacts, especially since the end of World War II. The free transfer of genetic



resources coming from the developing world has been accompanied in the developed world by an intensive generation of technology for the availability of new foods and medicines – and now the use of such technology in the wider world requires the payment of royalties!

The societies of the developing world have become highly dependent on the *savoir faire* of the countries which have become wealthy with such strategies. Fortunately, a few developing countries are capable of producing the key foods of their daily diets.

However, we have arrived with most of our population to a situation that is far from optimal. There is a general lack of food of whatever quality; the most nutritious foods, with high contents of nutraceuticals, are more expensive. People with much lower incomes are left to consume foods of lesser ingredients and low nutritional value, and consequently have higher rates of overweight people and obesity. This raises the incidence of diseases such as diabetes, which exert a damaging effect on life-quality for many people in the South.

Solutions will require a change of strategies. Fortunately, several of these regions have indigenous and almost-forgotten genetic materials of high nutritional and nutraceutical value that can grow and produce in low-quality agricultural areas. Additionally, we have outstanding examples of a few countries that have escaped the Third World designation in recent years. Their use of broad, high-quality education, adaptation of foreign technologies and internal generation of knowledge, plus high levels of self-esteem, have been the basic key to progress. ■