

Income-rich Saudi Arabia prefers grow-their-own food security

Food security is a policy goal of many nations. One obvious reason a country might adopt food security as a national policy goal is to protect it against the possibility of the loss of the ability to obtain imports due to an embargo, poor crops in exporting nations and events such as war which might cut off or delay needed food imports. In addition, countries may opt for domestic food production as a means of improving their balance of payments by reducing the amount of imported food or as a means of providing employment for a portion of the population.

Given the fact that one-third of its area is the world's largest sand desert and average rainfall is four inches, one of the places one would least expect to adopt a grow-your-own food security goal is Saudi Arabia. Unlike some less developed nations, with its position over some of the world's largest oil reserves, Saudi Arabia has sufficient income to import as much food as it needs.

Nevertheless, beginning in the early 1970s, Saudi Arabia adopted a policy with the goal of developing an agricultural sector capable of achieving food self-sufficiency. While still importing food and feed products from barley and rice to apples and bananas, Saudi agriculture has made great strides over the last 30-40 years.

Supported by policies that provide up to 1,000 acres of free land as well as machinery and equipment discounts of up to 50 percent, Saudi farmers have increased agriculture's share of GDP from 1.3 percent in 1970 to more than 7 percent in 2002. The area under cultivation has increased from under 400,000 acres in 1976 to more than 9 million acres today. Agriculture also supplies significant employment opportunities. Today 12 percent of the Saudi workforce is employed in the agricultural sector.

In addition to help with land and equipment, the Saudi government has embarked on water impoundment projects to make sure that they get full use of the four inches of rainfall they receive. Water is also obtained from deep wells and large desalinization projects. The goal of these water projects is to provide sufficient water for human as well as agricultural and industrial uses. Treated wastewater is used for industrial and agricultural purposes. As a result of these water projects, large tracts of desert have been transformed into fertile farmland.

The Saudi government has also established agricultural research stations as well as an extension service to help farmers figure out how to adapt their farming methods to the harsh desert climate. While Saudi Arabia once imported large amounts of wheat, today the country is nearly self-sufficient in wheat production, importing specialty flours and exporting surplus production. In comparison to the U.S. average wheat yield of 40 bu./ac., Saudi farmers reap 70 bu./ac. Of course, the larger yields do not necessarily mean that it wouldn't be cheaper overall to import the wheat. But, food security is a part of national security.

Saudi agriculture faces a number of challenges. One of the most serious challenges is the issue of water. The underground aquifers are being drawn down faster than the recharge rate. As a result, the rapidly growing population may end up competing with agriculture for scarce water resources.

Daryll E. Ray holds the Blasingame Chair of Excellence in Agricultural Policy, Institute of Agriculture, University of Tennessee, and is the Director of the UT's Agricultural Policy Analysis Center. (865) 974-7407; Fax: (865) 974-7298; dray@utk.edu; http://agpolicy.org.

