

A Nationwide Movement Boosts Food-sufficiency Rate

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Ranging from carbohydrates (rice, wheat), protein (soybeans) to fat (peanuts, sesame seeds), only whole grains and legumes can readily satisfy the bulk of the human body's nutritional needs. The average human being can survive on a meatless, vegetable-sparse diet, but to deprive a person of sustenance derived from cereal crops is to take his or her life. Cereal crops can be consumed in almost all shapes and forms – think bread, noodles or even vegetable oil. The importance of cereal crops to the human diet is reflected in the sharp rise in consumer prices whenever grain supplies run low.

In a 2010 research project, the Council of Agriculture (COA) determined that Taiwan's self-provisioning capacity stood at 31.67% in terms of meeting domestic demand for cereal crops. Similarly, the nation's low food-sufficiency rate is echoed in the high import figures for soybeans, wheat and maize – which are incidentally nicknamed the “golden jade trio” in Chinese.

Arable land is fragmented and unequally distributed across the island, making the nation's realm unsuited for heavy agricultural machinery or large-scale extensive farming that can lower operational costs through economies of scale. Moreover, wheat and soybean plants are less compatible with the warmer climate of the subtropics, forcing the majority of Taiwanese farmers to adopt rice and other vegetables as their cash crop instead. That leaves importing from international markets as the sole solution to meet domestic demand for soy, maize, wheat and other cereal grains. The officer of COA commented that “such agricultural imports were once considered cost feasible, given the stable transportation rates and regular climate patterns of the past. In face of rising crude oil prices and volatile weather events in recent years, however, international grain prices have soared. The detrimental effect of a low self-provisioning capacity upon the domestic economy now becomes clear.”

Taiwanese grains may not be able to compete with others on the basis of pricing or quantity, but quality is different. “Consumers won't have to worry about genetic modification or other forms of tampering, and local produce will always be fresher than imported products,” an officer pointed out. And there are plenty of consumers who are willing to pay extra for home-grown grains, both for the guaranteed quality and freshness and to support organic farming practices. In recognition of the bright market potential, the COA has been working closely with domestic agricultural producers in recent years to devise more soil-friendly farming methods and to boost the nation's grain-producing capacities.

While the island's subtropical climate poses substantial difficulties in the cultivation of soybeans, wheat and maize, the COA is still determined to boost the nation's food self-sufficiency rate to 40%. The Agriculture and Food Agency (AFA) has also devised several ingenious solutions of its own, most notably the invention of the "rice husk flour," a fragrant rice-based powder that can be used to substitute up to 20% of wheat-based flour in grain-derived products such as bread. If the entire nation were to replace 20% of its wheat usage with rice husk flour, Taiwan dependency on foreign grains would be reduced by up to 200,000 tons per year. The average citizen can also help lower the nation's consumption of wheat by simply choosing rice, the AFA official indicated that boosting Taiwan's food sufficiency rate should be viewed as a nationwide movement – while agricultural officials are focused on the policy aspects, the nation's citizens can contribute to the movement just by eating more locally produced grains and rice!

(Data Source: Council of Agriculture)

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