



Agricultural policies for a sustainable rice supply chain in Ecuador

The rice industry in Ecuador

The rice value chain contributes significantly to Ecuador's economy. As of 2017, the main economic contributions of the rice sector were:

- ▲ it generated 4.5 percent of the country's agricultural gross domestic product;
- ▲ it absorbed a large amount of rural and peri-urban labour (124 000 workers);
- ▲ it provided income for family farming; and
- ▲ it contributed to food security and food self-sufficiency – as rice is a staple food in the national diet.

The rice sector consists of 75 000 production units, and an estimated 65 percent of output is produced by small farmers (1–10 ha). Most farmers use semi-technical production systems (87 percent); while 8 percent use traditional techniques, and 5 percent are considered to operate in a full technical system. Guayas, Los Ríos, Manabí, El Oro, and Loja are Ecuador's main rice-producing provinces. The average production yield of paddy rice is greater than 5 tonnes/ha. Relative to other South American countries, Ecuador's rice yields are higher than in Colombia (4.71 tonnes/ha) and lower than in Peru (7.55 tonnes/ha).

Minimum domestic prices are above international prices

Demand for rice is inelastic (i.e. it responds modestly to price changes), and supply is well above Ecuador's dietary consumption needs. Years of large surplus production has supported a minimum support price policy. Under this policy, minimum domestic producer prices in 2017 were set at USD 35.50 per 200 pounds, almost double international quotations. Due to the high cost to the national budget of supporting a guaranteed minimum price, in 2017 a price bracket system was introduced, with a floor price of USD 32.3 and a ceiling of USD 35.5 per 200 pounds. The reform

KEY MESSAGES

- ▶ The high cost to Ecuador's national budget of maintaining a minimum guaranteed producer price for rice led to the introduction of a price bracket system in 2017.
- ▶ The minimum guaranteed producer price for rice has led to distortions throughout the marketing chain, only partially meeting its objective of price stability
- ▶ Farmers with greater productive capacity are currently accruing the highest income transfers from the guaranteed minimum rice price.
- ▶ Ecuador's recent comprehensive agricultural strategy, which takes an agricultural food system approach, represents an opportunity for small farmers to receive the necessary incentives to remain a part of the rural economy.

is expected to improve profitability conditions, especially for small farmers, and reduce some of the budgetary pressures, even though prices may remain above international quotations.

Price policies do not generate the incentives expected for small producers

The minimum support price policy and a complimentary high import tariff,¹ were meant to protect small rice producers from competition from world markets and increase their incomes. However, these policies have also generated price distortions throughout the national marketing chain, only partially meeting its objective of price stability. Moreover, farmers with greater productive capacity are currently accruing the highest income transfers from the guaranteed minimum rice price.

¹ Currently the tariff rate is of 67.5 percent of the value of rice imports (tariff bound to the World Trade Organization).

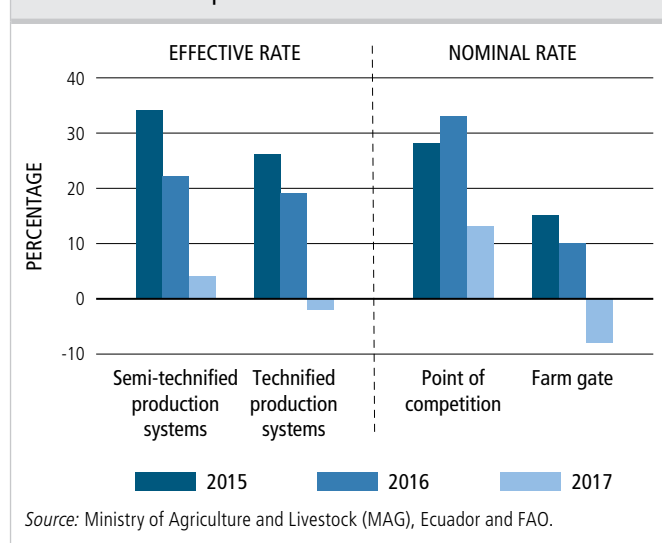
An Effective Rate of Protection (ERP)² analysis provided two crucial insights. First, among small producers, there is greater protection for farmers who received the high-performance technology packages supplied by the government. Second, the incentives for small producers do not exceed the incentives received by medium and large-scale producers with semi-technical production systems (Figure 1; left panel). The latter is explained by the concentration and efficiency in the use of production factors (machinery, irrigation, storage) with economies of scale by farmers employing semi-technical production systems, which resulted in lower production costs and higher incomes for this type of farmers.

Pricing policies generate more incentives for wholesalers

The above-described trade policies impact the entire rice supply chain, including commercialization channels, with effects of the policy reaching wholesale markets.

Regarding the Nominal Rate of Protection (NRP),³ when local prices are lower, producers receive greater disincentives, while at high local prices, incentives tend to benefit wholesale traders to a greater degree (Figure 1; right panel). Not only does this translate into consumer price inflation, but it also affects families with lower purchasing power given the role of rice as a staple food.

FIGURE 1. Rate of protection for rice in Ecuador 2015–2017



² ERP is based on the calculation of value-added generated by producers.

³ NRP is an indicator that allows for the examination of the impact of trade policies on the price received by producers and wholesalers.

The intervention of a new agricultural policy strategy in the rice supply chain

A new Ecuadorian agricultural policy, with its focus on agri-food systems, will contribute to the sustainable development of the rice supply chain. A new agricultural sector strategy seeks to promote the following policies:

- ▲ inducing productive development and technological innovation;
- ▲ increasing access to markets; and
- ▲ strengthening of producer associations.

Policy options to promote a sustainable rice supply chain

- ▲ **New pricing policy.** The recent reform of the minimum rice support price is expected to improve the profitability of small farmers. Even if the price floor reduction continues at a gradual pace. A scenario proposed by the Ministry of Agriculture and Livestock is that the current floor of USD 32.3 per 200 pounds is maintained for the next two years, followed by a yearly reduction of USD 1 for four years, and finally a decrease of USD 2 per year for another four years, until the price floor reaches USD 20 per 200 pounds. This proposed and alternative scenarios should be analyzed to understand their impact on rice farmer's well-being and its effect on consumers.
- ▲ **Changes in border protection.** Border protection should follow the line of minimum prices and begin a gradual reduction. An alternative measure to be evaluated is to ensure protection changes are in convergence with the market situation of neighboring countries.
- ▲ **Special support for family farmers.** Decoupling of social protection policies from farm output could be considered as a more viable and less costly alternative for the poorest families.
- ▲ **Diversification programmes and agricultural transformation.** These can be incentivized through private investments and putting in place public plans for reconversion and agricultural extension.
- ▲ **Rethink public interventions.** The quality of national inputs, such as seeds and agrochemicals, should be improved. It is essential that research and development help improve technological packages to align them better to the actual needs.