



By Nicolas Denis and Suraj Moraje

# Seeding growth in Philippine agriculture

Three billion more people will join the global middle class. Both trends, plus other possible stresses such as climate change and water scarcity, will put pressure on the world's ability to meet the demand for food.

The world is likely to add more than a billion people in the next 15 years (from 7.3 billion in 2015 to 8.5 billion in 2030), according to the United Nations. Over roughly the same period, McKinsey estimates that 3 billion more people will join the global middle class. Both trends, plus other possible stresses such as climate change and water scarcity, will put pressure on the world's ability to meet the demand for food.

The Philippines is geographically close to many centers of future demand, and it has long been a major agricultural producer. Over the last decade, however, the agricultural sector has grown at only about 2 percent a year in real terms, compared with 5 percent for the economy as a whole. The Philippines also has the region's oldest farmers (average age: 57) and relatively low levels of mechanization. Compared to other countries, we believe that the Philippines could improve its yields by as much as two to four times, depending on the crop.

Happily, experience shows that it is possible to improve yields and boost growth relatively quickly. For example, it took Morocco just four years to boost agricultural growth 43 percent. In Brazil, the Embrapa program, a public agricultural research initiative, helped to double agricultural exports between 1982 and 1997 by driving technological innovation for the local agricultural industry.

Current crop yields in the Philippines indicate huge potential for improvement  
Average yield, ton per hectare



In these and other cases, the following actions have proved effective.

### Focus on increasing revenue per hectare

Morocco, for example, directed a massive campaign at smallholder farmers to encourage them to grow citrus fruit and olives. Mexico launched a program to close the enormous yield differences (up to eight times) between the northern and southern regions. In the case of the Philippines, shifting from coconuts to banana or peanut crops could be more remunerative in some areas. Driving up yields requires programs that help farmers to access the right inputs, improve irrigation, and manage their farms better through well-designed extension programs.

### Invest in infrastructure and processing

Poor infrastructure in the Philippines increases export-related costs and wastes food, reducing the country's competitiveness in processing and related markets. Logistics costs account for 20 to 25 percent of GDP in the Philippines, versus around 15 percent in Thailand and Malaysia. Targeted investments into supply chain, cold chain, and storage facilities could help reduce spoilage and cut costs to consumers, while helping producers to realize higher profits. Better infrastructure would also be likely to encourage more investment in the sector.

### Improve the functioning of domestic markets

The route from farm to table is long, complex, and subject to disruption. A single bottleneck can lead to losses for producers and shortages for customers. On the other hand, a smooth journey can produce dramatic advances all along the way. For example, India is using information communication technologies to improve value-chain efficiency. Under the e-Choupal initiative, four million farmers in 40,000 villages have real-time access to market prices,

weather conditions, and production techniques through internet kiosks. These kiosks also act as aggregators through which farmers can buy inputs and sell their production. By connecting buyers and sellers, costs are cut throughout the value chain.

### Build strategic reserves

Catastrophic events and weather fluctuations can reveal the fragility of the food network. Countries do need a backup plan when primary food production or trade routes are disrupted, and also to build more resilience into the system. China, for example, has a strategic food reserve system to cope with supply and market disruptions, and to keep inflation in check. A national administration manages reserves of rice, wheat, soybeans, maize, vegetable oil, and meat in 31 provinces. Provincial and city governments hold their own reserves too.

A third of the Philippine population depends on agriculture for its livelihood. But the sector accounts for less than a tenth of GDP. That constitutes a lost opportunity to the country—and a lost chance to help feed a world that will need more food than ever improvement is critical. Improvement is both critical, and possible.

*Nicolas Denis is an expert principal in McKinsey's Brussels office. Suraj Moraje is a senior partner and managing partner in Manila.*