

Reaping the Benefits

The climate is right, the costs are right, the location is right.

What more will it take for Upper Egyptian farmers to join the roaring national and global economy?

By Marwa Helal

IT'S FEBRUARY AND A HOUSEWIFE IN LONDON is at her local supermarket. As she pushes her cart through the produce section, she is pleasantly surprised to find beautiful strawberries alongside the usual selection of seasonal fruits and vegetables. Not only are the strawberries fresh, they are reasonably priced. How is this possible when the United Kingdom's strawberries aren't due for another three months or more?

Enter our very own Sa'eedi farmers. The climate of Egypt, and especially Upper Egypt, lends itself to a considerable competitive advantage in growing seasons. Ideally, the strawberries our British housewife is eyeing could be grown in villages like Qena, Sohag and Nag Hammadi by farmers who own anywhere from 8 to 100 feddans of land (one feddan is approximately one acre).

The potential is great, but remains unrealized, with a number of technical, logistical and information-related obstacles on the road to opportunity. Knowledge is one such obstacle — many small-scale farmers in Upper Egypt are not even aware of the fair market price for their goods locally, much less the competitive advantage they have over North American and European growers.

The Challenges

AGRICULTURE ACCOUNTS FOR MORE THAN ONE third of the nation's workforce; this despite the fact that only 5% of Egypt's surface area is arable. Almost all of this farming takes place in Upper Egypt and the Delta. Of the two regions, the Delta has the better position, with a sophisticated irrigation system supporting a variety of horticulture. The practice of crop rotation has helped minimize soil erosion, and Delta farms operate on a large scale and thus have an easier time with supply chain logistics; the capital and the nation's main Mediterranean port are both within a four-hour drive.

Compared to the fan-like Delta, the narrow strip of arable land in Upper Egypt presents far more challenges for farmers. For one, the lack of agricultural diversity and crop rotation programs has led to considerable soil erosion. If Upper Egypt was to follow in the Delta's steps, it could further the sustainability of soil and water resources by switching from traditional crops such as sugarcane to horticulture like green beans, grapes and tomatoes. Crop rotation can make a significant difference: crop loss in Upper Egypt is 60 to 70%; the Delta experiences a 40% crop loss at most.

The small-scale farms of Upper Egypt

Tarek Raslan was one of the first farmers in Nag Hammadi to diversify his crops, but still faces challenges in transporting his crops to market

are widely dispersed across the available arable land, far from communication centers and each other, making efficient logistics and information difficult to coordinate. Distances between farms and markets are considerable, making transport a major challenge further exacerbated by poor picking techniques. So how do they get their produce to the market?

Rather haphazardly. The produce is picked by laborers in the fields, usually in a careless manner, plopped into baskets and carried over to a small truck arranged by the wholesaler. When the wholesaler arrives on the scene, he surveys the harvest sitting on the back of the truck and bargains a price with the farmer. The wholesaler then transports the goods to Cairo for sale or export.

The result is a huge loss of goods at every step of the process, from careless picking and packing to inadequate storage and transportation. The wholesaler usually lacks the resources needed to care for the produce in transit; without a refrigeration truck or other equipment needed to keep the goods fresh and safe, the crops are destined to ruin from the very beginning.

Tarek Raslan, a prominent farmer in Nag Hammadi, was one of the first farmers in

the area to diversify his crops. Throughout the year, his fields hold a range of crops from the traditional sugarcane, tomato and banana to grapes, cantaloupe, cucumbers and peppers. Raslan stresses that moving the goods is the largest obstacle to his and other farmers' success, followed by "the lack of technical support in the packing process. A system and the simple knowledge of how to pack the crops and transport them seems to be completely absent in our region."

A lack of transparent commodity pricing also hits farmers hard. When it comes to setting the field-side price, the wholesaler has the upper hand. There is little to no communication between farmers and no information about local and foreign market prices, leaving the farmer clueless about how much their crop is truly worth. An extreme but real case in point: About a year ago, farmers were being paid LE 0.50 per kilogram of tomatoes; in some cases these tomatoes — grossly undervalued — were being used as fertilizer. Meanwhile, consumers were buying the very same tomatoes at LE 5 per kilogram in the premium supermarkets in Cairo.

Sowing the Seeds of Change

THERE IS SOME HOPE FOR SA'EEDI GROWERS IN the form of an improved supply chain integration process. Among other things, the new process will begin by providing price information to both farmers and buyers. The goal is to create an environment that gives farmers the knowledge they need to grow and sell independently of the wholesaler, essentially cutting out the middleman. The Power of Integration project is being spearheaded by the Ministry of Trade and Industry's Industry and Trade Advisory Support Unit (ITASU) with assistance from international organizations such as USAID, the World Food Program, the UN Industrial Development Organization and the Japanese Development Bank.

The government plans to create communication centers in each governorate, giving farmers a place to exchange technical information and resources as well as pricing information. "Improving the farmers' knowledge, teaching them to diversify the kinds of crops they grow as well as improv-

ing the timing of when each sort of crop should be planted and harvested, improving the distribution networks and providing timely access to finance and technical assistance — all of these components will work to add value to the crops and enhance overall agribusiness for Egypt," says MTI's Tarek El-Baz, who is associated with the project.

Packed to Perfection

ONE COMPANY THAT HAS MASTERED THE fine art of agricultural exports is Magrabi Agriculture. Readers might more readily recognize the company's abbreviation: MAFA, for Magrabi Farms, from the yellow stickers on produce ranging from leafy greens to strawberries and other fruits. As one of the largest private land reclamation investment projects in Egypt, Magrabi Farms are revolutionaries in the export of produce, and its facilities are equipped with state-of-the-art quality-control technology including tissue and culture labs, hardening and shaping greenhouses and the ever-important pumping, cooling and packing stations.

Let's go back to the strawberries in our British housewife's shopping cart. At MAFA, the process begins with the fruit being picked and packed directly into clear punnets (lightweight plastic containers used for fruit). Once packed, the fruit is pre-cooled for up to three hours, then placed in cold storage before being loaded into a refrigeration truck. All vehicles used to transport the strawberries, whether from the field or from the storage area, are equipped to store the produce at optimum temperatures.

According to Niveen Fawzy, Magrabi Agriculture's export coordinator, this production and supply chain was developed by MAFA's own team of engineers and farmers. "Small things make the difference. For instance each plot is marked with a number and each carton picked is marked according to the plot it was picked from," she says. "Once the produce has been picked, in the case of strawberries, it is placed in cold trucks; usually they are packed in the field itself then moved to the cold trucks. That way the system of traceability stays intact."

"Usually, it's best to pick early in the morning when the temperature is [lower], then to

immediately place the fruit on the cooling truck. Once the trucks reach the airport, the punnets are placed in a cooling terminal before they are placed on the plane — this ensures that the produce will maintain its freshness for as long as possible."

Currently, Magrabi Agriculture exports to the United Kingdom, Europe, Russia and some countries in the Gulf region. The company is also exploring export relationships with China and Poland.

"The United Kingdom's [produce] season is during our summer, before Spain and Morocco can beat them in the export market," says Fawzy. "Egypt has the competitive advantage up until the third week of March — that's when the competition from Spain and Morocco kicks in."

But MAFA has more than just the competition in mind. "The most important thing to remember is quality," Fawzy notes. "If

The Subsidy Game

Agricultural tariffs remain a significant distorting force on the world agricultural market, making first-world markets in Europe, North America and Japan far less accessible to developing-world producers; at the same time massively subsidized first-world produce is dumped into emerging markets. Over \$300 billion is spent each year by the governments of rich countries to subsidize their uncompetitive agricultural sectors.

By the numbers:

The World Bank estimates that the abolition of farm subsidies would result in over **\$290 billion** in income gains in both rich and poor countries.

The European Union spent **\$74 billion** in 2007 — 44% of its total budget — on agricultural subsidies. **France** received 22% of the total.

Through extensive Royal Estates, the **Queen of England** received over **\$1 million** in agricultural subsidies in 2005, with **Prince Charles** receiving over **\$500,000**.

The United States Congress passed a Farm Bill in 2002 that authorized over **\$190 billion** in agricultural subsidies over a 10-year period. The bill expired in September 2007. In August, the House of Representatives passed a new **\$287 billion** bill, which is currently before the Senate for final approval. **bt**

— Tom Gara

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one exporter from Egypt sends something without meeting the health requirements and traceability standards, it has the possibility of ruining the market chances for the rest of the country."

Helping Hands

FARM FRITES, ANOTHER HOUSEHOLD NAME, IS the leading producer of frozen potatoes and vegetables in the Middle East, with a farming operation of over 6,000 acres on the Alex-Desert Road. Dr. Omar Abdin, Farm Frites assistant managing director for horticultural projects, explains what his team would look for when buying produce from a small farmer in Upper Egypt. "Ideally I would like to follow a model, for example, if we invested in a piece of land, gave it all of our attention by training the right people and then used it as a training ground for all of the other farmers in the region."

This model for spreading the agri-knowledge allows both parties to benefit. The large producer and exporter like Farm Frites wins by getting a high-quality product at a fair price, while small farmers get a reproducible, successful system for growing crops that are up to international health standards — all while getting a fair share of the cash.

Abdin adds that "there are a few major criteria we look for in a provider: the right

quantity, quality, safety, traceability and sustainability. The problem we usually face is that there is never the right quantity with the right quality at the right time at a fixed price.

"A problem like traceability usually comes up later — customers are now asking for traceability statistics, so we're forced to create our own farm while looking for another farm to help us grow — the demand is definitely there. In the meantime, we spot buy from small farmers but we have to be choosy about who we work with. Ideally, we want a team of small farmers who produce on time, the quality we want in the quantity we want, and who can offer traceability for the products.

"We can help them outsource the technical assistance, fix a contract with a fixed price. The advantage they have with us versus the exporters is that we are a guaranteed sale and we're not going anywhere — the farmer can come knock on our door at any time."

Farm Frites has initiated talks with Upper Egyptian farmers, but as of press time, no action had been taken toward establishing a model farm.

Other businesses have started reaching out to small-scale farmers, including Metro Markets and HyperOne Markets. Dr. Emad El Hawiri, manager of HyperOne Markets, has invited several growers to his store to

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see the end result of their efforts: how the produce is displayed and how the customer selects vegetables and fruits based on the price and quality they see before them. "This was a great experience for both them and me, it really helped both of us value the work we do," Hawiri says. "They need technical assistance, financial assistance and more — they have a very long way to go — they are in dire need of good knowledge."

That knowledge is on the way as the public- and private-sector work to integrate small farms into the big-business supply chain — and not a moment too soon. From Wal-Mart in Washington DC to Carrefour in Qattameya to the neighborhood Metro Market, there is a high demand for high quality, fresh produce all year round. It's about time the nation's farmers cultivated their competitive advantage. **bt**

Farmers and Traceability

As global supply chains are increasingly integrated, the ability to trace the origins and movement of materials and products has become an integral part of doing business. Track and trace systems ensure the safety and quality of products for consumers, and have traditionally been used to identify and locate unsafe foods or pharmaceuticals for recall. By making the supply chain transparent, they can also be used to assess the management of quality, risk and information.

Safety, security and traceability are currently at the forefront of both government regulation and industry concern around the world. Working with the UN Industrial Development Organization, the Ministry of Trade and Industry has set up ETRACE, the first project in the Middle East aimed at enhancing the competitiveness of agricultural exports, product safety and quality. With this initiative, the government hopes to raise the international image of the Egyptian agricultural sector and make it a major player in the global economy.

ETRACE helps exporters, NGOs, farm associations and public institutions apply traceability to the supply of fresh produce, making it compliant with international regulations on food safety. The project allows importers and monitoring authorities to trace all of the steps taken during packing and distribution — crucial in cases of health emergencies or recalls. For more information visit: www.etrace.org.eg **bt**