



CAN FARMERS EARN MONEY BY FARMING IN OR NEAR CITIES?

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YOUNG REVIEWERS:



DAVID
AGE: 12



DEREK
AGE: 15



JAMES
AGE: 9

As you probably know, most farms are found in rural areas, far away from big cities. However, when food is grown near cities, it can make cities more sustainable and prepared for the future. Moreover, it even offers business options for farmers in the outskirts of the cities as well as for newcomers and start-ups producing food in the city centers. Short food-supply chains and well-known origin are only some of the benefits. New technologies like aquaponics can go hand in hand with traditional farms. Both complement each other and enhance local food production. Nevertheless, local food production needs to be economically viable to be sustainable and prosper in the end. This raises the questions: Is it possible to run a successful and sustainable farm near—or even within—a city?

While local food production is good for the people living in cities [1], it is not always easy for farmers who grow food near cities to earn enough money to keep their businesses running [1, 2]. Farmland is limited and expensive near cities because cities keep growing, and

they compete with farmers for land. Moreover, much of the farmland is not owned by the farmers, but leased.

CHALLENGE: ECONOMIES OF SCALE

Competition with larger farms can be a big problem for small farmers. Imagine you are a wheat farmer. When summer comes and your grain is mature, you are happy to use your harvester to reap the fruits of your work. Because your farm is small, you can afford only a small harvester. As a consequence, the harvest takes you quite a long time, and your machine needs a lot of fuel. This means that you will have high **production costs**.

Meanwhile, the farm next door is twice as large as yours. That farm is also selling wheat, but their machines are larger, more powerful and fuel-efficient (Figure 1).

PRODUCTION COSTS

Amount of money that a farmer has to pay in order to buy all the necessary supplies to grow food.

Figure 1

Larger farms generally have larger machines, which can harvest crops faster and are more fuel efficient. This is an example of an economy of scale—larger farms often have an easier time making a profit than smaller farms do.

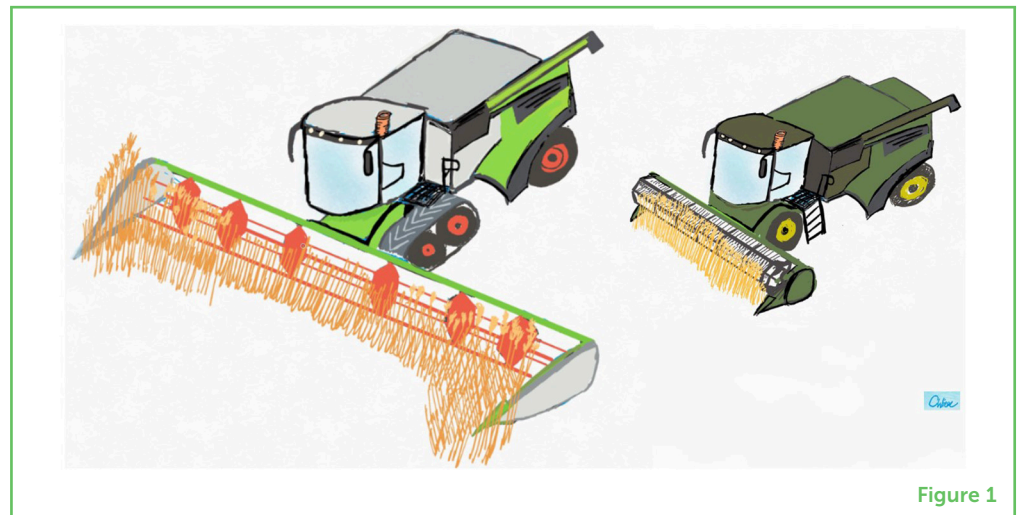


Figure 1

The larger farm needs less time for harvesting and therefore saves money on fuel and working time. The larger farm can also get higher prices per unit when selling its products, because they can offer larger amounts. They also spend less on farming supplies, like seeds and fertilizer, because they can buy supplies in bulk. This financial difference between large and small businesses is called **economy of scale**, and it means that larger farms or companies can have financial benefits due to their size [3].

Because farming is a very competitive business, many farmers try to enlarge their farms to take advantage of economies of scale. They also try to be as efficient as possible to save costs. When customers pay low prices for food, those prices do not always cover all the costs that farmers spend to produce food. Small farms must often shut down for this reason.

ECONOMY OF SCALE

Cost benefits that can be achieved due to the size of a company. Large companies can save more money and become more cost-efficient than small companies can.

CHALLENGE: PRICE PRESSURE

All farmers are under pressure to grow crops cheaply, which is known as price pressure [4]. For example, have you ever wondered why you can buy blueberries in winter, even though they only grow during the summer in many climates? In winter, blueberries must be transported long distances from South America or South Africa, to supermarket shelves across the world. The long transport routes are harmful for the environment, and the growing practices can be less environmentally friendly in certain countries. The growing practices required for farmers in Europe have very high standards compared to the rest of the world. This is good for the quality of the products, the environment, and the working conditions of the growers. But high standards also mean higher production costs. Countries that do not worry as much about protecting the environment or paying fair wages to farm workers can sell their food at lower prices—and some stores choose their products mainly based on prices. Therefore, farmers in places like Europe, where standards are high and **sustainability** plays a key role, sometimes face difficulties selling their products because other countries can produce food more cheaply.

SUSTAINABLE

Describes food production that does not harm the environment, and in which the workers have good working conditions and are paid a fair wage.

BUSINESS STRATEGY

Measures undertaken to achieve the desired development of the business and secure its stability.

LOCATION ADVANTAGE

Imagine you want to sell lemonade. You could choose a stand opposite a school or along a lonely hiking trail. Surely the school would be more favorable.

HOW DO FARMERS NEAR CITIES COPE?

Researchers found out, that farms have developed three different ways (cost leadership, differentiation and diversification) to cope with low prices. The first way is called “cost leadership.” In order to cope with the price pressure, farmers try to increase the size of their farm even more. Their farms grow and offer only one or very few different products, to make sure that they are able to offer large amounts. Simultaneously, these farms try to improve and optimize their farm organization and activities as much as possible. In order to save money. This **business strategy** is not applicable for every farm in every region. Especially when farmland is rare, like in cities, this strategy does not work anymore.

Farmers along the fringes of cities use two main strategies to cope with the many challenges they face: differentiation and diversification. Both strategies build on an important **location advantage** that these farmers have—being close to lots people, the city dwellers! If farmers can adjust their businesses to the needs and wishes of city dwellers, they will not be as affected by global food prices. This can be good for both the farmers and the consumers. When farmers and customers can directly interact with each other and develop a relationship, and the customers begin to like and trust the farmers and their products, then the price of the food is no longer the only reason the customers purchase it.

DIFFERENTIATION

A business strategy that involves offering customers something unique that they will not get elsewhere.

Figure 2

To compete with larger farms, small farms can try the strategy of differentiation, meaning they can offer unique or better quality fruits and vegetables than larger farms can.

DIFFERENTIATION—STAND OUT FROM THE CROWD!

Differentiation means being unique—different from other producers [3, 5]. But how can farmers differentiate their farms from others? And how can they build good relationships with their customers? The quality of their products can be the starting point. Some vegetable species have a great taste, but they need more time to grow and the yield is smaller compared to more frequently grown species. This is especially the case for tomatoes and strawberries (Figure 2). If small farmers grow unique, good-tasting fruits and vegetables, they will have an advantage over large farmers that choose the fast-growing but less tasty varieties.



Figure 2

Another way for farmers to differentiate is to farm less common or exotic breeds of livestock (animals). Ostriches are a good example of an exotic animal that can be raised on a farm. Did you know that one ostrich egg is the size of 24 chicken eggs? Quails lay very small eggs. To replace a chicken egg, you need 10 quail eggs. This is a clear example how exciting and diverse food can be!

Farmers can also differentiate by providing superior living conditions for their animals. Chickens running across green meadows and warming their feathers in the sun are beautiful to look at and are a real selling point. However, building nice living spaces like stables is expensive, and farmers cannot keep as many animals if they give their animals more space. This means production becomes more expensive for these farmers, which is why they have to charge more for their products.

FOOD-SUPPLY CHAIN

Describes the path of a product from production through processing to the consumer. The more intermediate stops a product makes from the farm to the dining table, the longer the food-supply chain.

However, small farmers often sell directly to customers, either in small shops on the farms or at farmers' markets, so the **food-supply chain** is shorter [6]. A food-supply chain describes the path of a product, from production on farms through purchase by customers. The more partners that are involved in food-supply chains (farmers, traders, processors, transport companies, packaging, wholesalers, supermarkets, consumers, etc.) the less money from the sales price ends up in the farmer's pocket (Figure 3). Therefore, the farmer makes less money the longer the food-supply chain becomes. Consequently,

farmers can earn more money when they sell directly to customers, although those farmers have higher costs for production, processing, and selling of food.

Figure 3

(A) When farms are far from their customers, the food-supply chain is long. When this happens, farmers make less money when the food is sold to consumers (see “farm share” pie chart) because the profits are spread out over all the partners in the chain. (B) When the food-supply chain is short, there are fewer partners, and the farmer ends up with a larger profit.

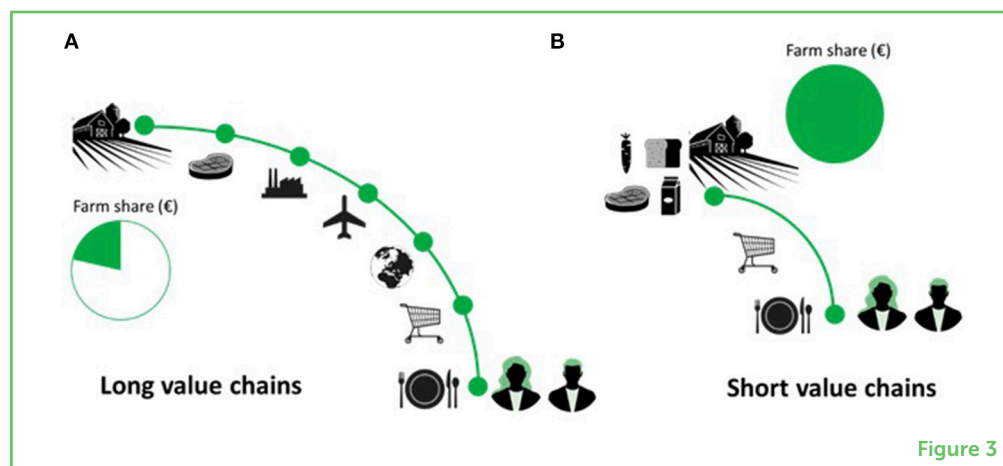


Figure 3

DIVERSIFICATION

A business strategy that involves offering new products and services in addition to food production, such as holiday activities for families, riding lessons, and open a café on the farm.

DIVERSIFICATION—DO NOT KEEP ALL THE EGGS IN ONE BASKET!

The idea of **diversification** is to make a farm less dependent on selling food, by finding ways to earn income from other activities [7]. Some farms offer holiday activities for families, particularly those who live in cities and are searching for things to do in nature. Other farms keep horses and offer riding lessons, which city dwellers also enjoy. There is a lot to see and learn about agriculture and farm life, so some farmers open their gates for school classes, while some choose to open a café or restaurant on the farm. As you can see, agriculture can not only produce food, but it can also make life more colorful and diverse for city dwellers. However, this only works if farmers earn enough money to keep their farms running.

SUMMARY

Let us think again about the wheat we discussed at the beginning of this article. While most rural farmers sell their wheat into long supply chains, differentiated and diversified farms might do something different. Differentiated farms might process the wheat into bread that they can sell in their on-farm shop, while diversified farms might offer baking events to teach people about all the steps between harvesting wheat and making bread. Both options create memorable experiences for customers and help customers form connections with farmers.

So, coming back to the initial question of whether a farmer can earn money by producing food in or near a city, the answer is: Yes, but...! To be successful, farmers near cities must adjust their businesses appropriately, to meet the needs and wishes of city dwellers. Doing so can result in many advantages for both farmers and the city dwellers.

ORIGINAL SOURCE ARTICLE

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YOUNG REVIEWERS

DAVID, AGE: 12

I am David, and I would like to have a three bros farm when we grow-up with our little brother Peter.



DEREK, AGE: 15

Hi, I am Derek, and I currently live in Vancouver, Canada. I love science, but outside of that, I can be found staring at a map, trying to wrap my head around math problems, desperately attempting to memorize ancient vocabulary moments before a test, or hitting the buzzer far too late in quiz competitions.



JAMES, AGE: 9

I am James, and I would like to have a three bros farm when we grow-up with our little brother Peter.



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