



Qatar Agriculture Sector

Sector Analysis

February 2020

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1. Qatar Agriculture Sector Overview

Qatar has limited agriculture production, producing mostly date palms and vegetable crops. Water constraints and unavailability of agriculture land are the principal restraints in crop production. Despite challenges in crop production, Qatar intends to boost its output by setting up 1400 farms covering 45,000 acres of land in the next five years. Most of the farms will produce vegetables and fruits. The government is giving priority to the production of vegetables as they use a lesser amount of water and are also less soil intensive (Mordorintelligence.com, 2019).

Qatar currently imports most of its food, but it is trying to increase the production and cut the imports of maize, millet and sorghum. It is not a food exporting country, and all its production is consumed in the local market. In 2015, Dar Al Rayyan Investment Co. (a local company) received a license for QR 1.3 billion from the Ministry of Economic and Commerce (MEC) to augment Qatar's domestic production of fresh & frozen poultry. Furthermore, to increase dairy production, 4,000 cows were airlifted into Qatar in mid-2017 (Mordorintelligence.com, 2019). The agri-business and food production sectors have experienced significant growth in recent years. Agricultural products were previously imported from neighbouring states, but logistical costs increased due to the blockade imposed by regional countries. Locally produced foods became more competitive as imports became more expensive. The government has started implementing a clear plan to support these industries and encourage investment from the private sector. Local companies have already been very active in looking for international partners. In the domestic food sector, opportunities are present in producing meat, poultry and fish. Depending on the season, there is also a lot of potential to produce fruit and vegetables as well. Growth in these segments would lead to stronger demand for related services, including food processing, refrigerated logistics and warehousing. Investments in food and agriculture are also part of Qatar's strategy to diversify the economy. Additionally, maintaining a balance between local production and imports is vital. This is being ensured through strategic investments in countries including Sudan, Oman and Australia. (Oxford Business Group, 2019).

The Qatari agricultural sector has made significant progress in meeting local market requirements and raising the level of self-sufficiency due to the growing interest of the government. The percentage of self-sufficiency of fresh vegetables in the country reached 22% in December 2018 while 35 strategic projects for the production of vegetables in protected facilities are intended to be introduced. The

vegetable self-sufficiency is expected to reach 55% within three years. Moreover, the sufficiency of green fodder has reached approximately 47%, and several strategic projects are being developed for its production as well. The self-sufficiency of these feeds is expected to increase to 70% within three years (Gulf-Times, 2018). The Qatari government is actively pursuing projects to cater to the food security requirements of the country. Qatar ranked first in the Arab World and 22nd in the World Food Security Index for 2018, which included 113 countries. The index is based on the Economist Intelligence Unit and criteria used by them consists of the following factors—food availability, accessibility, quality and safety standards in the food sector, diet diversification, agricultural infrastructure, GDP per capita PPP, ease of funding farmers, spending on agriculture and the rates of supply compared to demand levels (Gulf-Times, 2018).

2. Initiatives towards self-sufficiency – Made in Qatar

Qatar has made significant progress in the area of self-sufficiency in food and vegetable production. The sales of vegetables jumped to 8,226 tons in the 2019 season compared to 1,969 tons in the 2018 season, showing a growth of 318%. The Ministry of Municipality and Environment (MME) has stepped up efforts to increase self-sufficiency rate up to 70% in vegetable production in the next five years. To achieve the target, the Ministry is working to allot 34 large plots of lands to private companies and import the latest farming technologies to increase the production of existing farms. The MME, in cooperation with the Ministry of Commerce and Industry (MCI), launched the Qatar Farms Program last year in collaboration with major commercial outlets including Carrefour, Lulu Hypermarkets, Al-Meera and Family Food Center. The program enabled local vegetables to compete with imported products, thereby breaking the monopoly of imported products. The rising sale of local vegetables encouraged farmers to increase production. One of the major achievements of the program is that it helped bring down the prices of vegetables in the local market by encouraging competition and providing more options to consumers. Qatar's locally produced vegetables' sales surged over 16% in December 2018 compared to November 2018 at winter vegetable markets due to increased production of local seasonal vegetables (Lozano, 2019).

2.1. Qatar Farms Programme

The Qatar Farms programme is being implemented by the MME and MCI for the marketing of local vegetables. It aims to provide Qatari farmers with the opportunity to display their vegetables in various consumer complexes at reasonable prices (Qatar-Tribune, 2019). Four big supermarkets, i.e.

Al-Meera, Carrefour, Lulu and Family Food Center are participating in the programme. High-quality local vegetables like tomato, cucumber, squash, pepper, eggplant, cabbage, broccoli and herbs are available in the participating supermarkets at a reasonable price for consumers. The objective of these programmes is to reduce the interference of intermediaries in the process of selling local agricultural products for the benefit of farmers and consumers. The availability of local products has led to a considerable reduction in the price of imported vegetables.

2.2. Mazzraty

Mazzraty is a local chicken farm that offers chicken grown naturally without hormones and antibiotics. Global best practices are employed to raise their chickens to ensure a quality end result. Its products sell the most at the Villaggio hypermarket. The farm vision is to cater to the poultry needs of the entire population and develop new ranges of products based on current trends in the market. The distribution of the chicken supply is done daily by the Mazzraty team, ensuring that Carrefour's customers have access to fresh poultry at all times (Gulf-Times, 2019).

2.3. Qatarat Agriculture Development Company

Qatarat Agriculture Development Company (QADC) is a leader in farming. It operates three main farms spanning a total of 8 million square meters. QADC also offers technical and marketing consultancy to 30 other farms, providing them with know-how, coaching and operational support. Establishing a local agricultural farm in the middle of the desert has been a significant milestone, with many facilities producing a wide range of vegetables, from eggplant, tomato and cucumber to more specialized vegetables. Carrefour is a key partner for Qatarat. The rationale behind working with local farms for Carrefour is two-fold. Firstly, consumers are becoming increasingly conscious of where their food comes from. Secondly, buying local is also seen as corporate responsibility. Carrefour aims to continue giving back through the ongoing support of the local market, thereby contributing to the nation's economic and environmental development, both of which are key pillars of Qatar National Vision 2030 (Gulf-Times, 2019).

3. Industry Drivers

Qatar Agriculture sector is developing due to a rapid increase in tourism, advanced technologies, government initiatives and low water requirement in horticulture process. Qatar is also using desalination for potable drinking water, which has helped the country to increase agriculture production for almost two decades. Horticulture is the new trend in agriculture production which have given a boost to production (Mordorintelligence.com, 2019).



3.1. Increasing Tourism

Increase in tourism has a significant effect on the local agriculture sector as it stimulates demand and encourages competition between local & imported products. The rise in tourists leads to improved demand for agriculture products as food demand and a variety of food, both increases. There is a need for different types of foods to satisfy tourists' desires. Therefore, high-quality food, every day of the year is essential to the hospitality sector. The benefits of food sourcing to local farmers are considerable if it meets the quality criteria and customer tastes. In this way, an increase in tourism significantly contributes towards the development of Qatar agriculture sector.

3.2. Advanced Technology

Technology in food production is particularly important in regions with harsher climate conditions, like Qatar. Developing research capabilities is a long-term strategic objective for the government, universities and local research institutions. Many firms are looking to increase production efficiency and average yields, as well as lower water consumption through innovative technologies. Hydroponics, for example, is estimated to reduce water consumption by 70% when compared to

other cultivation methods, while greenhouses could enable continuous production throughout the year. Qatar has adapted to the country's scarce groundwater supply by increasing the use of wastewater and treated sewage water in water-intensive processes, such as for the production of fodder for livestock. Moreover, a local company such as Hassad Food is partnering with Yara International (Norwegian chemical firm) to develop fertilizers suited to Qatar's climate conditions and soil salinity (Oxford Business Group, 2019).

3.3. Government Initiatives

The role of the government in the agriculture sector is that of a facilitator as the private sector is responsible for implementing strategies and managing the day-to-day operations of individual projects. The government has launched several initiatives to encourage private sector production such as updating regulations, providing low-interest loans and running campaigns to increase the visibility of locally made products. The Ministry of Municipality and Environment is planning to increase the amount of land allocated for cultivation in order to support production, while a specialized food security committee has been tasked with identifying supply gaps and designing a long-term strategy for food security. The government intends to lead investment in research and support the private sector by providing technological expertise or other inputs like subsidized infrastructure (Oxford Business Group, 2019). The MME is working on plans to extend the local production season to 12 months instead of 9 months. Furthermore, the Ministry of Economy and Commerce also played a prominent role in launching several initiatives aimed at boosting national production, supporting factories & entrepreneurs. The Ministry launched "National Product" initiatives in cooperation with major commercial and consumer complexes. The Ministry has also cooperated with the Bidaya Center and Al Meera Consumer Company to expand the National Product initiative through a partnership that provides the opportunity for emerging local companies to showcase and market their food at the largest consumer stores (The Peninsula Qatar, 2018).

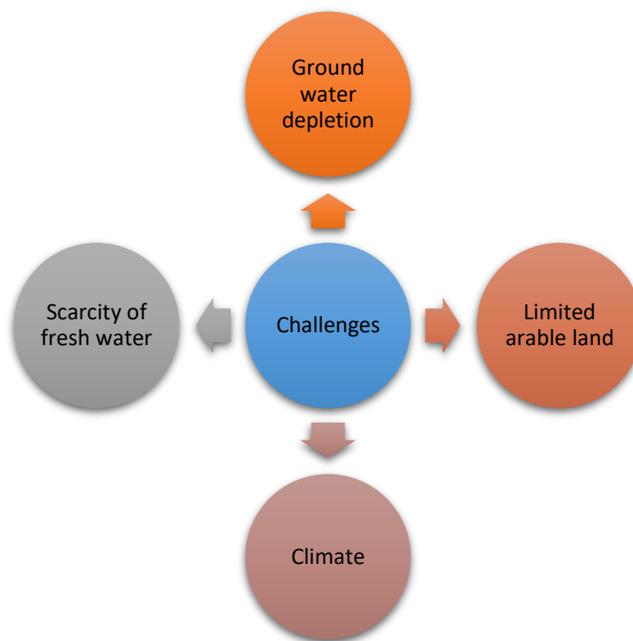
3.4. Food Security Initiatives

The Qatari government is heavily investing in horticulture and agriculture to boost local production and increase self-sufficiency as food security has become a top priority. The MME has established Qatar National Research Funds for all food security projects. The Qatar National Research funding is currently offering many opportunities for financing different pilot studies and projects in the food security area in Qatar. The priority will be given to financing different research and pilot studies that

encourage and focus on food production in the state of Qatar with the protection of the environment and natural resources that include greenhouse projects (especially production of fruits & vegetables), dates production & fish farming (Hortibiz.com, 2019).

4. Industry Challenges

Qatar is a net importer of food products. Scarcity of fresh water, less rainfall, limited arable land and groundwater depletion are some of the most significant restraints for agriculture production in Qatar (Mordorintelligence.com, 2019). Some of the major challenges faced by Qatar Agriculture sector are as follows:



4.1. Ground water depletion

The local agriculture production has jumped by 400% since the political and economic blockade was imposed on Qatar by its Arab neighbours in 2017. Groundwater depletion is raising environmental concerns over the long-term sustainability of Qatar's ambitious self-sufficiency policy (Castelier, 2019). Qatar's two primary groundwater resources are the Rus and Umm er Rhaduma aquifers. Water withdrawal from these sources far exceeds their recharge rates and has led to the rapid lowering of the water table, causing the deterioration of water quality and increasing saline intrusion (Ismail, 2015).

4.2. Scarcity of fresh surface water

Qatar is an arid country with limited water resources. With scarce surface water and an average annual rainfall of 76 mm per year, Qatar relies on desalination to meet the increasing water demand. The groundwater receives less than 40 million m³ per year as natural recharge, whereas extraction of groundwater is more than 220 million m³ per year, mainly used for agriculture. Given the scarcity of fresh surface water, most agriculture activity depends on wells (Baloousha, 2016).

4.3. Limited arable land

Qatar is a desert nation with lots of oil and natural gas, but little arable land. Qatar's environment is hostile to agriculture, characterized by extreme heat, water scarcity and high soil salinity (Fuchs, 2012). According to the World Bank, only 1.23% of the land area of Qatar is arable.

4.4. Climate

Qatar has an arid desert climate, characterized by scanty rainfall, high temperatures during summer (> 40 °C), high evaporation rates, powerful winds and high relative humidity (Fao.org, 2008). The rainfall in Qatar is scanty rainfall, with an annual average of about 76 mm per year. Rainfall is extremely unpredictable and highly erratic, both in time and space. Because of its low intensity and variability, it is not considered reliable for supplementing irrigation and maintaining agriculture, yet it represents the main source of irrigation water in the form of recharge to groundwater (Fao.org, 2008).

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