



Farah Al Qawasmi
Research Assistant, Gulf Studies Center,
College of Arts and Sciences - Qatar University

Towards a Sustainable Qatar: Circular Economy and Food Security



Qatar, a peninsula located in the Arabian Gulf, faces significant challenges arising from its arid climate, which poses the main obstacle to securing both water and food resources and needs. Before 2017, Qatar imported more than 85% of its food from neighboring countries in the Gulf (Wellesley, n.d). However, the GCC blockade marked a pivotal turning point, emphasizing the urgent need to strengthen local production and diversify food trade routes. In response, Qatar expanded its trade partnerships beyond the Gulf region—particularly with ASEAN countries—while simultaneously investing in local agricultural projects.

To support achieving its deliberate goals, Qatar began its transition from a linear to a circular economy, while mobilizing national institutions to implement the sustainable development objectives outlined in the Qatar National Vision 2030. Presenting the nation's strategic initiatives highlights the combined efforts to tackle food security challenges and enhance Qatar's local self-sufficiency, as well as the utilization of natural resources, and advancing its broader sustainable development agenda.

Qatar has been a strong actor in global efforts to achieve environmental sustainability and accelerate climate change initiatives. The state demonstrated its commitment to global initiatives in 1996 when it ratified the United Nations Framework Convention on Climate Change (UNFCCC) and became a signatory to the Kyoto Protocol in 2005. In 2008, the government introduced the Qatar National Vision 2030, a comprehensive framework that set forth the country's long-term goals for economic diversification and sustainable development. Following on from that, Qatar was the first Arab country to host the United Nations COP conference in 2012, and it later signed and ratified the Paris Protocol in 2016 (MOFA). Qatar's dedication to global environmental agreements extended to its local objectives, where the circular economy and its direct role towards food security emerge as key

components of its sustainable development goals. Food security is an integral part of the transition from a linear to a circular economy. The circular economy is defined as a regenerative economy that minimizes waste and reintegrates it back into the state's production cycle. This economic model follows the three R's principle, which are Reduce, Reuse, and Recycle to reduce waste, promote efficient resource use, and achieve sustainable and environmental goals (Kolade, 2025).

In terms of food security, Qatar faces two main challenges: its harsh climatic conditions and rapidly growing population. These factors once made the nation heavily dependent on food and water imports, yet they have also served as key drivers behind the development and enhancement of Qatar's National Food Security Vision. This vision seeks to achieve more than the country's immediate needs as it also aims to establish a resilient and sustainable system capable of withstanding future political, economic, and environmental challenges. In December 2024, Qatar launched its National Food Security 2030 initiative, aiming to build a resilient framework that reduces the country's reliance on food imports while increasing domestic agricultural productivity (Prime Minister, 2024). The initiative covered 17 feasible strategies designed to achieve Qatar's long-term food security objectives. These strategies include the integration of advanced technology into agricultural practices to minimize food waste and enhance productivity (Dairy News, 2025). Additionally, they emphasize the need to strengthen partnerships between public and private sector entities to improve the efficiency and sustainability of Qatar's food supply chain. Furthermore, the strategies impose stricter state regulations to ensure food safety and quality across production, storage processes, and ensure feasible shelf-life regulations. Finally, this highlights the importance of promoting healthier consumption habits and reducing food waste within society as key mechanisms of achieving national food security

goals (Dairy News, 2025).

Qatar established and employed numerous national channels to advance its sustainable development agenda and achieve the objectives outlined in its National Food Security Vision 2030. Among these entities is the Agricultural Affairs Department under the Ministry of Municipality, which has secured over 950 farms across the country dedicated to the cultivation of local and organic produce. Moreover, in 2024, Mahaseel Company for Marketing and Agricultural Services marked a significant national achievement by producing over 26 million kilograms of locally grown vegetables and reaching a livestock population of over 1.4 million (Dairy News, 2025). Additionally, Qatar achieved 100% self-sufficiency in dairy production through its local company, Baladna (Koe, 2019). Although Baladna Farm was established in 2014, it significantly expanded its production capacity, capital investments, and operations in 2017 following the Gulf blockade. This strategic expansion aimed to reduce the country's dependence on regional imports of essential food products (The Peninsula, 2019). Expanding on these achievements, Qatar aims to extend its food security goals to achieve food self-sufficiency and security across a wide range of food categories.

By 2030, the National Food Security Program in Qatar aims to have achieved solid quantitative figures that align with Qatar's population growth. These figures include over 50% self-sufficiency in fruits and vegetable needs, 30% increased sufficiency in livestock and poultry, 80% in fish farms, while maintaining the achieved 100% efficiency in fresh dairy (Qatar News Agency, 2025). To effectively implement the objectives of Qatar's National Food Security (QNFFS) 2030 strategy on food security, Qatar underwent numerous reforms. First, it established the ground for change by shifting to a Circular Economy Model. Second, it set feasible strategies that prioritized enhancing the sustainability of its natural resources, particularly land and water. Third, it mobilized numerous domestic institutions to study and execute its sustainable development goals. Fourth, it involved the public sector by reforming food regulation laws and encouraging consumption and waste habits. Continuous work on these strategies helps in achieving these goals, which will ultimately enable Qatar to design more efficient local production chains and strategies, and advance the development of its agricultural goods and produce to achieve its food security goals.

