It has been an exciting first month for the FoodTech Challenge! We have been hard at work promoting the competition around the world to connect with bright minds like you to join the $1 million challenge in finding innovative solutions for a more food-secure world.

We launched the FoodTech Challenge in Dubai and attended the 46th Session on the Committee on World Food Security in Rome, Italy. During these events, our team connected with various leaders in agriculture, technology, education, and government to invite their students and start-ups to join the competition.

We're just getting started! Over the coming months, Tamkeen and the UAE Food Security Office will be present in various community events to promote the competition and engage with our participants. In our monthly newsletter, we will provide you with important news and updates about the competition, along with “agtips” to help you develop a strong application.

We want to thank you for joining us on this pioneering journey. We are eager to hear from you; please don't hesitate to get in touch with us at info@foodtechchallenge.com. Follow us on social media: Facebook, Twitter, Instagram, LinkedIn. What makes you passionate about food technology? What part will you play in solving the UAE’s food security issues?

Stay fresh,
The FoodTech Challenge Team
FoodTech Challenge Highlights

The FoodTech Challenge at GITEX
Dubai, 23 September 2019

The FoodTech Challenge exhibited at GITEX 2019 (Gulf Information Technology Exhibition), an annual technology trade show in Dubai. It is one of the largest exhibitions of its kind in the region, with over 100,000 visitors from over 140 countries.

The FoodTech Challenge team connected with many agtech start-ups around the world and invited them to participate in the competition. Thank you to our start-up acceleration partner Catalyst for promoting the FoodTech Challenge at their booth!

The FoodTech Challenge Launch
Dubai, 23 September 2019

The FoodTech Challenge launched on 23 September 2019 in Emirates Towers, Dubai.

The event was held in the presence of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President, Prime Minister, and Ruler of Dubai; His Highness Sheikh Hamdan bin Mohammed Al Maktoum, Crown Prince of Dubai; and various other government ministers and key players in the agriculture sector.

Committee on World Food Security
Rome, 14-18 October 2019

The FoodTech Challenge team was present at the Food and Agriculture Organization's (FAO) annual Committee on World Food Security (CFS) in Rome, from 14-18 October 2019. The event is the foremost international platform for stakeholders to work together to ensure food security and nutrition for all. H.E. Mariam Almheiri, Minister of State for Food Security, issued a call to action for youth to adopt an entrepreneurial spirit and develop technological solutions to address food security challenges in the UAE and around the world.

AgTips

In ‘AgTips’ (Agriculture Tips), we will share advice on how you can submit a strong application to the FoodTech Challenge. We are looking for exciting new business ideas that:

1. Address UAE-specific food security challenges
2. Incorporate innovative technological solutions
3. Demonstrate commercial viability
4. Make sustainable use of natural resources

In this newsletter, we explore the first component: food security challenges specific to the UAE. By developing your understanding of the UAE’s food security problems, you will be better positioned to propose strong solutions. While the UAE is considered food secure due to its economic and political stability, the desert climate of the country poses significant environmental, economic, and technological challenges:
Environmental Challenges

**Soil:** 75% of the total soil is composed of sandy soil, which is difficult to cultivate and requires large quantities of water. Only 7% of the UAE's soil has suitable properties for agriculture use.

**Land:** Total agricultural area in the UAE has decreased by 3% annually over the last 14 years as a result of steady desertification and soil degradation caused by natural and manmade causes.

**Water:** The majority of the UAE's water supply is from groundwater (44%) and desalinated water (42%), resources that are becoming increasingly scarce or costly to produce; rainfall is minimal and weather is extremely hot given the UAE's location.

**Pests and pesticides:** Pests in the UAE contaminate and reduce post-harvest yields, while chemical pesticides have exacerbated the stress on agricultural land.

Economic Challenges

**Demand-supply mismatch:** A number of UAE’s production of plant and animal products aren't aligned with domestic consumption patterns. For example, staple crops such as wheat, which comprise a third of calorie consumption in the UAE, cannot be commercially grown due to water-intensive cultivation requirements.

Technological Challenges

**Low technological adoption:** Farmers and investors are hesitant to integrate production technology due to limited training and advisory services. UAE University (UAEU) is the only university with a dedicated faculty for food and agriculture innovation in the UAE, limiting the country’s training capacity.

**Food waste:** Food is wasted in all stages of the supply chain due to pests, hot weather and gaps in food handling.

**Low adoption of food waste management policy:** Given the UAE's past rankings in food waste per capita, the National Food Security Strategy is tackling food waste at the top of its priorities.

Food for Thought

Can desert greenhouses defuse the food security time bomb?  
Why sustainable agriculture matters
In November 2018, the UAE's Minister of Food Security, Mariam Hareb Almheiri, announced a National Food Security Strategy intended to make the country the most food-secure in the world by 2051. The Ministry subsequently launched 10 accelerator programs for agriculture technology, offering loans and technical support to entrepreneurs.

Sustainable agriculture is at the heart of the comprehensive food security strategies of many nations today as they seek to eliminate hunger within their respective territories, while at the same time ensuring they protect the environment.

Yearly food waste in UAE pegged at 197kg per person

Annual food waste in the UAE is estimated at 197 kg per person, compared with 95 to 115 kg in Europe and North America, a top official of the UN's World Food Programme (WFP), told Gulf News.

Small steps can decrease the UAE's food waste, experts say

UAE residents have been asked to order only as much food as they can eat or cook at home and buy groceries in small amounts in a bid to reduce the country's food waste.

Fun Food Facts

Did you know that... honey never goes bad?
It’s pretty much the only food that does not spoil while in an edible state. But why, exactly, doesn’t honey go bad?