# Hong Kong startup introduces innovative irrigation technology to tackle agricultural challenges



Agriculture is facing significant challenges stemming from water scarcity and inefficient irrigation practices, which currently account for approximately 70% of global freshwater consumption. These outdated methods not only lead to the wastage of water and nutrients but also contribute to diminished crop yields and increased carbon emissions. In light of these pressing issues, the Hong Kong-based startup Full Nature Farms is seeking to innovate agricultural practices with the launch of its Rocket 2.0 Smart Irrigation Platform, showcased at CES 2025.

Founded in 2019 by CEO Ray Lok, Full Nature Farms previously established Evergreens Republic, a USDA-certified organic aquaponics farm that gained attention for its sustainable farming techniques. Now, with the introduction of Rocket 2.0, the company aims to revolutionise irrigation by employing data analytics and artificial intelligence to offer an estimated 30% reduction in water costs while also lowering energy consumption and enhancing crop yields.

The Rocket 2.0 platform is designed to cater to various agricultural needs, including vertical and open field farming, as well as greenscaping projects. This sophisticated standalone irrigation system employs a network of sensors that monitor crucial factors such as crop yield, soil health, and climate conditions. By integrating real-time weather forecasts, it facilitates precise and automated irrigation control on a set schedule, potentially transforming commercial farming operations across diverse sectors, from landscaping to community agriculture and vineyards.

Lok described the financial accessibility of their product, stating, “We offer farmers the opportunity to use our product through a subscription fee ranging from 10.00 to 20.00 USD per month per sensor, with no upfront costs.” This pricing strategy aims to eliminate barriers to entry for farmers, providing a scalable and affordable smart irrigation solution.

Full Nature Farms touts its comprehensive in-house technology ecosystem as a competitive edge, which includes automation controllers, software solutions, LED grow lights, precision agricultural pipes, a sensor stack, and an integrated farm management platform. Having raised approximately $4.5 million thus far, the startup has made significant strides in Hong Kong, where its products have been adopted by over 100 Michelin-starred restaurants and hotel groups. Their offerings, including the Eden 2.0 cultivation system, are now being implemented in various international markets, including Saudi Arabia and the UK, with plans for expansion into North America on the horizon.

The Rocket 1.0 version, which has been in testing in Hong Kong since January 2024, is expected to feature in 12 projects in the city as part of the initial rollout in the first quarter of 2025. Furthermore, pilot projects are also planned for regions such as Saudi Arabia, the Philippines, Australia, France, and China.

Recognition of the startup's innovative approach was underscored at CES 2025, where it received the Innovation Award in the Sustainability and Energy/Power category. The event coincides with a notable recovery in funding for the agricultural technology sector, as indicated by recent PitchBook data following a downturn in 2023 and early 2024. This resurgence highlights the growing recognition of the need for effective technological solutions to address the challenges faced by the agricultural industry.

Source: [Noah Wire Services](https://www.noahwire.com)

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