ENHANCING STRAWBERRY PRODUCTION IN CHINA WITH IOT BIG DATA SOLUTIONS

China has committed to the sustainable development goals. The Government’s plan includes zero-growth targets for the use of fertilisers by 2020, and limiting national water consumption to below 700bn cubic metres by 2030.

China Mobile and Linkdotter worked together to optimise the environmental growth factors within five winter greenhouses, totalling approximately 0.33 hectares, using connected IoT sensors and big data analytics.

The greenhouses equipped with the IoT solution produced the first crop of strawberries 20 days before the traditional greenhouses, allowing the early produce to be sold at a premium price.

The cumulative production for the season reached 75,000 kg per hectare compared to 33,750 kg per hectare in the traditional strawberry greenhouses.

The volume of water and fertilizer was reduced by 50% per kg of harvested strawberries, resulting in lower cost to the producer and lower environmental impact.

Taking into account just the yield, the IoT greenhouse returned a profit increase of approximately 75% over the traditional greenhouses, providing a return on investment in the first year.

As a result of this success, the producer has plans to extend the solution to his businesses in other locations.

The producer also reported a higher quality of crop from these greenhouses.