The Warren Centre
& Professor Ron Johnston

Humanitarian
Innovation Hackathon

2 ZERO HUNGER

THE GLOBAL GOALS
For Sustainable Development

Challenge Task

Develop or adapt innovative digital technologies to sustainably increase the food production efficiency of small-scale food producers (either farmers or fishers) in less developed countries.
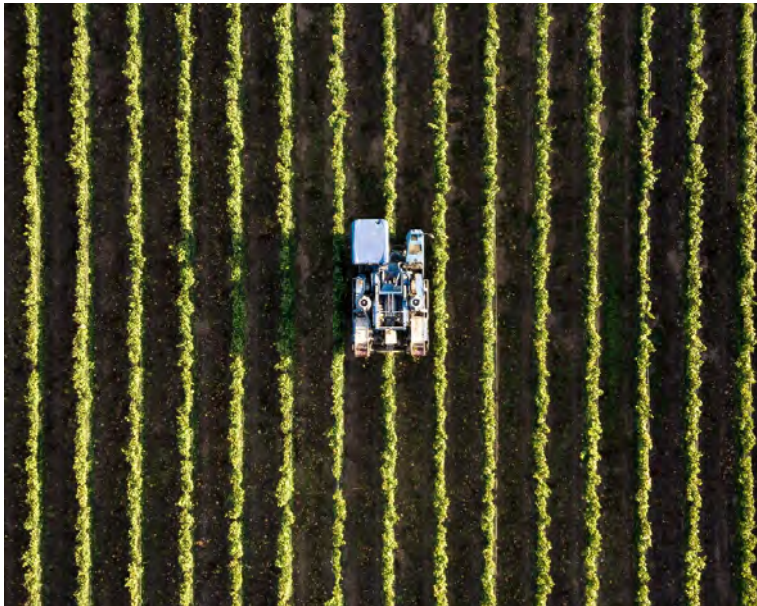
SDG Targets

- **SDG 2.** End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

- **Target 2.3**. By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

Hackathon Challenge B

To develop innovative digital technologies to increase efficiency of small-scale food producers.

Overview

Globally, hunger and food insecurity have been increasing since 2015 due to the combined impacts of the COVID-19 pandemic, conflict, climate change, and deepening inequalities[1]. Globally, 9.2% of the population (735 million people) are experiencing chronic hunger; a state of long-term undernourishment. To address this issue assistance is needed to improve the productivity of small-scale food producers. Digital technologies can play an important role in increasing efficiencies for small-scale farmers and fishers, via information, data, or automated systems. The challenge is that these innovations need to consider the environmental footprint and sustainability of agriculture and make improvements without creating any negative environmental or social impacts. Solutions that help farmers and fishers adapt to climate change threats and protect biodiversity are also key goals.

Any digital innovations need to take into account the smaller size of land/area available to small-scale food producers. Further, that these enterprises generally have very little opportunity for finance and low cash-flow rates.

Hackathon Challenge B
To develop innovative digital technologies to increase efficiency of small-scale food producers.

Digital technologies help African farmers[2]

References

1. United Nations. 2024, SDG 2. Zero Hunger. https://www.un.org/sustainabledevelopment/hunger

2. European Union Eramus+, 2020, Digital technologies help African farmers. https://sparkle-project.eu/digital-technologies-can-also-help-africas-farmers-the-power-of-digitalization