

COVID-19 Economic Response Plan

SMART AgriTech Scheme

Performance, as at 28 Feb 2022

Background

The SMART AgriTech Scheme **(AgriTech)** is a measure under Phase II of the Government's COVID-19 Economic Response Plan. The objective of this grant is to encourage and support the agricultural industry and agribusinesses servicing the industry to develop and implement innovative solutions to assist with transformational change within agricultural value chains by improving yields, efficiency and profitability.

AgriTech commenced in July 2020, as the scheme approached full subscription, Stage 1 applications closed on 29 January 2021.

Stage 1 applications

A total of 80 stage 1 applications were received, with a total grant value request of \$6.8 million. All Stage 1 applications were assessed by the end of February 2021. A total of 23 applications and a total grant value request of \$2.1 million were approved to move to the Stage 2 process.

Stage 1 applications showed an uneven distribution, with an initial peak in the first month of the scheme opening, and the majority received in the final month.

Stage 2 applications

Of the 23 Stage 2 applications received, 19 were approved for AgriTech grant funding varying between commercial and exceptional grants, with a total grant value of \$987,000. Individual grants range from \$6,000 to the maximum \$125,000, with an average grant of \$51,970. Own contributions (direct & in-kind) range from \$1,000 to \$171,000, with an average own contribution of about \$54,710.

Majority, 42 percent, of successful applicants are small businesses (<\$300,000 per annum) with 32 per cent representing medium businesses (\$300,000 to \$5 million) and the remainder classified as micro business.

Reporting and Monitoring

All recipients are required to submit quarterly reports, informed by their Stage 2 applications and detailing the progress of their projects for the duration of the GFA signed. This process is monitored by the Economic and Planning Division of MFEM. The updates below are sourced from the December 2021 updates and subsequent conversations with the MFEM team.



SMART AgriTech Grants – Updates

<u>Ootu Aquaponics</u>

Proposal Title: Ootu Aquaponics - Expansion

Proposed Venture: Expand Ootu Aquaponics system to increase production, revenue and provide scalability.

Project Update: Project was completed with the build of the aquaponics system and shade-house, the business is harvesting their produce to supply their café as well as other businesses on the island of Aitutaki.

Organics CI Ltd

Proposal Title: The Cook Islands Tea Factory

Proposed Venture: The Cook Islands Tea Factory Project is a start-up industry that applies technology to process Moringa (and the possibility of other species) for its commercial viability. This initiative aims to reformulate and expand a small local business into international sales through exportation to NZ, Australia, USA and Europe selling mainly online. The final product is a bag of organic moringa whole dry leaf.

Project Update: With the completion of the new laboratory in November 2021, Organics CI commenced trials for drying Moringa leaves. The results were not satisfactory, so further advice has been sought from various experts to assist with improving the drying method. In the meantime, the business owners have participated in various workshops such as *Pacific Trade and Invest's 'Path to Market programme'*, which will be beneficial for when products are ready to be marketed and sold. The dried Moringa leaves will be sold locally and exported overseas.

• Moringa Cook Islands

Proposal Title: Moringa Production

Proposed Venture: Purchase equipment to help with the cultivation and production of powderised Moringa. Prior to 2020 the business had been refining the production of moringa and since March 2020 started selling powderised moringa to the general public. However, given the lack of equipment and a proper drying house, the process is labourious and lengthy to produce small quantities of powderised moringa.

Project Update: Project is still in progress. The business has experienced difficulties in sourcing necessary materials and machinery due to border closures, however have managed to purchase equipment required and this is in transit - on its way to Rarotonga. The drying house is expected to be completed in time for the arrival of machinery. Work is also in progress to form an association and collaborate with Pa Enua growers to ensure continuity of supply of Moringa.

• Funky Produce

Proposal Title: Producing Honey

Proposed Venture: Establish a reliable Honey Production on Rarotonga to supply local stores by moving from a manual operation which is time consuming to a Semi/Automatic Operation.

Project Update: Equipment has been purchased from China and will be held in Auckland before the consignment can be shipped from Auckland in order to save on freight costs. Sales have improved since the opening of the borders and continues to grow stronger.

<u>Maao Veges</u>

Proposal Title: Enhancing crop production with drip fertigation hydroponic systems

Proposed Venture: To develop a drip fertigation hydroponic system to grow and research colored capsicums and other hydroponic suitable crops for all year round supply. The proposed system is a turn-key system comprising of smart farming components used within a modern day drip fertigation system, powered by solar energy.

Project Update: Installation of water tank, automatic dosing equipment, pump house and produce washing area is completed. Profile for greenhouse site and steel frames completed with setup and building of greenhouse in progress as the business awaits expertise from NZ to come over to assist in installation. Delays due to border closures.

Good Way Farm

Proposal Title: High Tech Greenhouse

Proposed Venture: To build a high tech greenhouse that will complement existing farming practices by providing and maintaining a controlled environment thus enhancing crop productivity.

Project Update: Building of the greenhouse is in progress despite delay due to border closures. Since implementation began several challenges have resulted in setbacks to the project, from unavailability of building materials such as scaffolding, severe weather which resulted in damages to the greenhouse cover which has meant that the completion of the structure will be delayed further. It is now expected that the project completion date will be pushed out until after the cyclone season (May 2022) when replacement materials have arrived. While implementation of the project is progressing, we have continued to plant crops to supply the local market with fresh produce.

• Jungle Farm

Proposal Title: JungleFarm Honey and Bee Products

Proposed Venture: JungleFarm is setting out to introduce quality, locally produced honey, unique honey-based beverages, and specialty bee products to the Cook Islands. To that end, JungleFarm sought help from the SMART AgriTech Scheme to assist with the setup of processing facility for honey and honey-based beverages including JungleFarm signature honey-mead. As soon as the facility is commissioned and equipped, honey processing will immediately begin.

Project Update: Jungle Farm (JF) planned key activities for this reporting period follow on from the previous.

- 1. Expand and increase number and locations of hive colonies
- 2. Processing site planning & design, and building materials procurement
- 3. Procurement of processing plant and equipment
- 4. Increase JF brand awareness

All key activities progressed well over this period. There have been improvements in processes and equipment has helped with the hive colony growth plan. Although there are delays to having the planned processing site ready for the initial harvests, a temporary location is available and ready for purchased plant and equipment (arriving in March Quarter) - this will free up resources to help accelerate other critical areas of development /production.

Raising the awareness of JF brand continues.

<u>Aitutaki Hydroponics</u>

Proposal Title: Controlled Environment Greenhouse

Proposed Venture: Aitutaki Hydroponics has a hydroponic farm in Aitutaki and would like to establish one in Rarotonga for ease of market access. Aitutaki Hydroponics sought AgriTech funding for this project to provide the capital for a commercial greenhouse so the business is better able to urgently replace imported crops.

Project Update: Construction of the greenhouse is near completion, with half of the structure completed to the point that growers have been able to begin planting a variety of crops. Despite several setbacks experienced during the implementation of this project, the business has been able to overcome this and learn from the experience to progress the project forward. Additional construction work was carried out to build a processing and storage facility on the section to enable efficient handling of produce. The second half of the shade house will be completed with the intention of expanding the variety of crops.

• Tairi Veges

Proposal Title: Mobile Poultry Unit for supplementary Fertilizer

Proposed Venture: There are three key areas within this project, first is the mobile poultry system, second is the organic fertilizer and third is expanding the vegetables garden.

Project Update: The materials for the mobile poultry unit have been purchased and work towards building the frame of the trailer has commenced. However, due to shipping delays to Atiu the materials needed to complete building the enclosed unit have yet to arrive.

• Ine Toa

Proposal Title: Expand chicken/layer farm and improve egg production farming on Mangaia

Proposed Venture: We propose to expand our current chicken/egg layer farm on Mangaia to a commercial capacity. Currently there is no commercial chicken farm that supplies fresh quality eggs to the local market on the island. This AgriTech scheme will help us purchase all the materials/resources required to carry out this extension.

Project Update: Majority of the materials have been sourced from Rarotonga and New Zealand and have either been purchased, quoted or waiting on approvals. This includes water tank, cooler rooms, solar system, production equipment and materials for chicken coup/housing/fencing/storage shed. Shaver chickens have been imported and have begun laying eggs with production increasing in the month of December.

Indigo Pacific

Proposal Title: IOT permaculture farming set-up

Proposed Venture: The proposal is to create a permaculture farm set-up with modernized technology for much improved yield per square meter.

Project Update: While negotiations with overseas suppliers appeared straight forward at first, the hurdles experienced due to Covid-19, particularly supply issues and border closures resulted in ongoing challenges with logistics and costs.

The project is now gaining momentum with the import of all new stock of flowers/edible/high yielding crops by mid-April 2022 confirmed with flights and approvals from Agriculture for import permits and confirmed by Anthora – Amsterdam. The ground work for the land clearance and the contouring of land

area in readiness for installation of the shade house / processing shed with 1500sqm of land cleared has restarted in preparation for receiving the cultured stock.

The business is now able to progress the project with firm dates in place.

Tautu Farms

Proposal Title: Mobile Poultry Unit for Egg Production

Proposed Venture: To build 2 mobile units with the capacity to house 500 layer hens per unit (1000 in total) that can be towed from site to site.

Project Update: Trailer was completed and delivered in October 2021 with the nesting boxes customized and installed into trailer. Chickens that were already in place in January would not take to the trailer as had developed and laid in alternative nesting boxes in the brooder house. Five hundred chickens received in August and started laying eggs sporadically in November. Sales of eggs is currently underway.

<u>Aquaflow</u>

Proposal Title: Innovative Environments for Year Round Growing - a commercial demonstration model

Proposed Venture: To set up a year-round growing environment for commercially viable crops to act as both a commercial entity for an established grower and a demonstration unit (with accompanying technical advice) for current, new and emerging growers.

Project Update: Purchased greenhouse and materials from China, awaiting shipment to Cook Islands before project can be progressed further.

Mauke Royal Oil

Proposal Title: Mauke Royal Oil

Proposed Venture: To get a constant, good quality, reliable supply of the oil.

Project Update: Machinery has arrived and is currently in storage on Mauke. Building of the structure is expected to start in May with materials now being dispatched to the island. A Facebook page has been setup for the business while website content, logo and branding is still in the development stage.

• <u>Atai Farms</u>

Proposal Title: Atai Farms - Free Range Egg Farm

Proposed Venture: Introduce a more efficient, innovative Free Range Egg Farm, improving the current 'off the grid' set up allowing the farm and business to become more sustainable, climate change resilient and to improve the farms scalability.

Project Update: Purchased majority of the materials required for our project including; water tanks, water pump, plumbing materials, generator, timber, feeders, waterers, fencing, etc. Coop build/redesign is 95% complete. Farm has been plumbed and the perimeter fencing has been completed allowing the chickens to roam safely through our plantation. The first free range flock continues to lay well supplying eggs for the café and community and the second free range flock is due to start laying in May 2022.

Nicholas Farms

Proposal Title: Vanilla Infrastructure

Proposed Venture: Purchase a shade house irrigation system that will mimic the vanilla plants conditions in the wild where they thrive for many years.

Project Update: Irrigation and misting system ordered from NZ, however it arrived without a Manual so the business owners were unable to start assembling the system. Currently still waiting on this Manual to come through from Irrigation Express in NZ in order to start with assembling the system as there was a confusion with all the orders. In the meantime new power connection has been installed and is ready for the system to be put in place. Awaiting water tank and pump required for the system.

Araura Country Farms

Proposal Title: Purchase of a Venturi Irrigation Fertigation Network System

Proposed Venture: Purchase and install a Venturi Fertigation Irrigation Network System to mechanised and improve an open field farming business.

Project Update: Awaiting submission of Progress Reports.

• Kuru Kai

Proposal Title: Food preservation

Proposed Venture: Apply smart and innovative techniques to food preservation methods using technology that will transform locally sourced raw and cooked food crops into nutritiously healthy food products with a shelf life of up to 25years. The new cost-efficient food processing facility has been designed in line with safety and compliance standards for durability, low maintenance and practicality.

Project Update: Due to Covid-19 restrictions around the world there have been long delays to the procurement of the essential productive assets required for this project and a massive inflation in worldwide shipping cost. This meant the business had to re-evaluate its key requirements and project budget.

Due to delays with the builders, availability of building supplies and the requirement to have a civil engineer amend the architectural designs to accommodate an eventual extension, the new site is unfortunately not yet completed. However, aside from the prolonged schedule, we are extremely satisfied with the quality and developments of the building thus far.

A temporary processing site has been created by the business to accommodate the new Freeze Dryer machinery that arrived on the island. With staff first undergoing training sessions to better understand the tech and processes, they have begun first stage batch trials of a variety of fruits – mangoes, pawpaw and soursop. Using the limited tools available they are now testing with small batches and very limited productions.

Now that the borders have opened, we can proceed with initial plans.

• <u>Tripitt</u>

Proposal Title: Hot Stuff tunnel house

Proposed Venture: To purchase a commercial tunnel house to plant cayenne pepper to ensure that the farm produces high quality pepper, all year round and without the intrusion of pests and the negative impacts of climate and weather. A smart irrigation system will be included in this tunnel house irrigating fertilizer through water making feeding plants efficient and effective. A standalone solar system will ensure production cost and end cost are kept low increasing access to many Cook Islands people.

Project Update: Due to significantly increased cost to implementation of this project and the loss of labour, both parties have agreed to terminate the GFA and for Grant Funds will be repaid.

EPD will facilitate process for repayment of grant funds.

For further information contact:

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