V+ Agritech

Circular Agriculture, for a Sustainable Future!
Welcome Journalists from 2022 International Trade Fellowship!

International Trade Training

John Amari
Global Finance Magazine

Maria Anneke
CNBC Indonesia

Jon Viktor Cabuenas
GMA News Online

Muhammad Daud Khan
Pakhtunkhwa Radio

Minh Thu Ha
FBNC Vietnam

Claire Jiao
Bloomberg

Saman Khan
Voice of America

Heejin Kim
Bloomberg

Prem Kumar
Nikkei Asia

Kimberly Lim
TodayOnline

Doulot Akter Mala
The Financial Express

Shadab Nazmi
BBC News

Krutika Pathi
The Associated Press

Shakoor Rather
Press Trust of India

Rukshana Rizwie
Sri Lanka Guardian & Lanka Courier

Ramon Royandoyan
Philstar Online

Ramu Sapkota
Himal Media

Shruti Srivastava
Bloomberg

Su-Lin Tan
CNBC

Martha Ruth Thertina
Katadata.co.id

Ben Westcott
Bloomberg

Stella Xie
The Wall Street Journal

Taufiq Zalizan
TodayOnline, Mediacorp News

Li You
The New York Times

National Press Foundation (NPF)
Meet Our Expert Team

Between us, we have the expertise of a tech professor, a furniture businessman and a military veteran. Combine our innovative spirit, resourcefulness & disciplined execution with our passion to bring circular agriculture to the world, we aspire to 'move the needle' and build a more sustainable future.

Nelson Tan
"Techie Farmer"
CEO / Co-Founder
Product Dev

William Foo
"Happy Farmer"
Co-Founder
Ops & Log

James Yin
"Greenie Farmer"
Founding Member
Biz Dev, Sustainability, PR
VISIT PROGRAMME

Grp A / Bus A
Greenhouse (25 mins)

Q & A
Group Photo

Grp B / Bus B
Video + Brief (10 mins)
IoT Demo (5 mins)
R&D section (10 mins)

Orientation
V+ Agritech

Circular Agriculture, for a Sustainable Future!
Asean needs to prepare for greater weather extremes and food price spikes: Study

“South-east Asia is getting wetter and warmer, particularly in the last decade compared to the previous two.

“And the frequency of extreme weather events is becoming greater,” Mr Tom Rogers, Oxford Economics’ head of macroeconomic consulting for Asia, said in the webinar on the report which was released in March.

Oxford Economics estimated that the cost of producing food could go up by as much as 80 per cent in countries such as Indonesia by 2050, as governments implement measures aimed at achieving net-zero emissions.

Oxford Economics recommends that governments support farmers in adopting measures such as solar panels and the conversion of food waste to energy, which would make them less reliant on electricity from the grid.
Can the headwinds in the global food system, be turned into tailwinds for sustainable farming?

To combat the various economic uncertainties, local farms should adopt renewable energy and turn to innovation to rely less on conventional fertilisers, said Professor William Chen, director of the food science and technology programme at Nanyang Technological University.

"The need to push for local food production for enhanced food security is even greater against the backdrop of the headwinds in the global food system," Prof Chen added.
Food Security
We provide high-yield, natural & climate resilient farming solutions for land-scarce, water-stressed / arid communities.

Circular Production
Our farming methods efficiently uses energy, water & waste. ⅓ of food produced is wasted globally each year*. Growing hyperlocal shortens food supply chain & reduces food loss

Decarbonise Food Supply Chain
Food tops global supply chain emissions at 25%**. Growing hyperlocal reduces carbon emissions of long supply chains. Transiting to clean energy will further decarbonise food production.

Sources: *UNFAO; **Boston Consulting Group, 2021
Empowering Communities to Grow More With Less

**Maximize space, maximize yield**
Vertical farming allows an increase of crop yield, with efficient use of limited land resources.

**Minimising environmental Impact**
No pesticides and harsh chemicals used in Aquaponics farming. We get cleaner produce, anytime.

**Modular system for any community**
Easy installation and customization to cater to various communities and growing needs. Scalable solutions internationally.
The Benefits

This 2-in-1 system creates a controlled and sustainable growth environment that generates 7X higher yield compared to traditional farming methods. It uses 90% less water since water is constantly being re-circulated within the system. And 90% less energy compared to indoor farms.

The symbiotic relationship between the plants, microbes and fishes means that the plants depend directly on the nutrients-rich fish waste, without harsh chemicals which are harmful to both the environment and us.
Our Services

**Professional Consultation**
We have a team of industry professionals to help create turn key solutions for property owners.

**Farm Management Services**
We provide end-to-end farm management services to our clients. From planning to harvesting, we can help clients get more out of their farms.

**Modular Systems Setup**
Our designs are modular and scalable. Each module can be scaled up to the client’s requirements.

**IoT Automation**
Farms today should be smart. We are a data driven company leveraging on technology to help farms lower their efforts to grow, and hence make farms more efficient.
Our Circular System

Current
- Aquaculture module
- Horticulture module
- Waste management module
- IoT monitoring & control

In the Pipeline...
- More fish species
- Robotic automation to reduce labour
- R&D microbial formula for different crops
- Agricultural photovoltaics*

*In the Pipeline...
Joint Press Release:
V-Plus Agritech Partners Brite Solar to Bring Transparent Agri-Photovoltaics (Agri-PVs) to SE Asia & Oceania

**Benefits**
- Dual land use (agriculture + power gen)
- Light transmittance from 80% to 8%
- Power generation from 100 to 450 Wp
- >22% power conversion efficiency
- Bifacial panes
- Can retrofit to greenhouses
- No spectrum alteration

For crops requiring more light, e.g. grapes
For crops requiring less light, e.g. raspberries, blueberries
Circular Loop Complete!
Precision agriculture and farmer service platforms present large potential opportunity to drive yield improvements and reduce related emissions.

Sustainable farming is one of the top carbon abatement levers for SEA and will represent a $30B opportunity by 2030.

**Earliest-stage capital looking opportunistically for start-ups/innovative models to scale, mature capital supporting CAPEX-intensive production systems.**

- **Precision agriculture** – large potential especially given yield benefits; large agribusinesses lead investments, and potential for early-stage capital entry.
- **Nutrient inputs** – rising prices, awareness of emissions around nitrogen fertilizers creating opportunity for regional/local manufacturers.
- **Controlled env. agriculture** – potential to scale in urban areas (e.g., Singapore) if costs fall; extremely capital intensive, both institutional fund and PE/VC interest.
- **Farmer services platform** – as an enabler to expand farmer access to more sustainable practices, tech (e.g., large agribusinesses build in-house, VC-backed sustainable farming).

Source: Bain & Temasek, with contributions from Microsoft, Jun 2022
IoT Demo
R & D

Microbial Formula Research

Australian Jade Perch Aquaponics

Black Soldier Fly Larvea
SWAP GROUPS

Grp A / Bus A
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We Are CIRCULAR

QUESTIONS?