17 NOVEMBER 2026

Session n°23:

Smart food production and digitization: How Caribbean agrifood entrepreneurs can use data and technology





Caribbean Agrifood Business Series ...



Smart Farming and Digitization

HOW CARIBBEAN AGRIFOOD BUSINESSES CAN MAKE DATA AND TECHNOLOGY PAY: THE SKYCROP EXPERIENCE

GARNETT HARRIS | SKYCROP SOLUTIONS JA

IICA–COLEAD Online Session | 17 November 2026

Built in Jamaica, Serving the Region



- **Caribbean-based drone development**
- **Spraying, granular fertiliser and seed spreading**
- **Precision mapping: multispectral, RTK and LiDAR**
- **Operator training, maintenance and local repair**

50+

local farm and agency customers

20–120 L

drone systems designed and built in-house

6

countries served: Jamaica, Cayman Islands, Guyana, Montserrat, Bahamas, Trinidad

Partners and clients include

Cayman Islands Dept. of Agriculture · RADA · Ministry of Agriculture, Jamaica · Agro-Invest · Guyana · Bahamas · Trinidad

Smart Farming and Digitization

Digitization turns every field into data, and data into better, faster decisions.

1 CAPTURE

- Multispectral crop-health maps
- RTK and LiDAR field mapping
- Every flight logged

2 ANALYSE

- Spot stress before it shows
- Map treatment zones
- Track trends season to season

3 ACT

- Precision spraying
- Granular fertiliser and seeding
- Works on wet or steep land

4 SUSTAIN

- Trained local operators
- Local maintenance and parts
- Records for buyers and lenders

Lesson: data only pays when it changes what happens in the field the same week.

The Business Case: Costs vs. Returns

SPRAY DRONE

≈ US$15k

35–40 L system with ground station and power (SkyCrop 2024 quote)

RETURNS

- Less chemical lost to drift
- Far fewer labour-hours per acre
- Treats wet or steep fields on time

MULTISPECTRAL

≈ US$5k+

Entry crop-mapping drone plus analysis software

RETURNS

- Finds crop stress before it is visible
- Treat problem zones, not whole fields
- Replaces walking every row to scout

LIDAR + RTK

≈ US$10–50k

Entry to mid-range aerial LiDAR mapping systems

RETURNS

- Accurate terrain, drainage and land-prep plans
- Surveys at a fraction of ground-crew cost
- Rapid damage assessment after storms

All three also need training, batteries, software and maintenance. Small farms can buy each as a per-acre service.

Field evidence: [add 1–2 client results, e.g. acres per day, % input saved, payback]

Which Model Fits Which MSME?



SMALL FARMS

Buy the service, not the drone

- Pay per acre for spraying or mapping
- No capital outlay
- Benefit from the first season

CO-OPS AND MID-SIZE

Share a drone or back an operator

- Group ownership spreads the cost
- Trained young operators sell to neighbours
- A new rural service business

ESTATES AND AGENCIES

Own the fleet and the data

- Full control of timing
- Records for traceability
- Mapping and disaster assessment

Start with one problem — pests, fertiliser or mapping — measure it, then scale.

Lessons and What Would Help

- **Training and local support matter more than the hardware**
- **Service models open the door for small farmers**
- **Measure results from day one**
- **Climate shocks reward farms that can respond fast**

FOR FINANCIERS AND DEVELOPMENT PARTNERS

- Equipment finance and leasing for drone service operators
- Funded operator training across the region
- Clear, practical rules for agricultural drone use

skycropsolutions.com | info@skycropsolutionsja.com

Thank you



