



**Cocoa
Research
Centre**

COCOA BUSINESS

**HOW WOULD A FUTURE PROOF COCOA
ESTATE BUSINESS MODEL LOOK LIKE?**

exclusive interview Sport

Johnson to world leaders: we are one minute to midnight



Cop26 climate talks at serious risk of failure, says prime minister

Biden and Modi among politicians in Glasgow as crucial summit begins

Peter Walker Rome
Rowena Mason
Fiona Harvey

The Cop26 climate summit is at risk of failure because countries are still not promising enough to restrict global temperature rises to below 1.5C, Boris Johnson has warned.

In a blunt admission after two days of preliminary talks at the G20 meeting of world leaders, the prime minister conceded little progress had

1-12 NOV 2021
GLASGOW


COP26

WITH ITALY



Drivers

- Economic sustainability / productivity
- Quality and flavour diversity
- Unique innovative product designs
- Climate resilience
- Net Zero Carbon
- Rural Livelihoods
- Food security
- Gender integration



Trinidad and Tobago is an exclusive Fine or Flavour Cocoa Producer

Quality reputation and price premium

Triple Bottom Line



MONOCULTURE

- High Cocoa Yields
- Foreign Exchange
- Employment



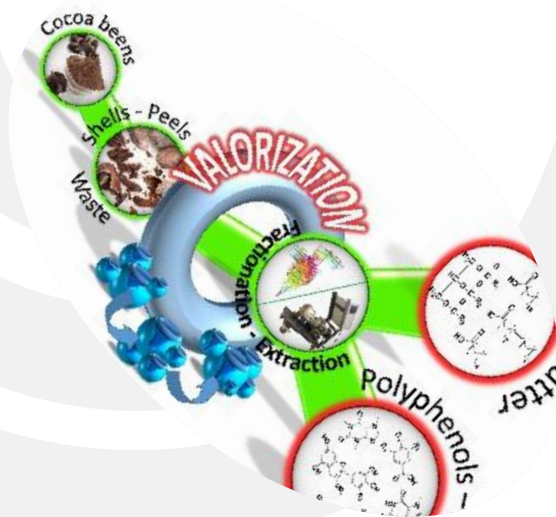
AGROFORESTRY

- Plus**
- Environmental Services
 - Carbon capture
 - Slope stabilisation
 - Flood control



FOOD AGROFORESTRY

- Plus**
- Food security
 - Income diversification
 - Social stability



VALUE ADDITION

- Plus**
- Circular economy
 - Cottage industries
 - Rural livelihoods

MONETISING SUSTAINABILITY – ESG COMPLIANT BUSINESS MODELS



TRINIDAD AND TOBAGO

- 1200 cocoa farms (~ 8400 -10000 dependents)
- Average farm size – 5 ha
- If attain productivity of 1 t per ha
 - Production 6000 t
 - Cocoa value US\$ 36 million US (1.2%)
- If add value (conservatively)
 - US\$ 250 million US (3.5% budget)

Double acreage and double productivity

- US\$ 1 billion US (14% of budget)

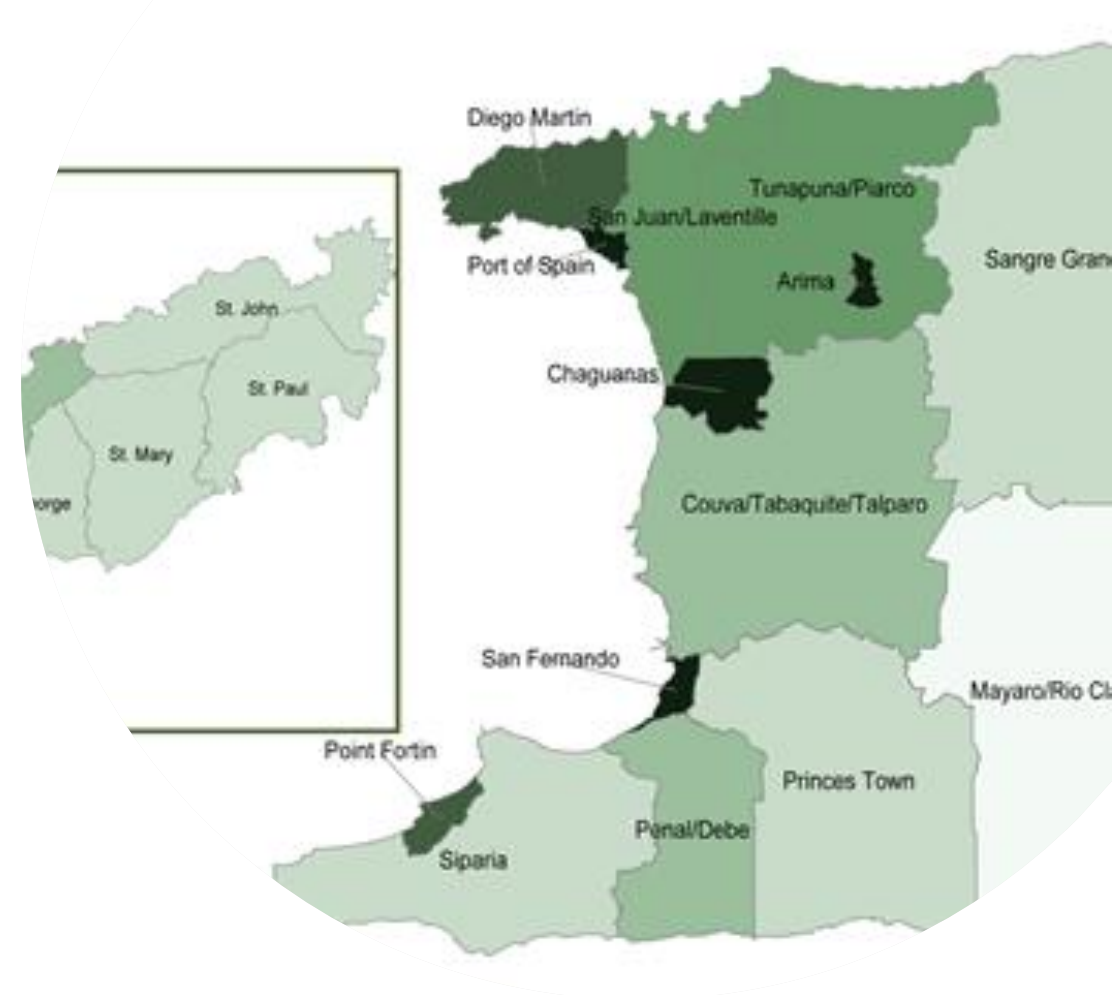
Accessory crop

Yield per ha – 7.5 t

Value @ US 1.3 per kg = 10,000 US per ha

Value @6000 ha = 60 million US (0.8%)

Double yield and acreage =240 million US (3.2%)



FARM BUSINESS PROFITS

COST OF PRODUCTION -

- Farm model (cocoa – agroforestry – food agroforestry)
- Size of farm (2.5 – 800 ha)
- No. of trees per ha (750 – 1600 trees)
- Farm terrain – sloping, undulating, flat
- Risk mitigation costs
 - length of dry season
 - flooding/ fires
 - pest and disease pressure
 - cadmium
- Labour cost (45-65 % of costs) /mechanisation employed
- Access roads
- Energy costs

Balance Sheet

As of December 31, 2016 (000s)

Assets		Liabilities	
Cash	481	Accounts Payable	625
Marketable Securities	1,346	Current Portion L-T Debt	1,021
Accounts Receivable	1,677	Taxes Payable	36
Inventory	2,936	Accrued Expenses	157
Prepaid Expenses	172	Total Current Liabilities	1,839
Other Current Assets	58	Long-term Debt	2,332
Total Current Assets	6,670	Total Liabilities	4,171
Gross Value of Property, Plant & Equipment	2,019	Owner's Equity	
Accumulated Depreciation	(664)	Common Stock and Paid-in Cap	194
Net Value of Property, Plant, & Equipment	1,355	Retained Earnings	4,009
Total Assets	349	Total Shareholders' Equity	4,203

Cost of production

1.2 – 2.0 US per tree per year
(900 -3200 US per ha)

FARM BUSINESS PROFITS

REVENUE STREAM

- Farm model
- Size of farm
- Variety, propagation method, age of trees (1 – 3 t/ha)
- No. of trees per ha (attrition of trees and presence of non-productive trees)
- Postharvest processing capacity (x 1.6)
- Length of dry season and access to irrigation (x2)
- Management
 - fertility management (x2)
 - pruning, pest and disease management (x 1.6 - 2)
- Income from accessory crops (x 1.5)

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Company Owns (left side)
What the Company Owes (right side)
Shareholders' Equity (bottom right)

FARM BUSINESS PROFITS

PROFIT = REVENUE - COST

10 ha farm

- Cocoa - 1 t per ha = 10 ton @6000 US = 60,000 US
- 1.5 t/ha = 15 ton @6000 US = 90,000 US
- Accessory – 5 t/ha = 50 t @1000 US = 50,000 US

Total **110,000 – 140,000 US**

Cost of production

- @ 900 US per ha = 9000 US per annum
- @ 3200 US per ha = 32,000 US per annum

Profit

- 101,000 - 131,000 US
- 78,000 - 108,000 US

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WHY IS TRINIDAD AND TOBAGO RIPE FOR INVESTMENT?

Evidence based approach to investment support

- Precision mapping allows nuanced support
 - Agro-ecology, fertility, productivity maps
 - Risk maps and mitigation
 - Flavour maps and traceability
 - Climate and carbon

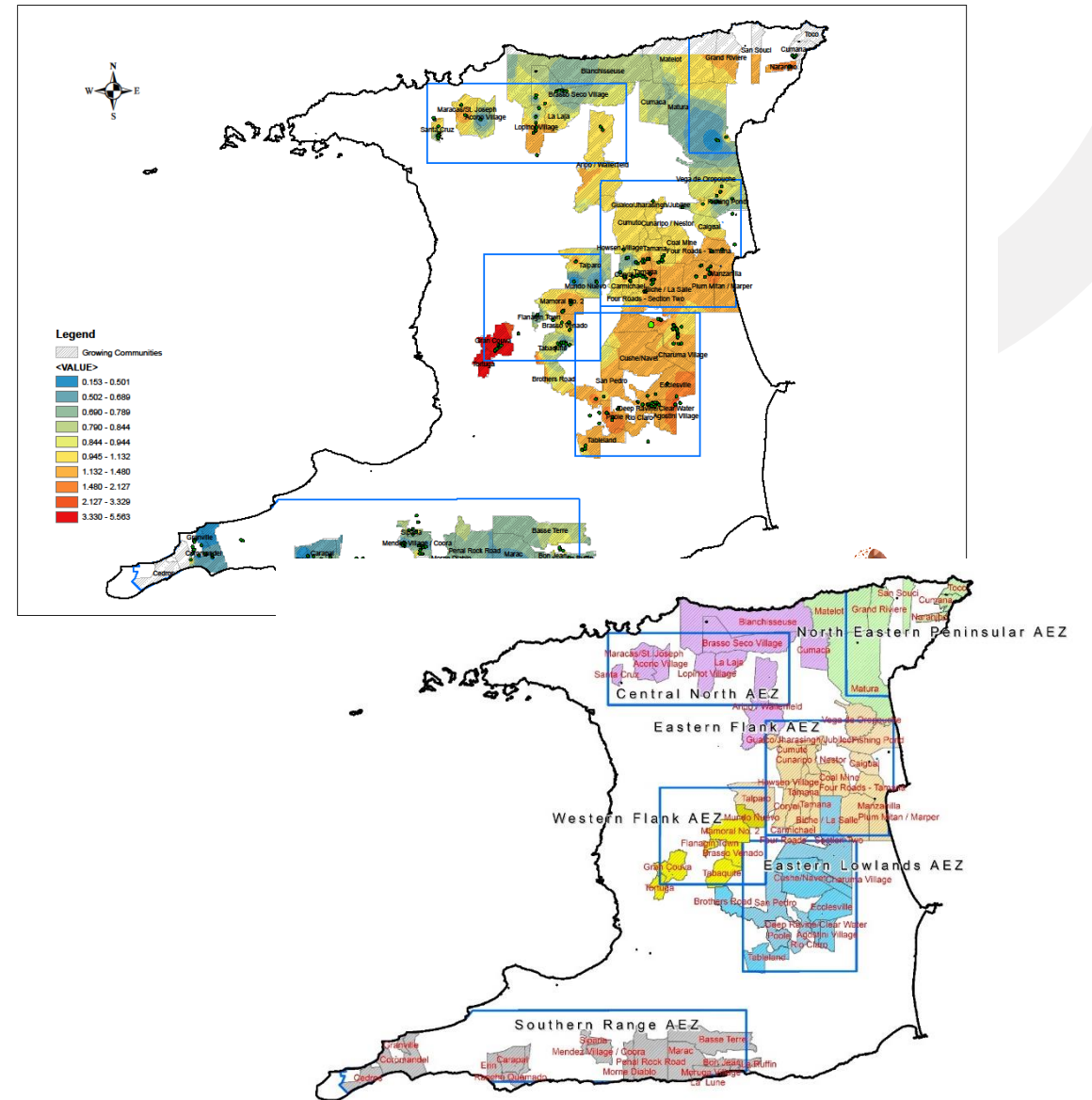
Innovation system

- Innovation centres of excellence

Genetic resources and breeding

- International Cocoa Genebank
- Long standing breeding programme

DISTRIBUTION OF CADMIUM IN SOIL (2016)



REMEMBER!!

ITS NOT ONLY THE PROFITS

TRIPLE BOTTOM LINE – PROFIT-PLANET-PEOPLE

- Environmental sustainability
- Carbon capture potential (Revenue!!)
- Social sustainability
 - Rural livelihoods
 - Food security





THANK YOU!



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