

Challenges of Producing Cocoa in Trinidad and Tobago

From a Producer's Perspective
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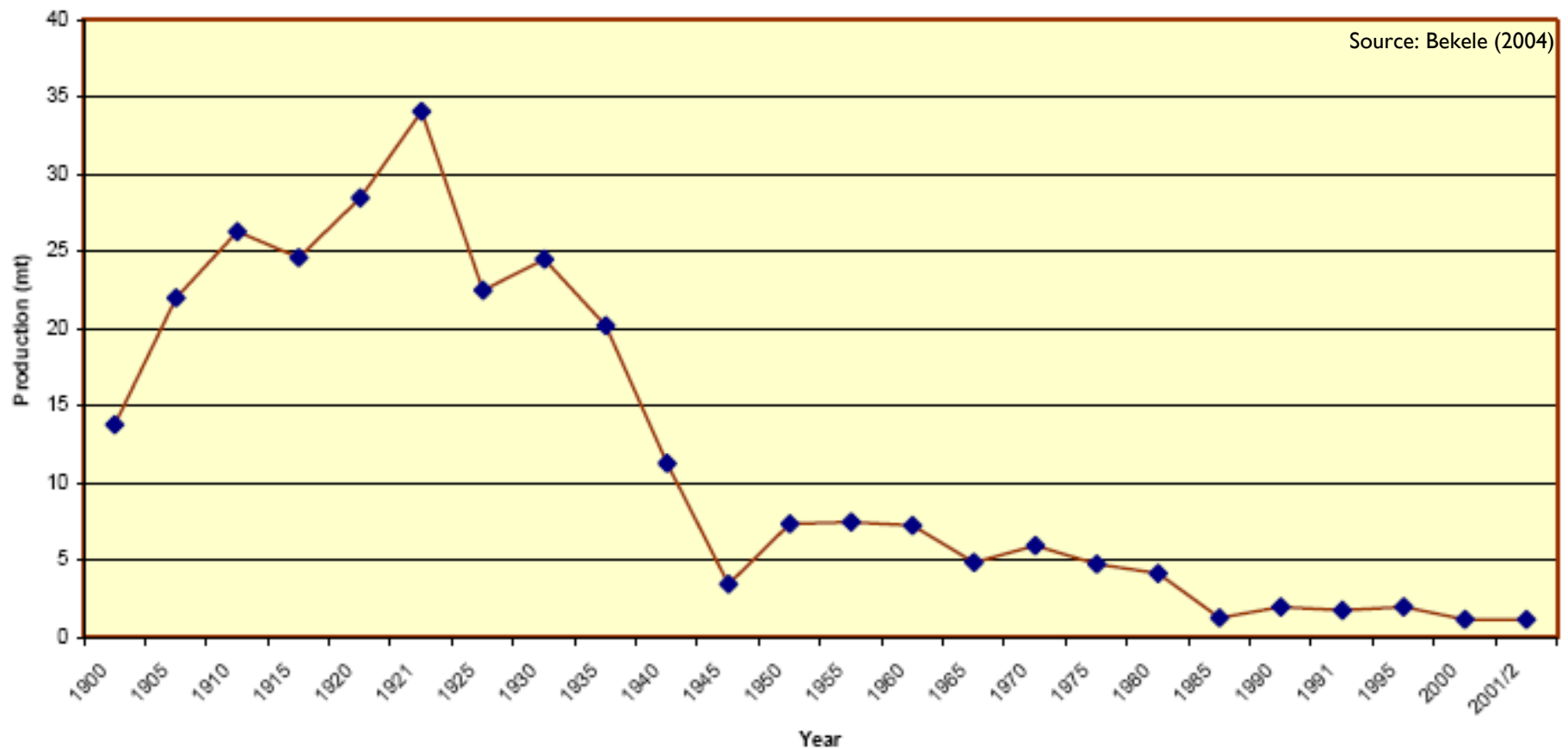


Presentation Outline

- ▶ Brief history of cocoa production in Trinidad and Tobago
- ▶ Analysis of the external business environment for cocoa
- ▶ The competition, Threats and Opportunities
- ▶ Way forward



Brief history of Cocoa Production in Trinidad and Tobago



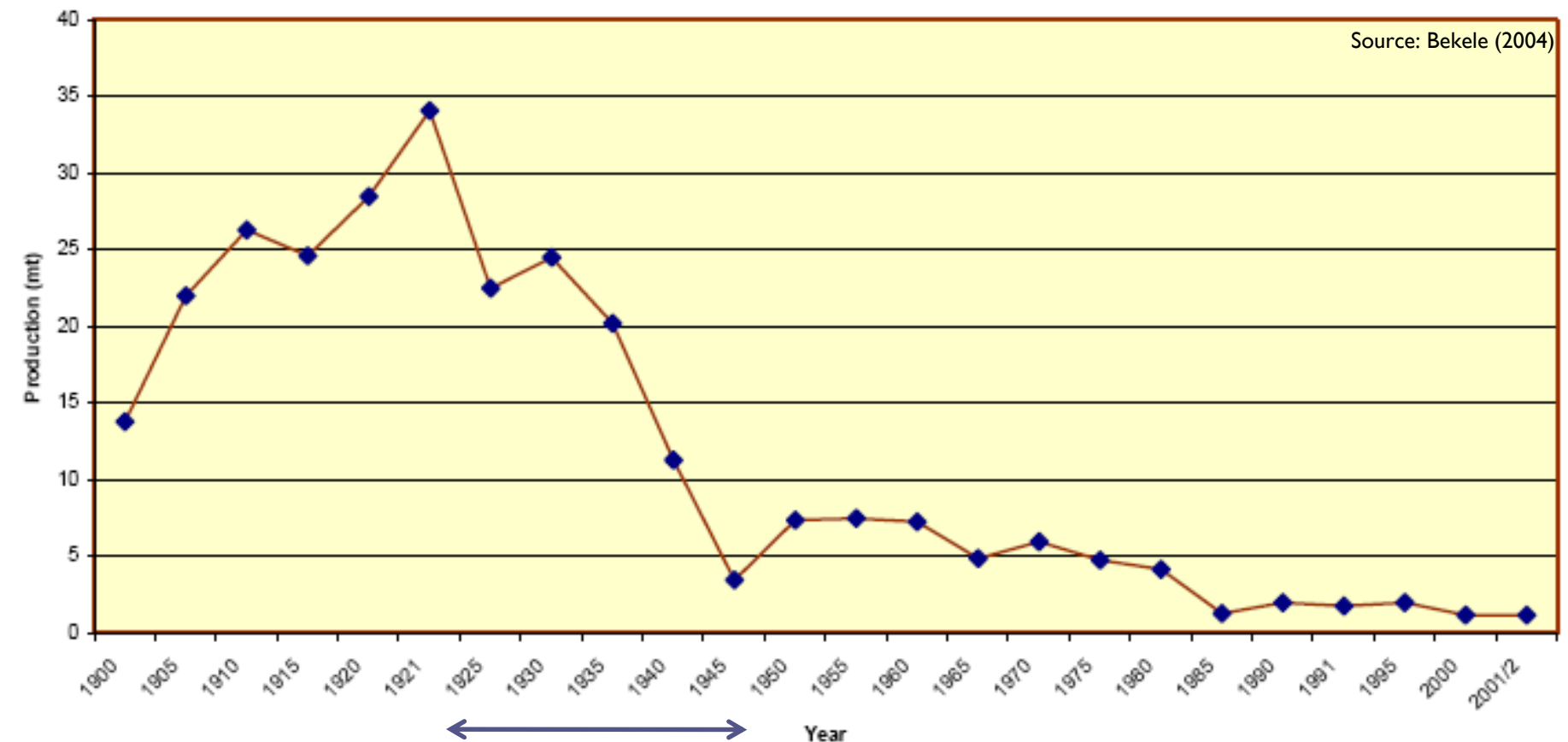
Golden age of cocoa in T&T
90,000 ha under cultivation



World Cocoa Conference, Abidjan, Ivory Coast

19-23 Nov 2012

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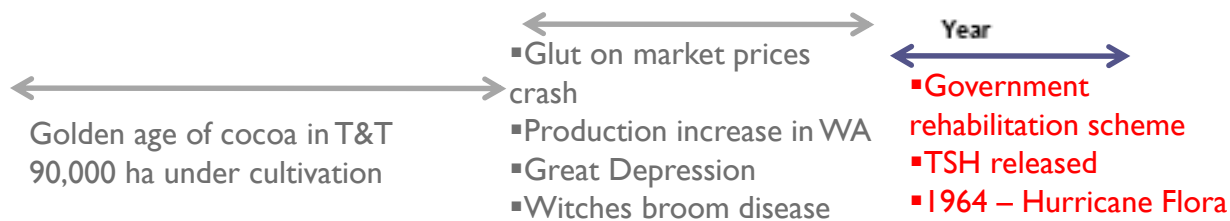
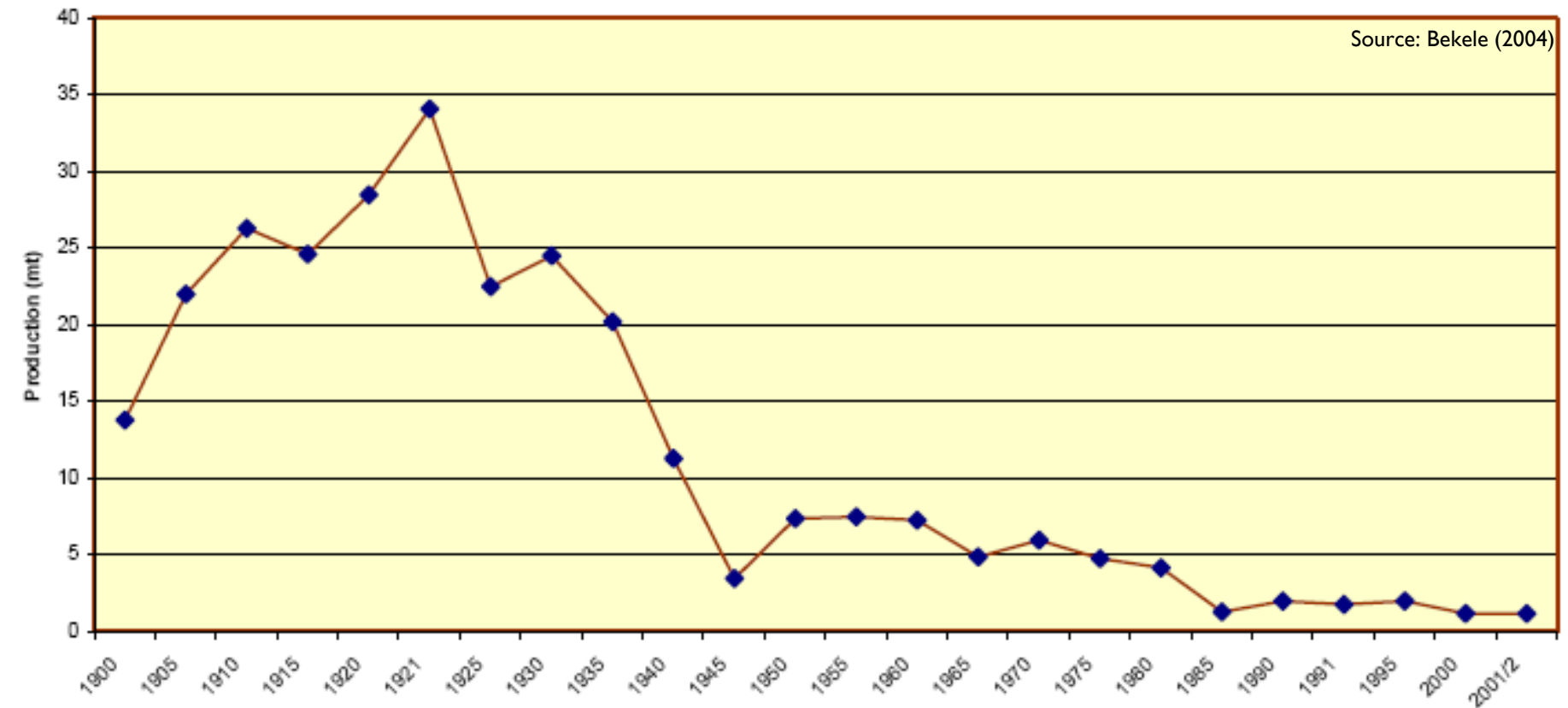


- ← Golden age of cocoa in T&T
90,000 ha under cultivation
- Production increase in WA
- Great Depression
- Glut on market prices
crash
- Witches broom disease

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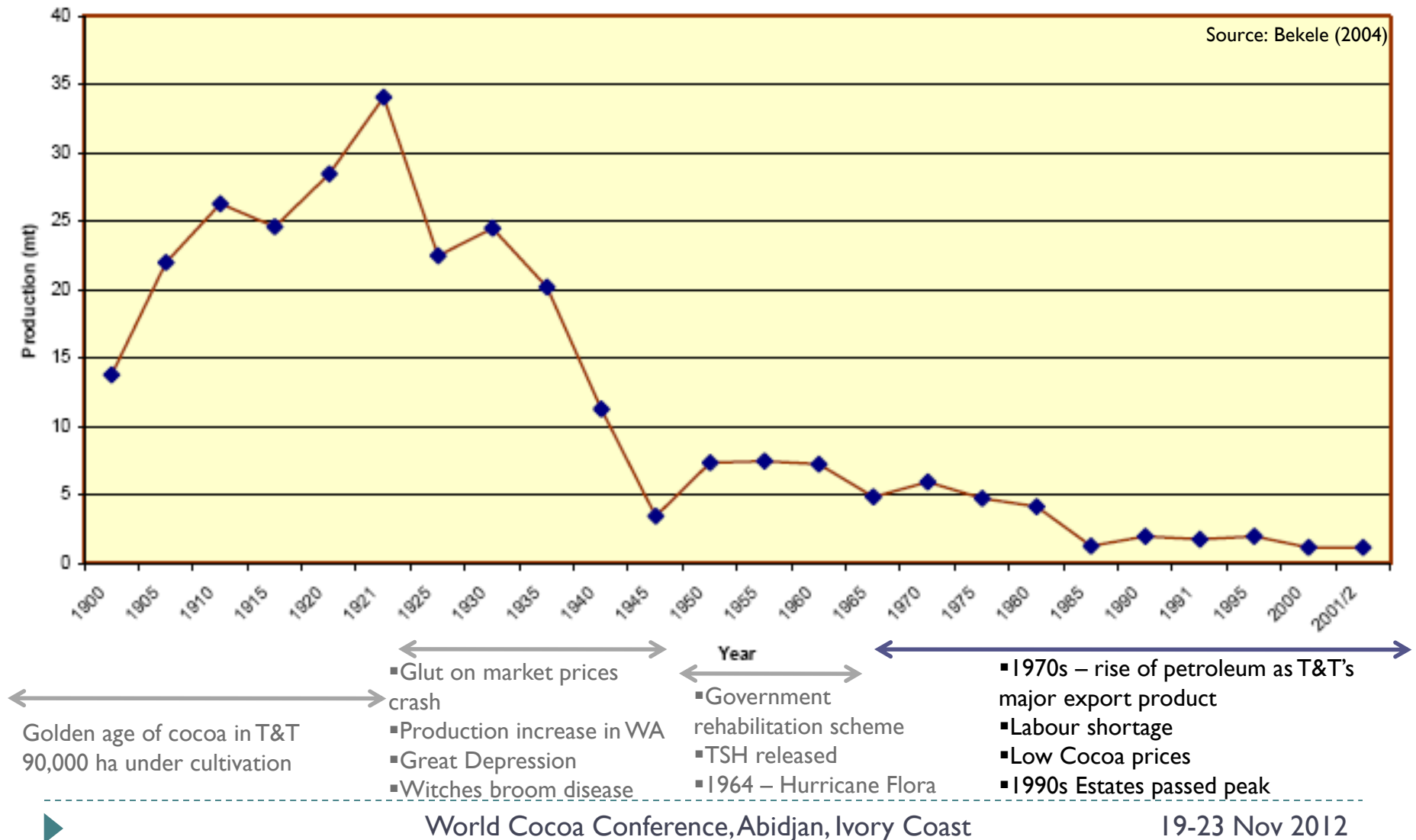


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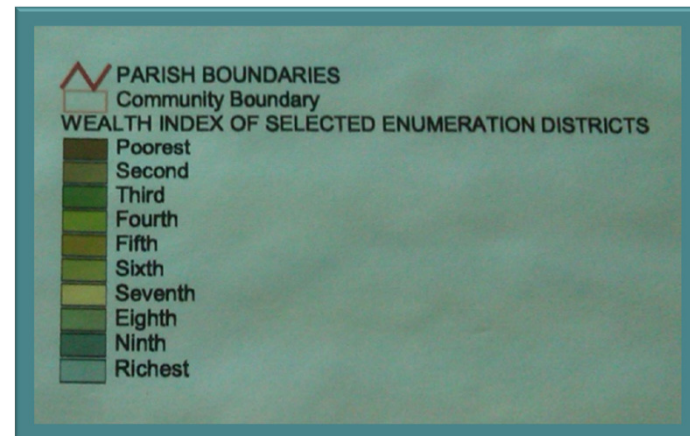
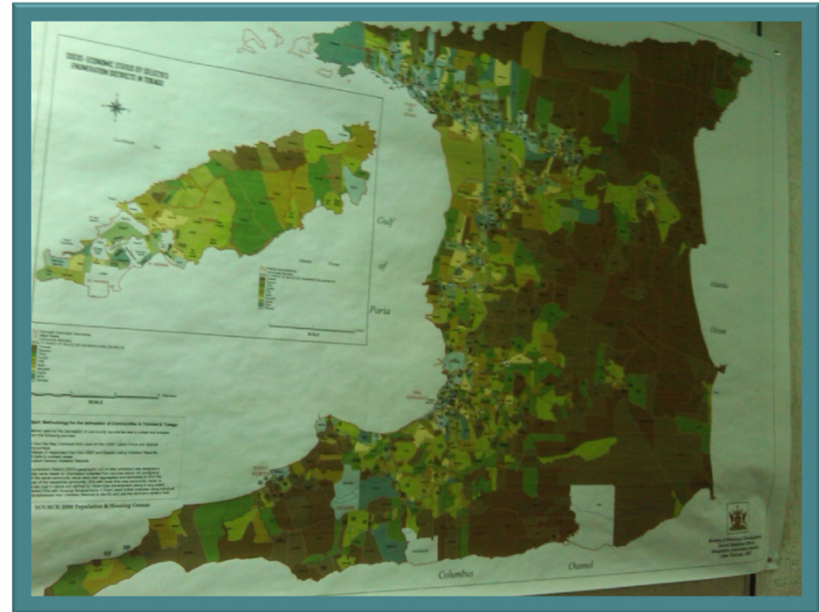
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Brief history of Cocoa Production in Trinidad and Tobago



Analysis of the External Business Environment for Cocoa

- ▶ Presently lowest income earning areas (in chocolate on map) in T&T are the agricultural producing or rural areas. Also major cocoa producing areas since the 1920s
- ▶ Currently an estimated 7,500 ha to 10,000 ha remain under cocoa cultivation, most under producing
- ▶ Constraints:
 - ▶ High cost of land for new estates
 - ▶ High cost to rehabilitate estates
 - ▶ Aging cocoa producers
 - ▶ Aged trees on producing Estates which must be replanted
- ▶ Should or Can T&T stay in the cocoa business?



Analysis of the Current Business Environment for T&T Cocoa

► Political

- **Political will** - Government (GoTT) intervening to revitalize the industry to diversify economy as part of long term development plan for T&T to move away from dependence on Oil and Natural Gas
- Cocoa Act of 1962; policy governing sale of cocoa is under review
- GoTT supports R&D by providing improved cultivars (TSH clones) at subsidized prices



Government focused on infrastructure development - paving of secondary roads to cocoa estates



Analysis of the Current Business Environment for T&T Cocoa

► Economic

- T&T cocoa can attract premium prices for its flavor attributes (fruity, floral, spicy, sweetness).
- Low threat of substitutes as flavor attributes are highly dependent on (GXE) GenotypeXEnvironment interactions
- Most T&T producers do not have access to info on demand for their cocoa especially in light of the global recession of 2008 -09



Stirring cocoa beans for even fermentation.
Montserrat Farmers Coop, Gran Couva.

Analysis of the Current Business Environment for T&T Cocoa

► Social

- Chocolate an emerging health food.
- Acceptance of IT tools and social media creates means to deliver information to producers
- Young growers are not attracted to this type of farming because of competition from more saavy industries or production systems



Putting cocoa beans into fermentation bin.
Montserrat Farmers Coop, Gran Couva.

Analysis of the Current Business Environment for T&T Cocoa

► Technological

- After 200 years, producing cocoa is still for the most part low tech
- However, some advances have been made in R&D such as cultivar development, spacing trials and bean processing to bring out the best flavour attributes



High Density planting of cocoa trees 1.3mX1.3m apart on Manickchand & Associates Estates, Sangre Grande

To Summarize the Challenges

- ▶ High capital investment to acquire land, develop infrastructure and establish or replant a cocoa estate. Climate change brings Medium to High risk from hurricanes and/or floods with no affordable crop insurance.
- ▶ Labour skilled in managing a cocoa estate and properly processing beans is very limited
- ▶ Investment in mechanizing the processing of cocoa beans to standardize quality is needed but costly
- ▶ Inadequate use of IT leads to poor marketing intelligence for T&T cocoa producers and a concern that either over production of cocoa or world economic crises can lead to falling bean prices as in the past. This results in lethargic response by producers to increase production
- ▶ Survival of the Cocoa Industry depends on attracting younger growers



The Competition, Threats and Opportunities

- ▶ **Competing Fiscal Needs of SIDS**
 - ▶ Economic Diversification away from petroleum based products and into efficient agricultural production systems
 - ▶ Urbanization with consequent need for housing leads to loss of abandoned estates
 - ▶ Food Security and need to reduce dependency on imported foods. 'Grow local buy local' also reduces Carbon Footprint
 - ▶ Hydroponic production systems are more attractive to young producers providing high returns in a short time with little effort and lower capital investment.



Growing vegetables in hydroponic systems
(A) Full sun and (B) in screen house

The Competition, Threats and Opportunities



The Competition, Threats and Opportunities

- ▶ Intercropping can diversify income and reduce risk
 - ▶ Hydroponic systems in open areas of estate will provide much needed income as cocoa reaches maturity. Cocoa as a tree crop, makes hydroponic systems more environmentally friendly
 - ▶ Staple tree crops such as breadfruit creates a sustained upper canopy. This also improves environmental services provided by estates such as maintaining biological corridors and improved carbon sequestration



Breadfruit (*Artocarpus altilis*) with fruit. A tree can produce between 50-100 fruits in a season



Way Forward – Modernize and increase profitability of Cocoa Industry

▶ What Basis

- ▶ Differentiation strategy based on unique flavor attributes of T&T cocoa or other GXE related secondary metabolites for producers to find niche markets and develop direct relationships with their customers

▶ Which Direction

- ▶ Satisfy current demand and Product development looking for new/diversified markets for T&T cocoa – health and wellness market

▶ How

- ▶ Internal development in partnership with intended customers for demand and supply of T&T cocoa and assistance from government incentives, CSR programs and international initiatives



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