

Financial Analysis of Small-Scale Artisanal Chocolate Processing in Ghana



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Introduction

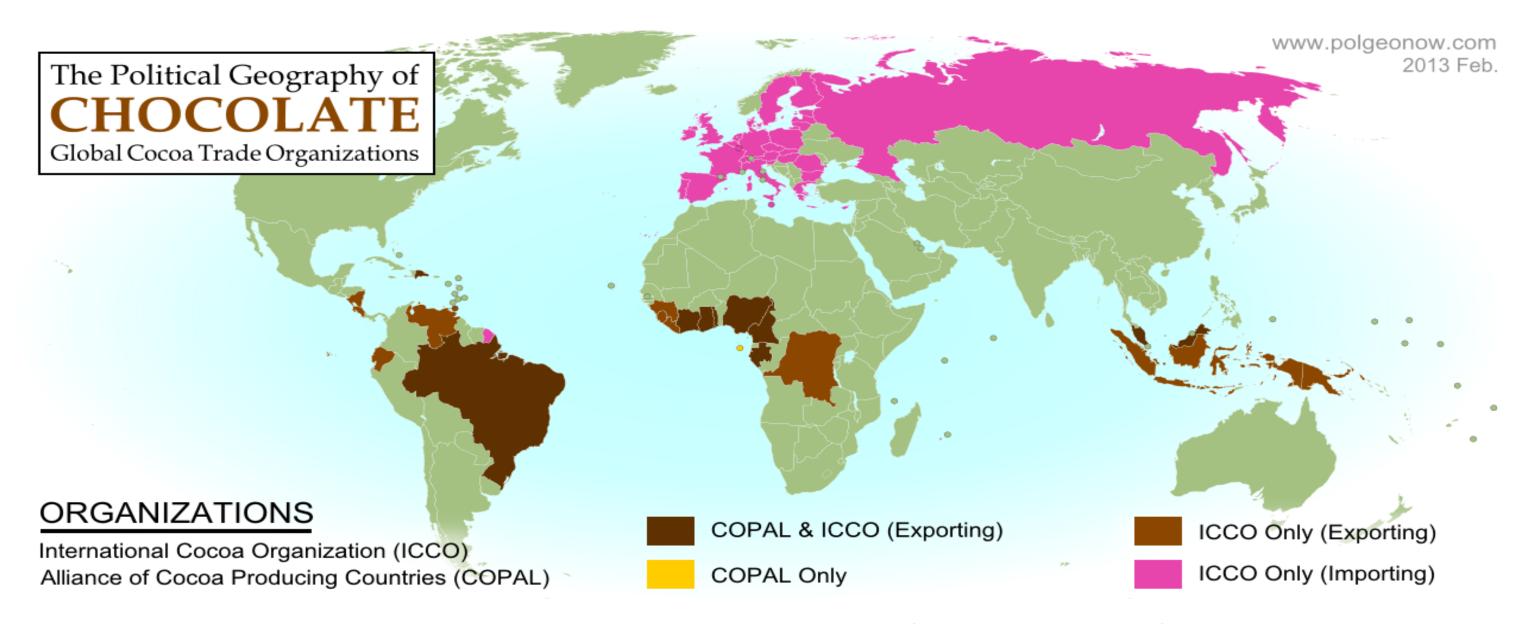


Figure 1: Political Geography of Chocolate map (www.polgeonow.com)

- The global chocolate industry is worth more than \$150 billion.
- West African economies receive less than \$6 billion of that total (Huellen and Abubakar, 2021).
- Ghana is the second largest exporter of cocoa but 80% are exported in raw form (COCOBOD, 2018).
- The government to processing 40 % Cocoa in the next five years (2021–2025) (Mabe et al.,2020).
- Thus, to address unemployment among cocoa-growing communities and to encourage youth entrepreneurship (Ichikowitz Family Foundation, 2020).

Objective

To evaluate the financial viability of Craft chocolate processing in Ghana.

Methodology

Approach: Case study.

• Area: Ga East District of the Greater Accra Region of Ghana.

• Data: Interview (Structured Questionnaire) One Firm.

• Time: October, 2021

Analytical procedure

Discounting

Net Present Value (NPV)

$$NPV = \sum_{t=1}^{n} \frac{(B_t - C_t)}{(1+r)^t}$$

Where C_t denotes cash outflow per year, t; b_t is cash inflow per year, t; n and r are number of years of the investment (1 to 5 years) and discount interest rate, respectively.

Benefit-Cost Ratio (BCR)

$$BCR = \frac{\sum_{t=1}^{t-n} \frac{Bt}{(1+r)^{t}}}{\sum_{t=1}^{t-n} \frac{Ct}{(1+r)^{t}}}$$

here Bt and Ct represent cash inflow and cash outflow per year, respectively, t; n denote the total number of years of the investment and r represents the rate of discount.

Internal Rate of Return (IRR)

$$IRR = LDR + (HDR - LDR) \frac{NPV^{LDR}}{NPV^{LDR} + NPV^{HDR}}$$

NPV is Net Present Value
HDR is Higher discount rate

LDR is Lower discount rate

Payback Period

 $Paybackperiod = \frac{Capital\ Investment\ or\ Cost\ of\ Project}{Annual\ CashFlow}$

Sensitivity Analysis

To examine the robustness of financial viability estimates to changes in factors that either affect cash inflow or cash outflows or both, and by extension NPV, BCR, IRR and payback..



Expected Output

- The initial capital and operating cost for small scale chocolate production will be identified.
- The financially viable of artisanal chocolate processing in Ghana will be revealed.

Conclusion

• The research intends to assess the feasibility of encouraging small scale production of chocolate especially for cocoa growing communities and young people as a panacea for unemployment and poverty reduction and to part-take in the chocolate value chain.





Reference

Ghana Cocoa Board (COCOBOD). The National Cocoa Consumption Campaign: All Hands on Deck; Ghana Cocoa Board (COCOBOD): Accra, Ghana, 2018.

Contact