

ECONOMIC COST-BENEFIT ANALYSIS OF RAINFOREST ALLIANCE CERTIFIED COCOA IN GHANA

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Ghana is well endowed with premium bulk cocoa and is strategically positioned to capture significant market shares for the growing demand in specialty cocoa products on the world market. Consumers' taste and preference for differentiated or 'specialty' cocoa based on environmental- and ethically certified cocoa products have been rising over the years. This study uses an ex-ante analytical approach to explore the potential for smallholder cocoa farmers in Ghana to develop niche markets for an environmentally and sustainably produced cocoa, namely; Rainforest Alliance Certified cocoa as an alternative to Ghanaian bulk cocoa. Using NPV, BCR and IRR economic decision criteria, the profitability or otherwise of introducing this rainforest alliance certified cocoa in Ghana is assessed. Rainforest Alliance certification requires farmers to shift from low or no shade Amazon production systems (i.e., <20 trees per ha) to medium shade Amazon production systems (70 shade trees distributed over a minimum of 12 species per ha) as well as other standards. In the base case scenario, results of the hypothetical high certified production system are compared with the current low input landrace cocoa and high input no shade cocoa systems. Under these conditions the certified production system and the low input landrace cocoa are essentially breakeven propositions while the high technology full sun system was moderately profitable. Sensitivity analysis of changes in FOB shares revealed that increasing the percentage of producer price from 70 to 85 percent of FOB dramatically increases the profitability of Rainforest Alliance certified cocoa at all varying FOB price levels when fertilizer price is subsidized. Profitability did however not change from the base model when fertilizer subsidies are removed by the government and the producer price increases to 85 percent of FOB.

Keywords: Cocoa biodiversity, Ex-ante Cost-Benefit Analysis, Rainforest Alliance Certification, Differentiated cocoa production