

Sustainable Cocoa Value Chain in the Eyes of Indigenous Wisdom – A Case Study

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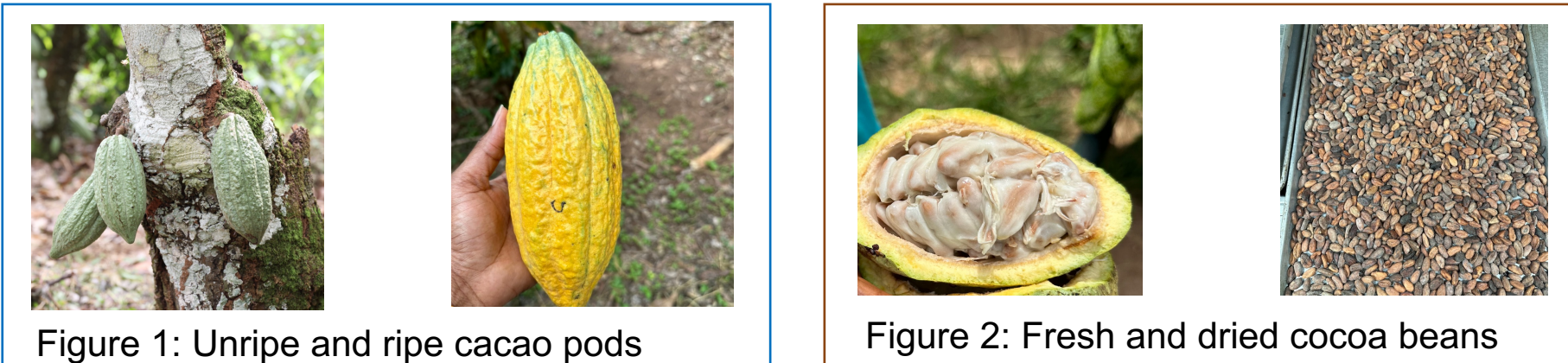
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ABSTRACT

Achieving a sustainable value chain requires collaborative efforts between cocoa farmers, chocolatiers, and chocolate companies, integrating indigenous wisdom with modern practices. This study explores the challenges and interests of cocoa farmers and chocolatiers in achieving a sustainable cocoa bean-to-bar practice, focusing on smallholder cocoa farmers and chocolate companies in Ondo, Nigeria, and chocolatiers in Montana, USA. The cocoa farmers, chocolatiers, and chocolate companies were interviewed using semistructured questionnaires. Farmers in Nigeria highlighted the seasonal timing of cocoa harvests, planting practices, fermentation processes, challenges in farming, government support, and the significance of cocoa farming to their families and communities. Challenges included physical strength requirements, climate impacts, disease management, and the need for more interest among youth in cocoa farming. Chocolatiers in the USA discussed company backgrounds, cocoa sourcing, production processes, challenges, innovation potentials, and consumer feedback. Challenges included financial constraints, equipment reliability issues, and the need for market adaptation. The study sheds light on the intricate dynamics of the cocoa value chain from the perspectives of indigenous knowledge from farmers and chocolatiers.

BACKGROUND

- Cocoa beans are seeds from the tree *Theobroma cacao* L., native to the Amazon and grown in tropical rainforests in Central and South America [1].
- Although cocoa originated in the Americas, 70% is grown in West Africa [2].



METHODS & RESULTS

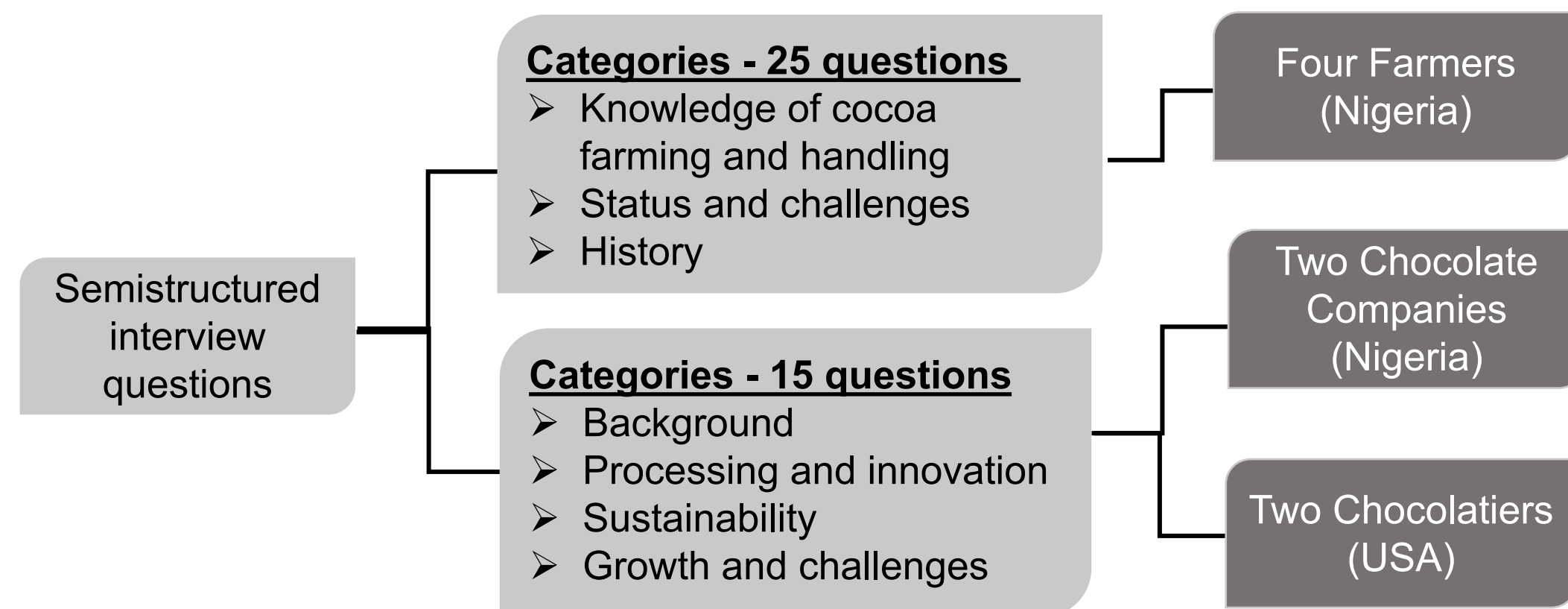


Figure 3: Interview question categories and research participants



Figure 4: Byproducts from cocoa beans & chocolate

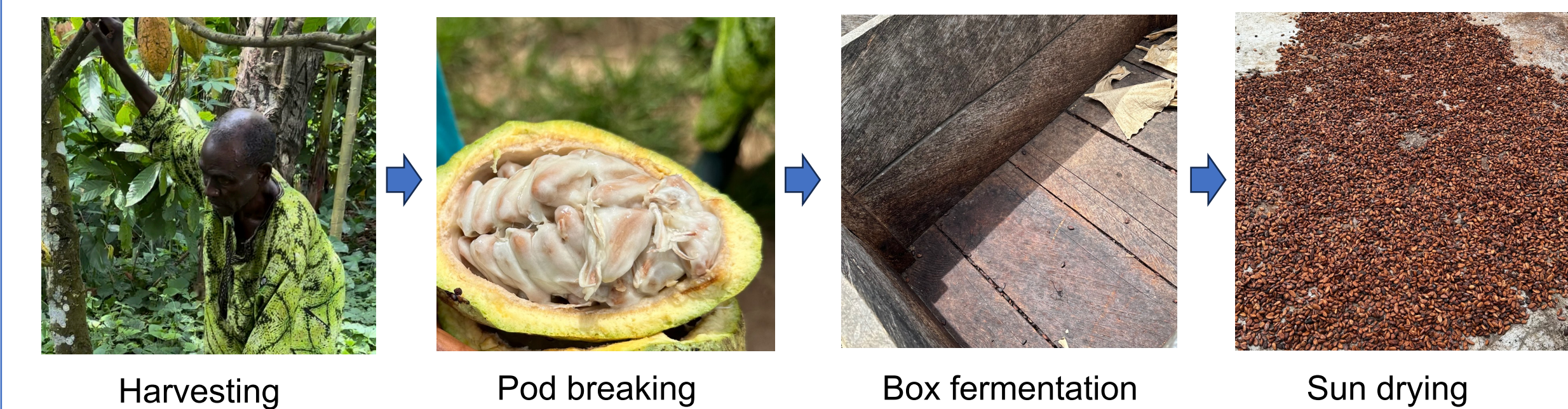
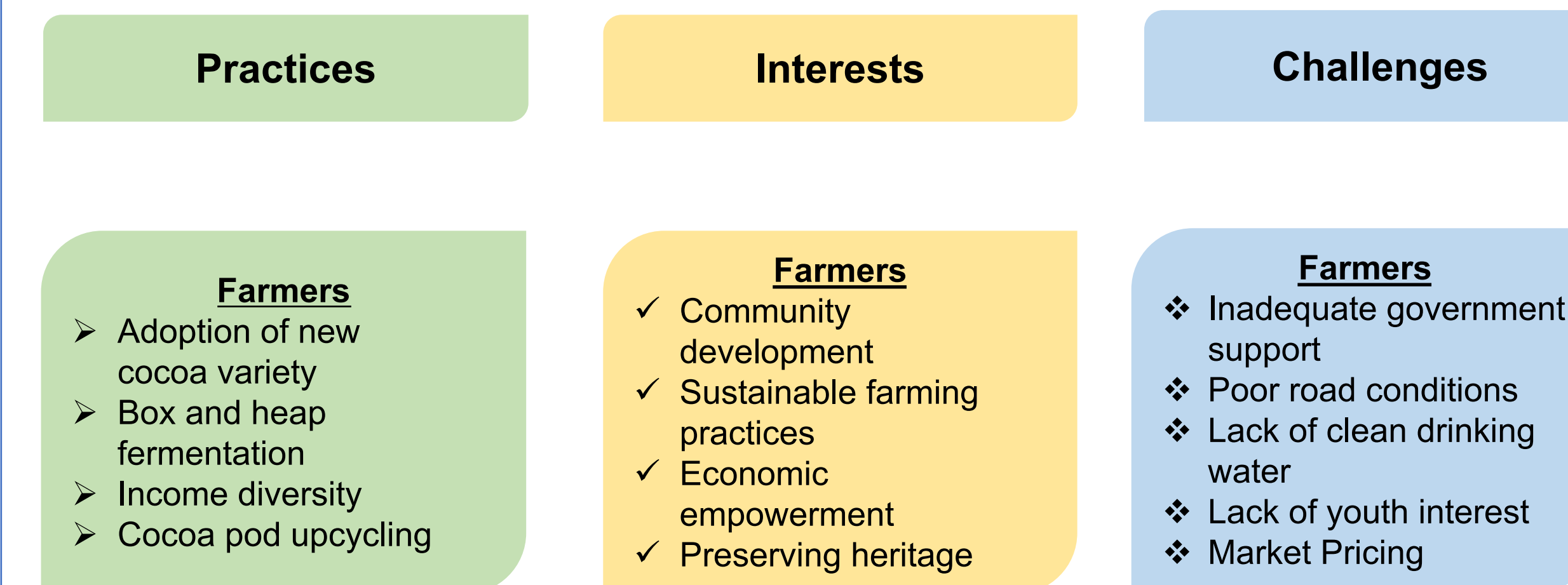


Figure 5: Farmers' cacao pods to cocoa beans process

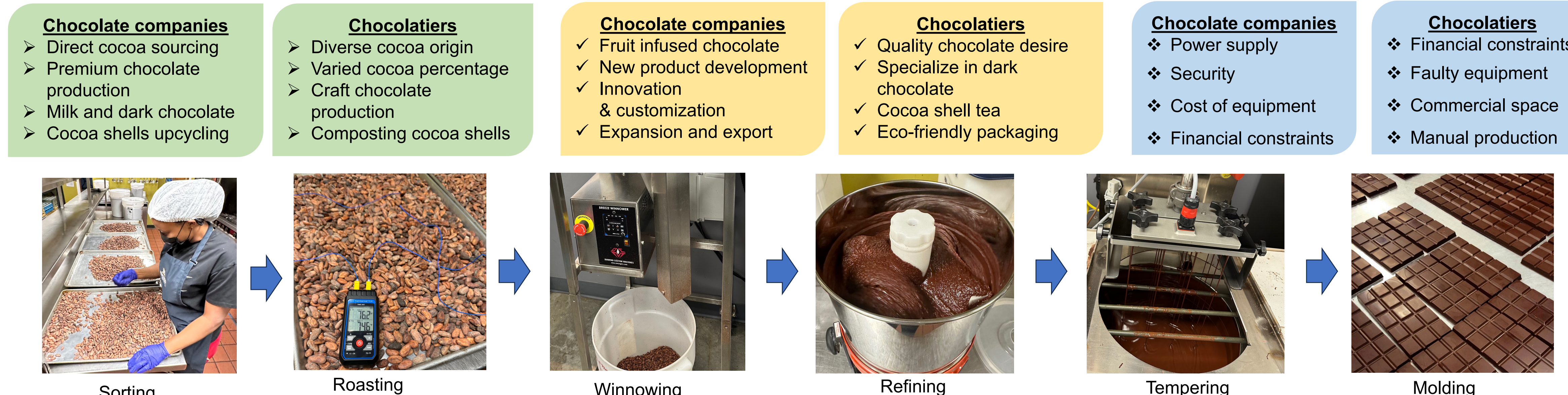


Figure 6: Chocolatiers and chocolate companies' cocoa beans to chocolate bars process

CONCLUSIONS

This research project reveals cocoa and chocolate's deep significance in Ondo and Montana, USA. It serves as the economic backbone, supporting livelihoods and generating export income. The sustainability of this traditional practice is further complicated by the reluctance of educated youth to continue cocoa farming, inadequate government support, and the influence of modern trends.

Table 1: Key sustainability themes identified

Theme	Farmers	Chocolate companies	Chocolatiers
Practices	Cocoa pod upcycling	Premium chocolate production	Diverse cocoa origin
Interests	Preserving cultural heritage	Expansion and export	Eco-friendly packaging
Challenges	Recruiting younger generations Cocoa pricing	Financial constraints Expensive and faulty equipment	

The findings contribute to the ongoing discourse on sustainable cocoa production and its implications for local communities and global chocolate industries. Further research and policy interventions are warranted to promote global inclusive and environmentally friendly cocoa value chains.

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