



Sacha Inchi and the Future of Alternative Development:

Market Access, Value Chains, and Smallholder Integration

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Executive Summary

This capstone project examines the challenge of illicit crop substitution in Putumayo, Colombia, through the case study of *sacha inchi*, a native seed with significant commercial, nutritional, and environmental potential. Despite alternative development efforts aimed at reducing coca cultivation, many alternatives have struggled to achieve sustainable results. The purpose of this study was to identify the factors limiting the expansion of *sacha inchi* production and to develop recommendations that could increase its attractiveness to farmers while supporting alternative development objectives.

The research was guided by the hypothesis that insufficient incentives prevent farmers from adopting *sacha inchi*. Three potential explanations were examined: limited market access, lower profitability compared to illicit crops, and weaknesses in the production process. The study combined multiple methods, including desk research, stakeholder interviews, market analysis, and cost-benefit analysis. The findings indicate that the primary obstacle to *sacha inchi* adoption is inadequate commercialization and market access. Farmers face uncertainty regarding demand, buyers, and long-term sales opportunities, reducing their willingness to invest in cultivation.

To address these challenges, the project proposes a strategy with three main components. First, farmers should receive technical assistance through training, improved cultivation practices, access to inputs, and strengthened cooperative support. Second, awareness efforts should increase recognition of *sacha inchi* among producers and distributors. Third, commercialization efforts should focus on expanding domestic market opportunities. Existing value-added products such as oils, snacks, and cereal bars provide immediate opportunities for market expansion. The international market development can be pursued once production capacity and supply have improved.

The project concludes that *sacha inchi* represents a promising alternative development crop for Putumayo. However, long-term success depends on creating reliable market opportunities, reducing commercialization risks, and strengthening farmer support, thereby contributing to a reduction of dependence on illicit economies.

Conclusion

This report examined the challenge of insufficient alternative development crop adoption. Through the case study of sachá inchi in Putumayo, Colombia, the following research question was explored:

What are the barriers limiting the success of sachá inchi as an alternative development crop in Putumayo? And what are the ways in which these can be addressed?

Through primary research and secondary research including stakeholder interviews, market analysis, and desk research, the project sought to identify the principal barriers. Additionally, recommendations were developed to strengthen the long-term adoption and viability of sachá inchi.

These findings support the central hypothesis: *H1 lack of incentives for sachá inchi cultivation limit successful crop adoption*. The research finds that these incentives are constraints related to market access, production conditions, and long-term support systems.

The first sub-hypothesis: *H1a Limited domestic and international market access of sachá inchi leads to less crop adoption*, was supported. Findings from stakeholder interviews, supported by desk research and market analysis suggest that limited market access remains a major constraint to the adoption of sachá inchi. The Bienestarina contract remains the primary procurement mechanism for sachá inchi, leaving farmers heavily dependent on a single buyer and vulnerable to fluctuations in demand. Without a diversified network of buyers there is a limited opportunity for commercialization and reduced incentives for farmers to expand production. Farmers prefer a reliable and predictable market; without predictability, they are reluctant to commit resources and time to cultivation.

The second sub-hypothesis: *H1b Sachá inchi is less attractive to farmers due to lower profitability, compared to illicit crops*, was inconclusive. Producers face challenges related to pricing and commercialization; however, the cost-benefit analysis (see [Section 4.6.4](#)) suggests that sachá inchi can generate competitive returns under the right market conditions and, in some cases, higher returns than coca cultivation. Current economic outcomes remain influenced by broader

commercialization constraints. Nevertheless, the findings do not support the conclusion that the crop itself lacks profitability and instead suggest that *sacha inchi* possesses significant economic potential when supported by appropriate market conditions. The limitations currently affecting low farmer returns stem from an extensive value chain process and little trickle down profitability to the farmers rather than from any inherent weakness in the crop itself. Therefore, *sacha inchi* itself is not less profitable than coca, however, it is unclear to what extent the current value chain in which it operates threatens its profitability for farmers.

The third sub-hypothesis, *H1c Weak production processes of sacha inchi reduce crop adoption*, was supported. Farmers identified several production challenges, including high infrastructure costs, high maintenance requirements, phytosanitary risks, and limited technical assistance including training, following the conclusion of the KOICA-UNODC project. These factors create obstacles for producers and increase the difficulty of cultivation and its costs. The findings indicate that production challenges and commercialization constraints are closely interconnected. Farmers emphasized that technical assistance, infrastructure, and production support are necessary to sustain cultivation, while reliable market opportunities provide the confidence to invest in overcoming those challenges. As a result, neither dimension can be addressed in isolation if *sacha inchi* is to become a viable alternative development crop.

Overall, the findings indicate that the long-term viability of *sacha inchi* as an alternative development crop depends on addressing the constraints that affect production, commercialization, and farmer incentives throughout the value chain. Farmers continue to face production-related challenges, including maintenance requirements, phytosanitary risks, and reduced access to technical assistance following the conclusion of the KOICA-UNODC project. In congruence, limited market diversification, low awareness of *sacha inchi*, and dependence on few buyers constrain commercialization opportunities. Together, these factors weaken incentives for farmers to expand cultivation and limit the long-term sustainability of alternative development efforts.

These conclusions should be interpreted in light of the methodological limitations discussed in [Section 3.3.1](#). These include holding remote interviews and being in another country which

threaten connection to stakeholders, the limited number of farmer interviews in Orito limit generalizability, and time constraints limit depth of research. Further research is also needed on two structural factors that emerged through the study, but were beyond its scope.

First, transportation infrastructure remains a significant challenge for the long-term viability of alternative development initiatives in Putumayo. Stakeholders identified poor road conditions, geographic isolation, political exclusion and high transportation costs. However, these structural constraints are not within the scope of the project and cannot be addressed through the proposed interventions, which focus on commercialization, awareness, and technical assistance. Future research should examine how transportation costs influence farmer decision-making and the comparative attractiveness of illicit crops in Putumayo.

Second, the role of armed conflict and insecurity should be investigated further. Due to time constraints and resource limitations, the project was unable to explore this topic in great depth. While many farmers did not identify security concerns as a major obstacle to cultivation in Putumayo, reports from organizations such as Human Rights Watch (2025) indicate that armed groups are prevalent and continue to exert influence in Putumayo with violence and coercion. The discrepancy may reflect security improvements compared to previous periods of the conflict, differences across municipalities, or it may be due to the fear and sensitivity of discussing security conditions and illicit economies during interviews. Understanding the interaction between territorial control and agricultural commercialization would strengthen implementation strategies for sustainable crop substitution.

Based on the findings, the project proposes an alternative development initiative centered on technical assistance, farmer capacity-building, awareness generation, and market development. The proposed intervention seeks to strengthen production systems while simultaneously expanding commercialization opportunities through institutional partnerships, business-to-business engagement, and buyer diversification. By addressing both supply and demand side constraints, the project aims to create stronger incentives for farmers to adopt and expand *sacha inchi* cultivation.