## Peru TSA on cocoa and palm oil

Status: Final review

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Implementing partners: The Ministry of the Environment (MINAM), Ministry of Agriculture (MINAGRI), Ministry of Environment (MINAM), private sector, local producers' associations and The Wolfs Company. analyzed in the period 2020-2030.

In Peru, the increasing demand for agricultural and livestock products (including cocoa and oil palm) is considered the main driving force behind the deforestation of 90% of the Amazonian forests (MINAM, 2016). Recent analyses foresee expansion above 230,000 ha and 100,00 ha of cocoa and oil palm by 2030, respectively.

The TSA's objective is to evaluate the economic and financial impact of adopting profitable business models of deforestation-free commodities, cocoa, and oil palm.

The TSA's preliminary findings indicate that shifting cocoa production to the SEM scenario would be more attractive for private investments since production systems under SEM maintain higher profitability throughout the evaluated 10-year horizon (2020-2030).

The total investments (years 0 to 10) amount to approximately 269 million Peruvian Soles (PS) with an aggregated net earnings estimated at nearly 76 million PS.

The cocoa SEM model allows meeting the deforestation objectives and the increase in yield established in the Regional Development strategies. The gradual transition to the SEM scenario by 2030 also maintains the projected production demand for BAU 2030 at 206,037 tons. Likewise, the SEM model would enable a reduction of CO2 emissions of approximately 8 million tons, which intrinsically leads to the conservation of biological diversity and a greater production's resilience to climate change. The social benefits of the transition on a national scale are estimated at 11,050,122 PS in wages, with a nominal value of 375,881,660 PS.

In the oil palm sector, the average annual return for SEM production systems could be up to 25% above their opportunity cost (15.2%). Directing SEM production to degraded areas (instead of deforesting new places) is the optimal production system since it presents higher profitability of 28% and a return of investment period of fewer than six years.

The cost for SEM's transition is estimated at 1,900 PS per ha/year at the farm level. To amortize this investment, the palm grower should have at least 12 productive hectares so that this investment represents 25% of its net profits. The investments necessary to shift to SEM requires an average increase of 34% in the producers' investment per hectare over ten years. Based on these findings, the TSA presents specific policy and investment recommendations to promote the shift from BAU to SEM.

