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“Can agroecological farming feed the world?
Farmers’ and academia’s views”

A sustainable alternative for the chiquitano forest in bolivia: the Cusi palm (*Attalea speciosa* Mart.)

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Abstract

Bolivia, one of the 16 megadiverse countries of the world which safeguard the habitat of 70 % of the known species, suffered multiple wildfires in the Chiquitano forest, which is considered a neotropical seasonal dry forest, between 2019 and 2021. It implies a total burned area of more than 3,000,000 hectares. Furthermore, the land use in the region is impacting the state of conservation of biodiversity and its ecosystems. Particularly in the community of San Jose de Campamento in the municipality of San Ignacio de Velasco, where terrestrial ecosystems are decreasing because the constant conversions of forests areas into agricultural and livestock land. This area is characterised by the abundance of some Non-Wood Forest Products (NWFPs) that involves all goods of biological origin other than wood, derived from forests, other wooded land, and trees outside forests. One of the most relevant NWFPs of the region is Cusi palm (*Attalea speciosa* Mart.), a native species which has multiple uses and applications. For example, the oil from its seeds is one of the most appreciated products in the pharmaceutical and beauty sector for its multiple physicochemical properties.

Based on these critical facts, the main purpose of this research is to analyse the potential of the Cusi palm as NWFP as a sustainable alternative for the Chiquitano Forest. To explore the perception of relevant stakeholders, the following specific objectives will be addressed in a three-stage-approach:

In the first stage, this research co-constructs the productive potential of the Chiquitano Forest with focus on the sustainable development of the Cusi palm, based in the knowledge of the most evident stakeholders.

Secondly, it involves an integrated discussion based on the analysis of the social and ecological factors that affect the potential for sustainability of the Cusi palm as a NWFP.

Finally, it implies the proposal of a schematic sustainable production process to produce Cusi palm, proposing holistic and long-term solutions.

In this way, the sustainable management of the Cusi palm adopting an agroecological approach could be a contribution to decrease deforestation, preserve biodiversity and promote management actions that are ecologically sound, economically viable, and socially acceptable.

Keywords: Agroecology, biodiversity, Bolivia, Cusi palm, noon-wood forest products, sustainable development