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Sustainability in Small Ruminants Systems: Integrated Assessment in an Indigenous Community of La Guajira, Colombia

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Abstract

In Colombia the Tropical Dry Forest (TDF) is one of the ecosystems most affected by deforestation and the expansion of livestock farming. Currently, only 720.000 hectares of the 8.8 million hectares of this type of forest remain today. Given the depletion of the TDF resources, it is essential to design sustainable land use strategies in communities that have a direct influence on these remnants. One of these communities are the Wayuu indigenous people in the area of influence of the Macuira National Natural Park in the Upper Guajira, whose main productive activity is the free-grazing of small ruminants (sheep and goats). The lack of grazing management causes a negative impact on the natural values conservation, threatens natural regeneration processes, contributes to soil compaction and erosion, and pollutes water sources. Therefore, to promote sustainable systems for small ruminants, The Colombian Agricultural Research Corporation –Agrosavia– designed a silvopastoral arrangement with native forage species of the TDF for the feeding of sheep and goats, taking into account the traditional knowledge of the indigenous communities, and fostering agroecological techniques.

This study aimed to do an ex-ante impact assessment of these silvopastoral arrangements. The integrated assessment was done using SCALA-PB tool among different stakeholders of the project. SCALA-PB is a standardised survey questionnaire compounded of a total of nine different steps with multiple questions related to sustainability, climate change mitigation, adaptive capacities, peacebuilding and scaling-up potential. The results showed that the major constraints for scaling up silvopastoral arrangements in these kind of indigenous communities were the economic conditions at the local/regional level, since there is no infrastructure such as access to roads, irrigation, electricity and tap water available, a lack of support for the spread of this kind of initiatives by other economic actors, a high level of financial capital (initial and maintenance costs) for the implementation is required. Finally, it can be seen that SCALA-PB is a useful tool to do a sustainability impact assessment, even when markets are not the main reason to implement projects, as it is the case of silvopastoral systems for small ruminants in indigenous communities.

Keywords: Ex-ante impact assessment, Goat and sheep farming, Indigenous people, Scaling up, Silvopastoral arrangements

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