



Community Forestry Enterprises as a Model for Sustainable Forest Development: The Case Of The "Baja Tarahumara" in Chihuahua, Mexico

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Context and Challenges of the Forestry Sector

In the context of economic globalization, the competitiveness of timber products faces significant challenges due to market liberalization and dependence on imports. Mexico, with 72% of its territory suitable for forestry, has sought institutional and legal avenues to improve the sector's competitiveness under sustainability criteria. Particularly in the state of Chihuahua, the second largest timber producer in Mexico, there is a critical gap in the sawmill industry, where actual operations are only at 56% of their potential. Specifically, the ejidos of Segorachi, Cerocahui, and Porochi, located in the municipality of Urique, an area of high marginalization, exemplify the problems faced by primary producers: they sell standing timber and logs with low profitability, which negatively impacts their sustainable rural development [1-3].

The Intervention Model: Horizontal Integration and Business Plan

As an alternative, the design of a Forestry Business Plan and the establishment of a Community Forestry Enterprise (EFC) under the legal structure of a Rural Production Society

(Baja Tarahumara Forestry Production Chain, S.P.R.) were promoted [4-9]. This initiative was based on a horizontal integration model to leverage economies of scale and improve sales conditions. The implementation process included:

- **Situational Diagnosis:** Evaluation of the geographic, social, and economic characteristics of the ejidos.
- **Participatory Strategic Planning:** Definition of a shared vision using the participatory methodology of the "Search Conference"[10].
- **Technical-Financial Design:** Integration of management, extraction, processing, and marketing plans to minimize risks and uncertainty.
- **Legal Formalization:** Establishment of the rural production cooperative to directly manage the primary processing and marketing of sawn timber.

Operationality and Financial Viability

The operational scheme stipulated that the three ejidos would contribute their logs to the Cerocahui sawmill. The Cerocahui ejido would receive payment for the processing service, while the combined volume would be marketed to access more favorable markets. From a financial perspective, the project showed high profitability: the Internal Rate of Return (IRR) analysis for the Cerocahui sawmill yielded 43%, exceeding the required discount rate of 20%. This margin is based on the added value generated by processing the raw materials.



Multidimensional Impacts for Sustainable Forest Development

The consolidation of this Forest Production Chain included comprehensive benefits:

- Social: Strengthening of social capital through training and job creation.
- Economic: Increased profits for ejidos (communal landholdings) from the sale of value-added products (boards, beams, sleepers).
- Technological: Improved efficiency in extraction and processing, reducing waste.
- Environmental: Direct economic incentive for producers to care for their forests through sustainable forest management [11,12].

Conclusion

The case of the “Baja Tarahumara” Forest Production Chain, S.P.R. showed that community-based partnerships are an effective tool for reversing the loss of competitiveness. This model not only improves the efficiency of the production chain but can also guarantee the sustainability of forest resources, transforming communities into resilient business actors. Additionally, this model can be replicated at the state and national levels [13-15].

References

1. Aregional (2005) Systemic Competitiveness Report of the State of Chihuahua and its Regions. Aregional, Mexico.
2. Bray DB, Peláez EJ (2021) Mexico's Community Forest Enterprises: Success on the Commons and the Seeds of a Good Anthropocene. University of Arizona Press, USA.
3. Carías Vega D (2019) Community-based forestry and community forestry enterprises in Quintana Roo, Mexico and Petén, Guatemala: how have policies, history, and culture shaped their trajectories? *J Sustain For* 38(7): 651-669.
4. Chamber of Deputies of the H Congress of the Union (2012) Agrarian Law 1992. Official Gazette of the Federation, Mexico.
5. General Directorate of Forest and Soil Management SEMARNAT (2022) Statistical Yearbook of Forest Production 2021. SEMARNAT, Mexico.
6. FAO (2020) National Report on Sawn Timber Production and Trade in Mexico. FAO, Italy.
7. Flores VR, Serrano C, Palacio VH, Chapela G (2007) Analysis of the Sawn Timber Industry in Mexico.
8. Government of the State of Chihuahua, Luján C, Olivas JM, Vázquez S (2012) Sustainable Forestry Development Program of the State of Chihuahua. Government of the State of Chihuahua, Mexico.
9. Hernández TM (2020) Radiografía del manejo forestal comunitario en México: Un modelo bajo presión. Mongabay Series, Mexico.
10. Luján AC, Olivas JM, González HG, Gómez O, Cuautle MA, et al. (2006) Plan Estratégico Participativo para el Desarrollo Forestal Sustentable en el Estado de Chihuahua. CONACYT-CONAFOR, Universidad Autónoma de Chihuahua, Mexico.
11. Merino L (2020) Community forest management in Mexico: A viable strategy for entrepreneurial development and stewardship for conservation. FAO, Italy.
12. Merino PL, Rodríguez J, Ortiz G, García A (2008) Estudio estratégico sobre el sector forestal mexicano. Consejo Civil Mexicano para la Silvicultura Sostenible AC, Mexico.
13. Solís-Mendoza LE, Sánchez-Nupan LO, Castro-Torres RB, Mora de la Mora GD, et al. (2024) Scaling up in community forest enterprises: the case of central Mexico. *Socio Ecol Pract Res* 6(347-366).
14. The Guardian (2024) Fewer wildfires, great biodiversity: what is the secret to the success of Mexico's forests? The Guardian, UK.
15. Torres Rojo JM, Moreno Sánchez R, Mendoza Briseño MA (2016) Sustainable forest management in Mexico. *Curr For Rep* 2: 93-105.