

CARBON FEASIBILITY STUDIES IN ZAMBIA



Clients: SNV, Impuls Africa, 2023



Sectors: Agriculture, Forestry, Household Energy



Service: Carbon Markets

The Symmetry team undertook carbon feasibility studies in Zambia, exploring opportunities for agro-forestry in Eastern Province and a REDD+ project in Western Province. Some of the key takeaways are described below.

Agro-forestry in Eastern Province

- There is growing interest by farmers in agroforestry systems in response to climate change, fodder needs and market opportunities for fruit and timber trees. Based on our financial models, farmers could make more income through agroforestry, in the absence of carbon payments.
- A major barrier is upfront costs, and the willingness of farmers to invest their own time to make the changes. To motivate change, farmers need to be able to secure the benefits from the tree crops with minimum risk and cost. To encourage adoption good quality seedlings, off take agreements and access to markets should be provided.
- Given the low carbon revenue per hectare, these payments will unlikely trigger change. There is a need for other market forces to encourage farmers to plant trees. To incentivize the switch a key risk mitigation element is the presence of buyers/off-takers for the products.

REDD+ in Western Province

- Deforestation is a significant issue in Zambia's Western Province, impacting local ecosystems, causing reduced biodiversity, increased soil erosion, and diminished water resources.
- Based on a land use change assessment, covering over one million hectares in Western province multiple carbon projects types (REDD+, improved agriculture practices and improved cookstoves) were identified.
- The proposed projects would create a protected buffer zone to the east and north of Sioma Ngwezi National Park, supporting forest protection, agro-forestry, enhanced ecotourism investment potential, providing sustainable livelihoods for communities in the target area.