An in-depth exploration of Huambo's Chipipa commune socioeconomic identity

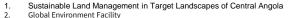
A socioeconomic study is an important analytical tool for understanding and comprehending the interaction between social and economic aspects within a specific community, region, or country. Social inequalities, poverty, climate change resulting from the irrational management of natural resources, migrations, among others, have significantly affected the socioeconomic conditions of the Chipipa community in the Huambo municipality of Angola.

In this context, FAO, through the ¹ZAEC project, with funding from the ²GEF, and the participation of the Angolan government through the Ministry of Environment and the Ministry of Agriculture, conducted a case study linked to the socioeconomic characterization of the Ngunga community. Our study aims primarily to characterize the social and economic aspects of the population residing in the Ngunga area, to identify potential challenges and opportunities for sustainable development and improvement in people's quality of life, as well as to identify factors contributing to soil degradation.

This socioeconomic study will serve as a valuable tool to analyze and propose solutions to the pressing issues emerging within the Chipipa community by providing a comprehensive and detailed insight into living conditions, work patterns, family structures, public policies, economic indicators, and cultural characteristics of this population. Additionally, it aims to strengthen the agricultural sector by enhancing financial capacity to promote agricultural income.

DESCRIPTION

Through the ZAEC project in its agroeconomic component, FAO is implementing a set of actions to reverse the negative trends of soil degradation in the Ngunga, Lomanda I, and II areas, within the municipality of Huambo, Chipipa commune, Huambo province, by developing the capacity of local stakeholders. This region has an estimated population of 1,409 with 113 in Ngunga, 905 in Lomanda I, and 391 in Lomanda II. For the sample size was defined inclusion and exclusion criteria as well as non-probabilistic sampling, thus fixing the sample size at 194 individuals, distributed as follows: Ngunga (47), Lomanda I (89), and Lomanda II (58).



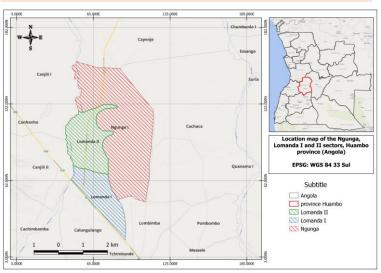
^{3.} The affected environment resource after the impact occurs





JUSTIFICATION

The capacity for production has become a highly significant element when considering the type of agriculture practiced in rural communities. In Ngunga, Lomanda I, and II, the lack of technical assistance, access to inputs, credit, and other sources of funding for agriculture has led to serious issues in both plant and animal production systems, thereby increasing the vulnerability of farmers. Consequently, they struggle to achieve high yields or access advanced production techniques that could improve their harvests.



Source: Bing Maps ©2024 Microsoft. Modified by Sérgio Kussumua.

A diagnosis was conducted using interviews with the aim of building a database of farmers containing key elements such as: livelihood capitals, Driving forces-Pressures-State-Impact-Responses (DPSIR), information related to family structure, and characterization of the family's livestock and crop production to assess socioeconomic conditions using the SPA methodology (Agricultural and Animal Production Systems).

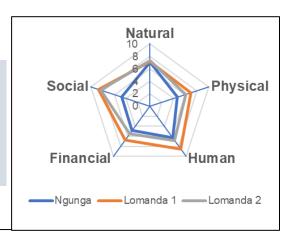
Finally, to evaluate land degradation costs, the Markandya, 2019 methodology was used, which relies on the cost of replacing services provided by the affected environment resource after the impact occurs (3 RC), or the cost of reducing or preventing the impact before it occurs (4 AE or 5 PE). In this regard, variables such as standardized crop yields, market prices of main products, standard cost per hectare for each crop, and local yield per crop were used.

The cost of reducing

Preventing the impact before it occurs

FINDINGS

- The main sustainable land management practices used include fallowing, contour plowing, soil coverage, and in some cases, crop rotation.
- Chemical fertilizers continue to be the most used for crop production.
- In terms of differentiation of livelihood capitals, financial capital had the lowest score, indicating the absence of funding.



Analysis DPSIR

The Driving Forces-Pressures-State-Impact-Responses (DPSIR) analysis demonstrated a strong demand for forest products for survival, increased poverty, and ultimately, low soil fertility.

Driving Force

- 1. Expansion of cultivation areas
- 2. Production of coal to meet the demand of urban centers

Locally existing good practices

- Selective felling of trees maintaining the species Ussombo, olohengo (Anisophyllea boehmii. Engl), Akulakula (Syzygium guineense), lombula (Upaca kirkiriana Mul.Arg), at the headwaters of the spring of the Ngunga river
- Existence of herbaceous and arboreal mulch at the head of the spring.

force

Driving

Pressure

Pressures

- 1. Recurrent drought in the last 5 years
- 2. Increased demand for timber and non-timber forest products
- 3. Increased poverty
- 4. Loss of soil chemical fertility

State

State

- 1. Uncovered soil 6%
- 2. Soil with plant remains

Answers

- Soil with grassy to nongrassy herbaceous cover 34%
- 4. Soil with bush 18%
- 5. Soil with trees 13%

Impacts inside the forest

1. Deforestation

Impacts

- Low vegetation cover regeneration
- Evidence of degradation by soil surface runoff
- Reduction of biodiversity
- 5. Pressure for the use of other native species

The main findings of the socioeconomic characterization conducted in the Chipipa commune, Huambo municipality, using the SPA methodology (Agricultural and Animal Production System) are presented in a summarized manner:

- ✓ The average family size is **6 children** per family
- ✓ Most inhabitants in these sectors mainly raise chickens and goats
- ✓ Regarding land access, most inhabitants have their own land, although they do not possess a land title
- ✓ Approximately **70% of the population** in these sectors own their homes
- ✓ The primary factor of degradation is declining fertility, linked to low productivity, erosion, and compaction
- ✓ The estimated cost for complete restoration per hectare was approximately **USD 6561**
- ✓ The average income of families in the three sectors of Chipipa is well below the national minimum wage of USD 39,75, standing at USD 8,4 monthly





Family size is 6 children/family



Restauration cost/hectare **USD 6561**



70% of the sector population own their homes



Most inhabitants in these sectors mainly raise chickens and goats

Final considerations

In general, the socioeconomic characterization allowed to assess the type of organization within this community in terms of agricultural and animal production. It also helped identify lines of funding to improve production systems and, equally important, address the challenges of the ZAEC project.