1. Introduction

- 70% of population In Mozambique live in rural areas (Gelcer et al., 2018) and depend directly on ecosystem services for their livelihoods (Smith et al., 2019).
- Almost 1/3 of population suffer from chronic food insecurity and 43% of children under 5 are stunted (WFP, 2020).
- Subsistence agriculture can play an important role in reducing the vulnerability of food-insecure households (GdM, 2005; Aliber and Hart, 2009).
- Nonetheless, studies on subsistence agriculture have indicated reduced income level and seasonal fluctuations in food consumption among households (Handa and May, 2006; Bozzoli and Brück, 2009).
- The research question is: can subsistence farming help households to achieve some level of food security?

2. Methods

- The study was conducted through interviews with 300 randomly selected farming households in two of the three administrative areas in Gurue District, Central Mozambique.
- We collected primary data on household socio-economic characteristics, food consumption patterns throughout the year and the coping mechanisms used in response to food insecurity.
- We employed descriptive statistics (mean, percentage and frequency) to analyze the data.

3. Results

Socio-economic characteristics

Table 1: Households Socio-economic characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of the household head</td>
<td>33</td>
<td>12.80</td>
</tr>
<tr>
<td>Education of the household head</td>
<td>5</td>
<td>2.70</td>
</tr>
<tr>
<td>Size of the household</td>
<td>6</td>
<td>1.10</td>
</tr>
<tr>
<td>Size of Land (ha)</td>
<td>1.4</td>
<td>1.20</td>
</tr>
<tr>
<td>Percentage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male-headed households (%)</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>Female-headed households (%)</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Non-farm income (%)</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

- On average, the respondents were about 33 years old with an average level of education of 5 years of primary school.
- The average size of land was 1.4 ha.
- The percentage of households with a non-farm income was 16%.

Food Access throughout the year

- The level of food insecurity decreases during the harvest season and increases during the growing season.

Coping mechanism to food insecurity

- In the study site farmers use crop diversity and food preservation to fight against food insecurity.
- They produce up to 6 crops under intercropping.
- The crop calendar allows the household to harvest different crops in different periods, which also allows the access of food for longer period.
- But, there is a seasonal variability in terms of the food species consumed throughout the year.
- The preservation of agricultural products helps to reduce post-harvest losses, while allowing food to be available for a longer period.
- The households mainly use open sun drying for food preservation. However food can get contaminated due to mixing of stones, dust, and other foreign materials.
- Preservation methods that use sustainable sources of energy, with a potential to address the limitations of open sun drying are necessary.

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