**USING CASSAVA (Manihot esculenta) VALUE CHAIN PRODUCTS IN FILLING GAPS FOR FOOD SECURITY IN NIGERIA**

*Agom, D. I., Enyenihi, E. A. and Benson, D. N*

1. Akwa Ibom State University, Obia Akpa Campus, Akwa Ibom State, Nigeria.
2. University of Uyo, Uyo, Akwa Ibom State, Nigeria.

*Correspondence: agom@yahoo.com; +2348023649664*

---

**Introduction**

Cassava (*Manihot esculenta*) is one of the most popular crops grown in Nigeria today and can be said to be the most widely consumed of all crops in the country. The crop has a character of being able to survive and do well even in marginal soils. Furthermore, the products from the cassava plant are very many and varied and used in various ways for various things and foods in the country. Cassava therefore has a long value chain and the value chain products serve to fill the food security gaps in South-South Nigeria, a region with high prevalence of poverty, hunger, malnutrition and general food insecurity.

**Methodology**

Primary data were collected from 240 respondents using a set of well-structured questionnaires which were complemented by personal interview and observation to ensure accuracy and consistency of data used. Data were analysed using descriptive statistics, rankings and regression analysis.

**Results and Discussion**

Results of the analysis showed that cassava is very widely produced, accepted and consumed in various forms in the area.

**Table 1: The common products from cassava value chain including their values**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Product</th>
<th>Value from one ton</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Garri</td>
<td>25,000 – 30,000</td>
<td>Tuber chaff</td>
</tr>
<tr>
<td>2</td>
<td>Starch</td>
<td>20,000 – 35,000</td>
<td>Tuber liquid extract</td>
</tr>
<tr>
<td>3</td>
<td>Tapioca</td>
<td>5,000 – 10,000</td>
<td>Boiled tuber</td>
</tr>
<tr>
<td>4</td>
<td>Abacha</td>
<td>15,000 – 20,000</td>
<td>Tuber chaff around</td>
</tr>
<tr>
<td>5</td>
<td>Ethanol</td>
<td>20,000 – 30,000</td>
<td>Processed tuber extract</td>
</tr>
<tr>
<td>6</td>
<td>Edible starch</td>
<td>20,000 – 25,000</td>
<td>Tuber liquid extract</td>
</tr>
<tr>
<td>7</td>
<td>Boiled cassava tubers</td>
<td>2,000 – 20,000</td>
<td>Tuber</td>
</tr>
<tr>
<td>8</td>
<td>Roasted cassava tubers</td>
<td>5,000 – 10,000</td>
<td>Tuber</td>
</tr>
<tr>
<td>9</td>
<td>Leaves used for soup</td>
<td>5,000 – 10,000</td>
<td>Leaves</td>
</tr>
<tr>
<td>10</td>
<td>Cassava flour</td>
<td>15,000 – 40,000</td>
<td>Tuber ground and processed</td>
</tr>
</tbody>
</table>

The regression result revealed that farming experience, farm size and fertilizer were significant in determining income (P<0.01) in the study area.

**Recommendations and Conclusion**

- The study recommends farmers to process more of their cassava to higher income yielding products.
- The factors that are critical to output should be enhanced for better outcomes, notably increasing production scale, making fertilizer available and improving road and transport infrastructure.
- Research and selection needs to be continued on improving cassava yield and processing speed and efficiency.

Cassava value-chain products have the potential to improve not only the household food security but also making impact nationally and globally.

---

**Challenges in Cassava production**

- Transportation of the bulky product was a challenge affecting 62.9% of respondents
- Land for farm expansion affected 57% of respondents
- Access to improve varieties was a problem to 46% of respondents
- Labour availability at peak periods was a problem to 41% of respondents
- Difficulty in processing of product using crude local methods
- Low shelve life of tubers once harvested
- Wastages due to low conversion rates
- Poor pricing of products in the on season

**Strengths of Cassava**

- Better yield than other crops on marginal soils
- High acceptance by people
- High consumption by the people
- All year round production
- Multiple forms of processing
- Many by-products from processing
- Common in every community and household