



# Improving opportunities for women in the value chains of underutilized species in Oyo State, Nigeria

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# Outline

**Introduction**

**Methods**

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**Conclusion/Policy Implications**

# Introduction

- Resurgence of interest in **value added** agriculture
- Motivation to enhance or stabilize farm-household incomes, creating rural employment and economic development
- NUS has the potential to contribute significantly to the livelihood of rural residents, migrants, urban residents, as well as national and global economies
- NUS of interest in the study are *Parkia biglobosa* and *Vitellaria paradoxa*

## Why *Parkia biglobosa* and *Vitellaria paradoxa*?

- recognition of contribution to fulfill basic needs of people, household economics, food security and conservation of natural resources (Joshi and Joshi, 2009).
- common species of the parkland agroforestry system
- provide essential dietary supplements especially during lean agricultural production periods or times of emergency.

# *Parkia biglobosa*

- **Taxonomy**
  - Family: Leguminosae
  - Common name: African locust bean
- **Habitat**
  - Semi-arid
  - 0-600 m altitude
  - 500-1400 mm mean annual rainfall
  - 26°C mean annual temperature



## *Parkia biglobosa*: Importance

- roots, barks, leaves, stems, flowers, fruits and seeds are all used medicinally to treat a range of ailments (Sacande and Clethero, 2007)
- pulp contains higher cellulose and sucrose but less ascorbic acid than the cotyledons and also contains simple sugars except maltose (Alabi et.al. 2005)
- sweet yellow pulp contains 60% sugar when ripe

# *Parkia biglobosa*: Importance

- seeds contain 30% protein as well as vitamins and minerals (Sacande and Clethero, 2007)
- fermented seeds for cooking stew and soup
- fruit pods are used to produce an insecticide powder for treating crops
- provide income and employment opportunities to rural and urban households (Tee et. al. 2009).

# *Vitellaria paradoxa*

- **Taxonomy**
  - Family: Sapotaceae
  - Common name: Shea tree
- **Habitat**
  - Semi-arid
  - 0-600 m altitude
  - 400-1800 mm rainfall mm  
mean annual rainfall
  - 26°C mean annual  
temperature





## *Vitellaria paradoxa: Importance*

- almost all parts of the tree have some practical use
  - fleshy pulp is sweet when matured
  - edible fruit can be eaten raw when over-ripe
  - bark, leaves and roots are for medicinal use
  - kernel is whitish and rich in fats (45-55%) from which is produced shea butter
  - vegetable oil is used in soap-making, cooking and skin and hair care
- prospects in maintaining the ecological balance and soil fertility for agricultural system

## *Vitellaria paradoxa: Importance*

- wood is heavy, strong and termite resistant.
- shell of the nuts can repel mosquitoes
- considerably contribute to wealth
- provides good fuel wood for household energy use

# Why women in NUS value chain?

- Women are the primary users of forests
- Women constitute 70% of the poor worldwide (FAO 2007)
- Involvement of women will help them to:
  - **achieve social responsibility aims**
  - **deliver commercial benefits by improving productivity and quality**
  - **future viability of key NUS**



## *Objective of the study*

To assess roles played by women and the benefits they obtain from their involvement and challenges faced in the value chains of *Parkia biglobosa* and *Vitellaria paradoxa*



*Parkia biglobosa* (Fermented locust bean)



*Vitellaria paradoxa* (shea butter)

# Study Area: Derived savanna zone, Oyo State, Nigeria

Longitude 2.5° E and 5° E

Latitude 7° N and 19° N

Land Area : 27,107.5 km<sup>2</sup>

Population: Approx.

5.6million

Gross State Product (GSP):

Approx. \$1.7b





# Sampling Procedure

Derived savanna zone of Oyo State, Nigeria

3 LGAs were purposively selected from the study area

5 Communities/LGA were purposively selected

10 women that are involved in value chain of the selected NUS were selected and interviewed in each community

# Methods of data collection

**Pre-tested  
structured  
questionnaires**

**Focus Group  
Discussions**

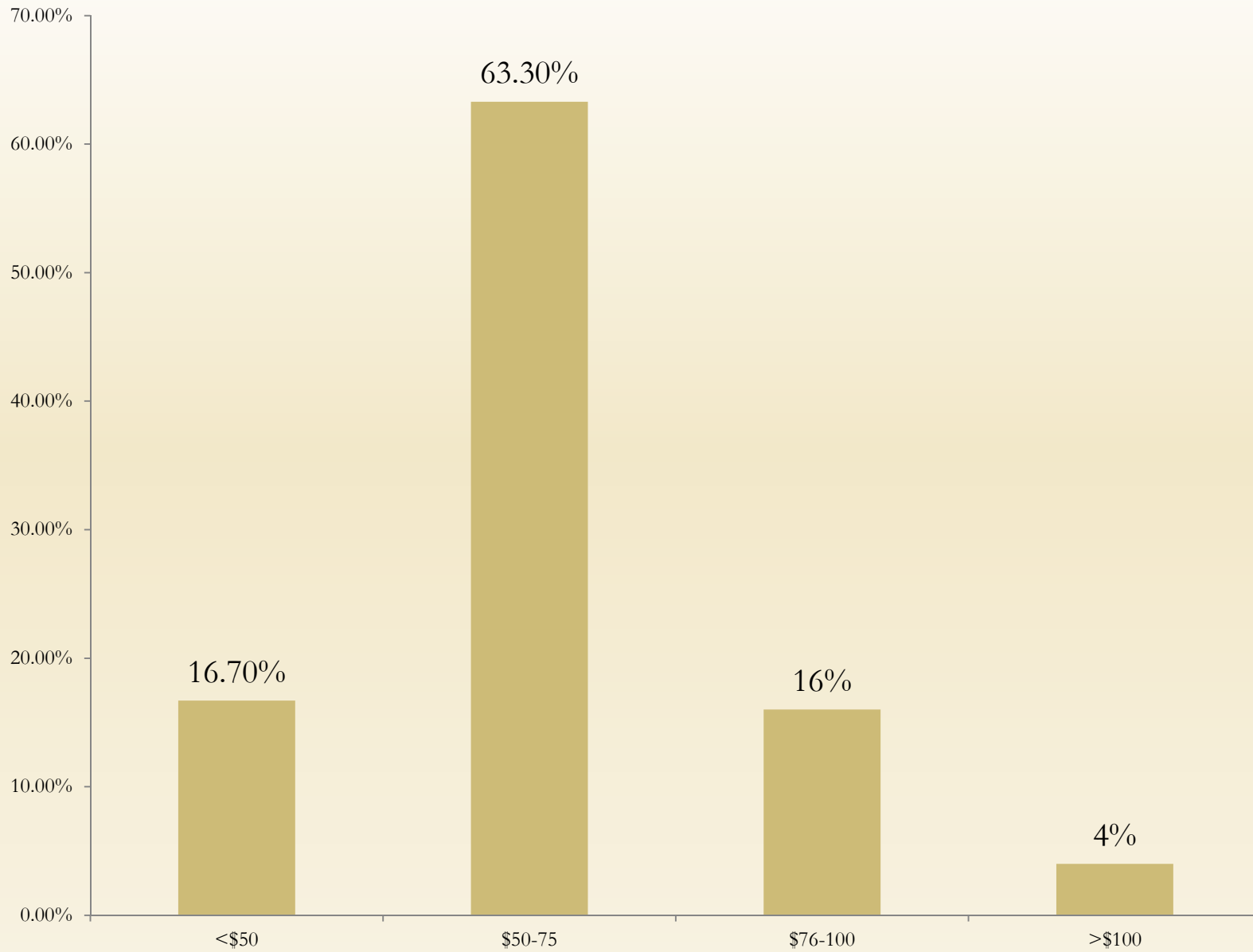
**Field  
observations**

# Demographic characteristics of the respondents

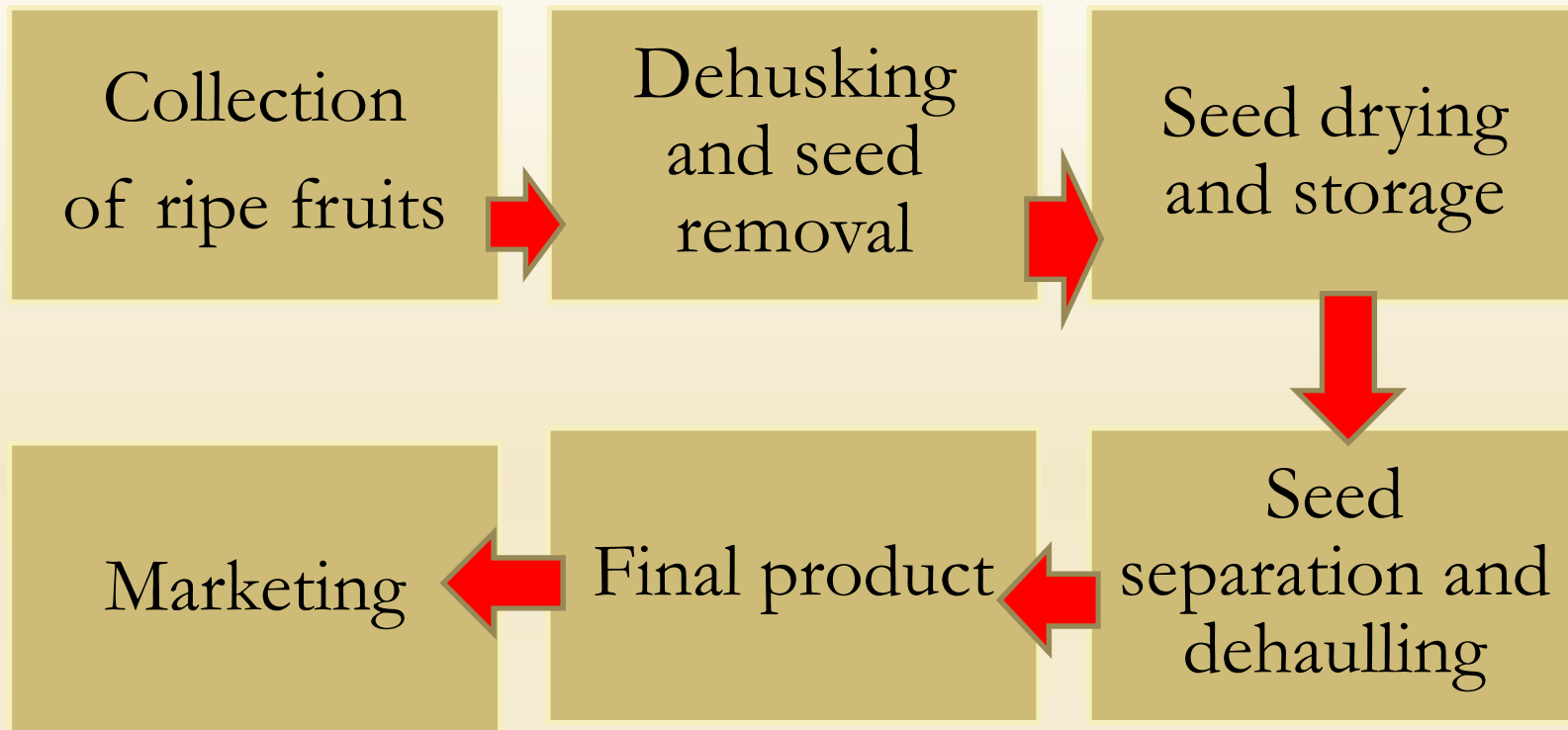
<b>Variables</b>	<b>Frequency (N= 150)</b>	<b>Relative Frequency (%)</b>	<b>Mode</b>
<b>Age distribution (years)</b>			
<20	0	0	
20-30	11	7.3	
31-40	34	22.7	
41-50	81	54.0	54
50-60	14	9.3	
>61	10	6.7	
<b>Marital status</b>			
Single	0	0	
Married	142	94.7	94.7
Divorced	0	0.0	
Widowed	8	5.3	
<b>Major occupation</b>			
Farming	18	12	
NUS value chain activities	132	88	88
Civil Servant	0	0	
Others	0	0	
<b>Highest Educational status</b>			
No formal education	128	85.3	85.3
Primary	15	10.0	
Secondary	7	4.7	
<b>Nativity of the respondents</b>			
Native	134	89.3	89.3
Migrants	16	10.7	
<b>Household size</b>			
1-4 members	45	30	
5-10 members	87	58	58
>10 members	18	12	
<b>Experience</b>			
1-5 years	10	6.7	
6-10 years	25	16.7	
11-15 years	95	63.3	63.3
>15 years	20	13.3	



# Monthly income from NUS

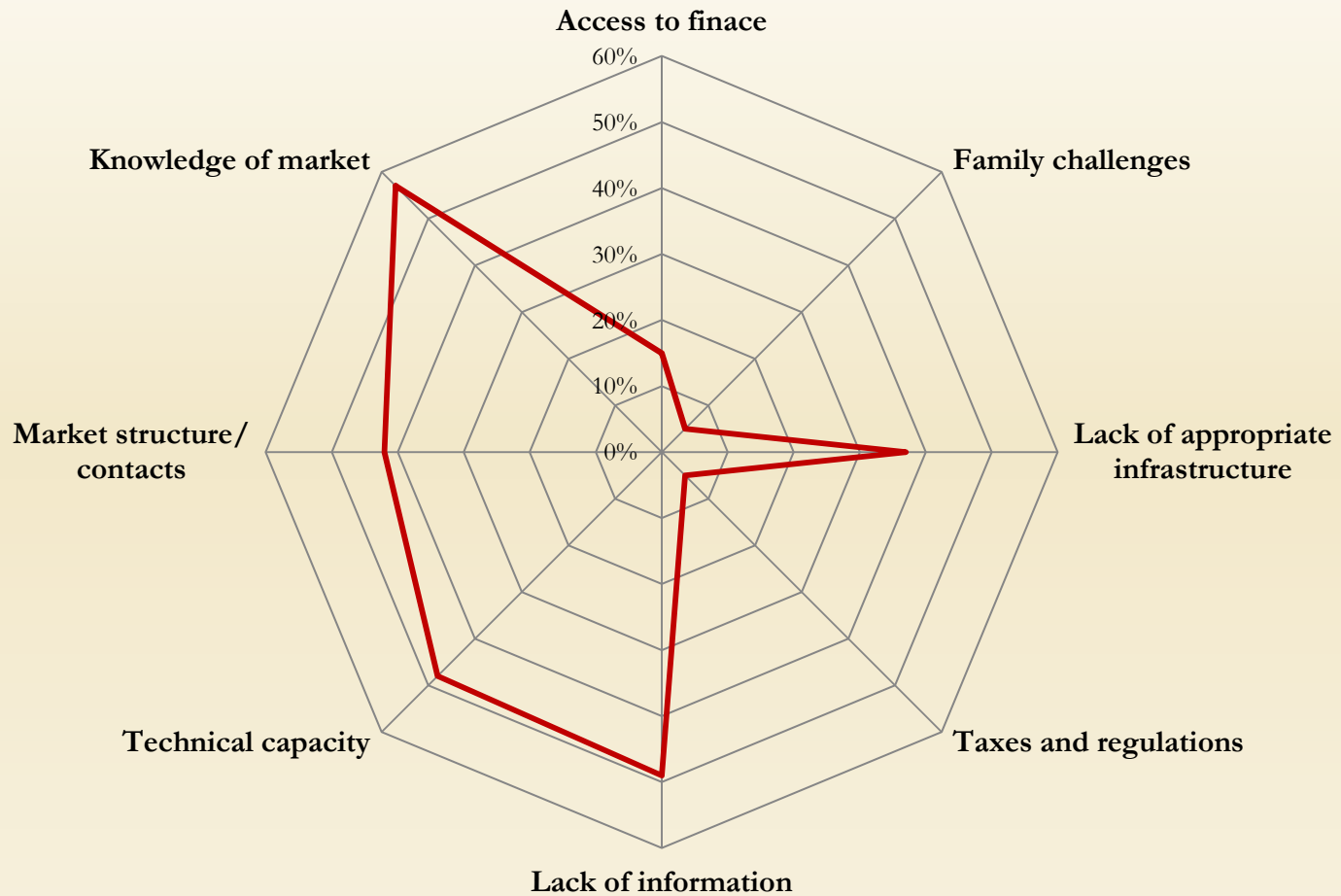


## Processing stages of *Parkia biglobosa*

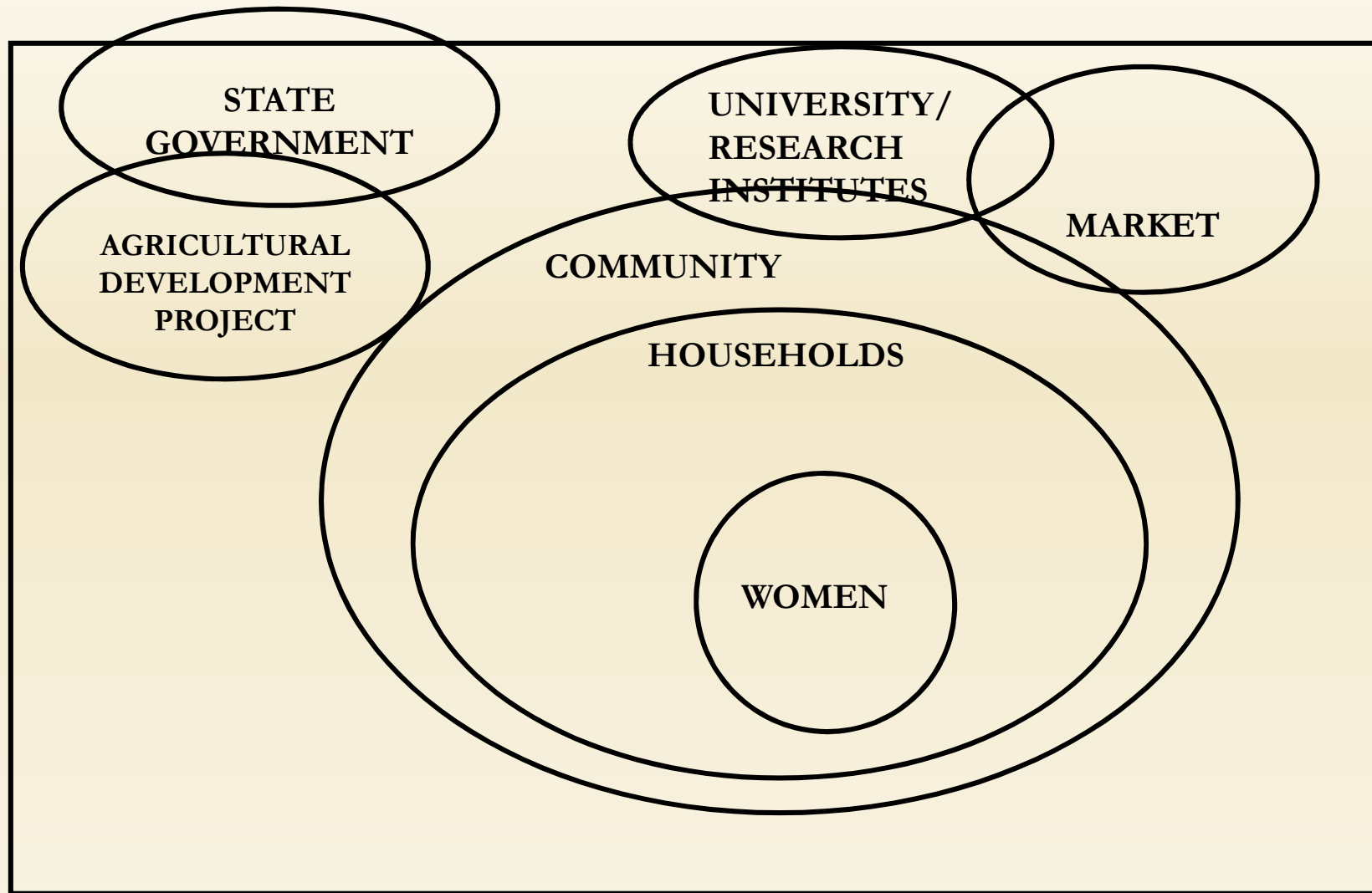


Women are the main actors along the value chain but men and children assist in collection of fruits and gathering of firewood.

# Constraints encountered in NUS value chain



# Venn diagram of Stakeholders analysis in-situ management of NUS



# SWOT analysis of in-situ management of *NUS*

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	<b>POSITIVE (+)</b>	<b>NEGATIVE (-)</b>
<b>Internal:</b>	<b>Strengths</b> <ul style="list-style-type: none"><li>- low-input management</li><li>-off-season cash crop</li><li>-- livelihood for women</li><li>- ecological benefit</li></ul>	<b>Weakness</b> <ul style="list-style-type: none"><li>- Lack of government policy to encourage conservation and use of the species</li></ul>
<b>External:</b>	<b>Opportunities</b> <ul style="list-style-type: none"><li>- Seeds can be processed into secondary product that have high commercial value</li></ul>	<b>Threats</b> <ul style="list-style-type: none"><li>- Urbanisation</li><li>-insect attack</li><li>- Deforestation</li></ul>

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# Conclusion

- *P. biglobosa* and *V. paradoxa* has very high socio-economic importance
- Low level of education among the respondents
- Processing and marketing is still at the local level and weakly organized
- Little or no utilisation of the *P. biglobosa* pulp while the processing of the seeds is largely unhygienic
- In-situ management of *P. biglobosa* is self motivated

# Policy Implications

- There should be more policy thrust and emphasis on developing and promoting NUS through;
  - raising the effectiveness of public participation
  - inter-sectoral coordination
  - multidisciplinary collaboration and
  - strategic partnership among the affected stakeholders
- Simple and easy to use technology that will facilitate good hygiene practices should be developed
- There is need to document the genetic constitution and production capacity of *P. biglobosa* and *V. paradoxa* populations within the entire area of distribution
- There is the need for in-situ-conservation and domestication of the NUS



