



# Securing food in the Hungry Season: Role of the Baobab Tree

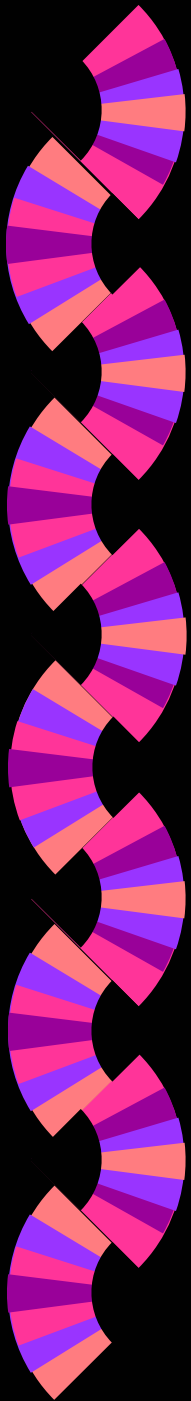
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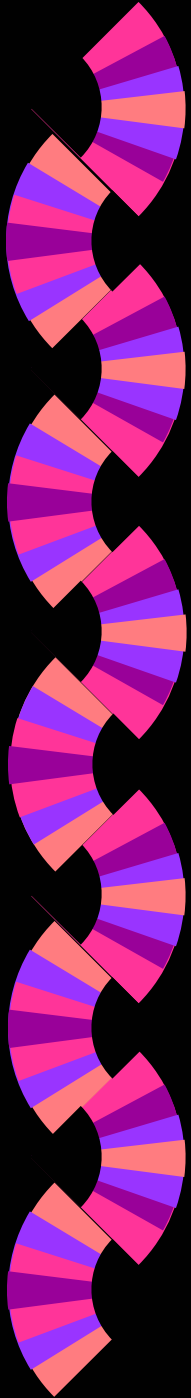
# INTRODUCTION

Baobab (*Adansonia digitata* L.) is increasingly recognised internationally as a tree with important medicinal value and growing prospects for export of its fruit pulp to serve as a base for products such as juices, energy drinks, ice cream, fruit powders, chewable tablets and cereal bars.



**But on African continent, where its growing area is very extensive, covering almost all the drier parts of sub-Saharan Africa, appreciation of multiple qualities of baobab is not recent.**

**As early as 1936, Fortes and Fortes reported its value as a food for Talensi ethnic group of Upper East Region of Ghana, where current study is also located.**



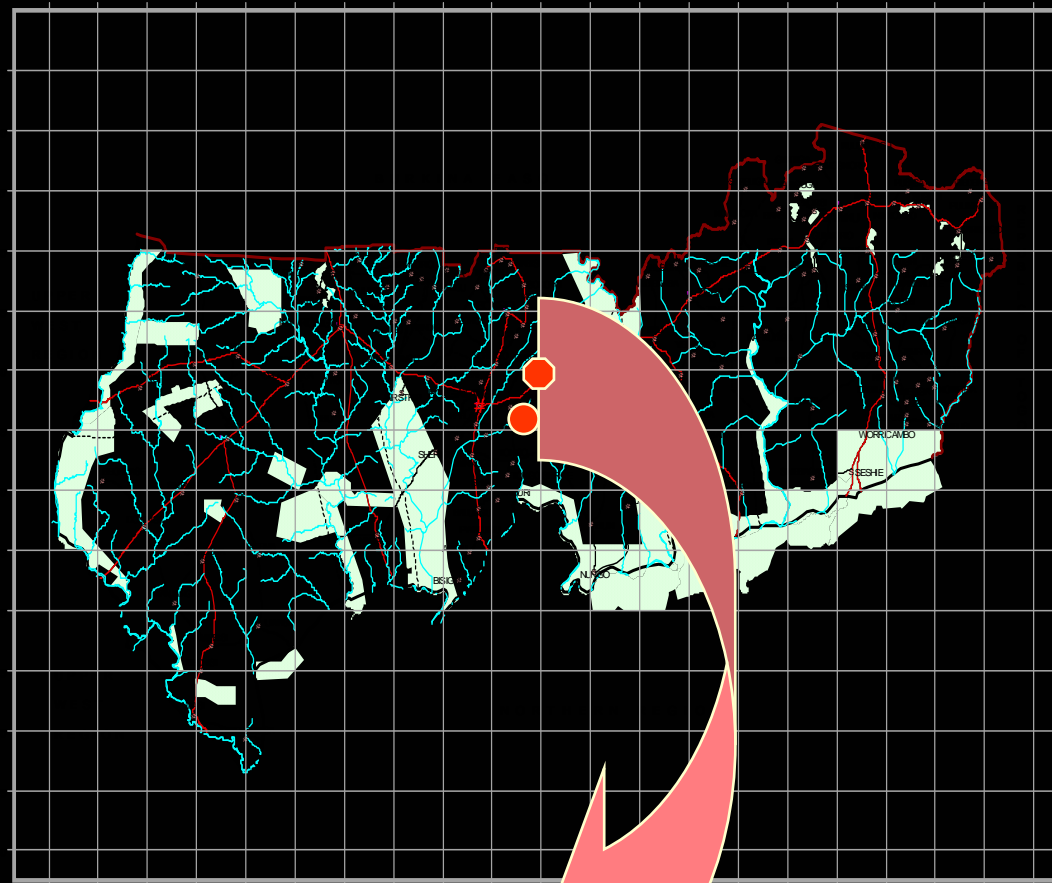
In Burkina Faso, leaves of baobab are one of the main staple food ingredients in many rural communities, while its strategic as food for the **hungry season** in N. Ghana was recognised by Hunter, 1967.



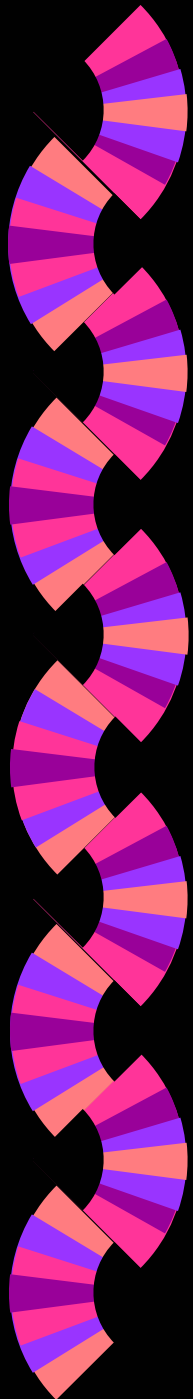
## Some facts about Upper East Region of Ghana

- Among the three poorest regions (out of 10) of the country
- Highest **rural populations** in the entire country (above 280 persons/km<sup>2</sup>)
- The highest rates of land degradation
- Long dry season (7-8 months) and torrential rains during rainy season, with total of about 900mm/annum
- High mortality rates for children under 5 years of age

# Upper East Region of Ghana



Study  
communities

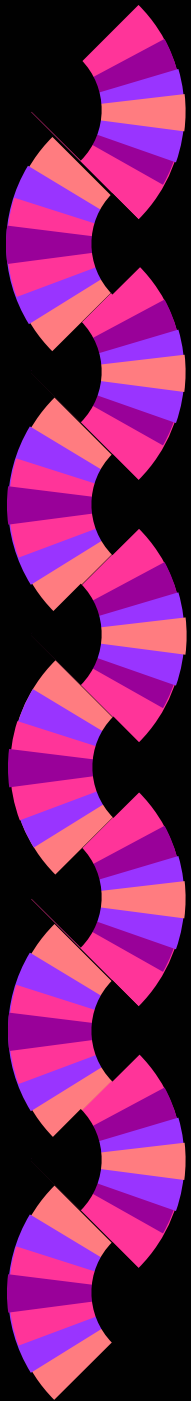




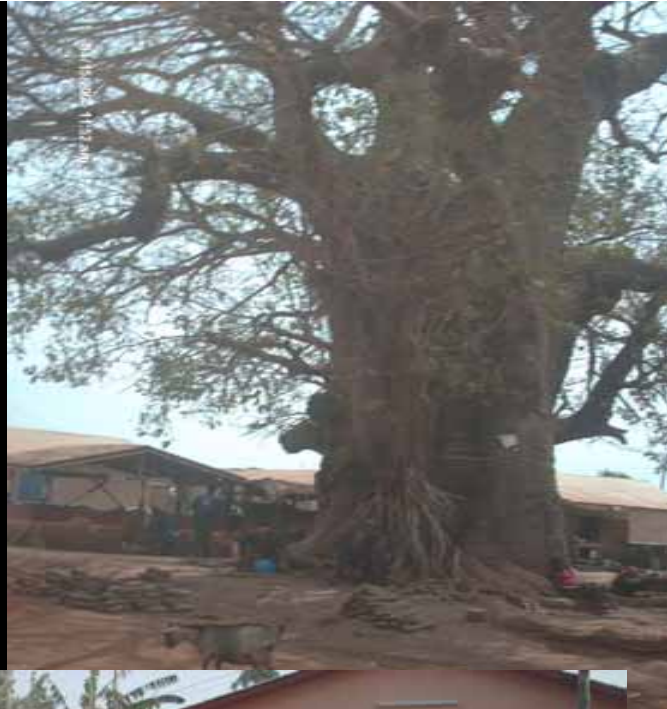
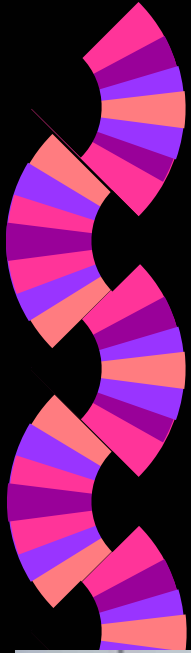
## The 'hungry season' in Northern Ghana

The term 'hungry' or 'lean season' refers to the period from January to June characterized by severe or harsher than usual food shortages in most farm households.

Major staple food crops, sorghum, millet and groundnuts are harvested around September/October in the study area. Up to December, there is sufficient food in most households.



- In January and February , many traditional ceremonies take place, most prominently, funerals, an important spiritual and social obligation that features prominently in the life of rural people in the area.
- Farmers expend a great deal of harvested produce providing food and drink for these events, which attract many thousands of people, and depleting food resources for the remaining months of the dry season.

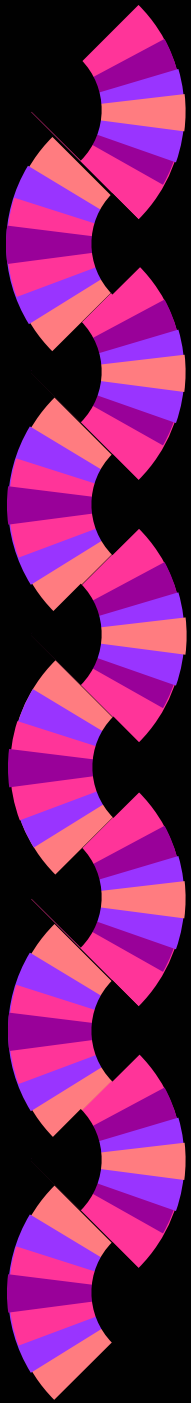


**Dry season in  
UER**  
**(baobab tree is  
present at almost  
every traditional  
compound home )**



**Dancers at  
traditional funeral**





As a result, the period from January to June is characterized by seasonal hunger and most farm families subsist on two or sometimes, **only one meal a day**. In July, an early maturing variety of millet is harvested and used to offer reprieve from hunger until the main harvest in September.

# Traditional coping mechanisms

Major coping mechanisms adopted by Farm households during the hunger season include seasonal migration (mostly by young men) and off-season economic activities such as gathering from the wild (by women and children). Baobab tree products collection, both for food as well as for sale on local markets after processing, is an important part of the hungry season coping strategies

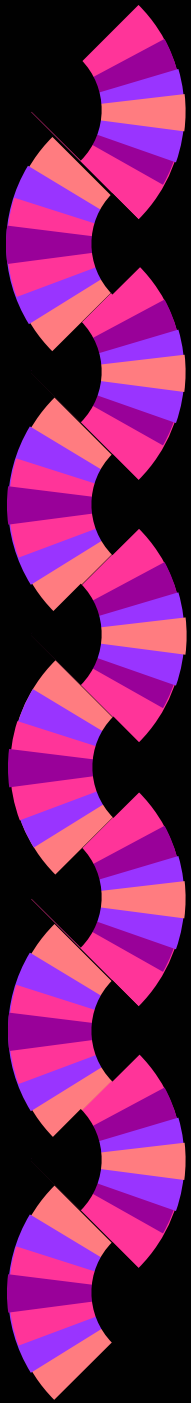




## **Study area, respondents and their main characteristics**

Survey was carried out in 2007 among the Gruni ethnic group in Upper East Region of Northern Ghana, an area where much work on the importance of baobab has been carried out over the past 70 years.

About 60 questionnaires were administered at 2 communities, namely Nangodi and Tanzui, close to Bolgatanga, a regional capital of the Upper East Region, which also serves as the nearest market town.



- All the respondents belonged to Nabdam (Grundi speaking) and Grundi ethnic groups and they all acknowledged that they use baobab tree products in their regular diet, during certain periods of the year.
- Male and female respondents of all ages were represented in the sample population.



## Findings

Most respondents look at baobab tree products as household food (45%), or source of both food and income (43%), while some respondents acknowledged that they also use these products for medicinal and spiritual purposes (12%).

Almost all the responses indicate that baobab products are important for them, while a few indicate that these products are 'indispensable'. Basic information is presented in Table 1.



## Use of baobab products by the respondents

Use baobab products only as household food	45%
Use baobab products both for food and income	43%
Using baobab products for multiple purposes (food income, medicine, etc.)	12%
Total	100%

***NB: there were no appreciable differences between male/female responses***

## Importance of baobab products to the respondents in % (n=60)

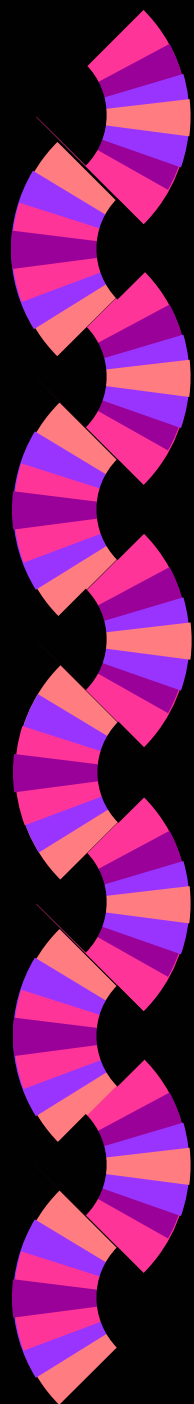
Highly important	90.0
Indispensable	3.3
No answer	6.7
Total	100%

***NB: Respondents scored on a scale of: 1= indispensable, 2=highly important, 3=moderately important, 4=not important***

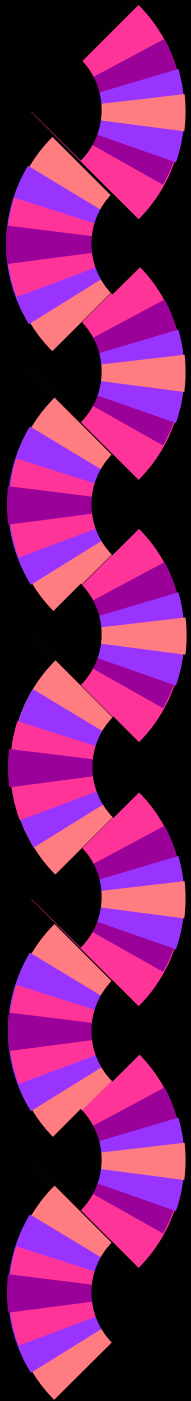
# Harvesting and use of baobab tree parts

- Almost all the parts of the baobab tree are used for various purposes (Table 2)
- Different community members, young and old, men and women, harvest various parts of the tree





<b>Tree part</b>	<b>Community group involved in harvesting</b>	<b>Use</b>	<b>Community group involved in use</b>
New leaves	Children	Food	All groups
Old leaves	Children	Food	All groups
Fresh fruits	Children	Food (snack)	Children
Old fruits	Men	Food	All groups
Pulp	Women	Ice cream/soup	All groups
Seed	Women	Soup	All groups
Dried old pods	Women	Firewood	Women
Tree bark	Men	Medicine	All groups
Roots	Men	Medicine	All groups
Stem, bark, leaves and branches	Women	'pito' i.e., local beer brewing	Women



- While harvesting of different tree parts attracts all categories of local people, **women are solely involved in processing** of the collected baobab tree parts. They maintained that they spend at least 50% of their time gathering and processing baobab during the season.
- The bulk of the processing takes place between December and January. Most of the women respondents indicated that **baobab pulp**, in particular, is **important in feeding their families at this time, especially children.**



# Marketing

The major products traded are the fresh leaves, dry pulp and dry powdered leaves. The fresh leaves are sold on the local market for domestic use on at certain periods of the year (May-December).

The dry pulp in very limited quantities and powdered leaves are also sold on the local market where middlemen come to purchase them and send to other parts of the country or neighboring Burkina Faso.

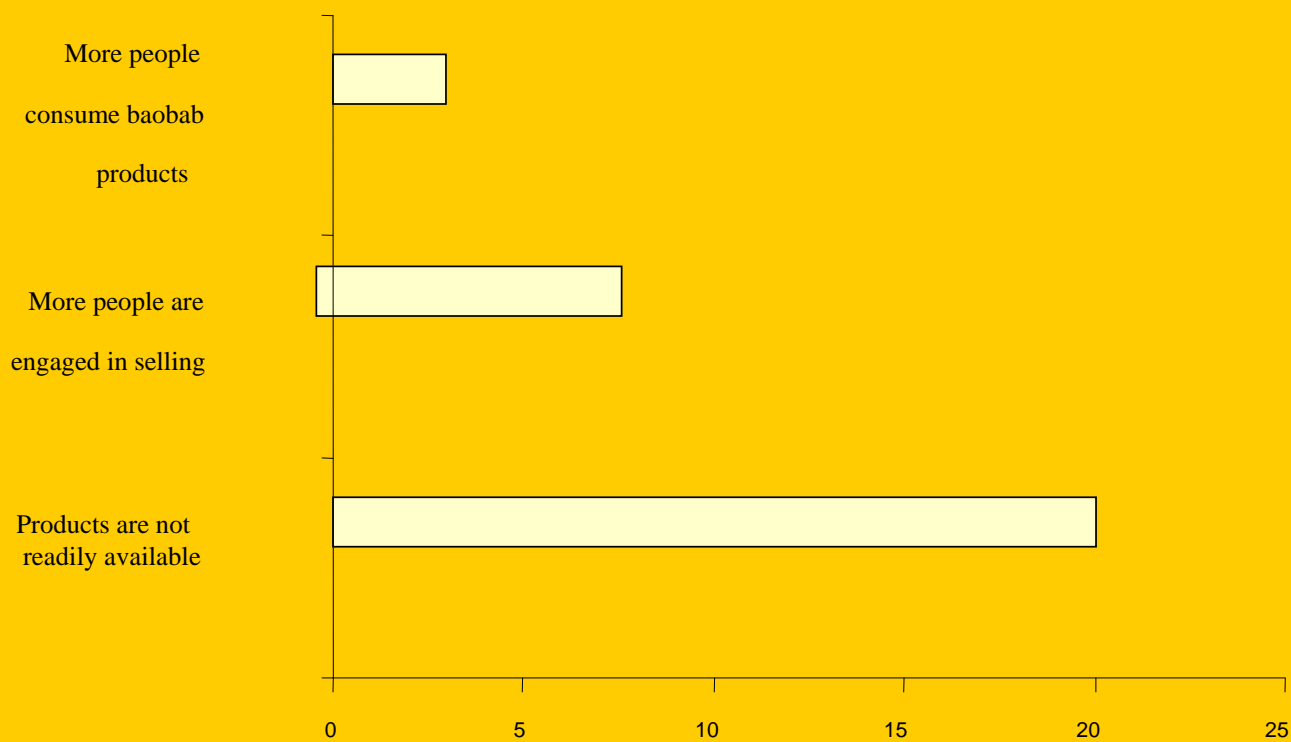
The **dry leaves** constitute the **bulk** of the trade in baobab products, with **over 80% of the traders engaged in their sale.**



## Availability of products – changes over time

- There is a general consensus among respondents that baobab products have become scarce over the years. Households mainly sell the leaves.
- The bulk of the pulp and seeds - **more valued products** - are **kept for household consumption**.

**Figure 1. Observable changes in baobab tree products trade in the study area over the past 30 years**





## Conclusions

- Baobab has been on record as an important tree in the study area for over 70 years. Its main prominence is in the role the products play in the local diet for hungry or 'lean' season.
- While all community members take part in collection of the tree parts, women in particular, have a major role in processing of the baobab products and see particularly the dry pulp as a good source of food for the household.



## Conclusions-continued

Trade in baobab products by community members is limited to the sale of fresh leaves in season and dry leaves throughout the year on the local markets (80%). These products have value in cross border trade with Burkina Faso and other regions of the country.

All respondents indicate decline in availability of products, with subsequent **retention** of the high value **dry pulp** solely **for household use**.



# The way forward

- We need to know more about reasons for reduced availability of baobab products – more work is required (Population growth? Climate change??).
- If confirmed, this may have a serious implications for hunger season coping strategies of local communities.
- Upscaling of production of exportable products-dry pulp in particular, is largely unexplored. Knowledge of local people, especially women, in production of these high value baobab products can be essential for improving income of these rural communities.



***THANK YOU FOR YOUR  
ATTENTION***