

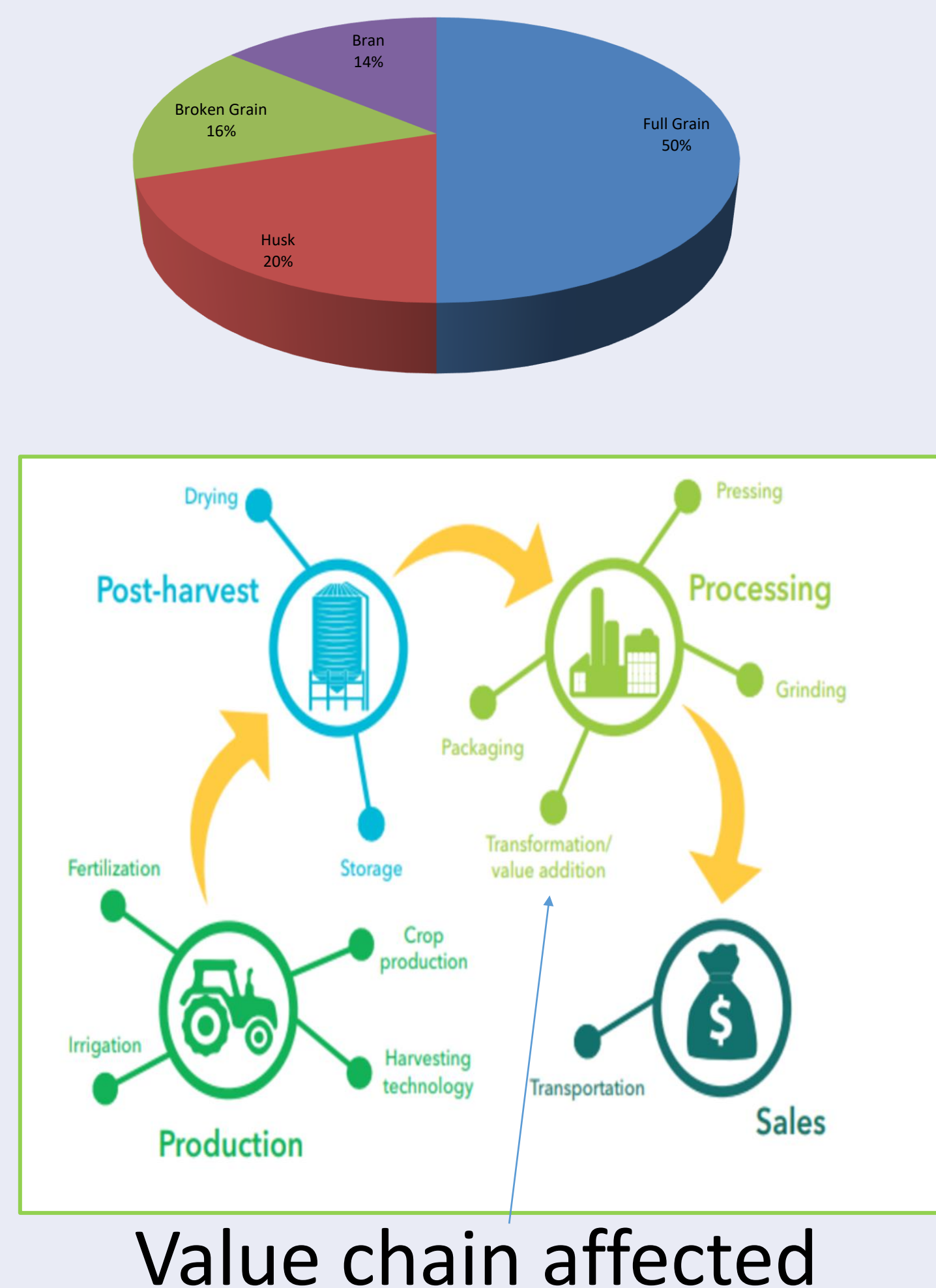
PROCESSING AND PACKAGING OF RICE FLOUR FROM BROKEN RICE IN MAKURDI, BENUE-NIGERIA

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Introduction

- ❖ Rice is one of the major staple foods in Nigeria. up to 40% of paddy rice is lost in the milling process due to underutilization of the by-products
- ❖ The by-products of rice are broken rice, the husk, and the bran layer
- ❖ Being able to utilize these by-products in alternative industries would, therefore, improve the yield and sustainability of rice production

Rice and by-products



Implementation steps

Activity	2022	2023	2024
Business registration	X		
Training and safety education for workers	X	X	
Renting of building		X	
Purchasing of machines and equipment		X	
Sourcing for raw material		X	X
Processing and packaging of rice flour		X	X
Certification			X
Marketing			X
Training for paddy rice processors			X

Objectives

- ❖ Value addition to Broken Rice
- ❖ Increase food availability and affordability
- ❖ Create employment opportunities
- ❖ Increase awareness on proper utilization of Broken Rice

Conclusion

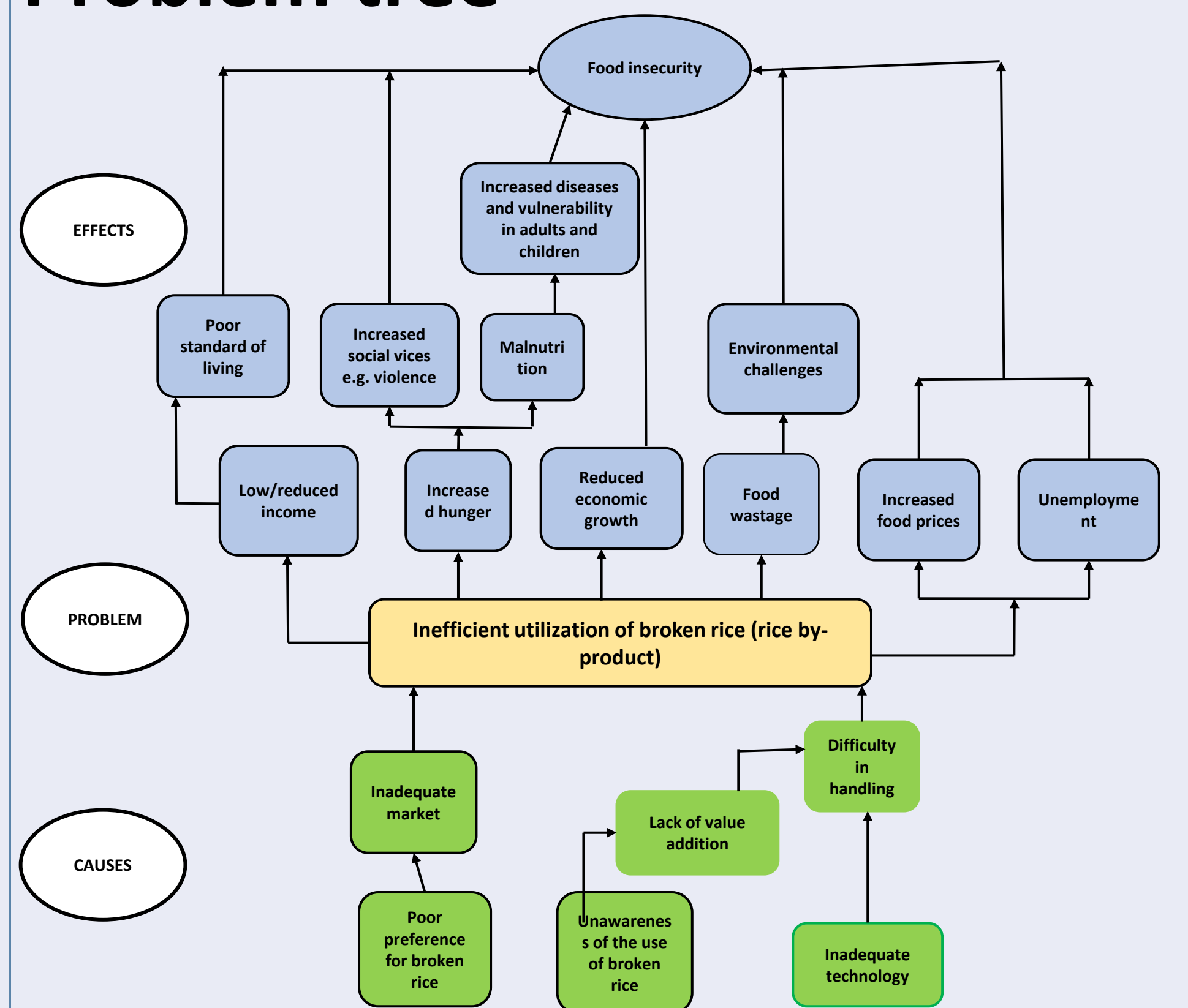
As paddy rice goes through the milling process to produce edible rice kernels, by-products are generated such as **Broken Rice**, Rice husk and Rice bran. Medium and large rice mills generate 10 to 15% broken kernels and this can be as high as 25% in small mills. The effective utilization of Broken Rice will increase sustainability in rice production and improve food security.



Expected costs

Cost	Euro (€)
Business Registration	200
Training and safety education	100
Renting of building	1500
Machines and equipment	9000
Broken rice	200
Packaging materials	100
NAFDAC registration	150
Marketing	100
Rice processor's training	3000
Operating cost	2000
Total	16,350

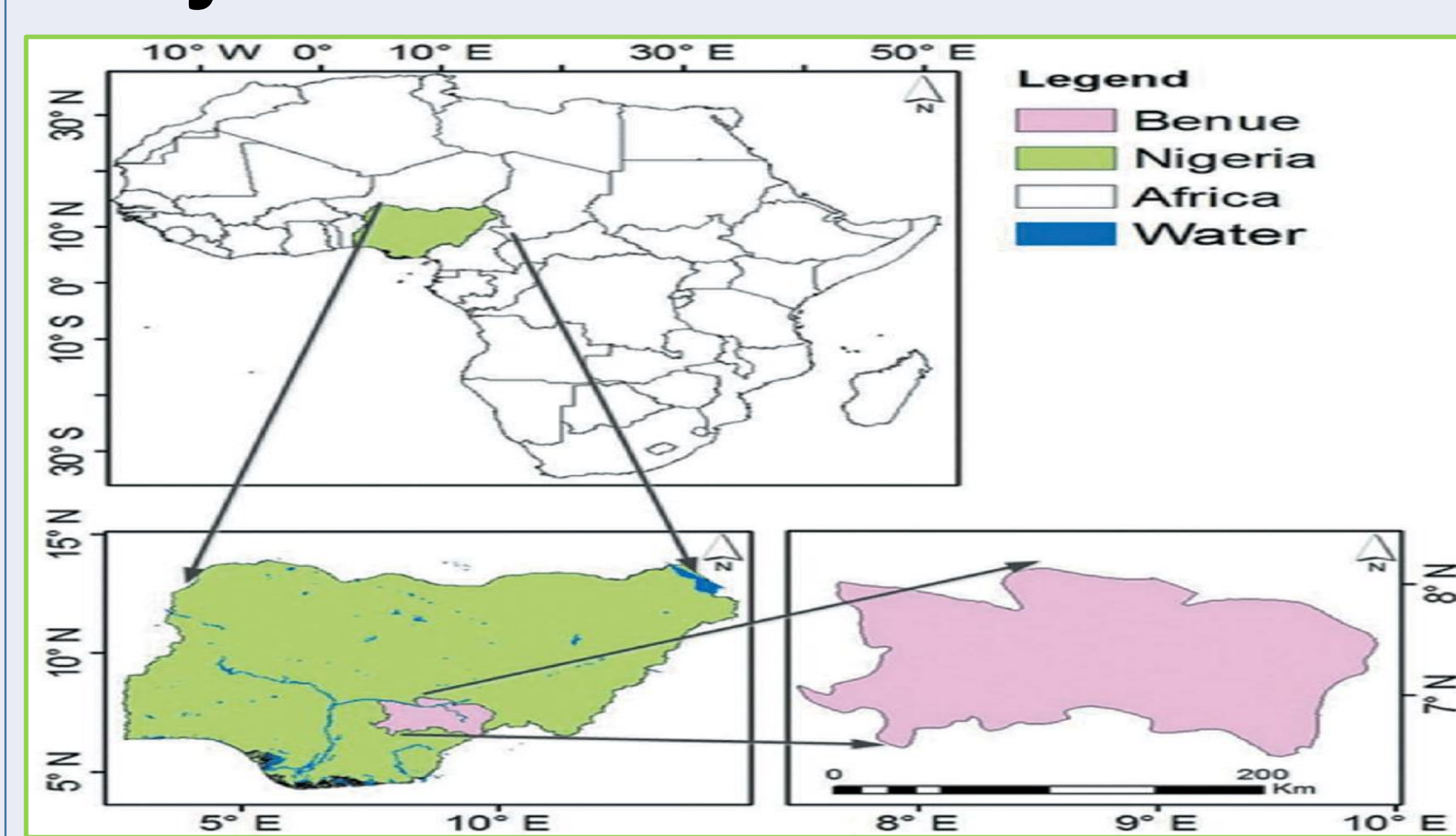
Problem tree



Possible risks

- Unfavourable government policy
- Poor economic conditions
- Competition from other flour industries
- Seasonality of raw material
- Inadequate funding

Project area



Expected outcomes

Increased food security

Job creation

Increased income