

# Utilization of Banana Pseudo-stem for Employment and Income Generation in Kakamega County, Kenya

## Rodgers Oyugi, Vintage Fibres

### Introduction

- Banana is a perennial crop rich in vitamin C and B6
- A staple starch food for more than 50 million people and important source of income
- In addition, have a high biomass content

### Problem statement

After harvesting, 80% of banana plant is disposed. Including, stem which can be an alternative to non-biodegradable plastic polymers. Further, conventional paper making method is highly polluting, and involves chemical usage. This can be replaced by banana pseudo-stem that are recyclable and biodegradable

### Value chain affected

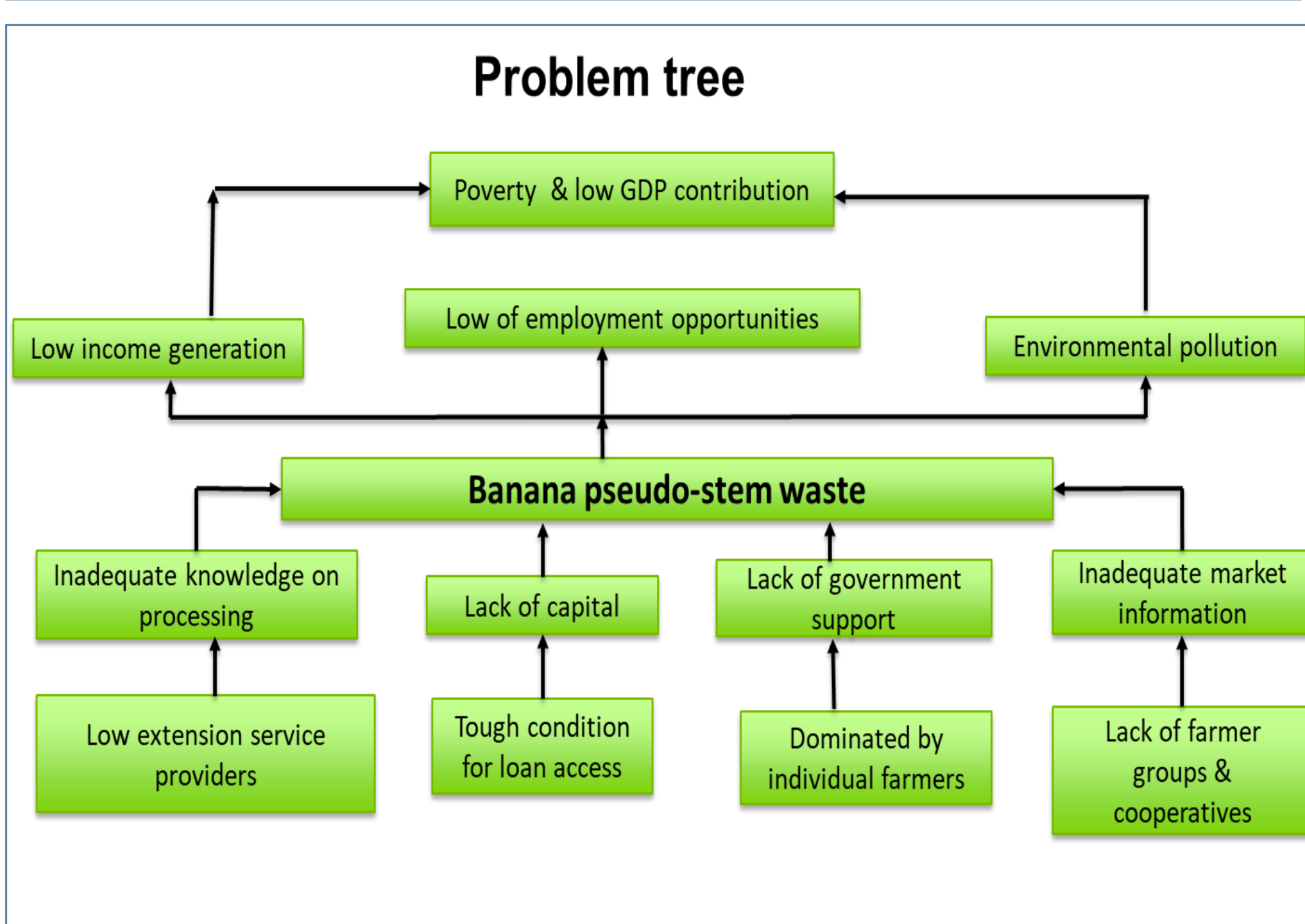
Banana pseudo-stem has high fibre content. Instead of being disposed as waste, they can be utilized to increase income and employment for youth and women

### Solution approach

- Processing of banana pseudo-stem can provide a platform for the economic empowerment of rural youth and women
- The enterprise would be established to develop entrepreneurial skills in processing of carrier bags and other handcraft products

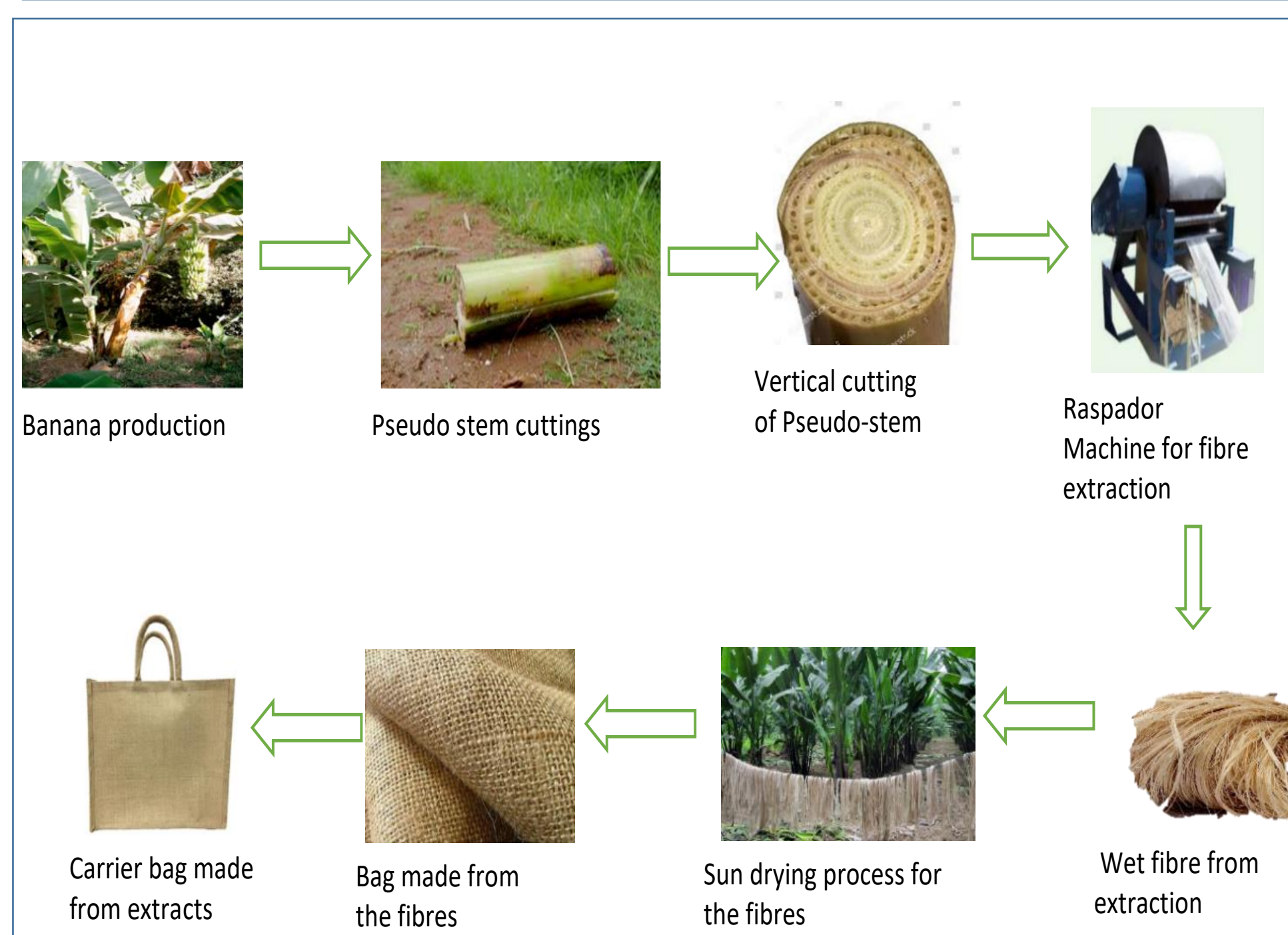
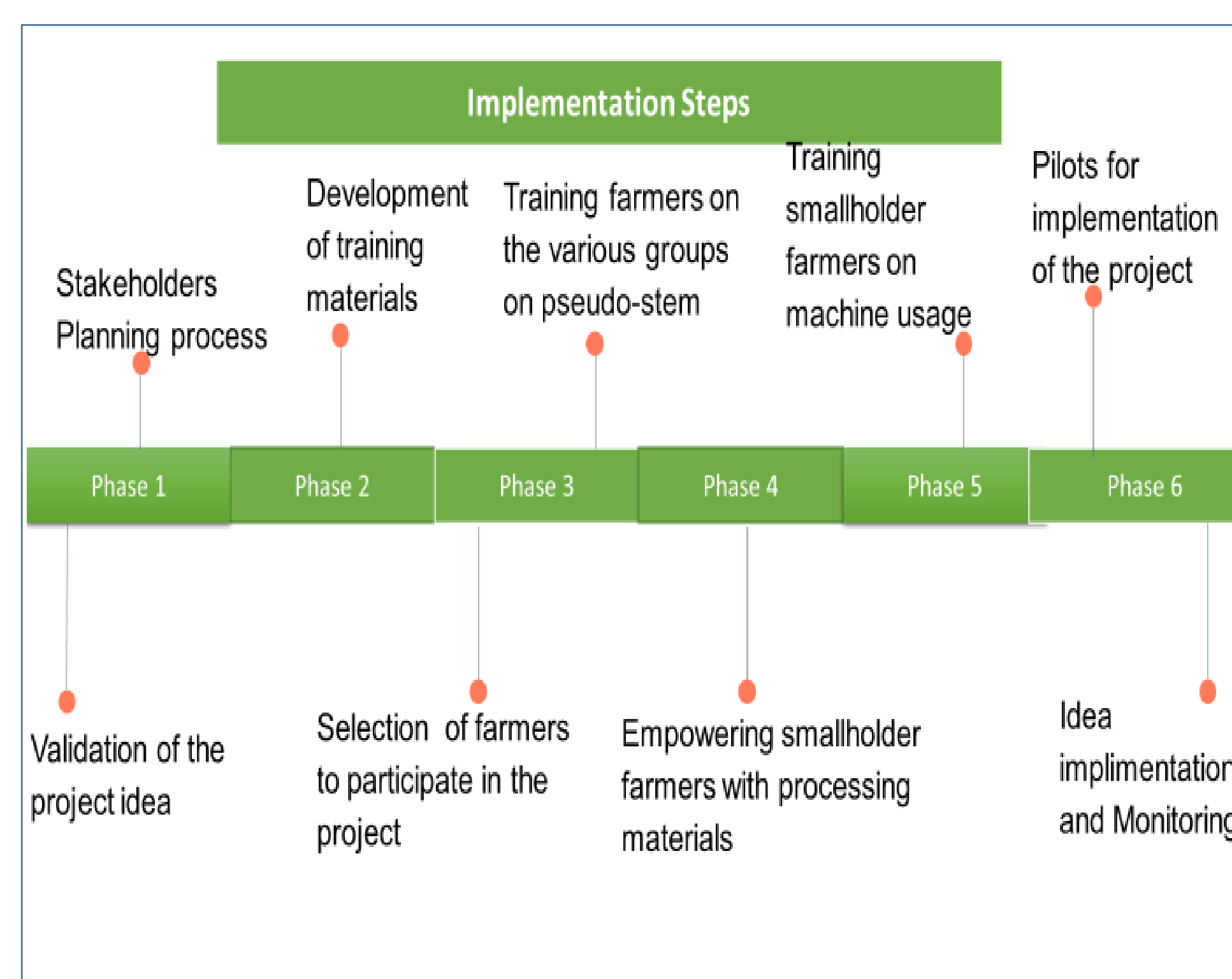
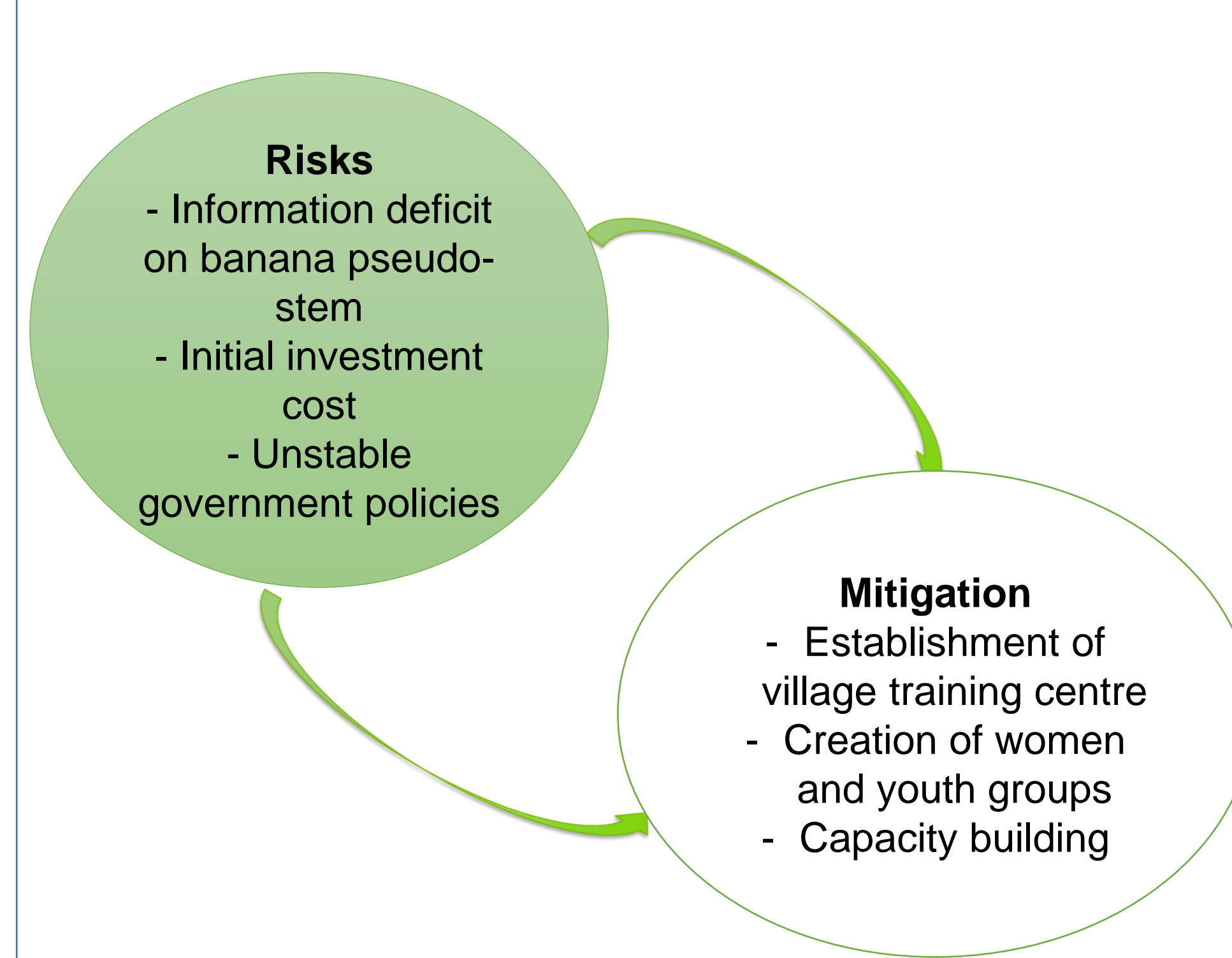
### Objectives

- To increase income of youth and women smallholder farmers
- To create employment opportunities for youth and women through the pseudo-stem processing
- To reduce greenhouse gas emission through the use of banana pseudo-stem



Expense item	Costs (Euros)
<b>Fixed Cost</b>	
Business registration and product certification	300
Structure refurbishment, equipment and furniture	700
Machinery and installation	1100
Other costs	335
<b>Total fixed cost</b>	<b>2.435</b>
<b>Variable costs</b>	
Salaries and wages	500
Raw materials supplies	600
Office supplies	80
Utilities	500
Repairs and maintenance	200
Miscellaneous	100
<b>Total variable costs</b>	<b>1.980</b>
<b>Total Costs</b>	<b>4.415</b>

### Possible risks



### Expected outcomes

- Increase of job opportunities for women and youth
- Creation of additional revenue stream for smallholder farmers
- Income generation
- Reduce environmental pollution



### Conclusion

- Utilization of banana pseudo stem into carrier bags and other handcraft products can be a profitable and sustainable business enterprise for youth and women in rural communities
- This will lead to increased livelihoods of smallholder farmers as well reducing environmental pollution
- This project does not only come with financial reward but also contribute to Sustainable Development Goals:

